



Western Cape
Government

Health

BETTER TOGETHER.



ANNUAL REPORT
2013

Tygerberg Hospital

Tygerberg Hospital
Annual Report
2013

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VISION, MISSION & VALUES

Vision

Quality health for all.

Mission

To provide equitable access to health in partnership with the relevant stakeholders within a balanced and well managed health system.

Values

The overarching values identified by the Provincial Government of the Western Cape are:

- Caring • Competence • Accountability
- Integrity • Responsiveness

Caring, Competence, Accountability, Integrity, Responsiveness.



The core values that will be reflected in the way in which the vision and mission are achieved are:

- Integrity • Public accountability • Innovation
- Openness and transparency
- Commitment to high quality service
- Respect for people • Excellence

FOREWORD

Message from Dr Beth Engelbecht Deputy Director General: Chief of Operations



The 2030 strategic Road to Wellness Plan for the Western Cape was shaped through extensive consultation in the 2012/13 year. Building a cohesive and united vision amongst 32 000 staff members, remains a major leadership challenge and the Department believes that the level of engagement gives confidence in our approach. Healthcare 2030 signals an important shift from illness to wellness and confronts all services to reposition themselves

towards this new vision. In a central hospital such as Tygerberg, the focus on continuity of care, integrated service delivery and patient centred experience are of particular importance. It is clear that the way we approach our day-to-day service of caring for patients need to reflect these fundamentals and should form part of the training and socialising of trainees in the hospital.

Tygerberg Hospital is also gearing towards its redevelopment and a project officer was appointed to facilitate all the projects related to this exciting challenge. It provides opportunities to remodel the delivery of our core business of service delivery and providing a platform for training and research.

Tygerberg Hospital is the largest hospital in the province, adding complexity in its management and organisation. Despite the current ageing and out-of-date infrastructure, the Department is proud of the amazing services the staff members are rendering to our community. The few complaints the hospital receives, are far outweighed by the large number of satisfied patients. Yet the focus on continuous improvement despite the resource limitations will always challenge our creativity and collective efforts.

Of particular importance is the pressure in our emergency centre, especially for general medicine patients. Pictures of the corridor care we are forced to deliver was shown to the provincial Cabinet to explain our pressures. The staff members working in these pressurised areas is applauded for dealing with the large patient numbers, and they need to be assured that the Department is working hard to strengthen our district health services to reduce the impact on the more specialised levels of care and to enhance the capacity of the whole system.

The Metro East has been the main receiving area for the population growth of more than 28% between 2001 and 2011. The level of deprivation and the related burden of disease contributed to the increased number of patients seen in the hospital. The bed utilisation

FOREWORD

rate in the hospital increased from 78,5% in 2011/12 to 81% in 2012/13, despite opening 74 more beds. Nine percent more patients were admitted in the same period, thus putting further strain on the available resources. These factors are considered in budget planning.

The establishment of the Office of Standards Compliance at national level heralds the increased focus on quality of care and specifically on patient safety. Tygerberg Hospital subjected itself to audits and developed a quality improvement plan to bridge the gaps identified. The hospital is the leader in infection prevention and control strategies and has implemented several of the Best care Always bundles to reduce the risk of hospital acquired infections.

Further major achievements include reaching functionality of the PACS/RIS system and the commissioning of the PET scanner.

Bottleneck areas in the hospital keep on challenging our resolve. These include critical care, theatre, MRI and CT scanning capacity. The hospital responded through establishing post anaesthetic high care capacity, extended hours for medical imaging and improving efficiencies in theatres.

I would like to make use of this opportunity to express my sincere appreciation to the hospital management, the clinical leadership and each and every staff member for the contributions they make. Our resolve will continue to be challenged and criminal elements will continue to harass our control systems, but we need to sharpen our strategies, our teamwork and our vigilance for the greater good of the community we service.

FOREWORD

Message from Dr Dimitri Erasmus Chief Executive Officer: Tygerberg Hospital

Tygerberg Hospital continues to play a central role in the delivery of specialised and highly specialised health services in the Western Cape, and remains an institution of academic excellence through its key partnership with the University of Stellenbosch, Faculty of Medicine and Health Sciences.

During the year under review, the hospital faced significant challenges with respect to infrastructure constraints and escalating service pressures, especially in the emergency and critical care services.



This annual report reflects the activities and achievements for the year 2013.

Service outputs for 2013 were as follows:

- Inpatient separations: 69 339
- Outpatient headcount: 332 436
- Bed utilisation rate: 85.4%
- Number of operations: 33 038
- Number of newborns delivered: 7 435

The key achievements during 2013 were:

- Commissioning of the child and adolescent psychiatric ward
- Completion of phase 1 of the infrastructure upgrade of the emergency centre
- Full functionality of the PACS [picture archive communication system] and RIS [radiological imaging system]
- An electronic content management [ECM] system was implemented to improve the management and availability of clinical records
- An additional theatre list for surgical emergencies was commissioned

One of the key challenges Tygerberg Hospital faces is the inadequate infrastructure – the Tygerberg Hospital redevelopment project is well underway following the appointment of the Project Officer as well as the Transaction Advisor Consultancy, and work on the needs analysis has commenced.

Notwithstanding the challenges of infrastructure constraints and significant service pressures during the year under review, the hospital continued to provide accessible quality care – this is due to the continued dedication and commitment of loyal staff.

I wish to thank the staff for the highly valued contribution they have made to healthcare delivery in the Western Cape and beyond.

FINANCE

HEAD OF DEPARTMENT

Director: Mr Toufiek Salie



Summary

The funding streams for Tygerberg Hospital, the single biggest health facility in the Western Cape, are secured from:

- R 1 067 145m NTSG (specialised tertiary services),
- R 130 148m HPDTG (professional training), and
- R 857 738m Provincial Equitable Share

An additional allocation of R21 096m from the Modernisation of Tertiary Services Grant (MTSG)

An overview of the Hospital's Annual Financial Results: 2013/2014

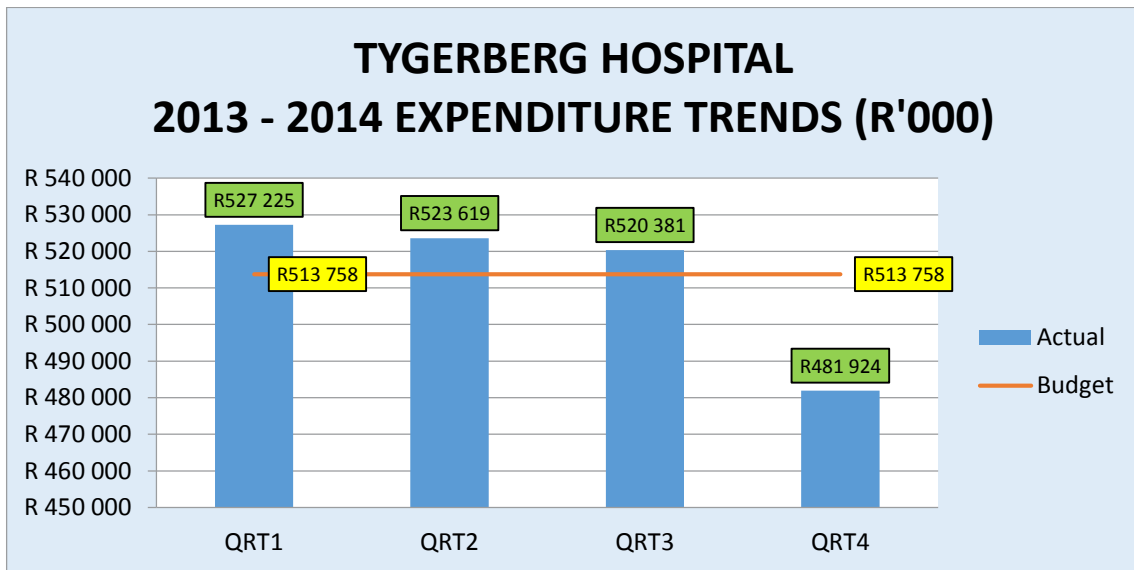
| | YR BUDGET | YE ACTUAL | VARIANCE | % |
|--------------------|------------------|------------------|----------------|---------------|
| Expenditure | R2 055,0m | R2 053,2m | R1,8m | 0,09% |
| MTS Grant | R21,1m | R 21,5m | R(0,4)m | (1,9)% |
| TOTAL | R2 076,1m | R2 074,7m | R1,4m | 0,07% |
| Revenue | R102,6m | R143,5m | R40,9m | 40% |

EXPENDITURE

The results achieved to provide ever demanding patient care (specialist and generalist care), professional training and medical research with the limited financial resources. The actual expenditure was slightly less than the budget by **R1.4m**, which is less than a full percentage point. The reason for this is the earlier year end book closure. However, the hospital faced major challenges during the year due to continuous patient load pressures, burden of disease and the burden of unfavorable economic factors (international and local), relating to currency exchange rates, interest rates, energy/oil price increases and the high Health Inflation Index.

FINANCE

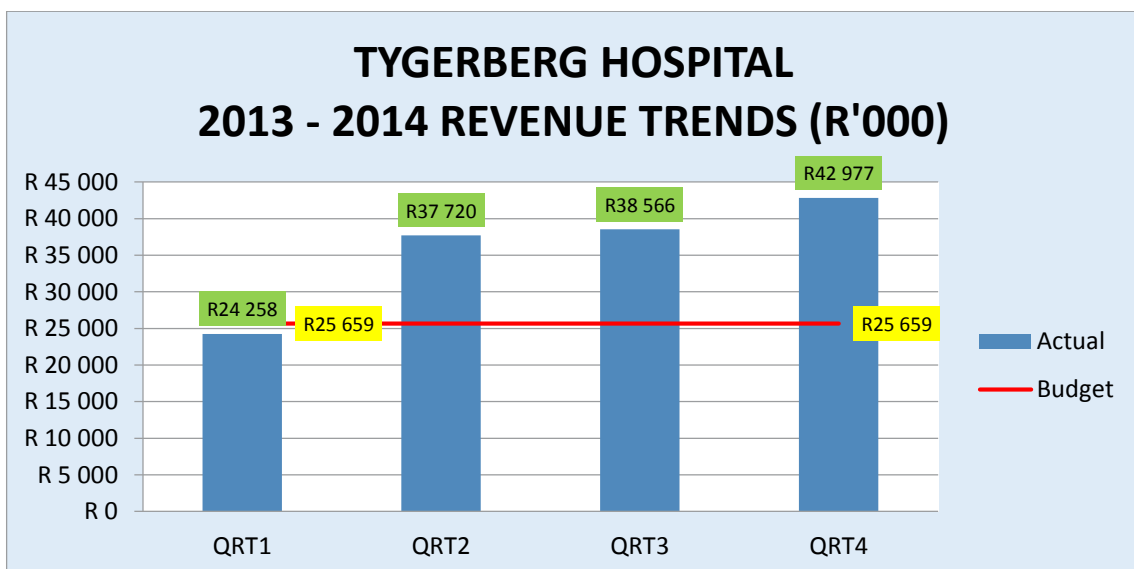
The graphic displayed indicates the quarterly spent.



REVENUE

The main revenue inflows emanates from the Road Accident Fund, Medical Aid Schemes, state departments and individual patients. The graphic trends of revenue inflows were significantly above target, resulting in a total over-recovery of **R40.9m (39.8%)** against the 2013/2014 target of R102.67m. Tygerberg Hospital realises the most revenue and is the highest achiever in the Department of Health.

The opening revenue outstanding balance of R211.5m as at 1/04/2013, was reduced by R110.2m (52.1%) to R101.3m due to the significant recovery and also write-offs.



FINANCE

An explanation of the expenditure results:

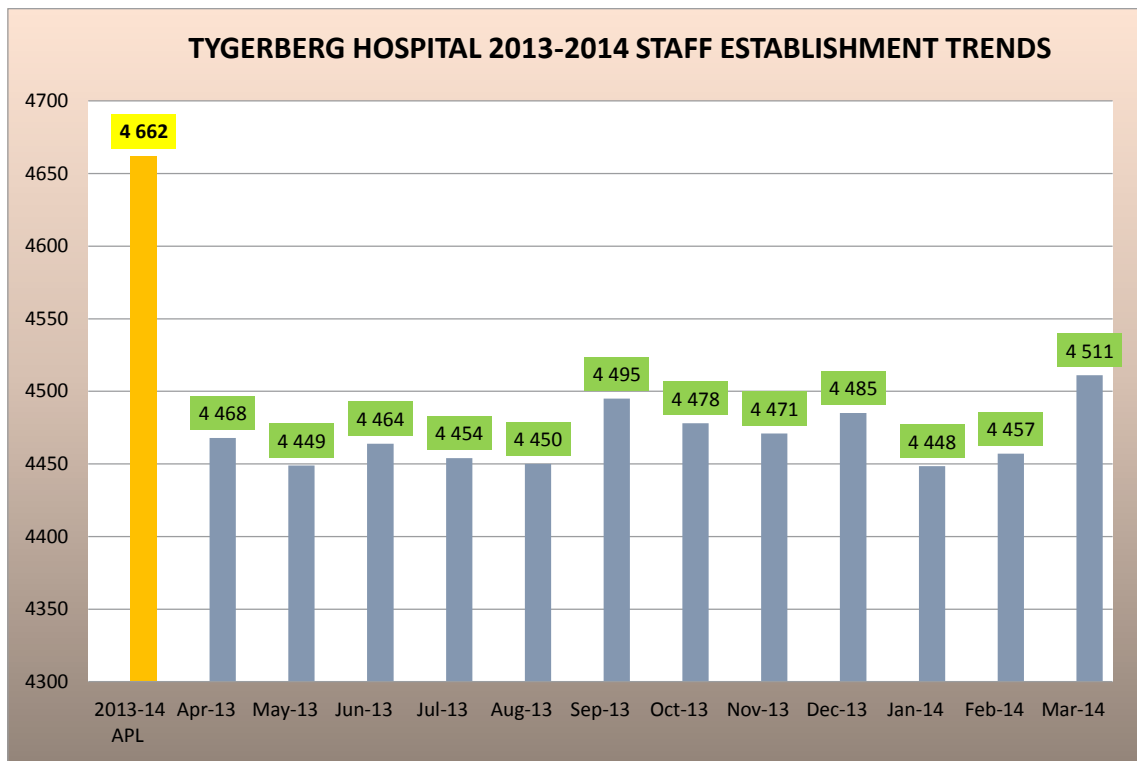
Staffing and Personnel Expenditure:

| PERSONNEL EXPENDITURE | BUDGET | ACTUAL | VARIANCE | % |
|-----------------------|------------------|------------------|--------------|-------------|
| Persal staff | R1 401,3m | R1 396,9m | R4,4m | 0,31% |
| Joint staff | R53,5m | R49,1m | R4,4m | 8,3% |
| Agency staff | R20,2m | R25,8M | (R5,6)m | (27,9%) |
| TOTAL | R1 475,0m | R1 471,8m | R3,2m | 0,2% |

Hospital staff stabilised at **4 511** as at year end March 2014. Nursing posts made up **44%** and doctors **13%** of staff. The APL was managed at a filled post rate of **95,87%**..

The general salary adjustments had a welcome effect on all staff.

The need to utilise substantial nursing agency staff during the year remains a necessity due to the national shortage of nurses. Nursing utilised a monthly average of **90 FTE's**. The strategic position is rather to have full-time nursing equivalents appointed.



FINANCE

Goods and Services (excludes agency cost):

| | BUDGET | ACTUAL | VARIANCE | % |
|--------------------|---------|---------|----------|--------|
| Goods and Services | R553,0m | R568,4m | (R15,4m) | (2,8%) |

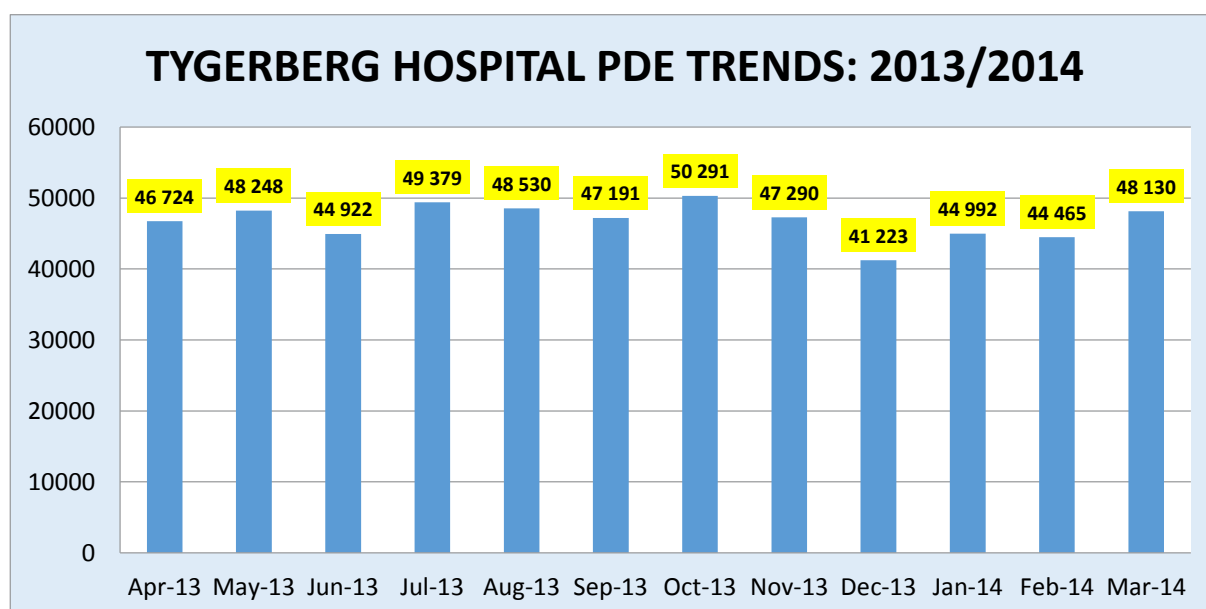
Major expenditure comparative spending trends:

| Category | Actual 2012/2013 | Actual 2013/2014 | % > |
|-----------------------------------|------------------|------------------|--------|
| Clinical Consumables | | | |
| Laboratory Services | R 77,7m | R 79,8m | 2,7 |
| Blood & Blood Products | R 52,3m | R 53,4m | 2,0 |
| Pharmaceuticals | R 71,7m | R 59,4m | (17,1) |
| Medical/Surgical Consumables | R167,4m | R200,4m | 19,7 |
| Other Good & Services | | | |
| Support Services | R 52,5m | R 51,3m | (2,3) |
| Steam, Gas, Energy and Utilities | R 48,7m | R 57,9m | 18,8 |
| Engineering & Service Maintenance | R 39,3m | R 40,9m | 4,1 |
| Remainder | R 23,2m | R 25,1m | (8,5) |

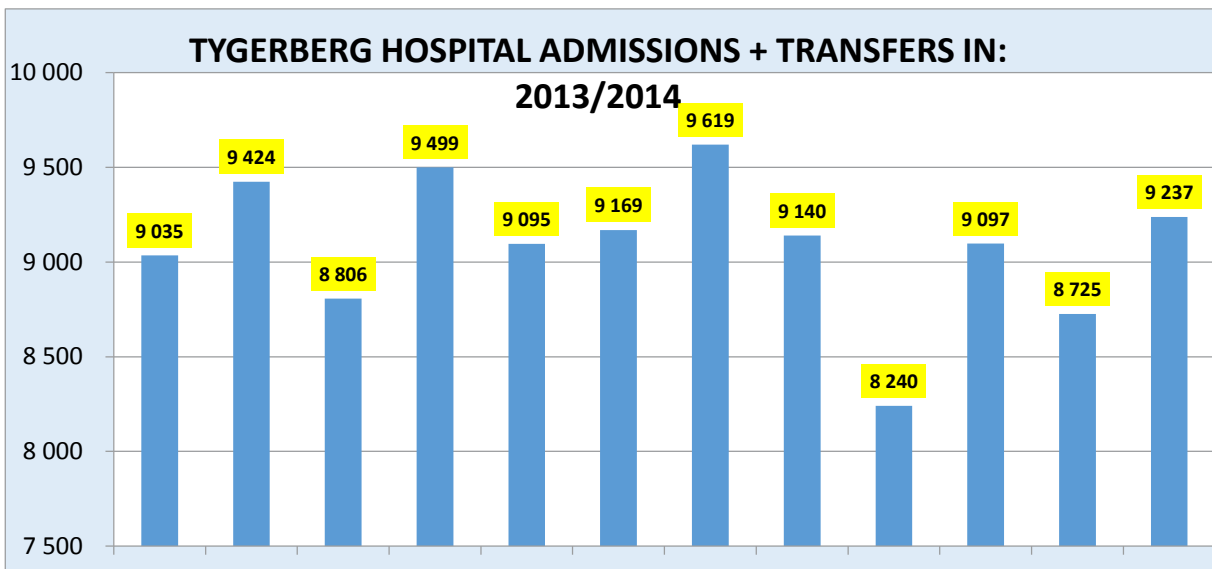
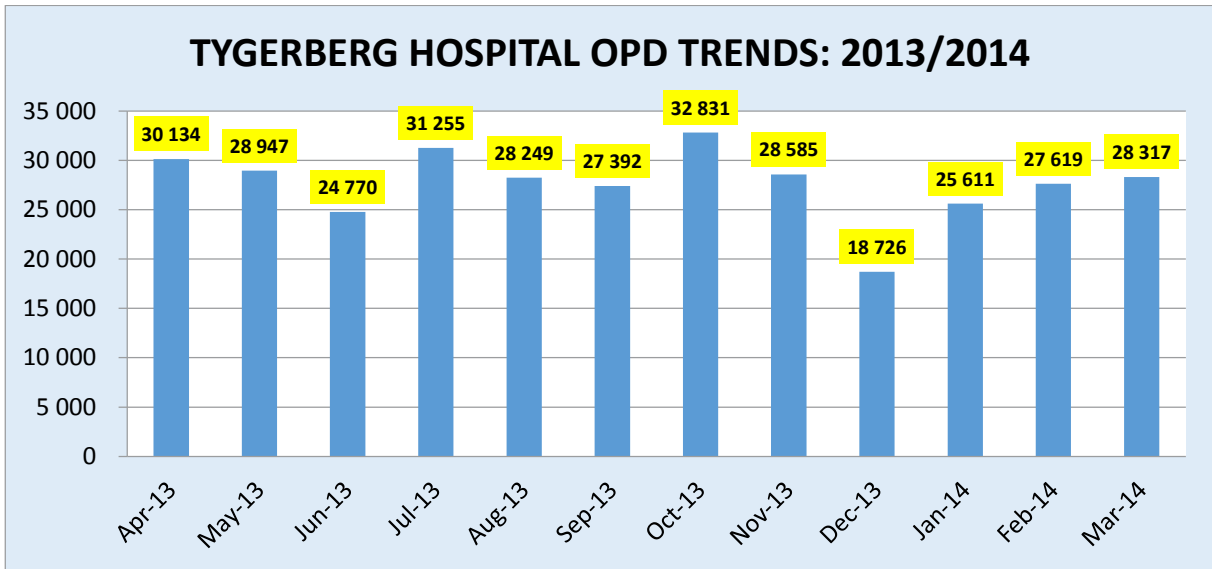
Patient activities increases experienced in relationship to the previous financial year.

| Patient Activity | 2012/2013 | 2013/2014 | % > |
|------------------|-----------|-----------|-------|
| PDE's | 541 315 | 561 385 | 3,7 |
| Admission | 67 596 | 69 894 | 3,4 |
| Patient Days | 408 330 | 428 703 | 5,0 |
| OPD Headcount | 344 031 | 346 777 | (0,8) |

Cost per PDE concluded at R3 660 more cost-effective against the target of R3 716.



FINANCE



Capital Equipment:

Tygerberg Hospital Capital Equipment Funding Sources

❖ Tygerberg Hospital Capital Funds R21,5m

The main items prioritised for capital equipment:

- Medical and Allied Equipment – R15,6m
- Computer Hardware – R1m new and refresh of old IT hardware
- Domestic Equipment and Furniture – R1,5m

FINANCE

❖ **Modernisation of Tertiary Services Grant** **R21,5m**

The total MTS grant of R39,6m continued to be used primarily for the modernisation of the Radiological Imaging Technology across the tertiary institutions. The R21,5m benefited by Tygerberg Hospital was i.r.o:

- Continued technical support and staffing (R2,2m)
- Acquisition of a MRI system (R13m)
- Maintenance and upgrade of the Nuclear Hermes System (R3,7m)
- The continued role out of the open text ECM system (R1,3m)
- Autoclave with warming cabinet (R0,3m)
- Ventilator (R0,6m)
- Microscope (R1,5m)

❖ **Smaller Equipment Items** **R2,4m**

Mostly medical instruments, office furniture, workshop tools and kitchen appliances

Year after year the hospital is making significant inroads in addressing the replacement of obsolete and outdated equipment with the acquisition of new modern high-tech medical equipment.

❖ **Donation Funding** **R3,2m**

Some of the major items received:

- ENT IPC Power System & Nim Neuro
- Viasys Bear 1000 Ventilator
- NT IPC Power Systems (3)
- Power Pro Electric drills (2)
- Technogas Generator
- Nemeto Dual Shot Alpha 7 Injector

DIRECTORATE FINANCE:

Salient features during the year:

The total Finance staff compliment is 462 and the average post filled rate was **97%**.

Tygerberg Hospital, as well as the Department, received an unqualified audit finding for the financial year 2012/2013. The audit categories of **Administrative Matters** and **Matters Affecting the Audit Report** were clean audits for Tygerberg Hospital. Minimal audit queries are recorded against **Other Important Matters**, with payments over 30 days the most noticeable.

Delegation received from National Health Gauteng to workshop FBU management with a later return visit.

Complex Supply Chain Tenders – Hermes, Scintomics, Linac and MRI

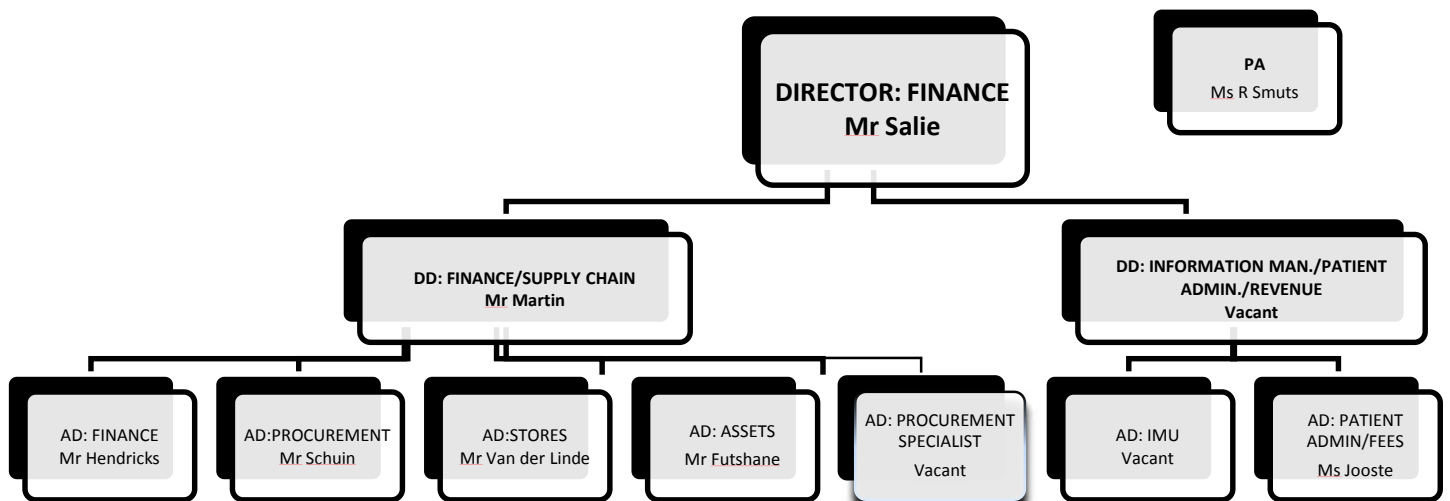
Challenges with ECM implementation at Medical Records

FINANCE

The full implementation of the control measures and tools including the procurement templates, internal assessments by the Devolved Control Unit and the self-assessment Control Management Instrument (CMI) contributed significantly to a higher level of compliance at all times to legislative prescripts and regulations.

Tygerberg Hospital accommodates Finance interns (students) from the colleges, volunteers and EPWP appointments as a training and development centre. Contribution to community upliftment is recognised.

FINANCE ORGANISATIONAL STRUCTURE



FINANCE SECTION

The Finance Department is increasingly being challenged by the various treasury compliance requirements.

Inadvertently it places further responsibilities on the Department to meet its obligations to its suppliers and to ensure that it carries out its duties efficiently and effectively without prejudicing the suppliers.

A further challenge is to avoid a build-up of workload causing backlog of payments and to ensure that suppliers are paid within the 30 day prescribed period. Late payments are reported monthly to Head Office.

FINANCE

These challenges were well contained due to staff dedication to maintain an effective work standard. The workforce of 29 staff only experienced 2 vacancies during the year. By September 2013 all vacant posts were filled.

During the year the **Sundry Creditors section** trained a total of 12 students, i.e. Financial interns from the CPUT and Northlink College.

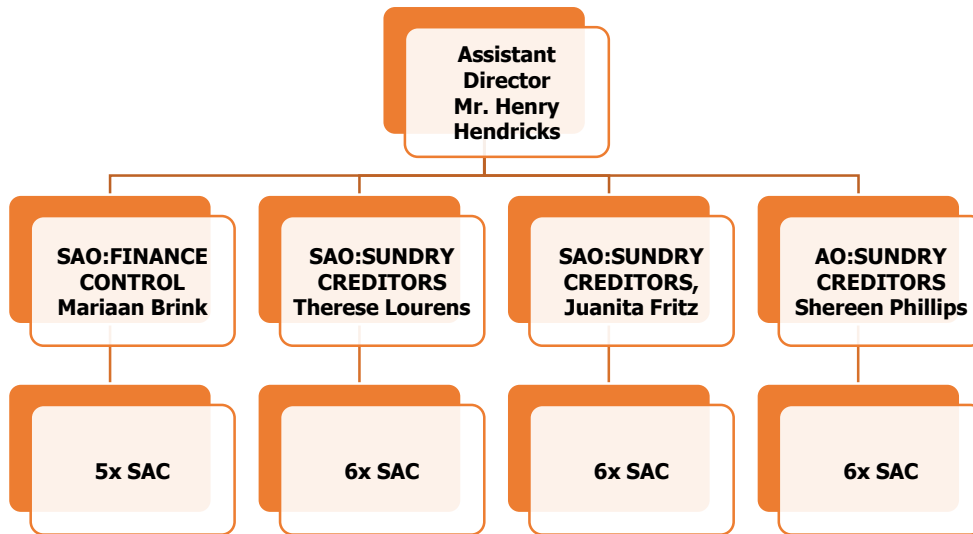
Year-end Accruals of R75,7m increased by 40,4% compared to the previous financial year of R53,9m. A monthly accrual meeting is in place to follow up on outstanding payments.

The Finance Control Section

- We have experienced an decrease of 44,6% in the remaining balance of our asset and liability accounts to the value of R1,33m at the end of the financial year.
- The target set to reduce staff debt by 40% was exceeded.
There were only 115 cases remained by 31/03/2013, - a clearance rate of 47%

This Unit met its monthly reporting requirements in respect of, amongst other things, the status of the Assets and Liability Accounts, IYM reports, budget loading onto BAS and reclaims from other hospitals and third parties on our premises.

STRUCTURE OF THE FINANCE UNIT



MAIN STORES

The objective of the Stores Management is to ensure the continuous availability of appropriate goods and consumables to render an effective and efficient patient care service all the time.

A consistent flow of consumables to the wards, clinics, theatres and other cost centres were maintained.

FINANCE

The ten stockholding stores, namely Engineering, CSSD, Bandages, Stationery, Disposable, Provisions, Surgical, Technical, Clinical Engineering, Theatre plus the two kitchen stores (fresh and dry products), handled purchase orders to the value of R65 million.

The non-stockholding warehouses, including gas and equipment stores, placed purchase orders valued at R569 million. The stock holding level decreased from R26,633 million at the beginning of the financial year to R19,755 million (25,8%) as at March 2014.

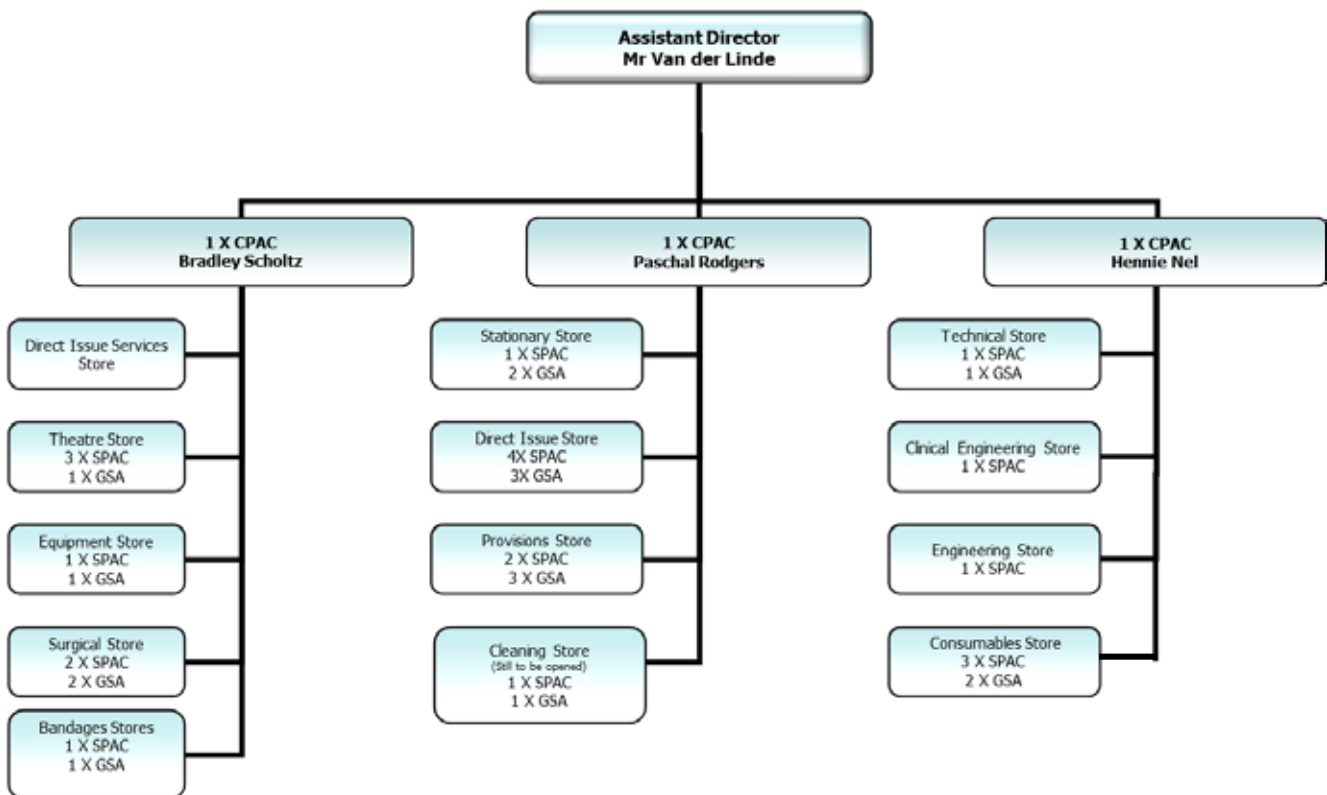
We successfully sent e-mails weekly to the suppliers containing a summary of their outstanding orders and 12. Compared to the last financial year, the number of outstanding lines on the commitment report has decreased from 659 to 371 for the period ending 31 March 2014.

Two successful stock-take were performed - mid-year and at year-end with minimal stock variations, as well as no audit queries reported by the Auditor-General for stores. Stock levels are monitored regularly to prevent stock-outs.

Three General Stores Assistants and one Senior Clerk are furthering their education by doing matric through ABET. They wrote examination from September 2013 and will be writing their final examination in June 2014.

Four students from the Cape Peninsula University of Technology have completed their six-month internship in Office Management and Technology in our various stores.

Year-end commitments of R28,7m increased by 41%, compared to the previous year (R21,0m). A monthly commitment meeting is held to address all outstanding issues.



FINANCE

SUPPLY CHAIN MANAGEMENT: PROCUREMENT

The primary function of this unit is to procure timeously appropriate consumables, services and equipment within the framework of Treasury rules and regulations. Challenges experienced during the year were the inadequate resources, which also had an effect of a three-month backlog of order processing. To overcome this, contract staff were appointed, the unit was reorganised and lean management was applied. The three procurement sections deal with:

- Equipment contracts (formal and limited) and purchases
- Quotation of consumables and services
- Services contracts (formal and limited) and purchases, SLA's and mini contracts

The total staff establishment for Procurement is 20 and the unit continuously utilise students.

❖ EQUIPMENT PURCHASES

Funds made available for capital equipment totalled R25.124m, plus a further R4m to accommodate the opening of the additional 74 beds and other urgent needs. We also spent R3.6m on minor equipment.

A total of 13 bids (above R500 000) to the value of R63,6m were awarded during the 2013/2014 financial year.

For equipment items between R100 000 and R500 000, a total of 20 "Mini-Bids" were invited and ordered to a value of R5,4m, and 10 limited bids were invited at a value of R2.7m.

This section also procured R7m worth of equipment for the new upgraded Trauma Emergency (EC project).

Large capital equipment that was purchased in the 2013/2014 financial year were:

1x Single Head Gamma Camera @ R2 299 373

1x Digital Wide Bore Magnetic Resonance Imaging (MRI) Unit @ R13 086 688

1x Linear Accelerator @ R29 714 166

Upgrade of the Hermes Nuclear Medicine system @ R3 733 740

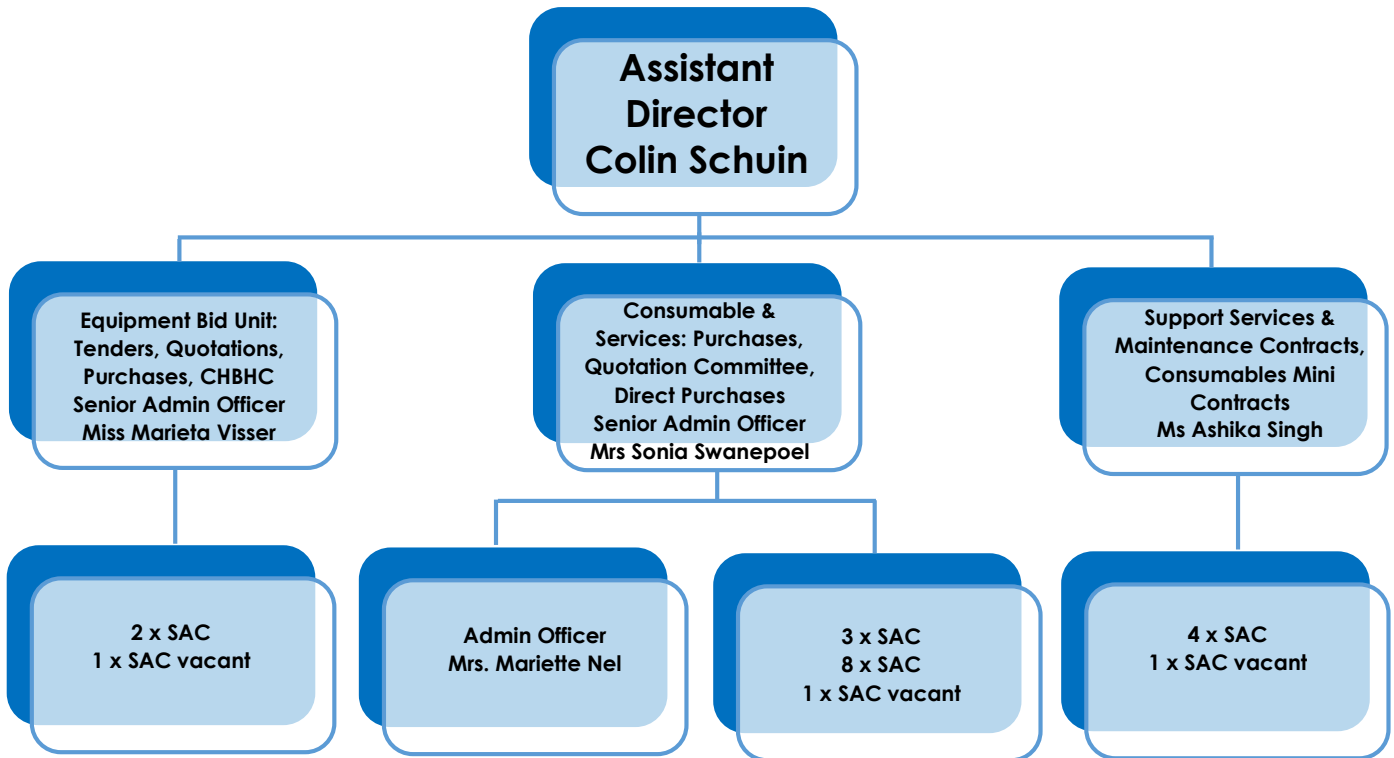
1x Lodox Digital Whole Body Imaging system (for Trauma) @ R4 050 256

❖ GOODS AND SERVICES PURCHASED

A total of 28 878 orders were placed in 2013-2014 to the value of R64,4m.

FINANCE

SCM: PROCUREMENT STRUCTURE



ASSET MANAGEMENT

The Unit consists of the ASD, AO, eight Clerks and one General Foreman. By the end of October 2013, one of the Clerks resigned to pursue her studies. This became a challenge for the unit as the Clerk in question played a major role in generating and drafting of the inventory lists.

After a period of two months, the post was filled and things started to settle down. Once again the Unit was hit by another challenge of losing two of its Clerks due to suspension.

This was the main challenge because the Unit was without full capacity for the rest of the financial year.

The Assets Operational Plan concluded, the main challenges remain:

- To physically verify all assets during the annual asset count and that
- Location Managers in the User Department take full responsibility for safeguarding, optimal use, maintaining and eventual disposal of the obsolete asset
- Control over assets which cannot be barcoded (R3 545 554)

Obsolete assets were sold to value of R51 072.

A R35m bulk write-off of assets which could not be verified for at least three years, were removed from the asset register.

FINANCE

The Unit, under the guidance of the Finance Directorate, successfully concluded the opening and closing balances reconciliation for both major and minor assets.

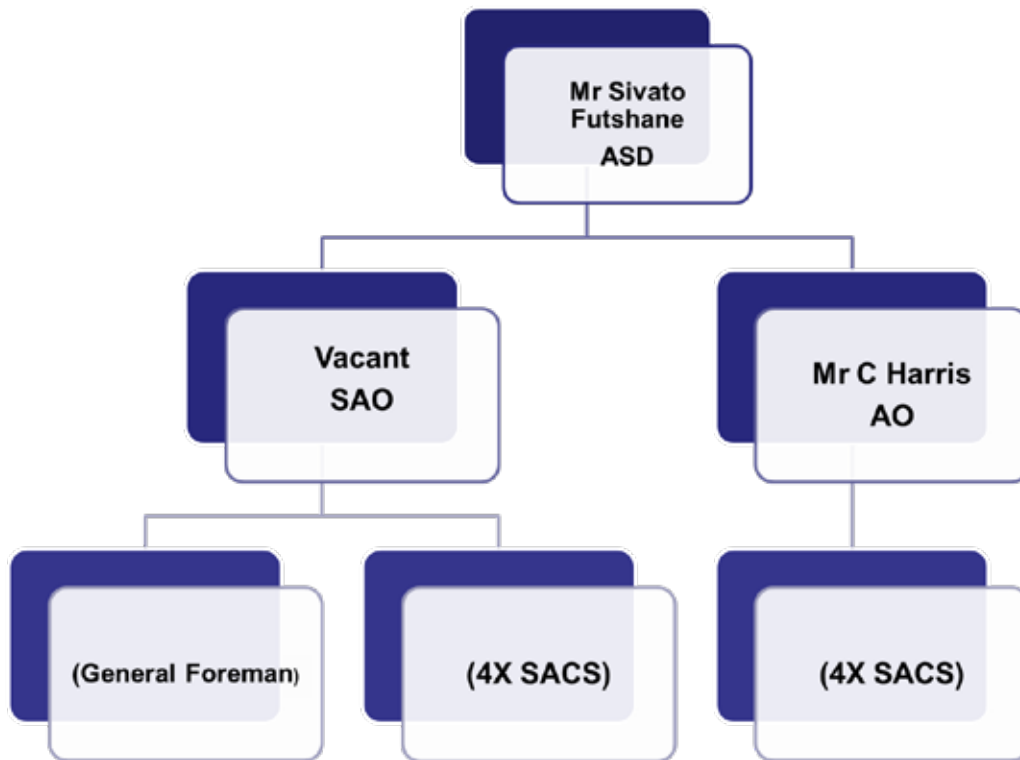
Assets Value:

| | | | |
|---------------|---------------|------------|----------|
| Major assets: | R399 969 291 | Quantity - | 8 815 |
| Minor assets: | R 57 613 256 | Quantity - | 46 967 |
| | R 457 582 547 | Total | - 55 782 |

Asset Inventory list – 88% was rolled out to the Location Managers.

For the financial year 2013/2014, no asset audit queries were recorded by the Auditor-General as yet.

ASSET MANAGEMENT STRUCTURE



INFORMATION MANAGEMENT UNIT

The Information Management Unit (IMU) consists of four (4) interlinked components, namely Financial Cost Centres, IT Hardware, Patient Statistics and Gatekeeping. The primary function of the IMU is to manage the information and data of the official systems which run through the “veins” of Tygerberg Hospital and to assist with the planning and roll-out of computer hardware and software. The Unit has a systematic approach to operational challenges and has the ability to analyse, interpret, summarise and present complex financial and non-financial information in a manner which is both understandable and properly supported. This enhances decision making, monitoring and planning at managerial levels.

FINANCE

The following IT hardware/software was procured and rolled out to the respective department:

| | | | |
|----|----------|---|-----|
| a) | Computer | – | 349 |
| b) | Monitors | – | 323 |
| c) | Printers | – | 83 |
| d) | Laptops | – | 1 |

The IT hardware/software included projects such as:

- a) Hermes
- b) eCCR
- c) Tech Refresh

The IMU has engagements with all feeder systems: Clinicom, JAC, Syspro and BAS. The reports developed feeds into management committees and meetings: Finance Exco, FFMC, M&E, FBU Exco and NTSG.

Data Avenue can be regarded as the one-stop-shop for Information and Communication Technologies. After the upgrade of the passage, relationships with other role players, namely IT infrastructure, System controllers, Desktop Support and System Developers, have been strengthened. The various components provide support to end users and management in order to perform daily duties and to actively participate in critical decisions respectively.

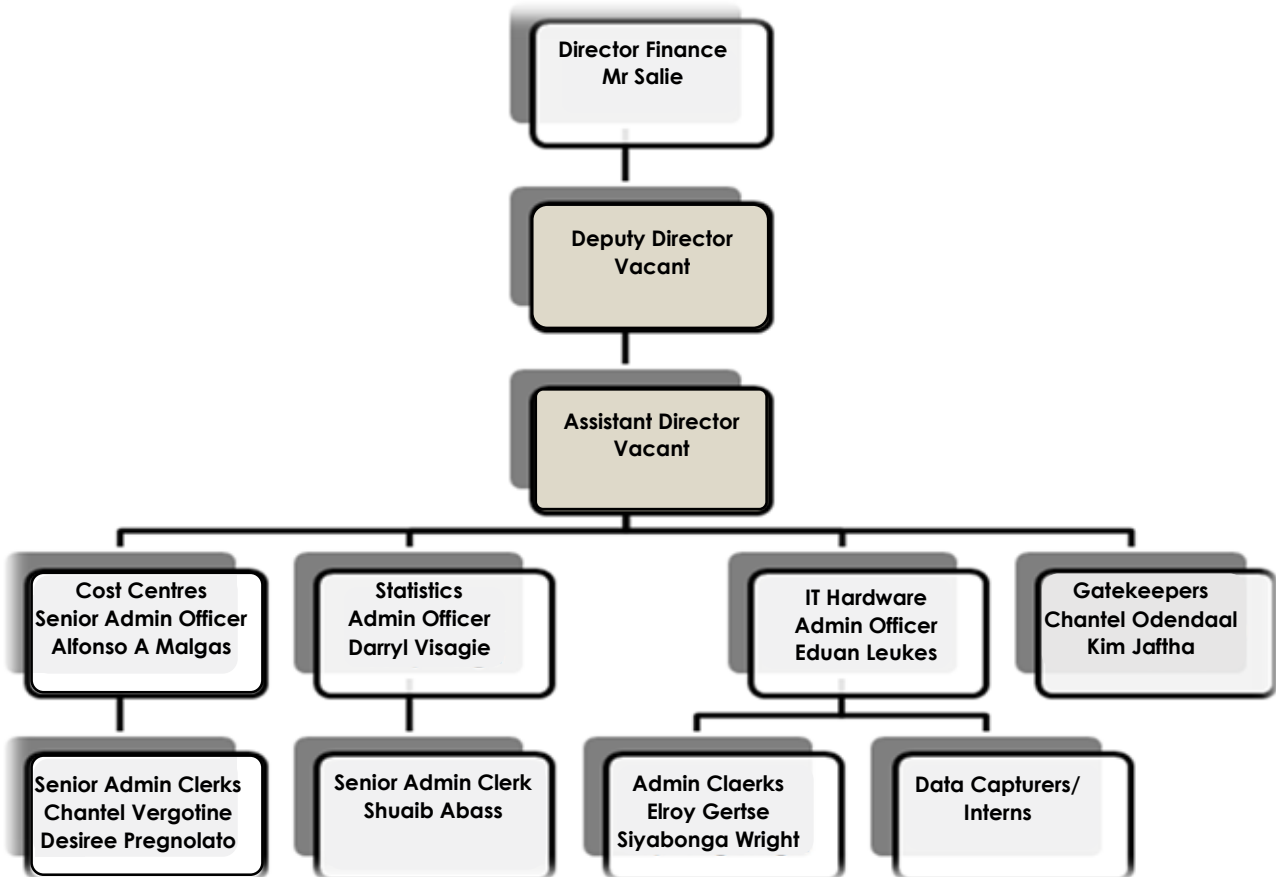
It is evident that the new offices are promoting a good and harmonious working environment and the return on this investment will be seen for years to come.

The Unit's staff complement comprises of 10 members, who are the best assets of the Unit and who are young, dynamic and dedicated in providing a service to Tygerberg Hospital and beyond.

Delegates from other provinces were received to share best practices with Tygerberg Hospital in respect of Cost Centre Management, NHLS internal control systems and Asset Management, as well as Functional Business Units.

FINANCE

STAFFING ESTABLISHMENT OF THE INFORMATION MANAGEMENT UNIT



MEDICAL RECORDS

- **Summary of activities:**
 - Merging of folders statistics
 - Implementation of ECM
- **Resources:**

| Posts (Full-time) | Number | Filled |
|-------------------|-----------|-----------|
| SAC | 53 | 52 |
| Messengers | 6 | 6 |
| Data Captures | 2 | 2 |
| AO | 2 | 2 |
| Total | 63 | 62 |

- **Output:**
 - Implementation of Enterprise Content Management
 - Merging of duplicate folders or patients with multiple folder numbers

FINANCE

COMMENT ON OUTPUT:

- **ECM – Enterprise Content Management**

Work processes within Medical records were overshadowed by the implementation of ECM during the 2013/2014 financial year. ECM is the process of scanning patient information and makes the images available electronically. The following challenges were experienced and remedial action taken:

| | |
|-------------------------------|---|
| Insufficient Hardware | All clinics equipped with relevant hardware by the end of 2013/2014. |
| Repetitive Technical problems | Urgent attention by Datacentrix and IT is provided. However, technical challenges are still experienced on a continuous basis and are hampering the production of the section. |
| Human resources | Due to the lengthy process of prepping and indexing of patient information, the hospital requested 30 interns to assist. This number was never filled and extra strain was placed on medical records staff to produce results. This remains a challenge until the majority of history information of patients is scanned. |
| Tracing of folders | Information Management at Head Office is in the process to develop a tracking system for the episode folders. All episode folders are currently captured on a batching system in Records – Records is thus able to trace the folder once it reaches Records en-route to the scanning centre. |

- **Merging of Folders:**

Total merging of patients folders: 271

- **Teaching and Training (undergraduate-, postgraduate- and elective students):**

| Month | Course | Total |
|-------|--------------------------|-------|
| May | Public Service Induction | 5 |
| July | Client care | 4 |
| Sept | Records management | 1 |
| Oct | Intro to Registry | 10 |

HOSPITAL FEES

- **Summary of activities:**

- Allocation of receipts on BAS & AR
- Clearing of Journals
- Follow-up of outstanding invoices
- Reporting
- Submission of invoices to third parties

FINANCE

- **Resources:**

| Posts (Full-time) | Number | Filled |
|-------------------------------|-----------|-----------|
| Senior Administrative clerks | 38 | 37 |
| Senior Administrative Officer | 1 | 1 |
| Administrative Officers | 3 | 3 |
| Case Manager | 3 | 1 |
| Confirmation Clerk | 2 | 2 |
| Account Controllers | 5 | 3 |
| Registry Clerk | 1 | 1 |
| Total | 53 | 48 |

- **Output:**

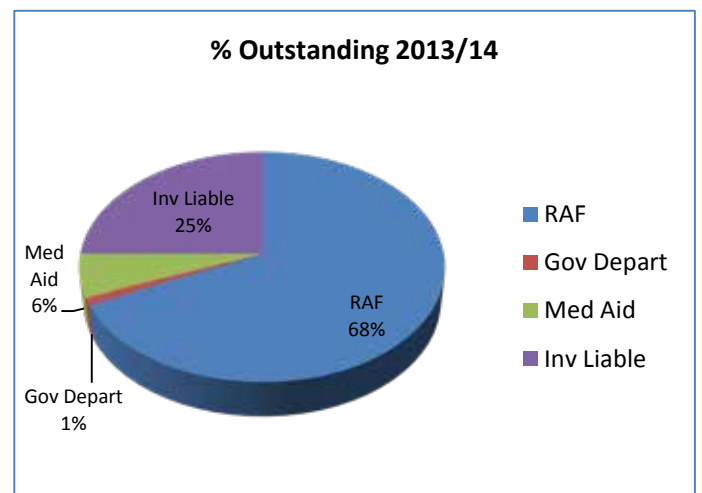
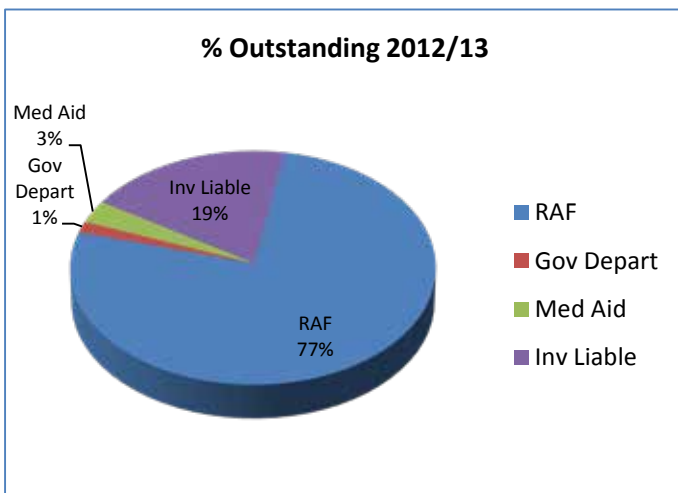
- Outstanding balance
- Government Department debt
- Follow-up of invoices outstanding 90 - 120 days (individually liable)
- Write-off – bad debt
- EDI Challenges and Successes
- Allocation of receipts on BAS and AR
- Reconciliation BAS / AR
- Implementation of the electronic summary and breakdown of Nedbank statements
- Refunds
- Fees Complaints (Patient Advisory Services)
- Utilisation of Interns

- **COMMENT ON OUTPUT:**

OUTSTANDING BALANCES:

31 March 2013: R212 988 791

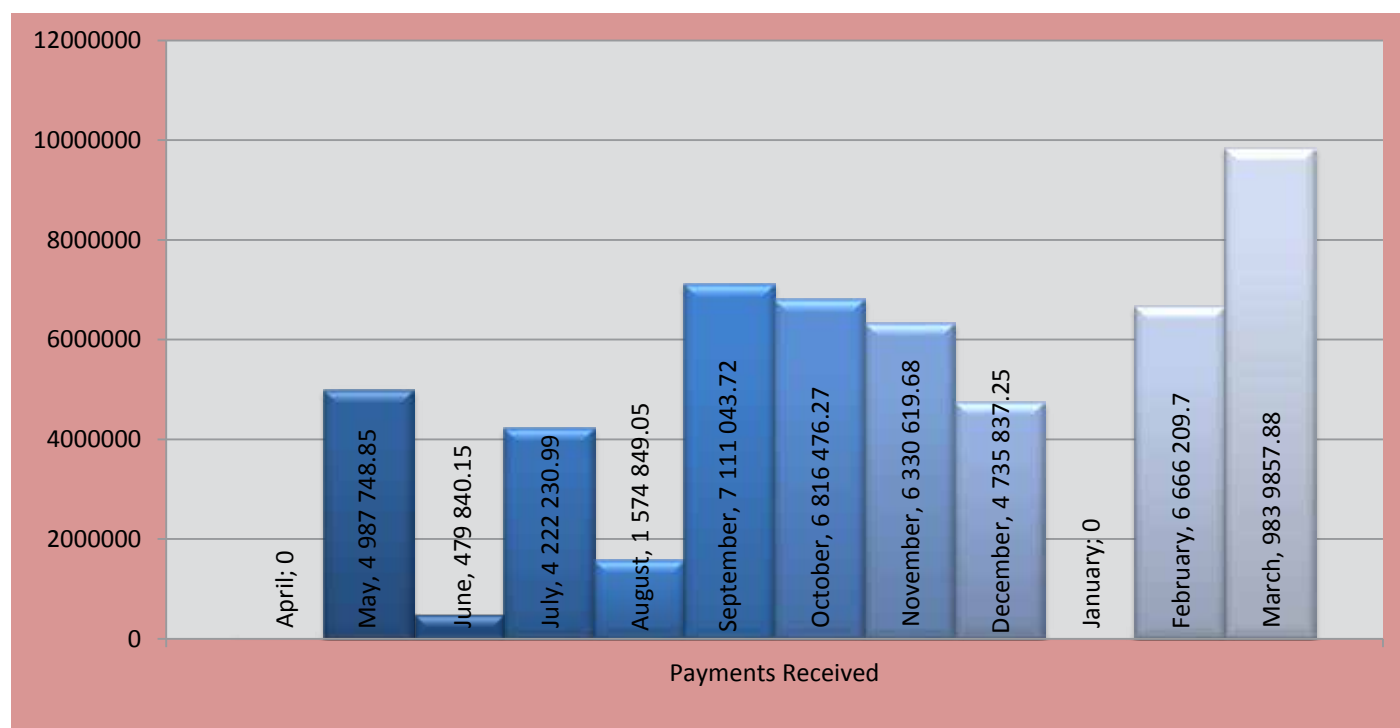
31 March 2014: R185 977 284



Road Accident Fund remains the biggest contributor to the outstanding balance. An amount of R126 225 225 as at 31 March 2014 reflects as outstanding balance on our system. This represents 68% of the total outstanding balance for debtors.

FINANCE

RAF Payments for 1 April 2013 – 31 March 2014



GOVERNMENT DEPARTMENT DEBT: AS AT 31 March 2014

| DEPARTMENT | OUTSTANDING | PAYMENT |
|------------|-------------|-----------|
| SAPS | 1 467 011 | 2 474 413 |
| DCS | 547 795 | 2 137 249 |
| SANDF | 66 513 | 539 214 |
| COIDA | 6 790 788 | 2 484 984 |

- Follow-up of invoices outstanding 90 - 120 days (individually liable):**

A special task team follow up on the unsuccessful RAF claims (MVA) exceeding 60 (sixty) days, as well as the PNMA. A HIS report is requested 90 – 120 days and these are followed up monthly. The C.M.I. report is completed monthly and this ensures effective/intense follow-up of Debit and Credit Balances. The result has a positive impact on the income.

The total for these cases followed up are as follow:

Individually liable (PNMA) Outstanding Cases and Balances

| | April | May | June | July | August | September |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Invoices | 3 625 | 3 921 | 3 479 | 3 746 | 3 379 | 3 260 |
| Amount | R6,444,970.67 | R7,204,903.54 | R6,170,730.79 | R6,879,378.90 | R6,527,610.46 | R6,656,862.08 |

| | October | November | December | January | February | March |
|--|---------------|---------------|---------------|---------------|---------------|----------------|
| | 3 459 | 2 953 | 2 806 | 3 452 | 3 275 | 4 060 |
| | R6,964,087.98 | R6,372,394.64 | R9,799,648.20 | R7,766,618.18 | R7,247,723.41 | R12 946 259.60 |

FINANCE

Unsuccessful Motor vehicle accident (MVA) Outstanding Cases and Balances

| | April | May | June | July | August | September |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Invoices | 76 | 96 | 58 | 147 | 66 | 98 |
| Amount | R274,593.24 | R578,599.03 | R271,714.29 | R377,147.10 | R198,465.85 | R306,988.29 |

| | October | November | December | January | February | March |
|--|------------|---------------|-------------|-------------|-------------|-------------|
| | 61 | 965 | 301 | 57 | 74 | 258 |
| | R14,247.17 | R1,200,023.29 | R491,236.19 | R225,056.39 | R149,998.19 | R643,117.47 |

- **Write-off of outstanding debt:**

Due to financial constraints experienced by debtors and as per financial delegations, financial relief is applied and debt can be written off. Furthermore, outstanding balances of debtors that do not re-act to final demands, telephonic calls and SMSs are written off and handed over to the Department's debt collectors.

As per agreement with the DoH, RAF payments are settled at 90% and the 10% balance per invoice is waived. Approximately R42m RAF prescribed matters were written off in March 2014.

Debt waived for the financial year: R46,9m

- **Electronic Data Interface (EDI) Challenges:**

TBH is the front-runner in the total cases submitted to the Medical Schemes through EDI. We have seen a decrease in the percentage of errors due to many efforts and procedures put in place.

The successful EDI claims increased as follows:

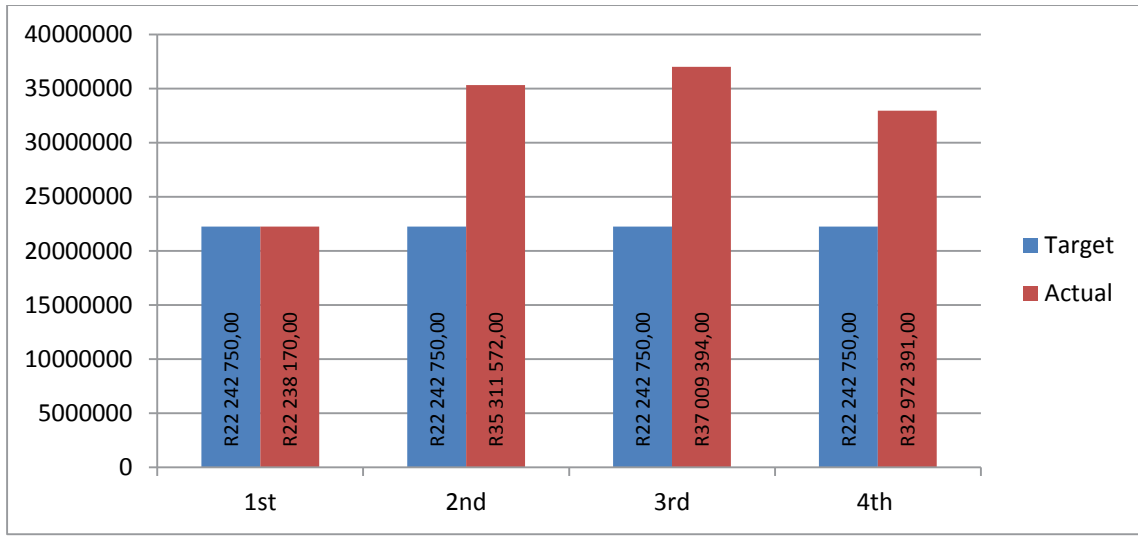
| Year | Inpatients | Outpatients | All cases | Total gross | Average number of days to close | Average cases per month | Average value per month |
|-------------|------------|-------------|-----------|-------------|---------------------------------|-------------------------|-------------------------|
| 2013 | 1 925 | 14 231 | 16 156 | R58 821 265 | 19 | 1 346 | R4 901 772 |
| 2012 | 1 744 | 12 975 | 14 719 | R44 577 125 | 15 | 1 226 | R3 714 760 |
| 2011 | 1 725 | 12 093 | 13 818 | R33 380 041 | 24 | 1 115 | R3 524 911 |
| 2010 | 1 648 | 8 467 | 10 115 | R31 080 347 | 31 | 1 055 | R3 267 654 |
| 2009 | 1 516 | 7 890 | 9 406 | R29 563 617 | 31,92 | 941 | R2 956 352 |
| 2008 | 1 480 | 8 492 | 9 972 | R32 071 093 | 29,38 | 831 | R2 672 591 |

- **Allocation of receipts on BAS and AR:**

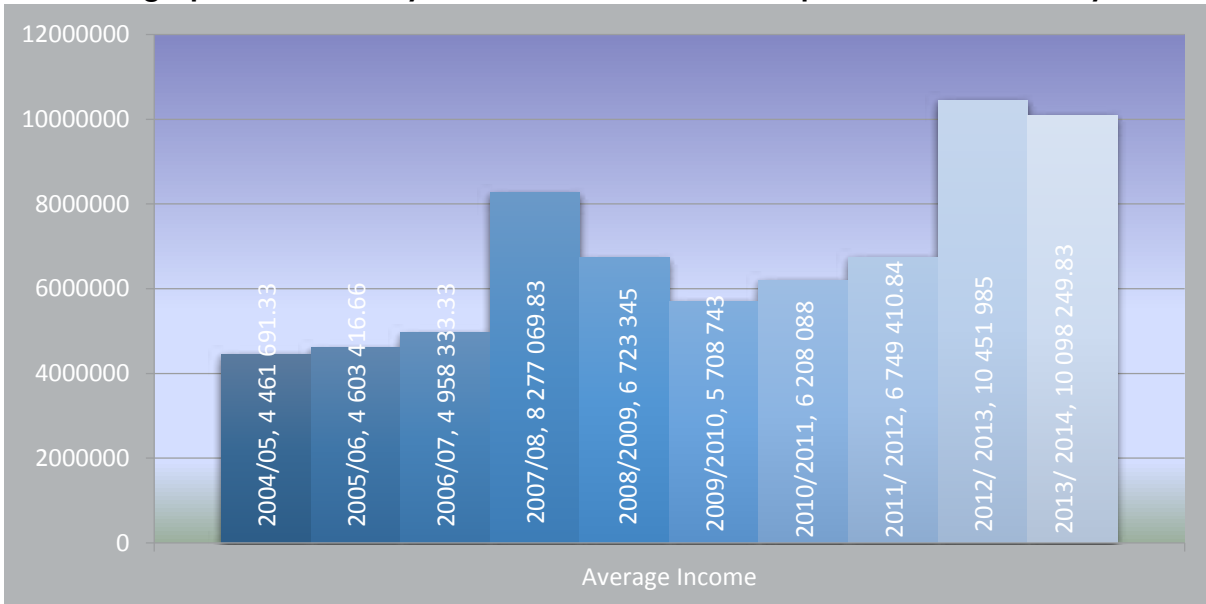
The following amounts were allocated on BAS and the Accounts Receivable system during the financial year:

FINANCE

Actual Income vs. Target Income 2013/2014



See graphic trend analysis of income collection improvement over the years.



- **Reconciliation: BAS/AR:**

Reconciliation between the Basic Accounting System (BAS) and Accounts Receivable System (AR) is an Audit requirement and the central hospitals are annually audited on the BAS/AR reconciliation. The hospital received a clean audit during the previous financial year.

- **Implementation of electronic summary and breakdown of Nedbank statements:**

An electronic summary and breakdown of the Nedbank transactions per statement was implemented on 1 August 2013. Payment transactions are broken down into several predetermined item codes. Payments of the same item codes are programmatically grouped together and

FINANCE

summarised as one entry per item per day. This procedure will enhance the reconciliation process between BAS and AR.

- **Refunds:**

Credit balances on the system are monitored and refunds effected where overpayment is identified. A register ensures that refunds are reported. Total refunds: R480 994.

- **Fees Complaints (Patient Advisory Services):**

Complaints received from the PALS Office are maintained and have to be finalised within 25 days. Many of these complaints are due to dissatisfaction with services, patients experiencing financial difficulties and/ or attitude of staff.

Complaints received and finalised for the year are as follow: 46

- **Utilisation of Interns:**

A total of six Interns (North Link and PAYE) were trained and assisted with the following tasks:

Undelivered post – contact debtors for correct addresses, ID numbers and cell numbers and adjust the system accordingly.

RAF patients – make copies of clinical notes for submission to the RAF via Alexander Forbes.

JAC error list – Identify invoices for medication dispensed from JAC.

Assist with raising and checking of invoices.

- **Teaching and Training (undergraduate-, postgraduate- and elective students):**

| TRAINING STATISTIC: HOSPITAL FEES: 01 January 2013 – 31 December 2013 | | | |
|--|-----------------|------------------------------|------------------------|
| TRAINING | DURATION | TARGET GROUP | NUMBER OF STAFF |
| MS Excel | 3 | Admin Clerks | 2 |
| MS Power Point | 3 | Admin Clerks | 1 |
| Know your rights | 1 | Admin Clerks | 3 |
| Microsoft Office Word | 3 | Admin Clerks | 9 |
| Human Resource Management | 2 | Admin Clerks | 2 |
| Customer Care | 2 | Admin Clerks | 6 |
| Introduction to Office Management | 2 | Admin Clerks | 4 |
| Stress Management | 1 | Admin Clerks | 3 |
| Office Management | 2 | Admin Clerks | 3 |
| Access | 3 | Admin Clerks & Admin Officer | 2 |
| First Aid | 2 | Admin Clerks | 1 |
| Minute Taking | 2 | Admin Clerks | 2 |
| Handling of state money | 2 | Admin Clerks & Admin Officer | 5 |
| Batho Pele | 1 | Admin Clerks | 2 |
| BAS Sundry Payments | 5 | Admin Clerks | 1 |
| BAS Receipting | 1 | Admin Clerks | 1 |

FINANCE

PATIENT ADMINISTRATION

- **Summary of activities:**

Patient Reception Services is responsible for the administrative processes pertaining to the appointment, registration, admission and discharge of in- and outpatients on the Health Information System as per financial prescripts. Additional responsibility is the collection and safekeeping of patient fees and the creating of invoices. The Enterprise Content Management (ECM) system was implemented during the financial year. This revolutionised the process of data management within the health environment and have greatly reduced waiting times associated with the obtaining of patient records.

- **Resources:**

| Posts (Full time) | Total | Filled |
|-------------------------------|------------|------------|
| Senior Administrative Officer | 3 | 2 |
| Administrative Officer | 8 | 8 |
| Senior Administrative Clerk | 219 | 216 |
| Total | 230 | 226 |

- **Outputs:**

- Ensure ICD10 codes are captured on the Clinicom system of all patients.
- Capturing of ID no's on the Clinicom system
- Admissions and discharges of all out patients and inpatients
- Raising of accounts and collection of patient fees

- **Comment on output:**

The outputs achieved for ICD 10 Coding and ID no's.

ICD 10 Coding % for 2013/2014

| Month | IPD | OPD | ID NO'S CAPTURED |
|-----------|-------|-------|------------------|
| April | 93,78 | 95,71 | 63% |
| May | 95,08 | 91,92 | 63% |
| June | 92,54 | 91,87 | 66% |
| July | 94,6 | 93,40 | 67% |
| August | 94,69 | 93,71 | 69% |
| September | 93,3 | 93,56 | 69% |
| October | 91,57 | 94,17 | 70% |
| November | 92,80 | 94,08 | 70% |
| December | 92,37 | 91,57 | 70% |
| January | 93,38 | 93,37 | 68% |
| February | 92,05 | 96,39 | 71% |
| March | 94,07 | 96,22 | 71% |

FINANCE

- **OPD Visits:**

| | |
|---------------|------------------------|
| Annual | Per Day Average |
| 505 424 | 1 384,7 |

Annual Inpatient Days

428 757

- **Collection of Patient Fees - Cashier Collection at receptions: R2,5m.**

- **Teaching and Training (undergraduate-, postgraduate- and elective students):**

| Short Course | Period | No of staff |
|--|---|-------------|
| Comprehensive Package | 11/04/2013 | 4 |
| Orientation | 01/07 - 05/07/2013 | 6 |
| Service Group Linkage | 25/07/2013 | 11 |
| MS Power Point Level 1 | 05/08/2013 + 12/08/2013 | 1 |
| EDI | 08/08/2013 | 4 |
| COID | 13/08/2013 | 1 |
| Absenteeism/ Labour | 06/09/2013 | 21 |
| Cashier Session | 13/09/2013 | |
| Financial Planning/ Management of Will and Testament | 09/10/2013 | 3 |
| Stress and Work Balance | 16/10/2013 | 1 |
| Diversity Management | 11/02/2014 | 6 |
| MS Word | 11/02 + 18/02 + 25/02/2014 | 1 |
| Xhosa for beginners | 11,18,25/02 + 04,11,18,25/03 + 01/04, + 08/04/2014 | 1 |
| Life Skills | 03/02/2014 | 3 |
| Know your Rights | 10/02/2014 | 1 |
| Office Management | 13/02/2014 - 14/02/2015 | 3 |
| Project Management | 17/02/2014 - 21/02/2014 | 4 |
| Batho Pele | 24/02/2014 – 25/02/2014 24/03/2014 – 25/03/2014 November 2013 | 5 |
| Stress Management | 03/03/2014 | 1 |
| Presentation Skills | 12/03/2014 - 13/03/2014 | 3 |
| Public Service Induction | 19/03/2014 - 20/03/2014 August 2013 | 12 |
| MS Excel | 27/11/2013 | 1 |
| Time Management | 26/11/2014 | 2 |
| Conflict Management | | |
| Customer Care | October 2013 | 9 |
| Comprehensive package Clinicom | 09/04/2013 | 6 |

FINANCE

| | | |
|-------------------------|------------------------------------|----|
| First Aid | 08/05/2013 | 1 |
| Clinicom Training | 16/07/2013 - 18/07/2013 April 2013 | 28 |
| UPFS / Chapter 18 | 18/02/2014 - 20/02/2014 | 5 |
| Progressive Discipline | 31/01/2014 | 1 |
| SPMS | 13/03/2013 | 2 |
| Accounts Receivable | April 2013 | 36 |
| ECM SOP training | July 2013 | 34 |
| Clinicom System Changes | April 2013 | 29 |

Way Forward Financial Year 2014/2015

The budget allocation for the financial year 2014/2015:

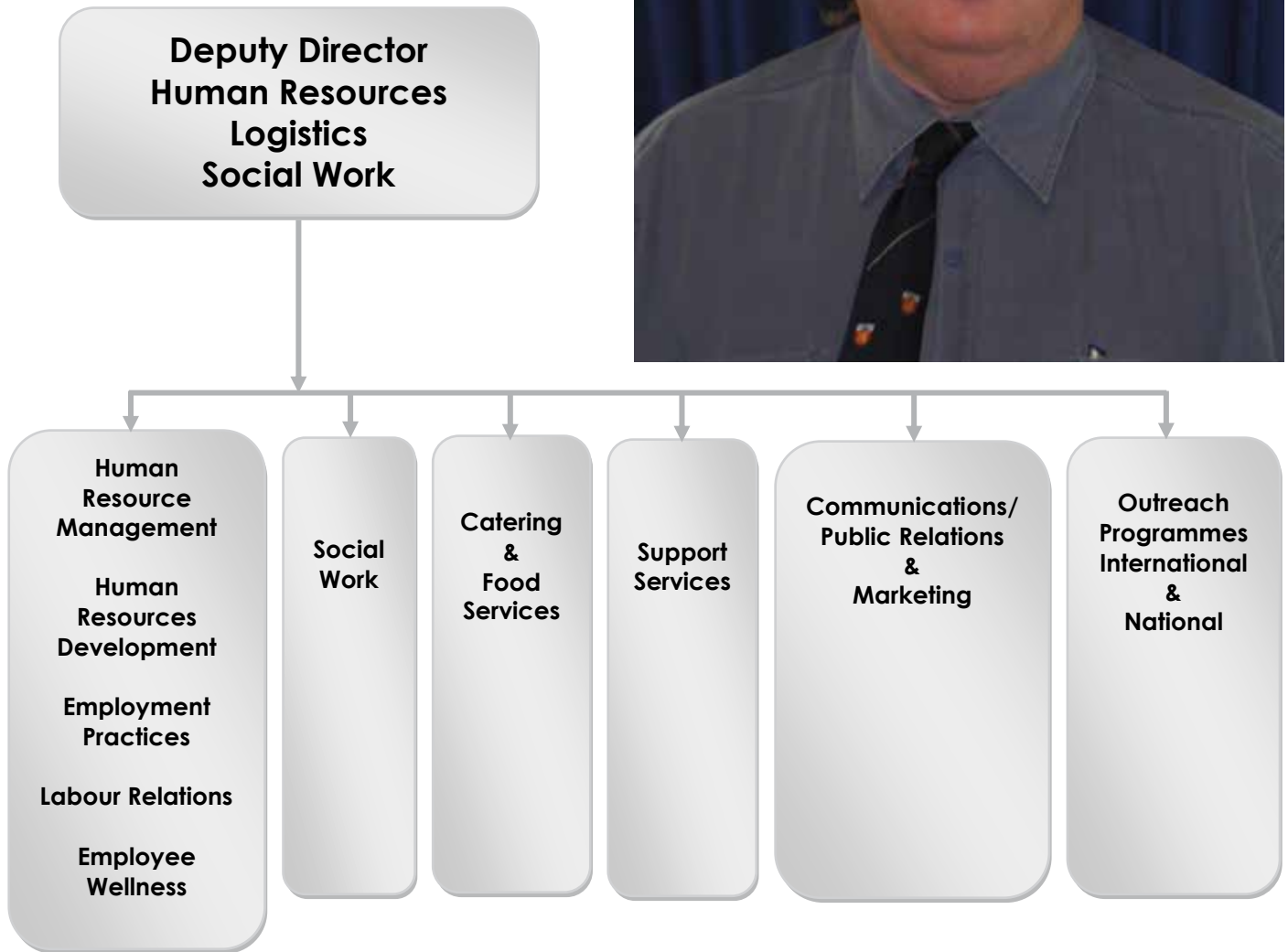
| | R' 000 FY: 2013/2014 | R' 000 FY: 2014/2015 | |
|---------------------------|-------------------------|-------------------------|------|
| Compensation of Employees | 1.455 | 1.587 | 8.3 |
| Goods and Services | 0.573 | 0.638 | 10.2 |
| Transfer Leave | 4.498 | 0.601 | 25.1 |
| Machinery and Equipment | 22.546 | 12.302 | |
| | 2 055.031 | 2 243.370 | 8.4 |

An additional amount of R6.7m was allocated in the budget for hearing interventions, including cochlear implants. Substantial amounts have been set aside in Program 8 Health Technology budget of R35.5m and R1.9m in respect of Revenue Retention funding.

ADMINISTRATION

Administration: Mr P.J. Wolfaardt

The following diagram reflects the areas forming part of the subdirectorate:



Below, a report listing activities and background within the responsibilities of my department.

Human Resource Management Assistant Director: Mr E.C. Steyn

The establishment of Human Resource Management was suitably filled during this quarter.

| Rank | Filled | Vacant | Total |
|----------------------|-----------|----------|-----------|
| Assistant Director | 1 | 0 | 1 |
| Senior Admin Officer | 6 | 0 | 6 |
| Admin. Officer | 5 | 1 | 6 |
| Senior Admin Clerk | 27 | 0 | 27 |
| Total | 39 | 1 | 40 |

ADMINISTRATION

The global personnel statistics turnover of Tygerberg Hospital is listed below:

Tygerberg Hospital

| <i>Nature</i> | <i>Administration</i> | <i>Professionals</i> | <i>Technical</i> | <i>Nursing</i> | <i>General</i> | |
|-----------------------------|-----------------------|----------------------|------------------|----------------|----------------|------------|
| Resignations | 11 | 48 | 6 | 63 | 16 | |
| Dismissals | 0 | 0 | 1 | 3 | 6 | |
| Ill Health | 2 | 0 | 1 | 5 | 1 | |
| Retirement 65 | 1 | 2 | 3 | 2 | 4 | |
| Early Retirement | 3 | 1 | 4 | 14 | 12 | |
| Deceased | 1 | 2 | 1 | 2 | 4 | |
| Transfers out | 17 | 6 | 1 | 17 | 6 | |
| Contract expiry | 10 | 151 | 16 | 32 | 9 | |
| Totals | 45 | 210 | 33 | 138 | 58 | 484 |
| Transfers in / Appointments | 35 | 204 | 34 | 187 | 52 | 512 |
| Difference | -5 | -67 | -12 | -27 | -6 | |

The post position of Tygerberg Hospital is as follows:

| Institution | Filled | Vacant | Session |
|--------------------|---------------|---------------|----------------|
| Tygerberg Hospital | 4484 | 176 | 64 |

Policy and procedure on incapacity leave and ill health retirement in the public service (PILIR)

A statistical overview of the 2013 – 2015 cycle for period 01 January 2013 until 31 December 2013 for Tygerberg Hospital is as follows:

ADMINISTRATION

STATISTICAL ANALYSIS

1. Number of Incapacity Leave and Ill Health Retirement applications

PENDING FOR SUBMISSION to the Health Risk Manager.

| | 2007 – 2009 Sick Leave Cycle | 2010 – 2012 Sick Leave Cycle | 2013 – 2015 Sick Leave Cycle |
|---|---------------------------------|---------------------------------|---------------------------------|
| Short Incapacity | 0 | 0 | 13 |
| Long Incapacity | 0 | 0 | 3 |
| Ill health Retirement (continue submitting to Head Office) | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 16 |

2. Advice from the Health Risk Manager accepted and enforced

| | 2007 – 2009 Sick Leave Cycle | | 2010 – 2012 Sick Leave Cycle | | 2013 – 2015 Sick Leave Cycle | |
|-----------------------|---------------------------------|----------|---------------------------------|----------|---------------------------------|----------|
| | Approved | Declined | Approved | Declined | Approved | Declined |
| Short Incapacity | 0 | 0 | 0 | 0 | 0 | 0 |
| Long Incapacity | 0 | 0 | 0 | 0 | 0 | 0 |
| Ill health Retirement | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

3. Deviations from the Health Risk Manager and grievances received from employees for the month

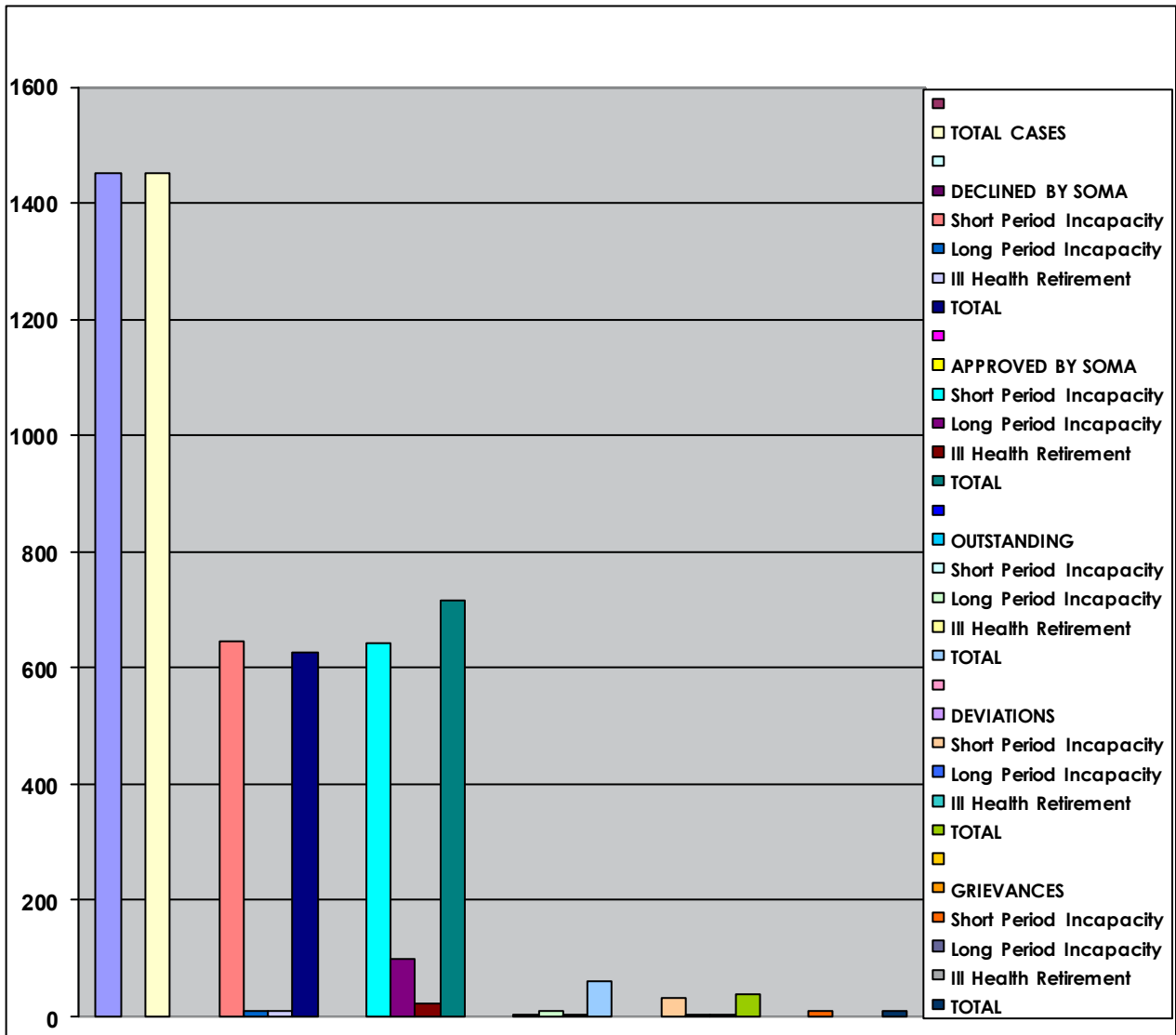
| | DEVIATIONS | | | GRIEVANCES | | |
|-----------------------|------------|----------|----------|------------|----------|----------|
| | 07-09 | 10-12 | 13-15 | 07-09 | 10-12 | 13-15 |
| Short Incapacity | 0 | 0 | 0 | 0 | 0 | 0 |
| Long Incapacity | 0 | 0 | 0 | 0 | 0 | 0 |
| Ill health Retirement | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

ADMINISTRATION

STATISTICS FOR THE 2010 – 2013 CYCLE

| | |
|--|------------|
| 2013 - 2016 | 151 |
| TOTAL CASES | 151 |
| DECLINED BY FORBES | |
| Short Period Incapacity | 1 |
| Long Period Incapacity | 0 |
| Ill Health Retirement | 0 |
| TOTAL | 1 |
| APPROVED BY ALEXANDER FORBES | |
| Short Period Incapacity | 7 |
| Long Period Incapacity | 0 |
| Ill Health Retirement - Approved by Dr Erasmus | 3 |
| TOTAL | 10 |
| OUTSTANDING | |
| Short Period Incapacity | 120 |
| Long Period Incapacity | 18 |
| Ill Health Retirement | 2 |
| TOTAL | 140 |
| DEVIATIONS | |
| Short Period Incapacity | |
| Long Period Incapacity | |
| Ill Health Retirement | |
| TOTAL | |
| GRIEVANCES | |
| Short Period Incapacity | 0 |
| Long Period Incapacity | 0 |
| Ill Health Retirement | 0 |
| TOTAL | 0 |

ADMINISTRATION



HRM: EMPLOYMENT PRACTICES Assistant Director: C Lindsay

Approved Staff Complement

| Rank | Filled | Vacant | Total | Comments |
|-------------------------------|----------|----------|-----------|--|
| Assistant Director | 1 | 0 | 1 | <u>ADDITIONAL POSTS ON ODI</u> |
| Senior Administrative Officer | 3 | 0 | 3 | Admin Officer posts x 2 and Admin Clerk posts x 2 - |
| Administrative Officer | 1 | 0 | 1 | Posts above <u>NOT FUNDED</u> on APL, but |
| Administrative Clerk | 3 | 3 | 6 | created in principle on structure for |
| Total | 7 | 4 | 11 | Employment Practices Component |

Recruitment and Selection

Statistics for the period 1 January 2013 – 31 December 2013:

Total interview meetings 183
Total appointments made 486

ADMINISTRATION

Establishment Control

The Approved Post List (APL) as at 31 December 201 was as follows:

| SubGroup | Cost per post (R'000) | 2013/2014 | SubGroup | Cost per post (R'000) | 2012/2013 |
|-----------------------------|-----------------------|--------------------------|----------------------------|-----------------------|--------------------------|
| | | Approved number of Posts | | | Approved number of Posts |
| Management SL 09-10 | 365 | 17 | Clinical Tech SL G1-3 | 322 | 21 |
| Management SL 11-12 | 619 | 5 | Clinical Tech Man | 452 | 15 |
| Management SMS | 1 050 | 2 | Med Tech/Tech Officer G1-3 | 373 | 12 |
| Medical Clinical Head | 1 672 | 26 | Medical Physicist G1-3 | 665 | 5 |
| Medical Clinical Manager | 1 150 | 0 | Medical Tech Manager | 458 | 1 |
| Medical Interns | 481 | 84 | Orth & Pros SL06-8 | 201 | 0 |
| Medical Non-Clin Man | 1 061 | 6 | Orth & Pros SL09-10 | 437 | 0 |
| Medical Officer Comm Serv | 638 | 0 | Specialist Scientist G1-3 | 596 | 10 |
| Medical Officer Grade 1-3 | 862 | 94 | Admin SL 01-6 | 190 | 505 |
| Medical Specialist Gr 1 - 3 | 1 188 | 91 | Admin SL 07-8 | 272 | 64 |
| Med Sub-Specialist Gr 1 – 3 | 1 356 | 41 | Registry SL 07 | 209 | 1 |
| Pharmacology SL 11-12 | 1 342 | 1 | Secretaries SL 01-7 | 183 | 3 |
| Registrar | 811 | 232 | StoresAdmin SL 02-6 | 161 | 0 |
| Registrar Snr | 1 074 | 15 | Stores Admin SL 07 | 225 | 3 |
| Nurses: Prof Gen | 278 | 382 | System Controller SL08-10 | 298 | 0 |
| Nurses: Prof Gen Comm Serv | 195 | 30 | Artisans SL 05-10 | 250 | 23 |
| Nurses: Prof Spec | 401 | 398 | Eng Technician Management | 494 | 4 |
| Nurses: Staff | 189 | 425 | Handymen SL 03-6 | 148 | 20 |
| Nursing Assistants | 156 | 806 | Indust/Eng Tech Production | 324 | 18 |
| Clinical Tech SL 03-6 | 162 | 4 | Tradesmen SL 01-3 | 115 | 30 |

ADMINISTRATION

| SubGroup | Cost per post (R'000) | 2013/2014 Approved number of Posts | SubGroup | Cost per post (R'000) | 2013/2014 Approved number of Posts |
|-----------------------------|-----------------------|------------------------------------|-------------------------------|-----------------------|------------------------------------|
| Allied Health Comm Serv | 216 | 10 | Social workers Manager | 453 | 4 |
| Clinical Psych Comm Serv | 434 | 0 | Speech Therapy G1-3 | 321 | 9 |
| Clinical Psych Intern | 408 | 5 | Speech Therapy Manager | 418 | 3.63 |
| Clinical Psychologist G1-3 | 621 | 4 | ASOs SL 01-7 | 178 | 4 |
| Dieticians G1-3 | 342 | 15 | Domestic SL 01-6 | 124 | 480 |
| Envir Health Off SL 06-10 | 336 | 0 | Domestic SL 07-8 | 247 | 1 |
| Health Promotor SL 03-7 | 188 | 0 | Domestic SL 09-10 | 329 | 1 |
| Occ & Ther Man/Co-ordinator | 419 | 6 | Drivers SL 02-6 | 144 | 12 |
| Occ Therapy Assistants | 212 | 5 | FoodService SL 01-6 | 127 | 115 |
| Occupational Therapy G1-3 | 297 | 10 | FoodService SL 07-8 | 251 | 7 |
| Optometrist G1-3 | 173 | 1 | FoodService SL 09 | 360 | 1 |
| Oral Hygienist G1-3 | 348 | 0 | General workers SL 01-6 | 130 | 55 |
| Pharmacy Assistants | 191 | 17 | Grounds SL 01-3 | 113 | 4 |
| Pharmacy Comm Serv | 327 | 2 | Librarian SL 02-8 | 224 | 0 |
| Pharmacy G1-3 | 533 | 22.50 | Messengers SL 01-4 | 119 | 21 |
| Pharmacy Intern | 249 | 4 | Operators SL 02-7 | 165 | 88 |
| Physiotherapists Assistants | 201 | 0 | Porters SL 01-4 | 121 | 129 |
| Physiotherapists G1-3 | 293 | 13 | Porters SL 05 | 201 | 0 |
| Physiotherapists Manager | 414 | 6 | Security SL 03-6 | 149 | 27 |
| Radiographers G1-3 | 342 | 88 | Security SL 07-8 | 260 | 1 |
| Radiographers Manager | 426 | 19 | TelephoneExchange SL 02-6 | 172 | 17 |
| Social workers Assistant | 183 | 0 | TelephoneExchange SL 07 | 270 | 1 |
| Social workers G1-4 | 324 | 19 | Typists SL 03-6 | 194 | 43 |
| | | | Grand Total as on 31 DEC 2013 | | 4662.25 |

ADMINISTRATION

Table 1: PERMANENT PERSONNEL: Race / Gender / Disability

| CATEGORIES | | TARGET | CURRENT EE | GAP |
|------------|----------|--------|------------|-------|
| Race | African | 1264 | 918 | 346 |
| | Coloured | 2179 | 2727 | -548 |
| | Indian | 38 | 45 | -7 |
| | White | 775 | 558 | 217 |
| Disability | PWD | | 19 | |
| Gender | Male | 2294 | 902 | 1392 |
| | Female | 1962 | 3346 | -1384 |

Table 1: Permanent Personnel: Race / Gender / Disability

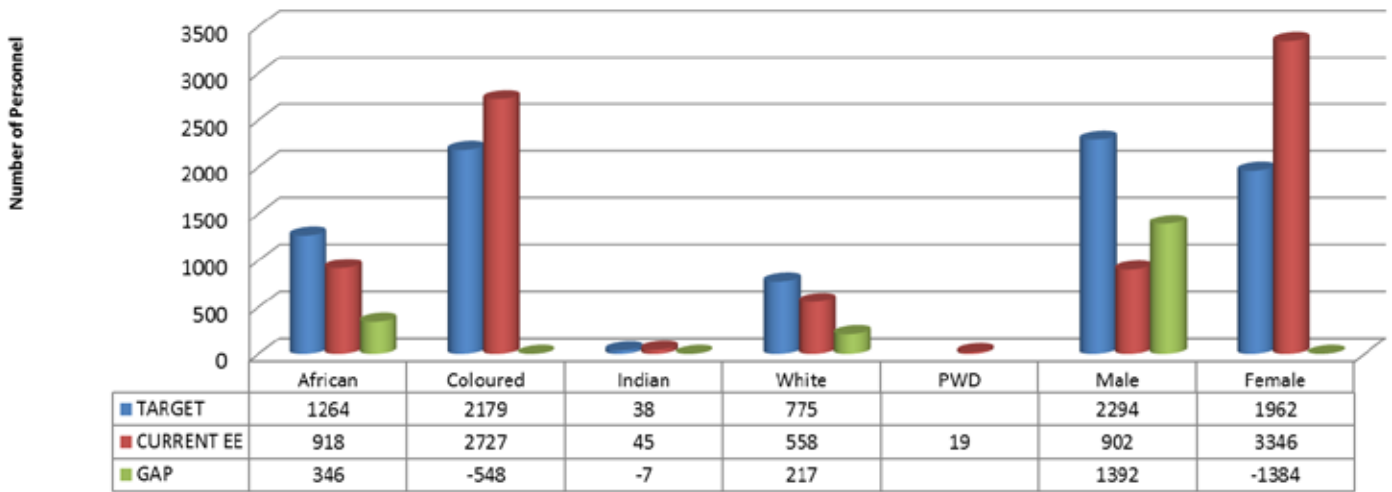
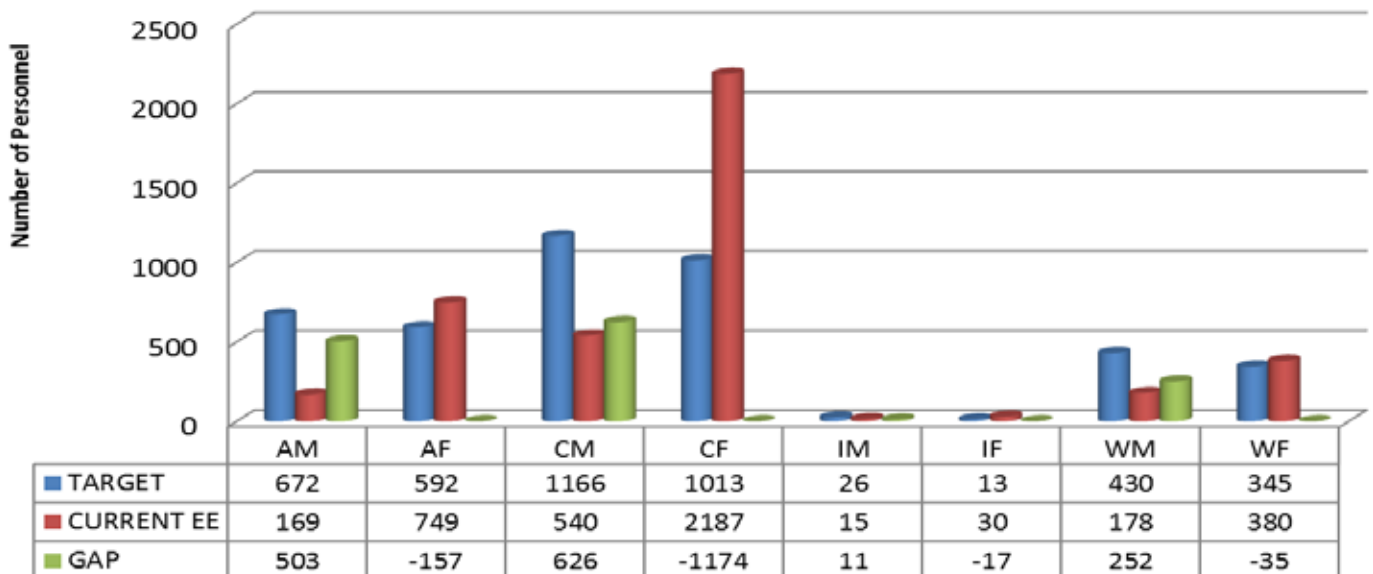


Table 1: Permanent Personnel: Race and Gender



ADMINISTRATION

Staff Performance Management System

The results for the 2012/2013 reporting cycle on 1 April 2013 were as follows:

SUMMARY PER SALARY LEVEL

| Salary level | Performance is Below Fully Effective (0% - 99%) | Number of employees who qualify | Total number of employees in Institution | Percentage employees who qualify |
|--------------|---|---------------------------------|--|----------------------------------|
| Levels 1-2 | 2 | 80 | 392 | 20.41 |
| Levels 3-5 | 4 | 368 | 1704 | 21.60 |
| Levels 6-8 | 1 | 229 | 1121 | 20.43 |
| Levels 9-10 | 1 | 128 | 627 | 20.41 |
| Levels 11-12 | 1 | 73 | 614 | 11.89 |
| Total | 9 | 878 | 4458 | 19.69 |

SUMMARY PER OCCUPATIONAL CLUSTER

| Occupational Clusters | Performance is Below Fully Effective (0% - 99%) | Number of employees who qualify | Total number of employees in Institution | Percentage employees who qualify |
|-----------------------|---|---------------------------------|--|----------------------------------|
| Administration | 2 | 136 | 626 | 21.73 |
| Medical | 1 | 49 | 557 | 8.80 |
| Nursing | 1 | 40 | 1955 | 20.46 |
| OSD and Related | 1 | 81 | 362 | 22.38 |
| Support Services | 4 | 212 | 958 | 22.13 |
| Total | 9 | 878 | 4458 | 19.69 |

REPRESENTIVITY SUMMARY (race, gender and disability)

| Equity | Performance is Below Fully Effective (0% - 99%) | Number of employees who qualify | Total number of employees in Institution | Percentage employees who qualify |
|---------------------------|---|---------------------------------|--|----------------------------------|
| Coloured Male | 2 | 132 | 539 | 24.49 |
| Coloured Female | 3 | 494 | 2 195 | 22,51 |
| White Male | 2 | 36 | 280 | 12,86 |
| White Female | 1 | 87 | 479 | 18,16 |
| African Male | 0 | 31 | 172 | 18,02 |
| African Female | 1 | 86 | 705 | 12,20 |
| Asian Male | 0 | 2 | 50 | 4,00 |
| Asian Female | 0 | 10 | 38 | 26,32 |
| Persons with Disabilities | 0 | | | |
| TOTAL | 9 | 878 | 4458 | 19,69 |

ADMINISTRATION

HUMAN RESOURCES DEVELOPMENT

Ms J Johnson

1. Learnerships

1.1 Diagnostic Radiography

Six learners: First-year students

Three learners: second-year students

Funding: Health and Welfare Seta

1.2 Pharmacy

1.2.1 Post Basic Pharmacist Assistants

Two unemployed (18,2) learners were placed in permanent posts.

Funding: Expanded Public Works Programme (EPWP)

2. Bursaries

2013/14

Thirty-one employees received part-time bursaries with an estimated budget of R638 948,00. These beneficiaries are from the following categories: Nursing, administration support and Professionals. These bursaries are funded by the Directorate: HRD.

2014/15

Forty-five bursaries were approved by Directorate HRD:

| | | |
|---------------------|---|----|
| Administration | – | 16 |
| Support | – | 6 |
| Engineering | – | 6 |
| Health Professional | – | 3 |
| Nursing | – | 14 |

3. Adult Further Education and training (Grade 12)

Forty-two staff members enrolled and registered for exams in May / June 2014

Six out of 16 staff members successfully completed their Grade 12 exams. This was celebrated with the CEO's ball of 2013. The rest is busy completing their remaining subjects.

4. Internship

4.1 Expended Public Works Programme (ECM)

Seventeen Data Capture Interns are on an internship at the institution.

Seven received permanent employment within Health

4.2 Experiential Learners (3, 6 or 18 month) Cape Peninsula University of Technology (CPUT)

Thirty Human Resources Management, Office Management and Financial Management students were offered an opportunity to do experiential training for a period of three or six months. These students got exposure in Personnel and Employment Practices, Labour Relations, HRD and Finance Departments.

Twenty four returned to complete their studies. Three contracts were extended and one permanent employed at Tygerberg Hospital.

Further Education and Training College (FET)

Thirty-nine students require an 18 month in-service internship in order to complete their Diploma / Certificate. These students were placed in the following departments: Patient Admin, Nursing, Social Work, HRD, HRM, Finance, IPC, Physiotherapy, Speech and Hearing, Hospital Fees.

Twenty four are still continuing with their internship, seven received permanent employment (five at Tygerberg Hospital) and eight contracts expired or resigned.

4.3 Premier's Advancement Youth programme

2012/13: Fifteen interns were placed for a year in Patient Admin and Social Work Department.

ADMINISTRATION

Only one of the interns were permanently employed (Tygerberg Hospital).

2013/14: Fourteen interns were placed for a year in various departments

4.4 Generic Interns

2012/13: Sixteen interns received internship placement in the following departments:

Patient Admin, Nursing, Social Work, HRD, HRM, Personnel Offices, Finance, Hospital Fees, Medical Records, IMU, Foodservices and Gynaecology.

Three of the interns received permanent employment within Health (two at Tygerberg Hospital) and a further twelve resigned, further studies or contracts expired.

2013/14: Six interns received internship placement in the following departments:
Nursing, HRM and Gynaecology.

5. Training Skills fund and Provincial Training Institute

The training statistics have shown significant increase. The function is expanding and is embarking on other programmes that are cost-effective, such as information sessions. Training includes in-house coordinated short courses, skills programmes, external and internal workshops, congresses / conferences and training provided by the Provincial Training Institute and Directorate HRD: Head Office.

Total training interventions : 3 274
Total employees trained : 1 784

6. Human Resources Development Committee (HRDC)

The Human Resource Development Policy and the Terms of Reference has been adopted. A decision to call for representatives from all departments to attend the HRDC meetings will be done during 2013.

7. Staff Wellness Programme (EAP)

The hospital continues utilising the services from Internal EAP and ICAS, an independent counseling and advisory provider. The relationship between the internal EAP and ICAS continues to be a viable option.

Over the four quarters of 2013, 83 employees (individual cases) were dealt with. The period between April – December 2012 that a total of 134 cases were handled, indicating a decrease in the utilisation of services. It is recommended that ICAS services be again emphasised by having awareness sessions. Managerial and referral services must also be encouraged.

It is a prevalent trend that most of the cases emanate outside the work context, for example relationship issues which have topped the list of all cases handled from quarter to quarter in 2013. Other issues were stress, child and family care, legal issues, trauma, information and resources and money management. Organised per gender, the data depicts that females, as in the other reporting periods, were more likely to present their problems than males. There was an increase in high risk cases throughout the reporting period. This was however successfully managed. The stats also indicate that staff with more than five year's employment is the bulk users of the services

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A further breakdown of the utilisation is depicted in the table below. Utilisation 2013

| Interventions | Q 1 | Q 2 | Q 3 | Q 4 | Annual Utilisation |
|---|------------|------------|------------|-------------|---------------------------|
| Individual cases (Employees only) | 4 | 5 | 6 | 68 | 83 |
| Individual cases (including defendants) | 57 | 50 | 45 | 77 | 229 |
| Group Interventions | 21 | 5 | 2 | 2 | 30 |
| | 82 | 60 | 53 | 147 | 342 |
| Other interventions | | | | | |
| Managerial referrals | 2 | 2 | | 1 | 5 |
| Managerial cases | 5 | 5 | 6 | 2 | 18 |
| High risk cases | 2 | 2 | | 3 | 7 |
| Targeted interventions | 120 | | | 120 | 240 |
| Advocacy awareness | | 135 | 84 | 2102 | 2 321 |
| Total | 129 | 144 | 90 | 2228 | 2 591 |

8. Challenges

Non-adherence to the processes and procedures such as funding requests, especially by senior staff
 Shortage of senior staff attending training
 Change in Procurement process had a result in training targets not met
 Supervisors not releasing staff to attend training

9. Achievements

Improved attendance and commitment by the HRD Committee members
 An increase in staff attending learning programmes

Successful implementation of the internship programme whereby interns were permanently employed

Training interventions is more focused on key performing areas of staff
 An increase in staff attending the compulsory Public Service induction programme, thus reducing the backlog

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| Training Interventions | Clerks | Craft and Related Workers | Elementary Workers | Plant and Machine Operators | Professionals | Senior Officials and Managers | Service Workers | Technicians |
|--|--------|---------------------------|--------------------|-----------------------------|---------------|-------------------------------|-----------------|-------------|
| 10th International Congress on Complications during Cardiovascular Intervention | | | | | 1 | | | |
| 11th Congress of the World Federation of Societies of Intensive and Critical Care Medicine | | | | | 6 | | | |
| 12th World Congress in Foetal Medicine | | | | | 2 | | | |
| 13th Cape Temporal Bone Course | | | | | 1 | | | |
| 14th Annual National Child Abuse Conference | | | | | 8 | | | |
| 14th Congress of the International Neuro - psychoanalysis Society | | | | | 1 | | | |
| 15th Biennial Congress of the South African Sports Medicine Association Congress | | | | | 1 | | | |
| 15th SA Society Human Genetics Conference | | | | | 2 | | | |
| 16th Biannual International Society of Radiolabeled Blood Elements Conference | | | | | 6 | | | |
| 17th Reach To Recovery Pre - Conference Workshop | | | | | 5 | | | |
| 18th Congress of the European Haematology Association | | | | | 1 | | | |
| 1st National Pharmacy Conference | | | | | 1 | | | |
| 21st International Interdisciplinary Wound Care Course | | | | | 1 | | | |
| 22nd Annual International Paediatric Endo surgery Group Congress | | | | | 1 | | | |
| 22nd Biennial South African Arthroplasty Congress | | | | | 2 | | | |
| 26th Annual Labour Law Conference | | | | | 1 | | | |
| 28th Association of Surgeons of South Africa Biennial Congress | | | | | 1 | | | |
| 28th European Haematology Association Tutorial | | | | | 1 | | | |
| 29th South African Labour Law Reports Annual Seminar | | | | | 1 | | | |
| 2nd Update in Management of Patients with Vestibular Disorders | | | | | 1 | | | |
| 32nd Conference on Priorities in Perinatal Care in Southern Africa | | | | | 2 | | | |
| 3M Critical and Chronic Care Solutions | | | | | 1 | | | 1 |
| 3rd World Congress of Regional Anaesthesia and Pain Therapy | | | | | 1 | | | |
| 44th Annual Congress and Instructional Course (Surgery of the Hand) | | | | | 2 | | | |
| 59th Congress of the South African Orthopaedic Association | | | | | 11 | | | |
| 5th Pan African Burns Society Congress | | | | | 1 | | | |
| 5th World Congress on Women's Mental Health | | | | | 1 | | | |
| 6th World Congress - Paediatric Cardiology & Cardiac Surgery | | | | | 1 | | | |
| 80 Hour infant and young child feeding course | | | | | 1 | | | |
| 80 Hours lactation management training for trainers and professional health care staff | | | | | 1 | | | 1 |
| 8th eLearning Africa Conference | | | | | 1 | | | |
| 8th World Congress of the World Society for Paediatric Infectious Diseases | | | | | 1 | | | |
| 9th AAGL International Congress on Minimally Invasive Surgery | | | | | 6 | | | |
| Abuse of Parents by Teenage Children | 1 | | | | 6 | | | 4 |
| Academic Emergency Medicine | | | | | 1 | | | |
| Account Tab Training | 12 | | | | | | | |

ADMINISTRATION

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|--|---|----|----|---|----|--|---|---|
| Addressing Basic Communication Needs in Hospitals | | | | | 4 | | | |
| Administrative Support: Etiquette and Ethics in the Public Sector | 5 | | | 1 | | | | 5 |
| Adobe Photoshop Level 1 | 1 | | | | 3 | | | |
| Adobe Photoshop Level 2 | | | | | 2 | | | |
| Advance Gynaecological Endoscopy Postgraduate Programme | | | | | 1 | | | |
| Advanced Neonatal Life Support | | | | | 56 | | | |
| Advanced Paediatric Life Support | | | | | 5 | | | |
| Advanced Wheelchair Seating Course | | | | | 2 | | | |
| AFRA Cardiology and Renal Imaging Course | | | | | 1 | | | |
| African Cochrane Indaba | | | | | 1 | | | |
| African League of Associations for Rheumatology Congress | | | | | 1 | | | |
| African Organisation for Research and Training in Cancer | | | | | 1 | | | |
| African Organisation for Research and Training in Cancer | | | | | 1 | | | |
| Afrikaans for Beginners | 6 | | 11 | | 3 | | 1 | 9 |
| American Orthopaedic Society for Sports Medicine | | | | | 1 | | | |
| Ampath Oncology Institute International Cancer Conference | | | | | 1 | | | |
| Annual Colonoscopy Outreach Surveillance Trip | | | | | 3 | | | |
| Annual Medical Education Partnership Symposium | | | | | 1 | | | |
| Annual Operation Planning Workshop | 1 | | | | | | 1 | |
| Annual Sages Congress | | | | | 1 | | | |
| Anterior Cruciate Ligament Management in the Sport population | | | | | 2 | | | |
| Antiretroviral Chronic Clubs Learning Sessions | 1 | | | | | | | |
| AO Spine Master Symposium - Cervical Spine | | | | | 1 | | | |
| Arthritis | | | | | 1 | | | |
| ARV Chronic Clubs - Learning Sessions | 1 | | | | 1 | | | |
| Assessor Training | | | | | 5 | | | |
| Asset and Inventory Management Workshop | | | | | | | | 1 |
| Association for Dietician in South Africa: Cancer Update and Nutrigenomics | | | | | 1 | | | |
| Auto Clave Training Course | | 13 | 4 | | | | | |
| Average LOS/LOC Guidelines | | | | | 3 | | | |
| BAS Journals | 1 | | | | | | | |
| BAS Reports | 1 | | | | | | | |
| BAS Sundry Payments | 2 | | | | | | | |
| Basic and Intermediate ABR Workshop | | | | | 2 | | | |
| Basic ICU Course | | | | | 1 | | | |
| Basic ICU Course | | | | | 1 | | | |
| Basic Life Support | | | | | 14 | | | |
| Basic Life Support | | | | | 40 | | | |
| Basic Mechanical Ventilation | | | | | 1 | | | |
| Basic Support and Assessment in Intensive Care | | | | | 1 | | | |
| Basic Surgical Skills Course | | | | | 7 | | | |
| Basic to Advanced Splinting Workshop | | | | | 1 | | | |

ADMINISTRATION

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|---|----|---|----|---|----|---|----|----|
| Batho Pele | 9 | | 3 | | | | | 5 |
| Best Care Always | | | | | 12 | | | |
| Bioethics Seminar | | | | | 5 | | | |
| Bioethics: Resolving Ethical Dilemmas | | | | | 2 | | | |
| Biology Psychiatry Congress | | | | | 1 | | | |
| Bipolar Disorder | | | | | 1 | | | |
| Breast Cancer Awareness workshop | | | | | 2 | | | |
| Breast Cancer Conference | | | | | 5 | | | |
| Breast Care | | | | | 1 | | | |
| Building Children's Nursing | | | | | 4 | | | |
| Burn Congress | | | | | 1 | | | |
| Bursary Information Management System | 1 | | | | | | | |
| CAESA/SAFHe Biennial Conference | | | | | | | | 1 |
| Cardiac resuscitation and syncope | | | | | 3 | | | |
| Cashier Stats Information Session | 31 | | | | | | | 2 |
| Cashier Training | 4 | | | | | | | |
| Centre for Diabetes and Endocrinology | | | | | 1 | | | |
| Cervical Cytology Update | | | | | 1 | | | |
| Child and Adolescent Psych diagnostics | | | | | 1 | | | |
| Childhood Diarrhoea Seasonal Deaths | | | | | 1 | | | |
| Children As Research Participants: Legal and Ethical Complexities | | | | | 1 | | | |
| Clinical Applications of Neuropsychanalysis | | | | | 1 | | | |
| Clinical Course | | | | | 1 | | | |
| Clinical Governance | | | | | 1 | | | |
| Clinical Management of HIV and TB in Pregnancy | | | | | 1 | | | |
| Clinical Workshop | | | | | 2 | | | |
| Clinicom Training | 19 | | | | | | | |
| Cognitive Behaviour Therapy for Social Phobia | | | | | 1 | | | |
| Complete Decongestive Therapy Course | | | | | 2 | | | |
| CompTIA A+ | 2 | | | | | | | 2 |
| Compulsory Induction Programme Train of Trainers | | | | | 1 | | | |
| Conference on Malignancies in AIDS | | | | | 1 | | | |
| Conflict Management | 18 | 1 | 8 | 2 | 28 | | 17 | 23 |
| Continuing Medical Training Medical Conference | | | | | | 1 | | |
| Continuing Nutrition Education | | | | | 3 | | | |
| Controversial Classics | | | | | 2 | | | |
| Creating a Respectful Workplace | 14 | | 3 | 1 | 1 | | | 1 |
| CSSD Conference | | | | | 2 | | | |
| Customer Care | 17 | | 23 | 1 | 13 | | 17 | 45 |
| Decontamination and Sterilisation Intermediate (CSSD) Course | | | | 2 | | | | |
| DIR Model and Floor time Principles Introduction | | | | | 1 | | | |
| Discovering Developmental Delay | | | | | 1 | | | |

ADMINISTRATION

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|---|-----|---|----|---|----|---|----|----|
| Diversity Management | 4 | | | | 8 | | | 2 |
| Drager Neonatal Workshops | | | | | 5 | | | 2 |
| Dual Diagnosis Training Programme Workshop | | | | | 1 | | | |
| Echocardiography | | | | | 1 | | | |
| ECZEMA | | | | | 3 | | | 1 |
| Emergency Medicine Society of South Africa Conference | | | | | 1 | | | |
| Emergency Services and Orthopaedic Workshop | | | | | 1 | | | |
| English for Beginners | | | 6 | 1 | | | | 2 |
| Enterprise Content Management (ECM) Essentials | 102 | | | | 93 | | | 36 |
| Enterprise Content Management SOP training | 25 | | | | | | | |
| Epidemiology and Population Health | | | | | 1 | | | |
| Ethical principles in neuromusculoskeletal conditions | | | | | 5 | | | |
| Ethics in Medical Research | | | | | 2 | | | |
| Ethics Workshop | | | | | 2 | | | |
| European Dialysis and Transplant Nurses Association/ERCA International Conference | | | | | 1 | | | |
| European Respiratory Society Annual Congress | | | | | 1 | | | |
| Events Management | 2 | | | | | | | |
| Facilitation Skills | 3 | | | | 6 | | | 1 |
| Family Violence and Abuse | | | 4 | | 5 | | 2 | 4 |
| Federation of Infectious Diseases Society of Southern African | | | | | 3 | | | |
| Foetal alcohol syndrome in SA | | | | | 1 | | | |
| FH/GAP MASAC Symposium | | | | | 1 | | | |
| Finance for Non-Financial Managers | | | | | 2 | | | |
| Financial Planning / Management of Wills and Estate | 9 | | 7 | | 7 | | 2 | 4 |
| Fire Fighting | | 3 | 3 | 1 | 2 | | | |
| First Aid Level 1 | 9 | 5 | 26 | 9 | 11 | | 15 | 23 |
| First Aid Level 2 | 1 | 1 | 1 | | | | 2 | 2 |
| First Aid Level 3 | 1 | 1 | | | | | | 2 |
| Focus Assessed Transthoracic Echocardiography | | | | | 1 | | | |
| Focus on Post-Partum Incontinence | | | | | 1 | | | 2 |
| Folder Management Workshop | | | | 1 | | | | |
| Fundamentals of Epidemiology | | | | | 1 | | | |
| Fundamentals of Epidemiology | | | | | 1 | | | |
| Grievances and Absenteeism | 27 | | 7 | | 11 | | | 10 |
| Group Dynamics | 1 | | 5 | | 1 | | 3 | 1 |
| Health Care Lean Management | | | | | | 2 | | |
| Health Care Risk Management of Waste | | | 1 | | | | | |
| Health Leadership Programme | | | | | 2 | | | |
| Hearing loss | | | | | 2 | | | |
| Here Be Lungs Congress | | | | | 1 | | | |
| HIV Training | | | | | 9 | | | 16 |
| Holistic Management of Infants and Children with Down's Syndrome | | | | | 2 | | | |

ADMINISTRATION

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|--|----|---|----|---|----|--|---|---|
| Hospital Acquired Infections and Infectious Diseases | | | | | 5 | | | |
| Human Resource Management | 12 | | 1 | | 5 | | | 1 |
| ICD-10 Changes in 2013 MIT Information Sessions | 4 | | | | 3 | | | 5 |
| Identify and Support an Employee in Crises | 3 | | | | | | | 3 |
| Image Guided Radiotherapy and Chemotherapy in Gynaecological Cancer | | | | | 2 | | | |
| Implementation of e-Learning Platforms for Nuclear Education and Training | | | | | 1 | | | |
| InDesign Level 1 | 1 | | | | | | | |
| InDesign Level 2 | 1 | | | | | | | |
| Induction for Clerks | 22 | | | | | | | 3 |
| Induction Programme | | | 1 | | 8 | | | 5 |
| Infection Prevention and Control - Link Nurse Training | | | | | 43 | | | |
| Information Technology Tradeshow Seminar | 3 | | | | | | | |
| Inorganic and Nanostructured Photovoltaic Symposium | | | | | 1 | | | |
| Intensity - Modulated Radiation Therapy Contouring and Planning | | | | | 2 | | | |
| Intermediate Wheelchair and Seating Course | | | | | 3 | | | |
| Intern Induction | 36 | | | | | | | |
| Internal Communication | 1 | | | | | | | |
| International Agency for Research on Cancer, Regional Hub | | | | | 1 | | | |
| International Atomic Energy Agency- Fellowship | | | | | 1 | | | |
| International Cancer Control Congress | | | | | 8 | | | |
| International Conference of the American Thoracic Society | | | | | 1 | | | |
| International Congress of Paediatrics | | | | | 1 | | | |
| International Critical Care Congress | | | | | 1 | | | |
| International Society of Nephrology World Congress | | | | | 1 | | | |
| International Urogynaecological Association Regional Symposium | | | | | 1 | | | |
| Intersarsity Research | | | | | 1 | | | |
| Introduction to BAS | 3 | | | | | | | |
| Introduction to Bas | 2 | | | | | | | |
| Introduction to Junior Management | 9 | 2 | 3 | 2 | 16 | | 9 | 4 |
| Introduction to Obstetric Ultrasound Competence | | | | | 1 | | | |
| Introduction to Office Management | 3 | | | | 1 | | | 1 |
| Introduction to the Assessment and Treatment of children with Cerebral Palsy | | | | | 1 | | | |
| Introductory Course for Master's Programme | | | | | 1 | | | |
| IPOKRATES Clinical Seminar | | | | | 6 | | | |
| IsiXhosa for Beginners | 9 | | 5 | | 8 | | 4 | 8 |
| Ithemba le Afrika Congress | | | | | 6 | | | |
| IUGA Regional Symposium | | | | | 2 | | | |
| Journal Club of Transplant Coordinators | | | | | 1 | | | |
| Junior Management Development Programme Block 1 | 6 | | | | 3 | | | 5 |
| Junior Management Development Programme Block 2 | 2 | | | | 1 | | | 3 |
| Kinesiotaping Workshop | | | | | 1 | | | |
| Kitchen Cleaner | | | 39 | | | | | |

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|--|----|---|----|---|----|--|---|----|
| Know Your Rights | 2 | | 5 | | 18 | | 1 | 12 |
| Know Your Rights and Responsibilities | 1 | | 1 | | | | 5 | 4 |
| Labour Relations Aspects and Code of Conduct | | | | | 9 | | 1 | 16 |
| Leadership and Management Annual Workshop | | | | | 4 | | | |
| Leadership for Change | | | | | 1 | | | |
| Lean Management | | | | | 1 | | | |
| Learner Licence | 13 | | | | | | | |
| Life Skills | 27 | | 12 | 2 | 1 | | 2 | 17 |
| Lilly Conversation Map (Diabetes education tool) | | | | | 2 | | | |
| Lower limb ultrasound guided regional Workshop | | | | | 1 | | | |
| Lumbar spine assessment and management | | | | | 2 | | | |
| Making National Development Plan Work: From Design to Delivery | | | | | 1 | | | |
| Management of Viral Haemorrhagic Fever | | | | | 14 | | | |
| Managing Absence in the Workplace | 2 | | 1 | 1 | 25 | | 8 | 4 |
| Managing Incapacity and Poor Work Performance | | | | | 11 | | | 1 |
| Managing Leave | | | | | 2 | | | |
| Managing Substance Additions | 5 | | 3 | | | | 1 | 3 |
| Master Insertion Workshop | | | | | 1 | | | |
| Maternity Care Guidelines Review | | | | | 1 | | | |
| Mechanical ventilation | | | | | 3 | | | |
| Medical Congress | | | | | 1 | | | |
| Medical Genetics | | | | | 2 | | | |
| Mentoring and Coaching Training | | | | | 1 | | | |
| Merck Serono Oncology Symposium | | | | | 1 | | | |
| Microsoft Access 2010 Level 1 | 6 | | | | 1 | | | 3 |
| Microsoft Access 2010 Level 2 | 6 | | | | 1 | | | 3 |
| Microsoft Access 2010 Level 3 | 6 | | | | 1 | | | 3 |
| Microsoft Excel 2007 Level 1 | 31 | 1 | | | 20 | | | 3 |
| Microsoft Excel 2007 Level 2 | 30 | 1 | | | 20 | | | 3 |
| Microsoft Excel 2007 Level 3 | 28 | | | | 19 | | | 3 |
| Microsoft PowerPoint 2007 Level 1 | 13 | 1 | | | 8 | | | 1 |
| Microsoft PowerPoint 2007 Level 2 | 6 | 1 | | | 3 | | | 1 |
| Microsoft Word 2007 Level 1 | 11 | 1 | 1 | 2 | 29 | | | 8 |
| Microsoft Word 2007 Level 2 | 12 | | | 2 | 27 | | | 6 |
| Microsoft Word 2007 Level 3 | 8 | 1 | | 2 | 6 | | | 5 |
| Midwifery Seminar | | | | | 3 | | | |
| Minute Taking and Report Writing | 8 | | 1 | | 2 | | | 1 |
| Mirror Therapy Workshop | | | | | 2 | | | |
| MMED Research Methodology for Registrars: 1 | | | | | 1 | | | |
| MMED Research Methodology for Registrars: 2 | | | | | 1 | | | |
| Moms Training | | | | | 2 | | | |
| MS Excel Advanced 2007 | 7 | | 2 | | 7 | | | |

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|--|---|---|---|---|----|--|---|---|
| MS Excel Basic 2007 | 9 | | 3 | | 8 | | | |
| MS Excel Intermediate 2007 | 8 | | 3 | | 8 | | | |
| MS Office Basic for Interns Level 1 | 6 | | | | | | | |
| MS Office Basic for Interns Level 2 | 6 | | | | | | | |
| MS Word Advanced 2007 | 1 | | 3 | | 5 | | | 2 |
| MS Word Basic 2007 | 1 | | 3 | | 5 | | | 2 |
| MS Word Intermediate 2007 | 1 | | 3 | | 5 | | | 2 |
| National Pain Course - Elective Module | | | | | 1 | | | |
| National Pain Course - Module 3: Pain Interventions | | | | | 1 | | | |
| National Science Foundation Surgical Subgroup | | | | | 1 | | | |
| National Training Workshop | | | | | 8 | | | |
| National Workshop: National Committee on Confidential Enquiries into Maternal Deaths | | | | | 1 | | | |
| Neonatal Cardio - pulmonary Resuscitation | | | | | 4 | | | 1 |
| Neonatal Nursing Association of Southern Africa | | | | | 2 | | | |
| Neurodevelopment a Autism | | | | | 1 | | | |
| Neurology a Vascular Surgery cases | | | | | 1 | | | |
| New Prevention of Mother to Child Transmission guidelines | | | | | 2 | | | |
| Novo Nordisk Symposium | | | | | 1 | | | |
| Nursing Education Association Workshop | | | | | 2 | | | |
| Nursing Education Forum Workshop | | | | | 1 | | | |
| Nursing Information Management System (NIMS) | 1 | | | | 7 | | | |
| Observing Arthroplasty Techniques | | | | | 1 | | | |
| Obstetrics and Gynaecology Update | | | | | 4 | | | |
| Occupational Health and Safety | | 4 | 6 | 1 | 4 | | 3 | 4 |
| ODNS Dry Needling Course | | | | | 1 | | | |
| Office Management | 8 | | 2 | | 1 | | | |
| Orientation in Finance | 4 | | | | | | | |
| Paediatric Academic Societies | | | | | 1 | | | |
| Paediatric Hearing Conference | | | | | 4 | | | |
| Paediatric lectures: Asthma - Ethics discussions | | | | | 1 | | | |
| Paediatric lectures: Genetic testing and Trisomy 18 | | | | | 1 | | | |
| Paediatric lectures: Metabolic Disorders; High Altitude and Hypoxia; GER Disease | | | | | 1 | | | |
| Paediatric Life Support | | | | | 2 | | | |
| Paediatric Refresher Course | | | | | 1 | | | |
| Paediatric Respiratory Disease and Physiotherapy | | | | | 2 | | | |
| Paediatrics Refresher Course | | | | | 1 | | | |
| Pain Management Programme | | | | | 11 | | | 3 |
| Palliative Care | | | | | 2 | | | |
| Pathology Forum: Medical Ethics and Law | | | | | 1 | | | |
| Patient Turning | | | | | 3 | | | 2 |
| Performance Management training | | | | 5 | 13 | | 1 | 2 |
| Performance Management: Policy, Reviews, Measures and Appraisals | | | | | 10 | | | |

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|---|---|---|----|---|----|---|----|
| Persal Introduction | 5 | | | | | | |
| Persal Introduction | 2 | | | | | | |
| Persal Leave Administration | 1 | | | | | | |
| Persal Personnel Administration | 4 | | | | | | |
| Persal Salary Administration | 2 | | | | | | |
| Persal Service Terminations | 1 | | | | | | |
| Persal Service Terminations | 1 | | | | | | |
| Personal Finance Planning | 9 | | 1 | | 1 | | 1 |
| Pfizer Nutrition Expert Symposium | | | | | 3 | | |
| Pharmacotherapy Update | | | | | 1 | | |
| Planning of World Centre of Career and Professional Development | | | | | 1 | | |
| Post-Partum Haemorrhage | | | | | 1 | | |
| Postgraduate Supervision Course | | | | | 2 | | |
| Pre-Retirement Planning | 4 | | 2 | | 2 | | 2 |
| Presentation Skills | 1 | | | | 26 | | 8 |
| Prevention and Control of Cancer | | | | | 1 | | |
| Priorities in Perinatal Care | | | | | 1 | | |
| Pro-prioception and Neuromuscular Control | | | | | 1 | | |
| Problem Solving and Decision Making | 4 | | 1 | | 4 | | 4 |
| Progressive Discipline for Supervisors and Managers | | | 1 | | 5 | | |
| Progressive Discipline Training | 1 | | 1 | | 42 | 7 | 4 |
| Project Management | 3 | 8 | 1 | | 6 | | 2 |
| Prontak/Predac 2013 | | | | | 4 | | |
| Provincial Dual Diagnosis | | | | | 1 | | |
| PSETA Capacity Building | | | | | 1 | | |
| PSETA Initial Accreditation Capacity Building Workshop | | | | | 1 | | 1 |
| PTI/PSETA Workshop | | | | | 1 | | |
| Public Service Induction Programme Level 1 - 5 | 8 | 1 | 30 | 1 | 3 | | 64 |
| Public Service Induction Programme Level 6 - 12 | | | 1 | | 62 | 1 | 2 |
| Quality Council for Trades and Occupations Workshop | | | | | 1 | | |
| Quality Improvement Summit - HASA Conference | | | | | 1 | | |
| Radiographic Workshop | | | | | 1 | | |
| Radiological Society of South Africa Cone CT Workshop | | | | | 1 | | |
| Radiology Investigations and case discussions | | | | | 1 | | |
| Radiology Refresher Course | | | | | 4 | | |
| Registrar Congress | | | | | 4 | | |
| Rehabilitation Conference | | | | | 1 | | |
| Rehabilitation Research Conference | | | | | 1 | | |
| Restoring Breastfeeding | | | | | 5 | | |
| Risk Assessment Task Team | | | | | 1 | | |
| Roche Investigators meeting for Protocol NV25719 | | | | | 2 | | |
| RSSA/ NASCI Cardiac CT Angiography Block 1 | | | | | 1 | | |

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|--|---|--|---|--|----|--|---|----|
| RSSA/ NASCI Cardiac CT Angiography Block 2 | | | | | 1 | | | |
| RSSA/ICIS Cancer Imaging Course | | | | | 11 | | | |
| SA Gastroenterology Society | | | | | 1 | | | 1 |
| SA Haemophilia Nurses Committee | | | | | 2 | | | 1 |
| SA Masters Fractures Forum | | | | | 1 | | | |
| SA Menopause Society | | | | | 2 | | | |
| SA Neurological Rehabilitation Association Conference | | | | | 4 | | | |
| SA Orthopaedic Association | | | | | 1 | | | |
| SA Regulating to Foodstuff for Infants and Young Children | | | | | 1 | | | |
| SA Society for Ultrasound in Obstetrics and Gynaecology Conference | | | | | 2 | | | |
| SA Society of Anaesthesiologist Congress | | | | | 16 | | | |
| SA Society of Clinical and Radiation Oncology and SA Society of Medical Oncology | | | | | 6 | | | |
| SA Speech Language Hearing Association | | | | | 1 | | | |
| SA Spine Society Congress | | | | | 1 | | | |
| SASA Symposium | | | | | 1 | | | |
| Security Grade C | | | | | | | | 4 |
| Security Grade D | | | | | | | | 4 |
| Security Grade E | | | | | | | | 4 |
| Seminar on Reprocessing of Endoscopes | | | | | 1 | | | |
| Sensitive Midwifery Workshop | | | | | 1 | | | |
| Sexual Harassment | | | | | 5 | | | 10 |
| Short Course in Undergraduate Clinical Supervision | | | | | 1 | | | |
| Sinjani Basic Course | 1 | | | | | | | |
| SIOP Renal Tumour Study | | | | | 1 | | | |
| Society of American Gastrointestinal and Endoscopic Surgeons Annual Congress | | | | | 1 | | | |
| Society of Radiographers of South Africa RSSA Imaging congress | | | | | 6 | | | |
| Staff Performance Management System | 4 | | 6 | | 78 | | 9 | 32 |
| Stoma Care Update | | | | | | | | 1 |
| Strategic Leadership, Management and Planning | | | | | 25 | | | 1 |
| Strengthening a Research Culture WC NEA Chapter Workshop | | | | | 1 | | | |
| Stress and Work life Balance | 2 | | 7 | | 9 | | 1 | 6 |
| Stress Management | 3 | | | | 14 | | 2 | 14 |
| Subgroup: Obstetric and Neonatology | | | | | 1 | | | |
| SUN Echo 2013 | | | | | 3 | | | |
| Supervisors Workshop for Social Workers | | | | | 2 | | | |
| Target Volume Determination - From imaging to Margins | | | | | 1 | | | |
| Taylor Spatial Frame | | | | | 4 | | | |
| The BoBath Concepts | | | | | 1 | | | |
| The European League Against Rheumatism Annual Congress | | | | | 1 | | | |
| The Management of: De Quervains, Dupuytrens, CTS, CRPS and Tenosynovitis | | | | | 1 | | | |
| The Problem of Chronic Pain | | | | | 2 | | | |
| The Treatment of the Paediatric Hand | | | | | 1 | | | |

ADMINISTRATION

| | | | | | | | | |
|---|------------|-----------|------------|-----------|-------------|----------|------------|------------|
| The World Society for Paediatric Infectious Diseases (WSPID) | | | | | 1 | | | |
| Time Management | 7 | | 4 | | 5 | | 3 | 1 |
| Total Intravenous Anaesthesia using Target Controlled Infusion Workshop | | | | | 2 | | | |
| Trans oesophageal Echo | | | | | 1 | | | |
| Triennial Congress of the IFSSH and IFSHT | | | | | 1 | | | |
| Truelok and TL - Hex Limb Reconstruction Course | | | | | 2 | | | |
| Turning Team | | | | | | | | 1 |
| Undergraduate Clinical Supervision Course | | | | | 2 | | | |
| Uterine Fibroids and Feedback SA Menstrual Society Congress | | | | | 1 | | | |
| Varian Update | | | | | 1 | | | |
| What's Hot in IPC | | | | | 1 | | | |
| Women in Management | | | | | 4 | | | |
| World Congress Paediatric Cardiology and Cardiac Surgery | | | | | 1 | | | |
| Wound Care Course | | | | | 1 | | | |
| Grand Total | 778 | 45 | 265 | 37 | 1499 | 3 | 130 | 517 |

3274

LABOUR RELATIONS MR R JAPHTA

INFORMAL DISCIPLINARY ACTION

| Disciplinary Action | Male | | | | Female | | | | Total |
|--------------------------|-----------|-----------|----------|----------|-----------|-----------|----------|----------|------------|
| | A | C | I | W | A | C | I | W | |
| Correctional Counselling | 3 | 7 | 0 | 0 | 4 | 12 | 0 | 1 | 27 |
| Verbal Warning | 7 | 16 | 0 | 0 | 10 | 15 | 0 | 1 | 49 |
| Written Warning | 10 | 12 | 0 | 1 | 8 | 31 | 0 | 4 | 66 |
| Final Written Warning | 4 | 7 | 0 | 0 | 4 | 15 | 0 | 1 | 31 |
| TOTAL | 24 | 42 | 0 | 1 | 26 | 73 | 0 | 7 | 173 |

FORMAL DISCIPLINARY HEARINGS FINALISED

| <i>Outcomes of Disciplinary Hearings</i> | <i>Number</i> |
|--|---------------|
| Final Written Warning | 2 |
| Suspension without salary | 9 |
| Demotion | 0 |
| Dismissals | 11 |
| Not guilty | 1 |
| Cases dismissed | 1 |
| Hearings pending | 3 |
| Dismissal appeal applications pending | 0 |
| TOTAL | 27 |

ADMINISTRATION

TYPES OF MISCONDUCT ADDRESSED AT DISCIPLINARY HEARINGS

| TYPE OF MISCONDUCT | NO | DEPARTMENT |
|---|-----------|---|
| Absent from work without reason or permission | 16 | Porter Services, Nursing. Food Services/Radiography/ House Hold Aid |
| Falsification of Medical Record | 1 | Nursing |
| Unauthorised removal of state property | 3 | Nursing |
| Discrimination | 1 | Porters |
| RWOPS | 1 | Nursing |
| Threatening Violence | 1 | Porters |
| Substance Abuse | 1 | Nursing |
| TOTAL | 24 | |

GRIEVANCES LODGED

| Type of Grievance | Number |
|--|-----------|
| SPMS grievances received | 17 |
| SPMS grievances resolved | 14 |
| SPMS grievances pending at Institution | 0 |
| SPMS grievances pending at head Office | 3 |
| Pilir grievances received | 5 |
| Pilir grievances resolved | 5 |
| Other grievances received (not related to SPMS PILIR or OSD) | 35 |
| Other grievances resolved (not related to SPMS PILIR or OSD) | 28 |
| Other grievances Pending/ Institution | 2 |
| Other grievances Pending/ Head Office | 5 |
| Total received | 57 |
| Total resolved | 47 |
| Total /Pending/ Head Office | 8 |
| Total/Pending/ Institution | 2 |

COLLECTIVE GRIEVANCES LODGED

| | |
|---|---|
| Collective grievances received | 5 |
| Collective grievances finalised | 3 |
| Collective grievances Pending / Institution | 1 |
| Collective grievances Pending / Head Office | 1 |

PENDING GRIEVANCES

| | |
|------------------------|-----------|
| Pending at Institution | 2 |
| Pending at Head Office | 8 |
| TOTAL | 10 |

ADMINISTRATION

DISPUTES

| Level | Number |
|----------------------------------|--------|
| Disputes declared | 3 |
| Disputes dismissed | 0 |
| Disputes withdrawn | 0 |
| Disputes deadlocked | 0 |
| Agreements reached (reinstated) | 0 |
| Disputes finalised | 1 |
| Disputes pending | 2 |

Training

| | |
|-----------------------------|-------|
| Number of employees trained | 2 115 |
|-----------------------------|-------|

Precautionary suspensions

| | |
|---|---|
| Number of employees suspended | 1 |
| Number of people whose suspension exceeded 60 days | 0 |
| Number of employees still on suspension by 31 December 2010 | 0 |

Other comparisons are as follows:

| Informal Discipline | | |
|------------------------|------|------|
| | 2012 | 2013 |
| Corrective counselling | 19 | 27 |
| Verbal warnings | 61 | 49 |
| Written warnings | 85 | 66 |
| Final written warnings | 57 | 31 |

Formal Discipline

| Formal Discipline | | |
|---------------------------------|------|------|
| | 2012 | 2013 |
| Final written warnings | 3 | 2 |
| Suspension without remuneration | 3 | 9 |
| Demotion | 0 | 0 |
| Dismissals | 3 | 11 |
| Not guilty | 3 | 1 |
| Cases withdrawn | 3 | 0 |
| Cases dismissed | 1 | 1 |

GRIEVANCES

| | 2012 | 2013 |
|------------------|------|------|
| SPMS | 18 | 17 |
| OSD | 0 | 0 |
| Other grievances | 55 | 35 |
| PILIR | 10 | 5 |

ADMINISTRATION

| DISPUTES | | |
|---------------------|-------------|-------------|
| | 2012 | 2013 |
| Disputes declared | 3 | 3 |
| Disputes dismissed | 0 | 0 |
| Disputes withdrawn | 1 | 0 |
| Disputes deadlocked | 0 | 0 |
| Agreements reached | 1 | 0 |
| Disputes finalised | 1 | 1 |
| Disputes pending | 0 | 2 |

| Training | | |
|---------------------------------|-------------|-------------|
| | 2012 | 2013 |
| Number of employees trained | 1 833 | 2 372 |
| Percentage of employees trained | 40,4% | 52% |
| Establishment | 4 538 | 4 562 |

COURSES PRESENTED AND ATTENDED

| 2012 | 2013 |
|--------------------------------------|---|
| Absenteeism Presentations | Absenteeism Presentations |
| Disciplinary Code and Procedure | Disciplinary Code and Procedure |
| Presiding and Investigating Officers | Presiding and Investigating Officers |
| Informal Disciplinary Procedure | Informal Disciplinary Procedure |
| Grievance Procedure | Grievance Procedure |
| Introduction to Labour Law | Substance Abuse |
| Annual Labour Law Seminar | Annual Labour Law Seminar |
| Induction | Labour Relations Induction |
| Massified Induction | Sexual Harassment |
| PERSAL | Know Your Rights |
| PILIR | Investigation and Report Writing |
| | Disciplinary Procedures for employees |
| | Disciplinary Procedures for Supervisors |

| PRECAUTIONARY SUSPENSIONS | | |
|----------------------------------|-------------|-------------|
| | 2012 | 2013 |
| Employees suspended | 0 | 1 |

ACHIEVEMENTS

In 2012, training was provided to 1 833 employees. In 2013, 2 372 employees were trained. As a result of information sessions for supervisors conducted by Labour Relations the number improved by 556 as compared to the previous year.

Institutional Labour Relations and Head Office Labour relations will provide Presiding and Investigating Officer training during February 2014.

ADMINISTRATION

INTERNATIONAL OUTREACH PROGRAMME

Mr PJ Wolfaardt

During this reporting, a number of programmes and initiatives were undertaken in terms of the responsibility.

Dutch

Co-ordinated two visits by Dutch Health.

Managers 57 managers in total

Students 4

Namibia

Assistance

Setting up patient transport network

Ambulance design

Meal provision to patients

Death – Mortuary

Free State Administration

Hospital Administration

Staffing models

Eastern Cape

Ambulance staff

Policies

Assistance to Post Graduate Students

LLM [UCT]:

Diagnosing the state of the management

medical waste

How healthy is the industry

M.TECH [CPUT]:

Medical waste management in the Western

Cape

COMMUNICATIONS

Ms LC Pienaar

The Communications Office continues to play a vital role in internal and external communications, including media liaison, publications, marketing, public relations, special events, receiving of donations, special visits, the local communities, international visitors and celebrities.

Special visitors

The office works in close collaboration with various departments to ensure that the organising of local and international visits run smoothly. International visits, special visitors and celebrities included the following:

| | |
|----------------|---------------------------|
| Dutch Visitors | 19 March |
| Minister Botha | 13 August, 8 & 31 October |
| Stormers | 17 July |
| UCT Visit | 10 September |
| SA Navy Band | 8 August |

Special events

| | |
|-----------------------------------|------------------|
| Nurses Day | 10 May |
| Opening of the Big Bore | 24 May |
| Opening of G-Lower Ground | 25 June |
| Open Day | 12 September |
| Mandela Day | 18 July |
| Women's Day | 8 August |
| Staff Wellness Day | 8 and 10 October |
| Long Service Awards | 24 October |
| Hartman Lecture Awards | 2 October |
| CEO Ball | 1 November |
| Smile Week | 11-15 November |
| Annual Children's Christmas Party | 5 December |
| Desmond Tutu Interfaith Service | 10 December |

SUPPORT SERVICES

Mr AJM Harmse

In-house Security Service:

- Due to the size of Tygerberg Hospital, the current staff allocated to each shift is not sufficient to enable the security department to function at its full potential.
- These circumstances place a tremendous strain on the Department, especially in the maintaining of security enforcement against various intrusions and unlawful acts.
- The situation is aggravated due to sick- and annual leave.

ADMINISTRATION

Resources

| | |
|------------------------|--------------------------|
| Supervisor | 1 Chief Security Officer |
| Senior Security Office | 8 |
| Security Officer | 15 |

Supervision:

Personnel Management:

Positive:

- Continuous staff training has resulted in a significant improvement in service delivery, e.g. Human Resource Management, Basic Supervision, Investigating Officer, Health and Safety Officers, as well as in the SPMS.
- PSIRA registration is in the process of being finalised [three outstanding].

Negative:

- Constant staff absenteeism.
- Inadequate equipment

Contract Security services:

Resources

Contract Manager

Shift x 1 (Day Shift)

| | | |
|-----------------|---------|----|
| Supervisor | Grade A | 2 |
| Supervisor | Grade B | 1 |
| Reaction Unit | Grade B | 2 |
| Controller | Grade C | 1 |
| Security Guards | Grade C | 15 |
| Security Guards | Grade D | 43 |

Shift x2 (Night Shift)

| | | |
|-----------------|---------|----|
| Supervisor: | Grade A | 2 |
| Supervisor | Grade B | 1 |
| Controller | Grade C | 1 |
| Reaction Unit | Grade B | 2 |
| Security Guards | Grade D | 36 |
| Security Guards | Grade C | 12 |

Shift x3 (Weekends)

| | | |
|-----------------|---------|----|
| Supervisor | Grade A | 2 |
| Supervisor | Grade B | 1 |
| Controller | Grade C | 1 |
| Reaction Unit | Grade B | 3 |
| Security Guards | Grade D | 43 |
| Security Guards | Grade C | 14 |

Mobility

| | |
|-------------|---|
| Vehicles | 3 |
| Motor Bikes | 2 |

Service Delivery:

- The in-house security is responsible for the internal security functions, whilst the private security attends to the perimeter.
- Weekly meetings between the internal and external security managers, officers and staff are held to address service delivery

Findings:

- The assistance from the hospital security at various locations and parking areas played a big role in the effective management of security services
- All allocated points that need to be manned, have been addressed
- New supervisory shifts have been implemented to ensure that every staff member becomes acquainted with all supervisors
- Since the beginning of 2013, an improvement of the control of private taxis have been found
- The apprehension of suspects lead to a reduction in in vehicle theft and vandalism
- Service delivery on weekends, public holidays and during night shift has improved
- Monitoring of staff attendance, reporting for duty as well as compliance led to the implementation of disciplinary action which resulted in an improvement of service delivery

Patient Transport

Personnel Management:

- Continuous staff training has resulted in a significant improvement in service delivery e.g. Absenteeism, Basic Service Condition, Disaster Plan, SPMS, Labour Relations, Code of Conduct, Discipline Procedures and the Batho Pele Principles

ADMINISTRATION

Pneumatic Tube Distribution:

The department is a dynamic division of the Support Service and is highly service delivery orientated with the focus on promoting operational efficiency in Patient Care.

- A new method with regard to the repair of the Tube system was put in place, which reduced cost, especially during night shift and over weekends. It further enhanced fluency of specimens to different laboratories and a decline in after-hour call outs

Service Delivery:

Resources:

- Operators x6
- Component lacks a post of supervisor to ensure the required level of efficiency

Personnel Management (Positive and Negative):

- All staff was nominated and received training on issues relating to the departments' objectives. The newly appointed staff also received geographic and practical induction training programme prior to deployment in the work field.
- Information sessions presented were uniform code, absenteeism, Basic Service Conditions, Disaster Plan, SPMS, Labour Relations, Code of Conduct, Discipline Procedures, the Batho Pele Principles, Admin Duties, etc.

General Constraints:

- The repair of tube lines often delayed; this the cause of user complaints
- The consistent blockage of tubes with specimens inside also caused criticism from the components
- A control system is in place where record keeping of specimens received and dispatch is recorded to enable the operator to identify the time and laboratories the specimens have been sent to
- The use of Tube Operators in other components

Mortuary:

Resources:

The establishment is as follows:

- Senior Admin Clerk x1
- Senior Porter x1
- Delays in the receipt and dispatch of necessary documentation to be completed by the medical staff had a negative effect on service delivery
- The Department has to make use of Porter services to enable it to render an effective service, this puts further strain on the Porters' Department.
- In spite of restrictions, the Mortuary is a division that forms part of the Support Structure and its primary goal is effective support to the family of deceased, medics, undertakers, as well as other staff.

Personnel Management (Positive and Negative):

- Staff receive continuous training
- The knowledge gained in terms of work procedures in the handling of deceased patient as well as ground level administrative duties with regard to the rendering of a cremation / funeral service, resulted in a high level of service
- Incomplete death certificates by the Medics are the cause of many delays of funeral arrangements for families of deceased patients
- Some doctors are not available to complete death certificates after confirmation of deaths
- Correct procedures are also not at all times adhered to where death occurs at ward level
- Time delay in the completion of "B" and "D" forms for cremation purposes is addressed on a daily basis

ADMINISTRATION

SUPPORT SERVICES (Continued)

Mr FS Boonzaier

CLEANING SERVICES (CONTRACT)

Resources: 1 x SAO and 1 x SAC

Overview:

The function of this component is to manage the cleaning of the non-core areas in the Hospital as well as the outside perimeters. Various measures have been implemented in an endeavor to curtail expenditure with regard to the cleaning contract.

The expenditure for the contract cleaning for the last nine months is as follows:

| Month | Expenditure |
|----------------|---------------|
| April 2013 | R684 501,42 |
| May 2013 | R648 781,51 |
| June 2013 | R650 125,30 |
| July 2013 | R646 720,12 |
| August 2013 | R649 446,29 |
| September 2013 | R648 505,90 |
| October 2013 | R665 555,84 |
| November 2013 | R644 866,71 |
| December 2013 | R664 290,56 |
| Total | R5 902 832,65 |

General constraints:

The residents at Disa and Protea courts are problematic with respect to littering. People who visit patients litter the staircases and passages despite bins being available.

SUPPORT SERVICES (Continued)

Ms CB Johnson

EXTERNAL CLEANING SERVICES

Service Delivery

The removal of medical waste and refuse from the campus is still outsourced by private contractors, namely Solid Waste and Waste Control.

Resources

| | |
|------------------------|-------------------------------|
| Supervisor | 1 (Principal General Foreman) |
| Senior General Foreman | 1 |
| General Workers | 9 |

Service Delivery

- An average of 9,2 tons of medical waste is generated on a monthly basis and successfully disposed of via Solid Waste Technologies.
- In October, Tygerberg Hospital successfully completed the Western Cape IPWIS registration process in accordance with R. 625 National Environmental Management Waste Act (59 of 2008): Waste Information Regulations and the Western Cape Health Care Waste Management Act, (Act 7 of 2007): Western Cape Health Care Risk Waste Regulations, 2013
- Strict control is in place in terms of monitoring removal disposal of waste and certificates are collected at Solid Waste Technologies bi-weekly.
- Removal of cardboard is done by an outsourced company, Oasis.

GARDENING SERVICES

Resources

| | |
|------------|-------------------------------|
| Supervisor | 1 (General Foreman) |
| Groundsmen | 5(4 permanent and 1 contract) |

General

The function of this component is to maintain the grounds / outside perimeters of the hospital. These include cutting and trimming of grass, trees, shrubs, flowers and removal of some, as well as removal of rubble, assist with removal of dirt in bags.

Constraints

As the perimeter of the hospital covers quite an extensive area, it is impossible for these staff to ensure that there is continuous trimming done and areas are neglected when they have to concentrate on certain tasks.

ADMINISTRATION

There are also two tractors used, that is not sufficient to cover the workload presented.

PEST CONTROL

Overview

The function of the Pest Control Department is to ensure that the hospital building (wards, basement, kitchen, administration), including exterior building (Protea Court, Disa Court, Doctors' Quarters, Carel Du Toit School, X-block, and Dental Faculty), is kept pest free.

Resources

| | |
|--------------------------|---|
| Chief Auxiliary Officer | 1 |
| Senior Auxiliary Officer | 3 |

Service Delivery

The officers work on various programmes during the week on a rotating basis.

The kitchens are fumigated on a weekly basis (Tuesdays and/or Thursdays, at night).

The officers also fumigate the basement (underneath the kitchen) on a regular basis to ensure a clean environment.

PORTER SERVICES

Service Delivery

The Smile Foundation scheduled 33 operations for children with cleft palates and the staff members allocated to assist from the Porters component found it a great honour to do so. The Department also assisted with the smooth relocation of various wards within the hospital, as certain wards were earmarked for upgrades.

Personnel Management

Training

The Chief Porters and Porters received continuous training to improve service delivery.

Financial Achievement

The procurement of additional trolleys, trolley mattresses and wheelchairs contributed to the enhancement of service delivery, although the general shortage of trolleys and wheelchairs still remains a problem.

LINEN MANAGEMENT

Mr I Stralinsky

Resources

| | |
|-------------------------|---|
| Assistant Director | 1 |
| Senior Linen Supervisor | 4 |
| Laundry Aid | 3 |

Annual Audit

Basic Linen Count

| <u>Pieces</u> | <u>Value</u> |
|---------------|----------------|
| 205 883 | R16 530 382,05 |

Linen Loss

| <u>Count</u> | <u>Value</u> |
|--------------|---------------|
| 94 319 | R6 135 393,31 |

The overall objective of hospital linen management is to maintain adequate supplies of clean and serviceable linen for the user departments at minimum cost. This can only be achieved through the closest possible co-ordination between laundry operations and linen distribution services, and by adhering to specific control mechanisms.

TELEPHONE EXCHANGE AND RADIO ROOM

Mr L van Renen

TELEPHONE EXCHANGE:

- Tygerberg Hospitals' Telephone Exchange has a Philips electronic business connect system that provides a 24 hour service
- The telephone exchange is manned by 1 X Principle Telecom Operator and 17 X Telecom Operators
- The Telephone Exchange consists of 8 consoles, 1 used for Doctors' Enquiries; 6

ADMINISTRATION

used for the handling of general calls/enquiries on a full time basis during 07:30 and 16:00

- These 6 consoles manage approximately 8 000 of the 12 000 incoming calls per day
- The outgoing calls amount to approximately 5 000, of which the Telephone Exchange handles approximately 4 000
- This total includes approximately 3 000 cellphone- and trunk calls
- The average cost of cellphone calls per month is R50 000,00
- The average cost of Telkom calls per month is R220 000,00

RADIO ROOM:

- The two Operators in the radio room handle approximately 3 000 calls for transmission during the following working hours: 07:30 to 16:00, and the Operator at Doctors' Enquiries handles approximately 1 000 calls per day

SMS MESSAGE SYSTEM:

- Tygerberg Hospitals' radio room uses SMS messages to contact doctors and personnel that do not have beepers, or when beepers are faulty
- Approximately 1 000 SMSs are sent daily and the average cost per month is R5 000,00

ACCOMMODATION

Mr EC Steyn, Ms CB Johnson and Mr AJM Harmse

| Doctors' Quarters | Rooms |
|-------------------|-------|
| Single Rooms | 38 |
| One Bedroom Flats | 36 |
| Two Bedroom Flats | 5 |

- This facility used to house medical interns / community service doctors

Protea Court

- Protea Court consists of 3 towers that facilitates temporary and permanent housing of staff and students that work/study at Tygerberg Hospital
- There are 479 beds in total and the rooms range from single- to 2 bedroom flats
- 124 permanent tenants reside at Protea Court, the majority from the Nursing Department
- The first floor in Tower 3 was allocated to CANSA (Cancer Association of South

Africa) to assist in the recuperation of patients

- The second floor in Tower 3 was allocated to the overnight facilities (mothers whose babies have been admitted at Tygerberg Hospital)
- Three floors in Tower 3 (92 beds) were allocated to the Emergency Services Department. Students who are completing their EMS training are allocated
- 29 tenants moved in and 19 moved out of Protea Court in 2013
- The night crèche is also accommodated in the Protea Court

Single Rooms/beds

| | | |
|-------------------------------|----------|-----|
| (Including suitcase rooms) | | 192 |
| Double Rooms = 127 | Total of | 254 |
| One Bedroom Flats | | 6 |
| Two Bedroom Flats =2 | Total of | 4 |
| Single Room with sitting room | | 1 |

This component also responsible to co-ordinate accommodation in Disa Court, UWC and CPUT

ADMINISTRATION

REPROGRAPHICS

Mr W Adonis

OVERVIEW

- The core function of the department is to ensure an efficient high volume production unit for printing and photocopying
- The implementation of the Open Text ECM system increased the volume of work as forms had to be barcoded and copied. The typist updates the barcoding register and updates various forms on a daily basis
- Due to the distortion and unsuitability of microfilming on the Rizo machines, double-sided forms are copied on the copiers and backed-up on the Rizo printing machines
- A Konico Minolta copier replaced the old 1050 copier, which improved service delivery. Two additional machines, B1050 and B920, serve as back-up for the B1250
- The Department further provides finishing's as requested, e.g. sort and stapling, gluing, punching, cutting and laminating
- The ID section handles the issuing of personnel identity cards for new appointees, changes in rank and surnames. Lost and damage cards are replaced at cost
- Printing for NHLS is charged

RESOURCES

Admin Officer 1
 Typist: 1
 Principal Operators: 4 rotate every month @ one of the four workstations:-
 Photocopying X 3 machines, printing Rizo A and Rizo B, sort, staple, cutting, punching, gluing and laminating

OUTPUTS

| | |
|------------------|-----------|
| ID photo's taken | 574 |
| Photo copies | 3 094 106 |
| Copies printed | 2 120 513 |
| Laminating | 2 890 |

TRANSPORT

Mr A Zas

OVERVIEW

- The main function of the component is to provide an effective and efficient motor transport service delivery
- The Department has 28 vehicles

RESOURCES

| | |
|-------------------|----|
| Admin officer | 1 |
| Senior Clerk | 1 |
| Drivers | 11 |
| General Assistant | 1 |

SERVICE DELIVERY

- The requests for transport to various destinations places pressure on the component due to vehicles that need servicing, breakdowns and the Unavailability of drivers due to illnesses and various leave
- The staff utilises their knowledge and experience of the various transport destinations and the shortest, yet safest possible routes to ensure excellent service delivery

REGISTRY/ARCHIVES /MAILROOM

Mr HTM Mbidlana

Registry

The Registry Department handles all incoming mail to Tygerberg Hospital. Outgoing mail for the period 2013 was ±60 000 at items (letters and parcels)

Resources

Administration Officer 1
 Senior Registry Clerk 1

- Approximately 450 faxes are dispatched on a monthly basis

ADMINISTRATION

- The telegram system is no longer in use, which resulted in an increase in faxes and dispatching of registered mail
- There is high volume of as the Registry's fax number reflects on Tygerberg Hospitals' documents

Archives

The filing system in the Archives Department is done in accordance with the Rules of the Department of Health. This system is continuously updated as and when required.

Messengers in the mailroom

The Messengers service the whole of Tygerberg Hospital including its surrounding buildings, as well the collection and delivery of documents to Head Office situated in Cape Town City Bowl and various hospitals, e.g. Groote Schuur and Red Cross.

Resources

Chief Messenger: 1
Messengers: 9 (7 working in Tygerberg Hospital and 2 at the Gene Louw Building)

One of the hospitals' messengers collects and delivers mail/documents on a daily basis to the Protea Court, Tygerberg Laundry, Forensic Services, Disa Court, Sarleh Dollie, Forensic Mortuary, Ravensmead Day Hospital and the Emergency Medical Services.

General

There is a need to increase funding for equipment expenditure.
Space capacity is almost at maximum.

FOOD SERVICES

Ms R Keyser

OVERVIEW

The Food Service Department of Tygerberg Hospital consist of 122 staff members, of which 5 are Managers, 3 Principle Supervisors, 28 Supervisors and 85 Food service aids. The main function of the component is to provide an efficient food service to 1 100 to 1 200 patients per day (3 meals per day).

Summary of activities

- Meal provision to all patients, caregivers and mothers from far as applicable to the Food Services Policy
- Costing of meals and recipes as indicated in the policies
- A total of 1,6 million meals for the year were served
- Training and Development of employees
- Managing performance of employees
- Maintain a high level of hygiene
- Adhering to all Food Services Guidelines

Resources

| | |
|-------------------------------------|----------------|
| Assistant Director | 1 |
| Food services managers | 7 |
| Principal food services supervisors | 3 |
| Senior Supervisors | 28 |
| Food Services Aids level 1 and 2 | 85 |
| SAC | 4 |
| Pronto [cleaners] | 8 per shift |

Infrastructure development

- Equipment (Preparation machine, heat sealing machines, fridges, industrial fans, etc.) were purchased
- Minor renovations and repairs was done to adhere to OHS standars and to improve productivity

Infrastructure challenges:

- Due to the age of the kitchen and equipment, mechanical parts are not always freely available, which then results in delays. However, the relationship between

ADMINISTRATION

the kitchen and Maintenance Department significantly reduced such incidences

- Despite various challenges, e.g outdated ovens, broken food trolleys, dishwashers, etc.) service delivery is still a success

Achievements with regard to research activities and research outputs:

- Improvement with regard to meal costing and monthly submissions to the Integrated Nutrition Programme (INP)
- An improvement in the pest control programme and standards due to adherence to the drafted programme for the Unit

Special achievements and other highlights

- Meal cost per patient on average is currently R21,96. Costing submitted on time to the INP office
- An improvement in late coming, as well as the general attendance
- Emphasis was placed on the above by interventions such as small workshops by Labour Relations and Human Resources Departments
- To ensure that daily production and serving times are adhered to, the scheduled visibility of managers and supervisors are strongly monitored
- Personnel hygiene check sheets are completed daily to ensure that all jewellery that is not allowed in the FS POLICY, is not worn
- With regular stock take and meticulous monitoring of stock, the Department managed to remain within its monthly expenditure
- Regular spot checks on storerooms are conducted by managers to reduce stock manipulation
- Apart from meeting deadlines with regard to meal plans the safety of our patients are our first priority. This is verified by regular microbiological analysis done by the NHLS
- Use of colour-coded material to prevent cross contamination

- A key control register is in place to reduce theft and to ensure that allocated employees open the stores and fridges
- Proper guidance is given to suppliers with regards to hygiene and other HACCP principles
- Rotation of staff on a yearly basis to different areas in the Unit to gain complete exposure and knowledge has proven to succeed
- Monthly meetings with the Main Stores to ensure that no shortage of stock is experienced
- Adherence to the ordering standards resulted in a significant reduction expenditure
- The yearly Food Service Audit reflected an improvement compared to previous years
- Meal evaluations conducted regularly by Top Management to assess food preparation

Personnel Management:

- Staff received training in specialised areas related to the immediate work environment
- Courses successfully completed were First Aid, Life Skills, Kitchen Cleaner, Conflict Management, Financial Management and Stress Management
- The purpose of the training programmes is to improve work ethic, skills and overall productivity
- All newly appointed staff received induction training before being deployed in the workplace
- Vacant posts were advertised and filled within expected time frames

DEPARTMENT OF SOCIAL WORK

Ms MN de Jager

Summary of activities:

Our greatest challenge has still been to give a true reflection of our work by means of statistics, since the Clinicom system does not make provision for any social work intervention

ADMINISTRATION

rendered to patients and their families once the patient has been discharged.

The fact that we lost three internships at the end of March also had a major impact on our services.

The loss of one of our medical colleagues, Dr Louis Heyns, presented us with an unforeseen challenge to provide counselling and support to nursing and medical staff remaining empathetic and objective in a situation which also affected us.

However, this incident just contributed to our commitment to rendering a meaningful, comprehensive and holistic social work service, with emphasis on treatment, support, outreach, prevention, training and empowerment of patients and families.

Among the milestones during the year, were the following:

- On 10 May 2013 the social workers participated in visiting and distributing gifts, sponsored by the Hospital Facility Board, to all female patients in celebration of Mother's Day
- The weekend social work service has been well established and the utilisation of

services proved that this is a much needed service in order to open up beds for critically injured patients and patients presenting with discharge problems as well as rendering support services to traumatised families

- On Mandela Day, The Department of Social Work, in conjunction with the Hospital Facility Board, distributed gifts to all patients and staff of Tygerberg Hospital. We reached about 5 000 persons in total
- In celebration of Women's Day, special attention was given on 8 August 2013 to all the female patients in the hospital. This project was sponsored by the Hospital Facility Board
- On 12 September we participated in the Hospital's Open Day. The Department of Social Work presented sessions on Laughter Yoga and Parenting Skills

- A social worker, Ms BH Steyn, presented a paper on the role of the social worker with laryngectomy patients at the SASCRO Conference in Durban
- Dr WC Steenkamp presented a paper titled "Social Work in a Burns Unit in a Developing Country" at the International Burns Conference in Ghana, 4 to 8 November 2013

Resources:

| | |
|----------------------------|---|
| Social Work Manager | 1 |
| Social Work Supervisors | 3 |
| Social Workers Production: | 16 (one vacant post) |
| Contract posts | 2 (one contract post since 19/02/2013 is used for the weekend social work service) |
| Clerks: | 2 |

Output:

Social workers render services in the form of individual therapeutic work with patients, group work with patients and families, community outreach programmes, both in the hospital as well as in the community. This amounted to 20 601 Clinicom attendances of patients. Service hours spent on patient care as recorded on Clinicom amounted to 14 360 hours. Another 8 507 patient attendances could not be captured on Clinicom, therefore the total number of patient attendances is in fact 27 299. Patient attendances not recorded on Clinicom, together with other diverse activities e.g. staff developments, patient discussions, meetings, training and public appearances, amounts to 10 504 hours.

Time spent on meetings, ward rounds, team discussions, community outreach programmes, training of students, induction of new social workers and staff development cannot be captured on the Clinicom system.

ADMINISTRATION

The three social work supervisors render services in terms of human resource management, clinical supervision, administration, training and an after hour telephonic consultation service, which also cannot be captured on the Clinicom system.

The impact of poverty, unemployment and the challenging socio-economic environment has further increased referrals for social work services pertaining to domestic violence, teenage pregnancy, substance abuse, family conflict and violence against women and children. When these already highly stressed families are once again confronted with secondary crises caused by illness and trauma, more complex social work interventions are needed. Trauma caused by road accidents and violence in the communities impacts on our services.

At the TygerBear Social Work Unit for Traumatized Children 283 new referrals were received from the community. These referrals were from social work agencies, Community Health Clinics and schools, forensic social workers and the court requiring specialist therapeutic services. TygerBear provides these specialist services to children due to the fact that there is a lack of resources in the community. Many of these referrals included sexually abused children, children who experienced or witnessed violence in the community, such as family members committing suicide or being killed, children with behavior and learning problems.

Group work programmes included:

- Parent Guidance groups for parents of newly referred children
- Support groups for laryngectomy patients
- Fibromyalgia Group
- Parent Guidance groups for parents of traumatized children
- Support groups for mothers providing Kangaroo Mother Care
- Rheumatology Family Group

Community work programmes will be discussed in Part 2.10.

Comment on Output:

There has again been an increase in the demand for telephonic consultation from child careers, teachers, parents, and neighbors, healthcare professionals from state as well as private facilities, the police and welfare agencies. A lot of time was spent on networking, with role players in the community, such as police, prosecutors, social workers, teachers and prospective careers, to ensure the safety of children at risk. Due to a lack of manpower and in an effort to reach more children, as well as to counteract the long waiting list for treatment, we have embarked on seeing children in groups.

The tracing of relatives and the lack of resources in the community is time-consuming. Proper discharge planning is complicated by the above, as well as late referrals to the social worker. Poverty, unemployment, crime and family violence indirectly affects the social work services.

The increase in administrative work (referral reports, child abuse reports, court reports, reports re discharge planning and to secure patient aftercare) is time-consuming.

Part 2

Infrastructural development

The compulsory storage of records for at least five years is still problematic due to the lack of safe storage facilities within the Department of Social Work, and therefore presents a challenge. We continue to prepare files for the scanning process of the ECM program. Social workers do not have access to information on the system yet. Complaints regarding the accessibility of social work feedback reports, which have already been scanned, have been received from medical staff.

The fact that social work offices are spread across the hospital, makes quality control a challenge. Safety of social workers in their

ADMINISTRATION

offices has recently presented a challenge and is being addressed. An enclosed area for social work services will serve as a measure of safety and quality control.

Community Outreach Programmes

- The Department of Social Work runs a 24 hour consultation service for professionals working with children
- An extensive relief programme is providing for all patients in need of transport, food, toiletries, blankets and clothes
- The Food for Thought programme makes provision for parents who sit with their children and outpatients from rural areas who leave their homes very early to reach the hospital in time for their appointments and who often have to wait for long hours until they reach home again
- Volunteers are trained and utilised for administration work, assisting in awareness programs, the comfort bear project, sorting of toys and clothes, packing of food parcels and toiletries and other general tasks
- A resource centre is in operation at the TygerBear Unit and provides information on child abuse and clinical work with children for professionals and students working with children, as well as information for parents and children visiting the Unit. Some resources are now available electronically
- Regular telephonic and personal liaison with SASSA, Intermediate care facilities, SAPS, and Special Courts for Sexual Offences and the Medical Legal Office in Tygerberg Hospital
- Liaison with different resources in the community regarding discharge of patients in need of care
- Receiving job shadowing students from different schools and universities
- The TygerBear's schools outreach project continues
- Talk on rape and sexual abuse at Kensington Rehabilitation Centre

- Women's Day talk to nurses at Nico Malan Nursing College on motivation and Laughter Yoga

Co-operation and partnerships

Department of Social Development, other welfare agencies, SASSA, Department of Education, Intermediate Care facilities, Rehabilitation facilities and service agencies. The schools outreach programme for services to traumatised learners continues.

Achievements with regard to research activities:

- Participation in a study on Home-Based Treatment of Childhood Neurotuberculosis

Initiatives/Achievements pertaining to the educational role:

Undergraduate

| | |
|----------------------|------------|
| Social Work IV, UCT, | 1 student |
| Social Work II, UCT | 4 students |
| Social Work IV, UWC, | 2 students |

Postgraduate

| | |
|--|------------|
| M. Diac. Play Therapy, UNISA | 1 student |
| BA Psychology Hons, UWC | 2 students |
| Educational Psychology | 1 student |
| Psychology Hons (Corner Stone College) | 1 student |
| M. Clinical Psychology, UWC | 1 student |
| B Psychology, UWC | 2 students |

The following training was done:

- 12/03/2013 and 14/03/2013: Trauma support for nurses.
- Weekly group supervision with students and social workers focusing on different topics such as:-
 - Trauma counselling (The Mitchell Model),
 - Pedophilia,
 - Helping Children with Learning difficulties find Social Success
 - Working with traumatised children
 - Court preparation, case discussions

ADMINISTRATION

- Amputations: Adversity versus opportunity, presented to social workers and students
- The role of the social worker in the Pediatric Orthopedic Ward
- The role of the social Worker in Nephrology
- Introducing the Triple P (Positive Parenting Programme) to social workers and students
- Parenting skills training
- Report writing
- Attachment Theory,
- The role of the Occupational Therapist
- Building children's self-esteem
- Selective Mutism
- The role of the social worker with TOP patients
- Mental State and Well-being of Social Workers
- Adjustment Disorders

An overview of services rendered by TygerBear Social Work Unit for Traumatized Children and Families presented at Child Psychiatry

- Orientation of new contract social worker in the TygerBear Unit working in Paediatrics and doing play therapy
- Orientation of new students
- The Children's Act presented to medical students in Child Psychiatry on five occasions
- Substance Abuse and the Family
- Domestic Violence training for MB ChB IV students
- The Children's Act and the Health Care

Worker for MB ChB IV students

- The Role of the Social Worker with HIV patients and families presented to MB ChB IV students
- Rheumatology lectures to MB ChB IV students
- Assessment of Rheumatology students
- Presentation at the Burns congress: Social Work in a burns Unit in a Developing Country

- Children with ADHD
- SASCRO Congress attended by a social worker and a social work supervisor
- Working with perpetrators of sexual abuse
- Domestic Violence and Abuse. Training presented to Nurses

Staff development

The following staff development sessions were arranged and attended:

- ECM Training
- Juvenile Forensic Work
- Music Therapy with Addicts
- Cognitive Behavior Therapy with Children
- Schizophrenia
- Psychosocial Oncology Support Services
- Children with severe behavior difficulties
- Role of the Social Worker in Obstetrics and Gynaecology
- Developing Performance Plans
- School Shootings presented by Dr F Schulte, Child Psychiatry
- Palliative Care
- Parental Grief
- Communicating with Children
- Grief Counseling
- Autism Spectrum and Asperger Syndrome
- Ethics in Rehabilitation presented by WCRC
- Positive Parenting presented by Sister Greeff, Child Psychiatry
- Forensic Work in child abuse cases, presented by dr Zahari
- Brief Intervention in Substance Abuse presented by dr Weich
- The effect of gangsterism on youth
- The Children's Act presented by Prof Julia Sloth-Nielsen

- Visit to Western Cape Youth Rehabilitation Centre

- Visit to introduction of Al-Anon services
- Visit to Stikland Hospital Addiction programme an Dual Diagnosis
- Attending SAPSAC Conference in Pretoria

ADMINISTRATION

- Visit by Prof Parker (MBE) presenting information on his work with premature babies
- Presentation Skills Workshop organized by Skills Development Department
- Report writing in Child abuse work
- Attending case discussions at Department of Child Psychiatry
- Presentation by Norwegian students on work done in schools outreach programme
- MS Word and Excel training done by social workers
- Ethics in Rehabilitation presented by WCRC
- Discussion of The Child Justice Act presented by Prof Julia Sloth Nielsen, UWC
- Presentation Skills Workshop organized by Skills Development Department were attended by most of the social workers
- Assessors training attended by 1 social work supervisor
- Attendance of case discussions at Department of Child Psychiatry on the following topics:
Attachment Theory, Oppositional Defiance, Gender Identity
- Dual Diagnosis Workshop
- Visit to the Hospital School
- Domestic Violence and Abuse
- Theraplay as a therapeutic intervention presented by Psychology Master's Intern, Jenna-Lee Proctor
- Attendance of weekly group supervision for students and social workers at TygerBear
- Termination of Pregnancy: The Role of the Social Worker presented by

Ms M Resandt

- The Role of the social Worker in the Tracheostomy Unit presented by Ms J Booysen
- Trauma: "Stealing my sense of being me" presented by Ms A Dampie
- Phantom Limb Pain presented by Psychology Hons Intern
- Getting High on Diabetes: A Social Work Perspective presented by Ms F Parker
- Teenage Pregnancy presented by Ms R du Toit
- Attending the Burns Symposium on 16 November 2013
- Attending the Burns Congress in Ghana from 4 to 8 November 2013
- Mental Health Review Board Workshop on 22 November 2013
- Domestic Violence

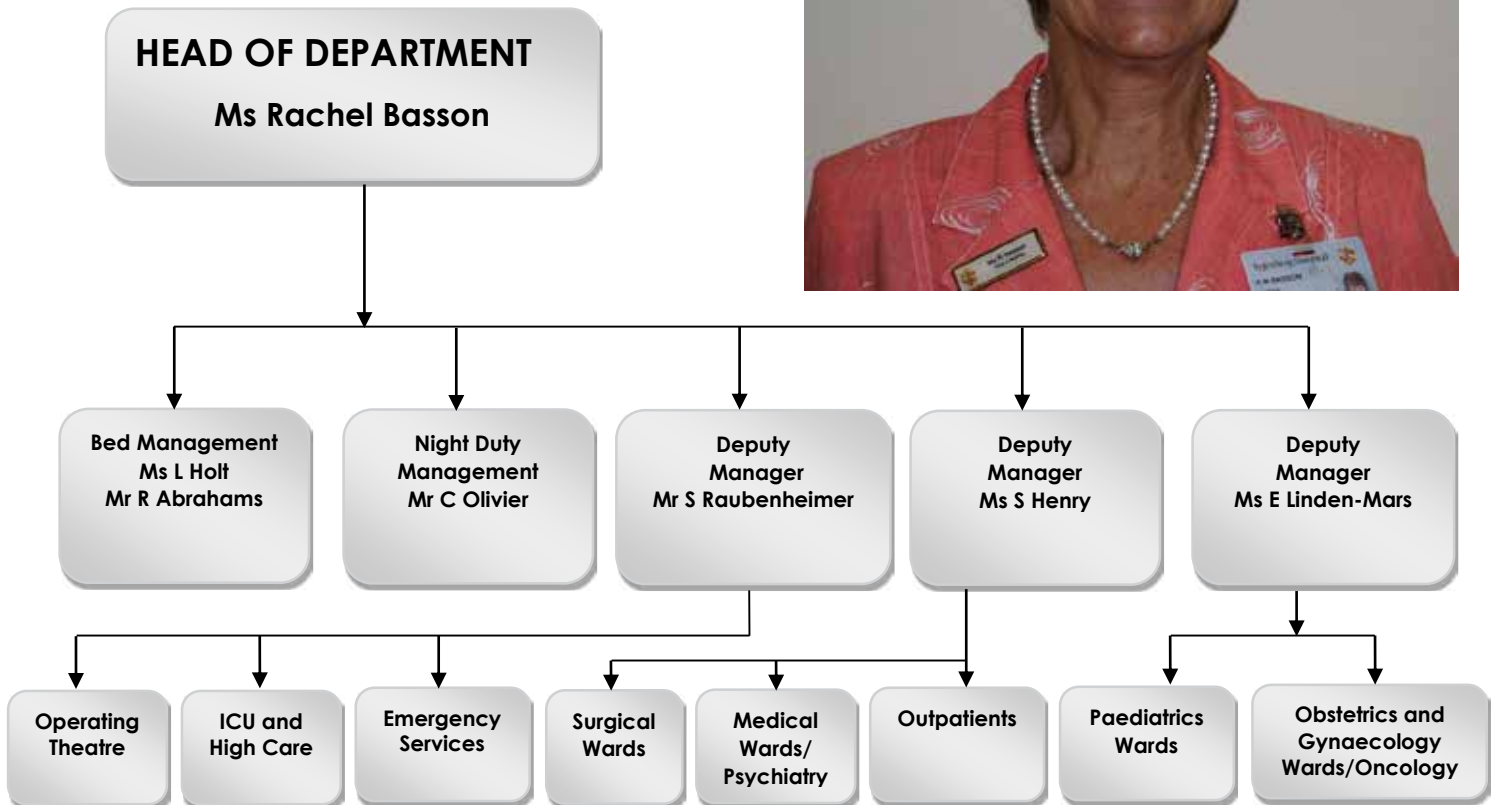
Employee Assistance Programme

- 186 New staff members were referred for Social Work services constituting 5257 consultations

Conclusion

Despite the challenges and barriers the Department of Social Work encounters, it remains our goal to render optimal psycho-social services to the patients of Tygerberg Hospital, their families and staff members.

NURSING



SUMMARY

The Nursing Services are responsible for all nursing care in all areas and disciplines within Tygerberg Hospital. The services include 30 operating theatres, 11 Intensive Care units, 12 High Care units, Paediatric and Neonatology wards, Emergency services and wards, Surgical wards, Medical wards, Outpatient clinics, Obstetrics and Gynaecology wards and Psychiatry wards.

Responsibilities in non-clinical services include CSSD and housekeeping in clinical areas and the crèche. The emphasis during 2013 was to improve the quality of nursing care by implementing best care initiatives, increased visibility of managers at patient care levels, regular audits of patient care delivered at ward level, effective communication initiatives, monitoring patients in waiting areas, prompt complaints management initiatives and creating patient-centred environments.

NURSING

CHALLENGES

The Nursing Services faced several challenges, e.g. staffing services at short notice and coping with increased patient numbers and bed occupancies, recruitment of speciality-trained professional nurses for theatres, paediatrics and obstetrics, training and upskilling of nurses to maintain high standards within the tertiary services and commissioning of new services with staff components in place.

NURSING AND SUPPORT RESOURCES

| Posts (1 January 2013) | Filled |
|----------------------------|--------|
| Nursing Services Manager | 1 |
| Assistant Managers Nursing | 8 |
| Bed managers | 2 |
| Professional Nurses | 792 |
| Staff Nurses | 410 |
| Nursing Assistants | 790 |
| Operators (CSSD) | 68 |
| Senior Housekeepers | 40 |
| Housekeepers | 36 |
| Household Aids | 394 |

Resignations (2013):

| | |
|---------------------|----|
| Professional Nurses | 31 |
| Staff Nurses | 11 |
| Nursing Assistants | 19 |

Appointments (2013):

| | |
|---------------------|----|
| Professional Nurses | 80 |
| Staff Nurses | 5 |
| Nursing Assistants | 61 |

ACHIEVEMENTS

Despite several challenges, the Nursing Services achieved, amongst others, the following:

- Staffing new services or extended hours of services at short notice, e.g. MRI and CT scans in order to decrease waiting time for patients
- Implementing quality improvement initiatives, e.g. Best Care Always Ventilator Associated Pneumonia bundles in 4 ICU's and Best Care Always Central Line Associated Bloodstream Infections bundles in 3 ICU's
- Awarding several nurses at the annual Hartman Memorial Award Event on 2 October 2013 for clinical excellence
- Celebrating International Nurses' Day and International Midwifery Day with special events

Completion of formal training programmes for professional nurses with the Nursing Education Institutions, e.g. Advanced Midwifery (3), Trauma and Emergency Nursing Science (4), Paediatric Nursing (4), Advanced Psychiatry (1), Oncology (1), Midwifery (1) and Critical Care (5). Informal training sessions were conducted to upskill 190 nurses in nursing procedures. Infection, prevention and Control sessions of 723 were arranged to ensure safe IPC practices at clinical level.

Nurses mentored an average of 554 students of different disciplines per day from various training institutions.

Nurses assisted and participated in several research projects of Masters and Doctoral students.

NURSING

CENTRAL STERILE SUPPLY UNIT: CSSD

HEAD OF MODULE: Mr MR Schuller

SERVICE:

- Deliver a service to Tygerberg theatre and all clinical areas

RESOURCES:

| | |
|----------------------------|----|
| CSSD Manager: | 1 |
| Administration Clerk | 1 |
| Principal Operators | 7 |
| Senior Housekeeper | 1 |
| Operators: | 49 |
| General Stores Assistants: | 4 |
| Linen Stores Assistants: | 5 |
| Housekeeping Aids: | 5 |

NUMBER OF MACHINES:

| | |
|-----------------------------|----|
| Sterilisers | 10 |
| Steris washer disinfectors | |
| • single chamber | 1 |
| • multi-washer disinfectors | 2 |
| EO Sterivac machines | 4 |

OUTPUT

- 230 trays processed through steam sterilisation on average per day
- EO sterilisation machine: 4 950 items processed through CSSD Gas Unit

TRAINING AND DEVELOPMENT:

- The CSSD Supervisor x 4 completed Staff Performance Management System (SPMS) in May 2013

SPECIAL PROGRAMS:

New CSSD validation system to ensure correct recording of processes within the unit:

- Decontamination Area: Maintenance Register for Washer Disinfectors which record all repairs and services up to date
- Barcoding of CSSD trays commenced in December 2013
- Decontamination policy for EO unit completed

ACHIEVEMENTS:

The items sent to EO sterilization unit were reduced and only Puritan bottles are manually cleaned at EO unit

NURSING

EMERGENCY AND ORTHOPAEDICS

HEAD OF MODULE: Ms S Kleinsmith

Services:

| Ward/Area | Beds | Service | Ave. Bed Occ. |
|---------------|---|---|---------------|
| F1 | 27 | Medical emergencies | 157% |
| C1A | 20 trolleys | Trauma | 199% |
| C1D East/West | 19 | Surgical emergencies <ul style="list-style-type: none"> • 19 beds • 10 chairs • 3 cots | 192% |
| J7 | 31 | Trauma Ward | 84% |
| Resus | 6 trolleys | Surgical Emergency | 117% |
| Day Surgery | 15 | Day Ward | 21% |
| J6 | 29 | Orthopaedics | 88% |
| F4 | 32 | Orthopaedics | 83% |
| A3E | 31 | Orthopaedics | 90% |
| A3W | 31 | Orthopaedics | 90% |
| | Total: 215 (beds only) 26 (trolleys) | | |

Resources

| | |
|------------------------------|-----|
| Assistant Manager: Nursing | 1 |
| Operational Nursing Managers | 10 |
| Professional Nurses | 79 |
| Staff Nurses | 55 |
| Nursing Assistants | 115 |
| Housekeepers | 9 |
| Household Aids | 43 |

Number of Beds:

Orthopaedics: 129 (x6 beds in ward D4 included)

Emergency: 84+15 beds in Day Surgery

Highlights of the Year

- Twenty new trolleys received in Ward F1
- Hartman Award Ceremony: Three Nurses received awards for clinical excellence
- Installation of security gates in Resus and at the back of J7, for protection for all patients

Academic

- Four Professional Nurses completed Post Basic Diploma in Trauma and Emergency
- Four Professional Nurses completed Post Basic Diploma in Orthopaedics
- Two Staff Nurses selected for R683 bridging course (Still in training)
- One Assistant Nurse selected for R2175 bridging course (Still in training)

Special Events

- Various team building events involving stakeholders

INTENSIVE CARE

HEAD OF MODULE: Ms R Walsh

- A1 W Surgical ICU
- A1 E Burn Unit
- A2 Cardiac Thoracic Surgery
- A4 Neuro Surgery Adults and Paediatrics, Thoracic Surgery

NURSING

- A5 High Care – Medical and Surgical
- A5 Bronchoscopy theatre
- A5 Unit Medical Unit
- A6 High Care Cardio
- A6 Unit Cardio
- A7 Peritoneal dialysis and Haemodialysis, kidney transplant, transplants and peritoneal outpatients, follow-up clinics
- Total Parental Nutrition Care

Resources:

| | |
|--------------------------------|-----|
| Assistant Manager Nursing | 1 |
| Registered Professional Nurses | 162 |
| Registered Staff Nurses | 63 |
| Registered Nursing Assistants | 82 |
| Nursing Clerks | 4 |

Number of Beds: 172

Average bed occupancy: 100%

Highlights of the year:

- Open day was held by A7 Nephrology Department on World Kidney Day March 2013. This function was attended by members of the public
- Open day was held by A7 Nephrology Department in August 2013 to make public and staff aware of organ donation
- Good progress with BCA bundles – VAP (Ventilated Associated Pneumonia) in A5 Medical Unit, A4 Neurosurgical Unit, A5 high care medical and surgical, A1 Burn Unit and CLABSI (Central Line Associated Bloodstream Infection) A1 West, Surgical Unit and A5 Medical Unit
- Best Care Always bundles rolled out to other units in the ICU
- The CLABSI (Central Line Associated Bloodstream Infection) A1 Burn Unit October 2013 A5 High Care – medical and surgical
- Both bundles progress and results extremely positive and is well accepted by the Medical and Nursing staff.

- Ward A5 Medical Unit and A5 High Care – Medical Surgical received an award by the Infection Prevention Control team for the best performance in Infection Prevention and control practices in the hospital for 2013

Academic:

- Five Professional Nurses successfully completed the Diploma in Critical Care during 2013
- One Staff Nurse successfully completed the bridging course to Professional Registered Nurses
- Three Nursing Assistants successfully completed the bridging course to Staff Nurses
- Three Nurses were awarded Clinical Excellence Awards at the Hartman Memorial Lecture in October 2013
- Conferences attended by Nursing Staff: national Cardiology Conference in February 2013 and Critical Care Conference in August 2013. International Research Conference in April 2013

Special Donations:

- A4 Neurosurgical Unit received toiletries for patients sponsored by an unknown donor in August 2013

Special Events:

- The Intensive Care Module participated in the open day event of the institution in September 2013
- Staff celebration functions were successfully held on International Nurses Day 2013 and Women's Day 2013
- A successful team building effort was held in November 2013 in the form of a Nurses Ball for the ICU staff and was well attended and appreciated

NURSING

INTERNAL MEDICINE

HEAD OF MODULE: Ms SD Henry

Services:

- The Internal Medicine Module consists of Internal Medicine, Psychiatry and Oncology wards
- The Module includes four medical wards, one metabolic unit, one dermatology and one neurology ward
- Psychiatry – three inpatient wards and two outpatients clinics, namely Child Psychiatry and Adult Psychiatry
- Oncology – two inpatient wards and five outpatient clinics

Number of beds:

| | |
|-------------------|-----|
| Internal Medicine | 152 |
| Psychiatry | 42 |
| Oncology | 47 |

Resources:

| | |
|------------------------------|----|
| Operational Nursing Managers | 12 |
| Professional Nurses | 66 |
| Staff Nurses | 43 |
| Assistant Nurses | 89 |
| Administration Clerk | 1 |
| Housekeeping Supervisors | 11 |
| Household Aids | 55 |

Highlights of the year

- GLG, a new adolescent ward, was commissioned on 25 June 2013
- D10 was upgraded to a dedicated Isolation and General Medicine Ward and was commissioned on 6 December 2013
- The Hartman Award Ceremony took place on 2 October 2013. The nurses awarded for Clinical Excellence are RN M. Gertse, SN M. Andrews, NA N. Betana
- Staff development took place amongst all categories of staff

- One Registered Nurse completed her studies in Advanced Psychiatry at Stellenbosch University
- One Registered Nurse completed her studies in Oncology
- One Registered Nurse completed her studies in Midwifery
- Two Assistant Nurses qualified as Staff Nurses in 2013
- The wards in the Internal Medicine Department each had their own team building end of year functions

OBSTETRICS AND GYNAECOLOGY

HEAD OF MODULE: Ms JR Sapto

Services:

- C2A Labour Ward
- C2A East
- C2A High Care
- C2A Recovery Ward
- F2M Antenatal
- J2 Mothers and Babies
- J5 Mothers and Babies
- J4 Gynecology
- FG Gynaecology and Oncology
- Breastfeeding Clinic
- Outpatients: High Risk Clinic, Teenage Clinic, Special Care, New Bookings, Diabetic Clinic, Fetal Evaluation and Sonar
- Family Planning Clinic

Resources:

| | |
|------------------------------|----|
| Assistant Manager Nursing: | 1 |
| Operational Manager nursing: | 7 |
| Professional Nurses: | 94 |
| Enrolled Nurses: | 46 |
| Nursing Assistants: | 94 |
| Administration Clerk: | 1 |

Number of beds: 187

Average bed occupancy: 80%

NURSING

Highlights of the year

- Approval of the renovations in C2A. Renovations to commence in 2014
- Outreach to 20 Ruyterwacht families on Mandela day, 18 July 2014. Grocery parcels were handed to families at Ruyterwacht Community Clinic by the Nursing staff of Obstetrics and Gynaecology

Academic:

- Three Professional Nurses successfully completed the Diploma in Advanced Midwifery
- The Hartman Memorial Award Ceremony: Three Nurses were awarded for clinical excellence
- One Professional nurse

Special donations:

- Voluntary aid services of Tygerberg Hospital assisted us in the creation of a patient friendly environment by sponsoring curtains to C2A East

Special events:

- The Department hosted two successful teambuilding events
- The Department hosted a successful programme on International Nurses Day and International Midwifery Day

OUTPATIENTS DEPARTMENT

HEAD OF MODULE: Ms MV Majiedt

Services:

Total number of patients seen:

| | |
|----------------|---------|
| TOP | 2 061 |
| Gynae-Onco | 4 761 |
| Gynae | 10 200 |
| X-Ray | 190 479 |
| ENT | 9 500 |
| Breast Surgery | 7 430 |
| Surgery | 18 931 |
| Stoma | 8 756 |
| Urology East | 4 711 |
| Urology West | 6 015 |

| | |
|---------------------|--------|
| Orthopaedics | 30 948 |
| Ophthalmology | 23 949 |
| Respiratory | 8 566 |
| Gastro | 11 195 |
| Diabetic | 7 661 |
| Internal Medicine | 6 431 |
| Cardiology | 4 236 |
| Sick Bay | 1 762 |
| Occupational Health | 1 951 |
| Dermatology | 11 102 |
| Infectious Diseases | 13 492 |
| Haematology | 679 |
| Nuclear Medicine | 4 249 |

Highlights of the year:

- Hygeia Award for cleanliness was introduced in 2013 for the most outstanding household aid
- The team building events for the staff were held, e.g. Valentine's Tea, Nurses' Day Breakfast, Mothers' Day and Fathers' Day Tea
- During Women's month, staff received free Pap smear examinations
- In July, during the 67 minutes for Madiba, staff served tea, soup and bread to patients
- 16 Days of Activism against violence towards women and children was commemorated in November and December 2013
- Radiology – Introduction of extended services for MRI and CT scan introduced. To date, 1 231 MRI investigations were done after hours
- Occupational Health – Flu injections and Hepatitis B vaccines administered to staff. Needle prickles and splashes 13-334. PTB new cases – 24
- Cardiology – Outreach to Paarl every second Friday to evaluate patients
- Orthopaedics – Baby friendly waiting room was renovated
- Gastro – Colonoscopy surveillance outreach: Total of 120 patients and 93 procedures done. In the Clinic, 11 195 patients seen and 6 765 procedures done
- ECM was rolled out successfu

NURSING

PAEDIATRICS AND NEONATOLOGY

HEAD OF MODULE: Ms AF Jacobs

Services:

| Area | Beds | Service | Average Bed Occupancy |
|-------------------------|------|---------------------------|-----------------------|
| Ward GG | 24 | Paediatric Emergency | 81% |
| Ward G1 | 30 | Neonatology | 90% |
| Ward G2 | 27 | Neonatology | 105% |
| Ward G3 | 18 | Oncology | 49% |
| Ward J3 | 25 | Neonatology | 108% |
| Ward G4 | 27 | Surgery | 81% |
| Ward G6 | 25 | Orthopaedics | 76% |
| Ward G7 | 25 | General | 100% |
| Ward G8 | 30 | Neonatology | 83% |
| Ward G9 | 30 | Neurology | 80% |
| Ward A9 PICU | 10 | Paediatric Intensive Care | 86% |
| Ward A9 Paeds High Care | 4 | Paediatric High Care | 51% |
| Ward A9 NICU | 8 | Neonatal Intensive Care | 138% |
| Ward A9 High Care | 4 | Neonatal High Care | 51% |
| Ward A9 Trachea | 6 | High Care | 86% |
| Ward G10 | 23 | Infectious Diseases | 50% |
| Provide KMC services | 62 | Kangaroo Mother Care | 95 – 100% |
| Milk Kitchen | | Provide milk and EBM | ± 1 500 bottles pm |

Highlights of the year:

Hartman Awards for Nursing Excellence

awarded to:

Professional Nurse:

Ms FD Small

Enrolled Nurse:

Ms G Abrahams

Nursing Assistant:

Ms L Welishi

Elsa Reiner Trophy Recipient: **Ms F Japhta**

Annual Christmas Party was held for close to 400 children and 250 parents.

There were lots of visits by various church groups, schools and international celebrities throughout the year.

Academic achievements:

Professional Nurses: Bridging Course Staff

Nurse to Professional

Nurse [R683] x1

Advanced Midwifery and Neonatology x1

Paediatric Nursing x4

Nursing Administration x1

Nursing Assistants: Bridging Course Assistant

Nurse to Staff Nurse [R2 175]

NURSING

SURGICAL

HEAD OF MODULE: Mr R de Bruyn

Services:

| Area | Beds | Service | Average Bed Occupancy |
|---------|------|--|-----------------------|
| Ward D1 | 25 | Vascular surgery | 91% |
| Ward D2 | 31 | Abdominal surgery | 84% |
| Ward D3 | 30 | Plastic /Max Fac. surgery | 57% |
| Ward D4 | 28 | Private (Medical/Surgical/Orthopaedics/Cardiology) | 130% |
| Ward D5 | 31 | Head Neck and Breast surgery | 82% |
| Ward D6 | 31 | Urology | 73% |
| Ward D7 | 31 | Ophthalmology surgery (Speciality) | 70% |
| Ward G5 | 22 | Ear, Nose and Throat surgery | 68% |
| Ward J1 | 32 | Medical / Surgical | 96% |

Total Number of beds:

261

Resources:

| | |
|------------------------------|-----|
| Assistant Manager Nursing | 1 |
| Operational Nursing Managers | 9 |
| Professional nurses | 4 |
| Staff Nurses | 43 |
| Nursing Assistant | 101 |
| Housekeepers | 9 |
| Household Aids | 34 |

Highlights of the year:

- **Hartman Clinical Excellence Awards 2013**
- Professional Nurses Award: RPN M. Mans
- Staff Nurse : REN S. Philander
- Nursing Assistant : RAN A. Parsons

- **Smile Week**

The Smile Week outreach programme to children with cleft lips and palates was held from 11 to 15 November 2013. Thirty operations were done.

Through the Smile Foundation a wound care workshop was arranged and attended by both staff/nurses from Tygerberg Hospital and nurses from other hospitals

- **Academic:**

- One Professional Nurse completed Post Basic Diploma in Ophthalmology
- One Professional Nurse completed diploma in Nursing Education
- Two Auxiliary Nurses completed R2 175 bridging course.

NURSING

THEATRE/OPERATING ROOMS

HEAD OF MODULE: Mr RE Visagie

Overview of activities

- This unit renders a competent, safe, compassionate and ethical-based health service to hospitals and clinics in the drainage area.
- The Unit performs in average 120 cases per day in the general theatres and 30 cases per day in the emergency theatres.

Resources

| | |
|------------------------------|----|
| Assistant Nurse Manager | 2 |
| Professional Nurses | 90 |
| Staff Nurses | 35 |
| Nursing Assistants | 44 |
| Admin Clerks | 5 |
| General Assistants | 45 |
| Housekeepers | 4 |
| Operating Room Practitioners | 2 |

Output

- 26 Theatres for elective cases
- 1 Catheterization Laboratory
- 1 Radiology Theatre
- 4 Emergency Theatres
- 1 Decontamination Theatre for Nuclear Radiation

Comment on output

- 29 710 cases were done in 2012
- The PACU and the fourth Emergency Theatre function very well, 7 days a week and is very well utilized

Infrastructural Development

- The installation of four sterilisers in Theatre are completed
- The installation of the Air Handling Units are still in progress.

Highlights of the year

Hartman Awards handed to:

- Ms D Witbooi Professional Nurse
Ms A Bosman Staff Nurse
Ms M Appel Nursing Assistant
- Strategic Planning sessions were held in the Module.
- Testing the readiness for a Nuclear Decontamination Theatre was held on 3 November 2013 with Eskom Power Station.

Conclusion

- The planning for upgrading of the third floor theatres and staff rest rooms to uplift the morale, is a priority.

ANESTHESIOLOGY & CRITICAL CARE

HEAD OF DEPARTMENT

Prof Andre Coetzee

Resources:

| Posts (Full-time) | Number | Filled |
|---|--------|--------|
| 58 | 58 | 58 |
| Posts (sessional – how many hours worked per week) | | |
| 4 | 16 | 16 |

Output:

29 898 anaesthetic procedures done
Pain Clinic relocated and fully serviced
Active participation in Surgical Intensive Care

Comment on output:

Clear increase in disease severity of patients
Very long waiting lists for emergency cases
Increased demand for services because of suboptimal function in surrounding facilities
94% of elective lists ready for surgery by 08:00

Part 2

Faculty of Health Sciences

Community outreach programmes/ community services and interaction

Senior supervision established at Khayelitsha / Eerste River and Karl Bremer / Helderberg.
Collaboration with University of Zambia initiated.



Partnerships

International:

Collaboration with the University of Botswana
Three supernumary postgraduate students
Visiting experts visits department with DoE funding
Master class training and teaching
Ipcrates international symposium on Critical Care

Achievements with regard to research activities and research outputs:

| | |
|---|---|
| Number of publications from the department/division | 5 |
| Textbooks and contributions to textbooks | 2 |

Teaching and Training (undergraduate-, postgraduate- and elective students)

MB ChB IV – VI
Elective students from Canada and England
100 % pass rate in MMed and FCA examinations

BIOMEDICAL SCIENCES

HEAD OF DEPARTMENT

Prof. Paul D. van Helden

Summary of activities

Division of Medical Physiology

Teaching

The Division of Medical Physiology is predominantly responsible for teaching and training of both undergraduate (MBChB, BChD, BSc Physiotherapy, Occupational Therapy, Dietetics) and postgraduate students (BScHon, MSc, PhD, MMed) studying at the Faculty of Medicine and Health Sciences.

Research

The three main fields of research include the Cardiovascular Research Group, the Stellenbosch University Reproductive Research Group and Tuberculosis Research.

Clinical Services

One Respiratory clinic per week

Clinical Services

One bronchoscopy theatre session per week
Eight weeks per year on Medical ICU call duty, including ward rounds, consultation service (ward referrals), after hours on-call and weekend ward rounds
Active participation in training of clinical assistants

Clinical Genetics and Genetic Counselling

We conduct our clinical work in the prenatal/perinatal, paediatric and adult medicine environment at Tygerberg Hospital. These include:

- Clinical Genetic assessment/counselling for fetal anomalies, teratogens and family history of birth defects (Interdisciplinary Clinic with Fetal Medicine)
- Genetic counselling for pregnancies at increased risk of Down syndrome (Interdisciplinary Clinic with Fetal Medicine)
- Perinatal assessment of all stillbirths for birth defects, and counselling of parents
- Paediatric Genetic Clinic and Ward Call service



- Paediatric and surgical specialties: Interdisciplinary Clinics for Haemophilia (together with paediatric Haematology), cleft lip and /or palate (with Plastic surgery), and craniosynostosis syndromes (with Plastic Surgery and Neurosurgery)
- Cancer Genetics (Currently mainly for familial breast cancer and familial colon cancer). In 2013 we started genetic counselling and testing for familial ovarian cancer and retinoblastoma. The breast cancer service is interdisciplinary, in collaboration with the Mamma Clinic team
- Neurogenetics – a relatively new clinic in collaboration with Adult Neurology

We conduct outreach services to:

- Level 2 hospitals (Paarl and Worcester)
- School for children with disabilities (blindness, deafness, intellectual disability)

The Division of Anatomy and Histology

Teaching

First semester:

MBChB II

MMed

Speech Therapy III

Second semester:

Dentistry

Occupational Therapy II

Physiotherapy II

Speech therapy III (Clinical Neurology)

BIOMEDICAL SCIENCES

Community outreach programmes/community services and interaction.

Division of Medical Physiology

Various members of staff act as regional finals judges in the ESCOM Expo for Young Scientists, a competition with the aim to create awareness for sciences amongst all school children.

Several members of staff are involved in the Mentor/Tutor Programme of the Faculty of Health Sciences.

Prof Barbara Huisamen is also involved in the Women in Science Career Development Mentor Programme. She and Dr S. Bardien-Kruger are currently lobbying for this programme to also be established in the Tygerberg campus.

Prof. Andreas Diacon is involved in the clinical service component of the Department of Internal Medicine at Tygerberg Hospital, where he makes a significant contribution to service delivery, as well as student teaching (both under- and postgraduate). He also maintains and staffs research clinics at various healthcare facilities and contributes to health care in study participants.

Clinical Genetics and Genetic Counselling

We have completed and are pilot testing an informational video on Down syndrome that we developed together with the Down Syndrome Association.

We work with the Foundation for Alcohol Related Research to highlight the problem of FAS, and in 2013 we were involved in a large epidemiological survey of FAS in Vredenburg, Saldanha Bay and St Helena Bay.

Dr Urban made a presentation to PINSA (support group for primary immunodeficiencies) and to the National Department of Social Welfare Roadshow on Albinism.

Division of Molecular Biology and Human Genetics

Prof. Corfield has continued her involvement in outreach activities that engage the general public in a greater awareness and appreciation of biomedical science. Since 1998, she has received support and encouragement for this work from different stakeholders and has actively encouraged the participation of others in these events. These activities have been undertaken with "outreach" funding from the CBTBR. Of note in 2013: Invited to give workshops and run Murder Mystery at Bahrian Science centre. On the scientific advisory committee of Cape Town Science centre

1. Work with DNA project to promote understanding of forensic DNA profiling Scifest Africa (1 per day 13 to 20 March)
Workshops given to communities in greater Cape Town area Emergency Medical Services (Pinelands 5 April), Tableview (14 August), Goodwood Fire station (7 September), Melkbosstrand (14 September), Thornton (28 September), Elsies River (7 November)
2. Murder Mystery that I developed to promote discussion about use of DNA forensics and establishment of a DNA database in South Africa given at:
Scifest Africa Grahamstown x2 (14 and 16 March)
Bahrian Science Centre (30 May)
CT Science Centre as a training workshop for teachers at CT Science Centre, Observatory (9 February)
Whale Coast conservation group, Hermanus (tied in with theme of biopiracy and IKS) (30 August)
3. The DNA detective workshop that promotes understanding of genetics, forensics, etc. given at:
Scifest Africa (1 per day Grahamstown 13 to 20 March)
The Albinism Society (Kleinmond 16 February)
Bahrian Science Centre x2 per day (26 to 30 May)
Annual Trainers workshop V & A Waterfront (22 and 23 October)

BIOMEDICAL SCIENCES

Laboratory work:

PCR – speciation of Mycobacterium tuberculosis strains infecting study participants
 IS6110 DNA fingerprinting of Mycobacterium tuberculosis strains infecting study participants
 Performance of Interferon gamma release assay testing in the immunology lab for TBH

patients – mainly paediatric oncology patients

Teaching

MBChB I: 8 lectures in immunology
 MBChB I – Verlengde graadprogram: 4 lectures in immunology
 MBChB II: 6 lectures in immunology
 MBChB IV: 1 lecture on TB immunology

Resources:

| Posts (Full-time) | Number | Filled |
|--|--|----------------------------------|
| Professor | 5 | 5 |
| Specialist | Genetic counselling: 2 (one is Head of Clinical Unit) | 2 (one filled by a registrar) |
| Registrar | 1 | 1 |
| Medical Officer | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Genetic Counsellor | 32 hours/week | Yes |
| Medical Geneticist | 8 hours/week | Yes |

Output:

Clinical Genetics and Genetic counselling

| CLINIC | FREQUENCY | PATIENTS SEEN 2013 |
|--|----------------------------------|--|
| TBH Assessment of stillbirths | Daily (weekdays) | 727 |
| TBH Prenatal Down Syndrome counselling | 1/week (and ward call) | 594 |
| TBH Prenatal Fetal Anomaly Counselling | 1/week (and ward call) | 310 |
| TBH Prenatal (FH) | | 35 |
| TBH Prenatal (Other) | | 26 |
| TBH Prenatal TOTAL | | 965 |
| TBH Paediatric Genetic | 1 clinic/week (and ward call) | 355 first visits 299 follow-up visits |
| TBH Paediatric Genetic TOTAL | | 654 |
| TBH Haemophilia | 1/ month | 1 |
| TBH Cancer Genetics | 1/month (and ward call) | 83 breast cancer 13 Colon cancer |
| TBH Neurogenetic Clinic | 1 in 3 months | 12 |
| TBH Cleft Palate | 2/month | ~70 |
| Outreach to LSEN schools | Regular | 105 |
| Outreach to Paarl and Worcester Hospital | | ~40 |
| Brief telephonic counselling and result-giving | | ~450 |
| TOTAL | | 3120 |

BIOMEDICAL SCIENCES

Division of Molecular Biology and Human Genetics

Specialist clinics (pulmonology): one clinic each week

- bronchoscopy theatre list: one afternoon and one full day theatre list per week
- 56 days intensive care unit after hour calls for each of two specialists

Comment on output:

Clinical Genetics and Genetic Counselling

- Due to the interdisciplinary nature of much of our work, the majority of our patient visits are booked in under other departments. In addition, we do not have inpatient beds for genetics. For these reasons, our work may be significantly under-represented on Clinicom
- Clinical genetic and genetic counselling consultations are long (assessment of a new case takes ~45 minutes, and follow-up cases ~30 minutes). As part of an assessment there may be contact with multiple family members for information, especially in the cancer genetic, neurogenetic and haemophilia clinics. Therefore, the patient numbers described represent a considerable workload

Division of Molecular Biology and Human Genetics

We performed Quantiferon tests for Tygerberg Hospital whenever requested, that is for Paediatric Oncology and for Ophthalmology. This is a specialised test for TB infection that is not available through the state sector.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

Division of Medical Physiology

The following infrastructural upgrades and laboratory equipment were procured during the course of the year: Fluorescent microscope, ChemiDoc MP

Chemiluminescent System, Incubator and Laminar Flowcabinet

Division of Molecular Biology and Human Genetics

Technical Advances

1. In all our projects we improve and advance technology and try to make use of the latest technology. Thus, for example, our ability to do DNA sequencing and handle data is vastly improved. Some other examples are given below
2. We have 2 small robotic stations to assist with large scale PCR assays, to maximise labour efficiency
3. We have introduced WGA, or whole genome amplification, so that we can make maximum usage of minimal samples
4. We have developed a novel method for the detection of transrenal DNA for the diagnosis of TB and are now applying this technique to identify the causative agent of sarcoidosis
5. We developed a transport bottle or medium for the transport of fine needle biopsy aspirates for the diagnosis of TB by either culture of the Xpert MTB/RIF assay
6. We have expanded our ability to do immunology work and have new instrumentation which can measure over 30 cytokines in a single sample
7. We have acquired a CFX-90 instrument for the development and evaluation of a novel PCR technology for the rapid detection of mutations conferring resistance
8. We have 1 automated Western Blotting station that is able to perform time-consuming western blots usually done by students or technicians. This has greatly reduced the amount of man hours spent on performing western blots.
9. We are the entity of choice for speciation diagnostics of non-tuberculous mycobacteria
10. We are the centre of choice for TB clinical trials

BIOMEDICAL SCIENCES

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BIOMEDICAL SCIENCES

4. Careers in Healthcare presentation: Presented by Caroline Pule (CBTBR) to Stellenbosch University bridging course students (28 March)
With Caroline's assistance, Careers in Health Care developed for placement on SAWISE website www.sawise.org.za/ (SAWISE = South African Women in Science and Engineering)
Poster made and presented to media before the Minister of Health's budget speech
5. Presentation entitled "One scientist's journey" (story of my 50 years in science) given at:

SU High Science meets High school series. Caroline Pule and Nathan McGregor presented their work at the same occasion. (Conservatoire SU main campus 25th July)
Unizul Science Centre Richards Bay, KwaZulu-Natal (KZN) (14 February)
National Science week at West Coast Science centre Vredenberg (two UCT postgrads presented their work at same time) Diazville High School and Weston High School (31 July)
6. Presentation entitled "The science of Love"
Given a Unizul science Centre Richards Bay, KZN (14 February)

Partnerships

Division of Medical Physiology

National:

The Cardiovascular Research Group, headed by Prof. Hans Strijdom, maintains close ties with the Cape Heart Centre (Hatter institute, UCT), the Disease Signalling Group (Physiological Sciences, US), School of Physiology (University of the Witwatersrand), Department of Medical Biosciences (UWC) and Cape Peninsula University of Technology.

Prof. Huisamen is involved in a collaborative study with Dr S. Bardiën-Kruger investigating

the possibility that Parkinson's disease is partly a mitochondrial disease. In addition, she has formed a collaboration with Prof. S LeCour at the UCT Cape Heart Centre to investigate the involvement of STAT-3 in one of her ongoing projects.

The Reproductive Research Group (SURRG), headed by Prof. Stefan du Plessis, actively collaborates with the research groups of Prof. Carin Huyser (University of Pretoria), Prof. Gerhard van der Horst (Medical Biosciences, University of the Western Cape) and Dr Guillaume Aboua (Cape Peninsula University of Technology).

Dr John Lopes has an ongoing collaboration with various departments at Stellenbosch University, including Geology, Chemistry, Forestry and Physiology. This is to introduce our students to an interdisciplinary approach in science, which is necessary for the successful application of science in the knowledge economy that South Africa is cultivating.

Prof. Andreas Diacon, together with Dr Sven Friedrich, is creating a research platform for molecular TB diagnostics. This has been successful and the investment timely as the public health sector is rapidly developing into the same direction. The platform has in the reporting period been expanded to paediatric tuberculosis in collaboration with the Department of Paediatrics and Child Health, and work in tuberculosis meningitis has been completed. Dr Diacon is also still involved with clinical research at the Department of Medicine.

Private sector:

Prof. Barbara Huisamen forms part of a collaborative study with the SMME ConbrioBrands to substantiate claims about the over-the-counter anti-diabetic remedy prepared from *Prosopis glandulosa*. They are currently investigating the anti-inflammatory potential of this preparation in conjunction with effects on muscle injury regeneration.

Prof. Barbara Huisamen forms part of a large collaborative project funded by Cape Kingdom to investigate the anti-diabetic

BIOMEDICAL SCIENCES

and anti-hypertensive effects of a watery extract of a specific indigenous plant species.

Prof. Barbara Huisamen forms part of a collaborative study with the SMME ConbrioBrands to substantiate claims about the over-the-counter anti-diabetic remedy Diavite. They are currently investigating the anti-hypertensive effects of this drug in a rat model of hypertension induced by a high fat diet.

Prof. Andreas Diacon is investigating novel anti-tuberculosis agents and regimens in collaboration with drug manufacturers and international partners, among them the Global Alliance for Tuberculosis Drug Development (New York, USA), the US AIDS Clinical Trials Network and the European Union (EDCTP).

International:

Prof. A. Lochner is involved in a joint project with Prof. K. Ytrehus from the Department of Physiology, University of Tromso, Norway. The project is entitled "The effects of melatonin on the ischaemic heart" and sponsored by a joint research grant under the South African-Norway programme on research co-operation.

Prof. Hans Strijdom has established several international collaborative partnerships, amongst others with the Medical University of Graz (Austria) and the private research company VITO in Belgium. Furthermore, Prof. Strijdom will serve as the project coordinator of a large, multi-national study involving 5 different countries (South Africa, Kenya, Ivory Coast, Belgium and Austria) investigating the relationship between HIV and ARV treatment and vascular dysfunction. This three-year study will commence in June 2014.

Prof. Stefan du Plessis collaborates extensively with Dr Ashok Agarwal, Director of the Reproductive Research Center, Cleveland Clinic, Ohio, USA. He is also involved in joint projects with Prof Diana Vaamonde (Spain), Dr Hans Ingolf Nielsen (Aalborg University, Denmark), as well as Drs

Charles Kimwele and Kavoo Linge from the University of Nairobi, Kenya.

Prof. Stefan du Plessis participated as an international faculty member in the Summer Intern Programme of the Center for Reproductive Research at Cleveland Clinic, Ohio, USA.

Prof. Andreas Diacon has continued and expanded his research activities into novel anti-tuberculosis agents and regimens in collaboration with drug manufacturers and international partners. The SU-based part of the enterprise has now grown to 20 members performing tests on sputum samples collected at various research locations in Cape Town, such as Delft, Mfuleni, Scottsdale, Brooklyn Chest Hospital and the Task Clinical Research Centre in Bellville. Prof. Diacon is also still involved with clinical research at the Department of Medicine and is rendering clinical services.

Clinical Genetics and Genetic Counselling Within Tygerberg:

Main clinical collaborations are with Fetal medicine (Prenatal diagnosis), Mamma Clinic (Familial breast cancer) and NHLS Immunology (primary immunodeficiencies).

National:

We work with the Foundation for Alcohol Related Research on joint research interests and advocacy to highlight the problem of FAS.

Private:

We work with the Fetal Assessment Centre to improve approaches to prenatal genetic counselling and genetic testing.

International:

Prof. Matthew Chersich, Centre for Health Policy, University of Witwatersrand, and International Centre for Reproductive Health, University of Ghent, Belgium

Division of Anatomy and Histology

National:

Collaborative work with Dr Helen Cox from Médecins Sans Frontières, Khayelitsha

BIOMEDICAL SCIENCES

There is a shortage of appropriately qualified Anatomists worldwide. The Division of Anatomy and Histology has a BSc Histology programme in place with 2 to 4 students per year. Since 2011, the division has offered Anatomy as a major BSc direction (35 students) at Stellenbosch University and is the only other university in the RSA (University of Pretoria = graduates 2 to 3 students per year) educating Anatomists.

A significant number of current students (15 out of a class of 35) expressed interest in pursuing Human Anatomy as a postgraduate discipline which has necessitated the Division to develop postgraduate programmes in Human Anatomy. The first group of 10 BSc Hons in Human Anatomy for 2013 were selected in November 2012. Furthermore, the Division has not (in the history of Stellenbosch University) offered postgraduate programmes in Human Anatomy and has thus limited postgraduate research capacity and a limited research publication record.

Human Anatomy is worldwide a highly specialised field, with a myriad of research opportunities, ranging from physical anthropology, the anatomy of human anatomical variation, comparative anatomy, surgical and radiological anatomy, etc. Since 2010, the Division has developed partnerships with 12 international manufacturers of surgical equipment (Accumed, Medtronic, Johnson & Johnson, Kyhpomed, Zimmer, Smith & Nephew, Stryker, Storz, Customed, Adcock-Ingram, Bicifix, etc.) as a venue of preference for cadaver workshops for the weekly retraining of Specialists in Orthopaedics (shoulders, hips, knees, ankles, elbows), Neurosurgery (brain and spinal reconstruction), Obstetrics and Gynaecology (laparoscopic Hysterectomy) and Plastic and Reconstructive Surgeons (skin flap reconstruction of the nose for example). The common denominator in all the workshops is that surgeons need to know their anatomy. Graduates in BSc Hons in Human Anatomy (and later MSc and PhD)

are in acute demand by the aforementioned companies.

Division of Molecular Biology and Human Genetics

National:

IIDMM, UCT: collaboration on Gates Grand Challenge project

Lung Institute, UCT: collaboration on diagnostic and biomarker projects

K-RITH (KwaZulu-Natal): Dr Adrie Steyn, collaboration on biomarker and TB

immunology work

MRC Durban, Dr Alexander Pym,

collaboration on capacity development grant

Private:

Dr Johan Theron, Panorama Mediclinic:

Sarcoidosis project

Becton Dickinson, Raleigh, Durham, USA, Mr

Alex Lastovich, new flow cytometric technology

International:

Max Planck Institute for Infection Biology, Berlin, Germany – Prof. Stefan Kaufmann,

biomarker project

MRC, The Gambia – Dr Jayne Sutherland, biomarker project

Case Western Reserve University, Cleveland, USA – Prof Henry Boom, biomarker project

Leiden University, Netherlands – Prof. Tom Ottenhoff, biomarker project

Makarere University, Uganda – Prof. Harriet Mayanja, biomarker project

London School of Hygiene and Tropical Medicine, UK – Prof. Hazel Dockrell,

biomarker project

Armhauer Hansen Institute, Addis Ababa, Ethiopia – Dr Abraham Aseffa, biomarker

project

Ethiopian Health and Nutritional Research Institute, Addis Ababa, Dr Kabede,

biomarker project

Karonga prevention Study, Malawi, Dr Mia Crampin, biomarker project

NIH, Maryland, USA – Dr Clifton Barry, biomarker project

University of Namibia, Dr M. van de Vyver, biomarker project

University of Zambia, Dr Duncan Chanda, capacity development project

BIOMEDICAL SCIENCES

Manhica Research Institute, Mozambique,
Dr Eucebio Macete, capacity development
project

Botswana Harvard Research Institute, Dr
Rosemary Musonda, capacity development
project

Malawi College of Medicine, Dr Newton
Kumwenda, capacity development project

Achievements with regards to research activities and research outputs:

Number of publications from the
department/division

Medical Physiology:

| | |
|---|----|
| Publications in peer reviewed research papers | 22 |
| Chapters in books | 2 |
| Conference Presentations | 15 |
| Conference Posters | 16 |
| PhD Graduates | 4 |
| MSc Graduates | 5 |
| Hons Graduates | 12 |

BRUNDYN K., KOEGELENBERG C.F.N., DIACON A.H., LOUW M., SCHUBERT P., BOLLIGER C.T., VAN DEN HEUVEL M.M., WRIGHT C.A.

Transbronchial fine needle aspiration biopsy and rapid on-site evaluation in the setting of superior vena cava syndrome. *Diagnostic Cytopathology* 2013; 41(4): 324-329.

DAWSON R., DIACON A.H. PA-824, moxifloxacin and pyrazinamide combination therapy for tuberculosis. *Expert Opinion on Investigational Drugs* 2013; 22(7): 1-6.

DIACON AH, DAWSON R, VON GROOTE-BIDLINGMAIER F, SYMONS G, VENTER A, DONALD PR, CONRADIE A, ERONDU N, GINSBERG AM, EGIZI E, WINTER H, BECKER P, MENDEL CM. Randomized dose -ranging study of the 14-day early bactericidal activity of Bedaquiline (TMC207) in patients with sputum microscopy smear-positive pulmonary tuberculosis. *Antimicrobial Agents and Chemotherapy* 2013; 57(5): 2199-2203.

DIACON A.H., DONALD P.R., MENDEL C.M. Early bacterial activity of new drug regimens for tuberculosis-Authors' reply. *Lancet* 2013; 381(9861): 112-113.

DOOLEY K.E., NUERMBERGER E.L., DIACON A.H. Pipeline of drugs for related diseases: tuberculosis. *Current Opinion in HIV and AIDS* 2013; 8(6): 579-585.

FLEPISI TB, LOCHNER A, HUISAMEN B. The consequences of long-term glycogen synthase kinase-3 inhibition on normal and insulin resistant rat hearts. *Cardiovascular Drugs and Therapy* 2013; 27: 381-392.

FLINT M., DU PLESSIS S.S. Trichomonas vaginalis in Sub-Saharan Africa: occurrence and diagnostic approaches for the male partner. *Medical Technology SA* 2013; 27(1): 26-28.

FRIEDRICH S.O., RACHOW A., SAATHOFF E., SINGH K., MANGU C.D., DAWSON R., PHILLIPS P.P.J., VENTER A., BATESON A., BOEHME C.C., HEINRICH N., HUNT R.D., BOEREE M.J., ZUMLA A., MCHUGH T.D., GILLESPIE S.H., DIACON A.H., HOELSCHER M. Assessment of the sensitivity and specificity of Xpert MTB/RIF assay as an early sputum biomarker of response to tuberculosis treatment. *Lancet* 2013; 1(6): 462-470.

HAMADA A., SHARMA R., DU PLESSIS S.S., WILLARD B., YADAV S.P., SABANEKH E., AGARWAL A. Two-dimensional differential in-gel electrophoresis-based proteomics of male gametes in relation to oxidative stress. *Fertility and Sterility* 2013; 99(5): 1216-1226.

HUISAMEN B, GEORGE C, GENADE SJ. Cardioprotective and anti-hypertensive effects of Prosopis glandulosa in rat models of pre-diabetes. *Cardiovascular Journal of Africa* 2013; 24(2): 10-16.

KAYIGIRE X.A., FRIEDRICH S.O., VENTER A., DAWSON R., GILLESPIE S.H., BOEREE M.J., HEINRICH N., HOELSCHER M., DIACON A.H. Direct Comparison of Xpert MTB/RIF Assay with Liquid and Solid Mycobacterial Culture for Quantification of Early Bactericidal Activity. *Journal of Clinical Microbiology* 2013; 51(6): 1894-1898.

KOEGELENBERG C.F.N., DIACON A.H. Image-guided pleural biopsy. *Current Opinion in Pulmonary Medicine* 2013; 19(4): 368-373.

KOLWIJCK E., MITCHELL M., VENTER A., FRIEDRICH S.O., DAWSON R., DIACON A.H. Short-term storage does not affect the quantitative yield of Mycobacterium

tuberculosis in sputum in early-bactericidal-activity studies. *Journal of Clinical Microbiology* 2013; 51(4): 1094-1098.

LIWA A.C., SCHAAF H.S., ROSENKRANZ B., SEIFART H.I., DIACON A.H., DONALD P.R. Para-Aminosalicylic acid plasma concentrations in children in comparison with adults after receiving a granular slow-release preparation. *Journal of Tropical Pediatrics* 2013; 59(2): 90-94.

MOR Z., LEVENTHAL A., DIACON A.H., FINGER R., SCHOCH O.D. Tuberculosis screening in immigrants from high-prevalence countries: Interview first or chest radiograph first? A pro/con debate. *Respirology* 2013; 18: 432-438.

SHARMA R., AGARWAL A., MOHANTY G., DU PLESSIS S.S., GOPALAN B., WILLARD B., YADAV S.P., SABANEKH E. Proteomic analysis of seminal fluid from men exhibiting oxidative stress. *Reproductive Biology and Endocrinology* 2013; 11(85): 1-15.

SHARMA R., AGARWAL A., MOHANTY G., HAMADA A., GOPALAN B., WILLARD B., YADAV S.P., DU PLESSIS S.S. Proteomic analysis of human spermatozoa proteins with oxidative stress. *Reproductive Biology and Endocrinology* 2013; 11(48): 1-18.

VON GROOTE-BIDLINGMAIER F., KOEGELENBERG C.F.N., BOLLIGER C.T., CHUNG K.F., RAUTENBACH C., WASSERMAN E., BERNASCONI M., FRIEDRICH S.O., DIACON A.H. The yield of different pleural fluid volumes for *Mycobacterium tuberculosis* culture. *Thorax* 2013; 68(3): 290-291.

Journal Articles (NON-subsidised)

DU PLESSIS S.S., GOKUL S.R., AGARWAL A. Semen hyperviscosity: causes, consequences and cures. *Frontiers in Bioscience Elite* 2013; 5: 224-231.

FRIEDRICH S.O., RACHOW A., SAATHOFF E., SINGH K., MANGU C.H., DAWSON R, PHILLIPS P.P.J., VENTER A., BATESON A., BOEHME C.C., HEINRICH N., HUNT R.D., BOEREE M.J., ZUMLA A., MCHUGH T.D., GILLESPIE S.H., DIACON A.H., HOELSCHER M. Assessment of the sensitivity and specificity of Xpert MTB/RIF assay as an early sputum biomarker of

response to tuberculosis treatment. *The Lancet Respiratory* 2013; 1(6): 462-470.

LAMPIAO F., DU PLESSIS S.S. New developments of the effect of melatonin on reproduction. *World journal of Obstetrics and Gynecology* 2013; 2(2): 15-22.

LOCHNER A., HUISAMEN B, NDUHIRABANDI F. Cardioprotective effect of malatonin against ischaemia/reperfusion damage. *Frontiers in Bioscience Elite* 2013; 5: 305-315.

Proceedings International

BECKER K.W., SCHEFFER C., BLANCKENBERG M.M., DIACON A.H. Analysis of adventitious lung sounds originating from pulmonary tuberculosis. 35th Annual International conference of the IEEE EMBS, Osaka, Japan, 2013: 4334-4337.

Chapters in Books

ABOUA Y.G., OGUNTIBEJU O.O., DU PLESSIS S.S. Can lifestyle factors of diabetes mellitus patients affect their fertility?. In *Diabetes Mellitus insights and perspectives*, InTech, Rijeka, Croatia (local name: Hrvatska), 2013: 95-116.

RAKHIT M., GOKUL S.R., AGARWAL A., DU PLESSIS S.S. Antioxidant strategies to overcome OS in IVF-embryo transfer. In *Studies on women's health*, Humana Press, New York, USA, 2013: 237-262.

Doctoral completed

GENIS A. Exposure of cardiac microvascular endothelial cells to harmful stimuli: A study of the cellular responses and mechanisms. PhD (Fisiol), 2013. 469 pp. Promotor: Strijdom H. Co-promoter: Huisamen B.

HATTINGH S.M. Ischaemic preconditioning: An investigation of the patterns of kinase activation and protein expression profiles during reperfusion in the rat heart. PhD, 2013. 330 pp. Promotor: Du Plessis P.A.L. Co-promoter: Engelbrecht A-M, Salie R.

NDUHIRABANDI F. An investigation into the mechanisms involved in glucose homeostasis, microvascular endothelial function and mitochondrial function in normal and insulin resistant states. PhD (Fisiol), 2013. 319 pp. Promotor: Lochner A. Co-promoter: Huisamen B, Strijdom H.

BIOMEDICAL SCIENCES

VAN VUUREN D. The role of protein phosphatase 2A (PP2A) in myocardial ischaemia/reperfusion injury. PhD (Fisiol), 2013. 355 pp. Promotor: Lochner A. Co-promoter: Engelbrecht A-M.

Masters completed

GEORGE S. A critical analysis of mitochondrial functioning and associated proteins in obesity-related cardiomyopathy. MScFisiol, 2013. 212 pp. Tutor or supervisor: Huisamen B.

HANSER S. Establishment and validation of a terminally differentiated adult rat ventricular cardiomyocyte model. MScGeneeskWet, 2013. 123 pp. Tutor/supervisor: Lopes J. Co-tutor/supervisor: Huisamen B.

LUMKWANA D. Identifying appropriate factors for isolated adult rat cardiomyocytes culture and experimentation. MScGeneeskWet, 2013. 132 pp. Tutor/supervisor: Lopes J.

MAARTENS PJ. Investigating the effects of nicotine on the male reproductive system. MScFisiol, 2013. 114 pp. Tutor/supervisor: Du Plessis SS. Co-tutor/supervisor: Windvogel S.

VAN DER LINDE M. Gender selection: separation techniques for x-and y-chromosome bearing human spermatozoa. MScFisiol, 2013. 208 pp. Tutor/supervisor: Du Plessis SS.

RESEARCH RECOGNITION OR AWARDS:

Margot Flint successfully completed the SANPAD (South African Netherlands Programme on Alternatives in Development) RCI programme (Research Capacity Initiative) for selected PhD students.

- Liwa A.C., Schaaf H.S., Rosenkranz B., Seifart H.I., **Diacon** A.H., Donald P.R. Para-aminosalicylic Acid plasma concentrations in children in comparison with adults after receiving a granular slow-release preparation. *J. Trop Pediatr* 2013;59:90-4
- Brundyn K., Koegelenberg C.F., **Diacon** A.H., Louw M., Schubert P., Bolliger C.T., Van den Heuvel M.M., Wright C.A. Transbronchial fine needle aspiration biopsy and rapid on-site evaluation in the setting of superior vena cava

syndrome. *Diagn Cytopathol* 2013;41:324-329

- Von Groote-Bidlingmaier F., Koegelenberg C.F., Bolliger C.T., Chung P.K., Rautenbach C., Wasserman E., Bernasconi M., Friedrich S.O., **Diacon** A.H. The yield of different pleural fluid volumes for Mycobacterium tuberculosis culture. *Thorax* 2013;68:290-291
- **Diacon** A.H., Donald P.R., Mendel C.M. Early bactericidal activity of new drug regimens for tuberculosis – Authors' reply. *The Lancet* 2013;381:112-3
- Kolwijck E., Mitchell M., Venter A., Friedrich S.O., Dawson R., **Diacon** A.H. Short-term storage does not affect the quantitative yield of Mycobacterium tuberculosis in sputum in early-bactericidal-activity studies. *J. Clin Microbiol* 2013;51:1094-8
- Mor Z, Leventhal A., **Diacon** A.H., Finger R., Schoch O.D. Tuberculosis screening in immigrants from high-prevalence countries: Interview first or chest radiograph first? A pro/con debate. *Respirology* 2013;18:432-8
- **Diacon** A.H., Dawson R., Von Groote-Bidlingmaier F., Symons G., Venter A., Donald P.R., Conradie A., Erundu N., Ginsberg A.M., Egizi E., Winter H., Becker P., Mendel C.M. Randomized Dose-Ranging Study of the 14-Day Early Bactericidal Activity of Bedaquiline (TMC207) in Patients with Sputum Microscopy Smear-Positive Pulmonary Tuberculosis. *Antimicrob Agents Chemother* 2013;57:2199-2203
- Kolwijck E., Friedrich S.O., Karinja M.N., Van Ingen J., Warren R.M., **Diacon** A.H. Early stationary phase culture supernatant accelerates growth of sputum cultures collected after initiation of anti-tuberculosis treatment. *J. Clin Microbiol* 2013;51:1094-1098
- Becker K.W., Scheffer C., Blanckenberg M.M., **Diacon** A.H. Analysis of adventitious lung sounds originating from pulmonary tuberculosis. *Conf Proc IEEE Eng Med Biol Soc* 2013;2013:4334-4337
- Dawson R., **Diacon** A. PA-824, moxifloxacin and pyrazinamide combination therapy for tuberculosis. *Expert Opin Investig Drugs* 2013;22:927-932

BIOMEDICAL SCIENCES

- Dooley K.E., Nuernberger E.L., **Diacon** A.H. Pipeline of drugs for related diseases: tuberculosis. *Curr Opin HIV AIDS* 2013;8:579-585
- Koegelenberg C.F., **Diacon** A.H. Image-guided pleural biopsy. *Curr Opin Pulm Med* 2013;19:368-373
- Kayigire X.A., Friedrich S.O., Venter A., Dawson R., Gillespie S.H., Boeree M.J., Heinrich N., Hoelscher M., **Diacon** A.H.; Direct comparison of Xpert MTB/RIF with liquid and solid mycobacterial culture for the quantification of early bactericidal activity. *J. Clin Microbiol* 2013;51:1894-1898
- 2. Boesak E.J., Baatjes K., Schoeman M., Appfelstaedt J.P., Urban M. BRCA related breast cancer in South Africa: clinical and pathological correlation of characteristics. University of Stellenbosch Academic Year-day, abstract number 316
- 3. Norman K., Morris S., Schoeman M., Urban M. Non-invasive prenatal testing with cell-free DNA: the future arrives but what does it mean for us? South African Society of Ultrasound in Obstetrics and Gynaecology Conference, Pretoria 2013
- 4. Schoeman M., Esser M., Urban M. The importance of Genetic Counselling in Primary Immunodeficiency disorders: X-linked Agammaglobulinemia (XLA) family as a case example in a developing country setting. African Society of Immunodeficiency Conference, Sun City, June 2013

Clinical Genetics and Genetic Counselling **Peer-reviewed articles:**

1. Schoeman M., Appfelstaedt J.P., Baatjes K., Urban M. Implementation of a breast cancer genetic service in South Africa – lessons learned. *South African Medical Journal* 2013; 103(8):529-533. DOI: 10.7196/SAMJ.6814
2. Olivier L.*, Urban M.*, Chersich M.F., Temmerman M., Viljoen D. Burden of fetal alcohol spectrum disorders in the rural West Coast of South Africa. *South African Medical Journal* 2013; 103(6): 402-405. DOI:10.7196/SAMJ.6249

Opinion pieces:

1. Urban M., Morris S., Schoeman M., Geerts L., Norman K. Appropriate clinical use of non-invasive prenatal testing in South Africa. *Obstetric and Gynecology Forum* 2014; 24(1): 35-40
2. Urban M. Clinical issues in genetic testing for multifactorial diseases. *South African Medical Journal* 2013; 103(8): 517. DOI:10.7196/SAMJ.7232 (*Equal first author)

Conference presentations:

1. Urban M.F., Olivier L., Viljoen D., Temmerman M., Chersich M.F. New evidence on the epidemiology of fetal alcohol syndrome in South Africa. SASHG conference, Johannesburg, October 2013

Molecular Biology and Human Genetics **Peer-reviewed articles:**

1. ANSONG C., ORTEGA C., PAYNE S.H., HAFT D.H., CHAUVIGNE-HINES L.M., LEWIS M.P., OLLODART A.R., PURVINE S.O., SHUKLA A.K., FORTUIN S., SMITH R.D., ADKINS J.N., GRUNDNER C., WRIGHT A.T. Identification of widespread Adenosine nucleotide dinding in Mycobacterium tuberculosis. *Chemistry & Biology* 2013; 20: 123-133
2. AXELSSON-ROBERTSON R., LOXTON A.G., WALZL G., EHLERS M.M., KOCK M.M., ZUMLA A., MAEURER M. A Broad Profile of Co-Dominant Epitopes Shapes the Peripheral Mycobacterium tuberculosis Specific CD8+ T-Cell Immune Response in South African Patients with Active Tuberculosis. *PLoS ONE* 2013; 8(3): e58309
3. AYEPOLA O.R., CHEGOU N., BROOKS N.L., OGUNTIBERJU O.O. Kolaviron, a Garcinia biflavonoid complex ameliorates hyperglycemia-mediated hepatic injury in rats via suppression of inflammatory responses. *BMC Complementary and Alternative Medicine* 2013; 13: 363

BIOMEDICAL SCIENCES

4. AYLES H., DU TOIT E., SCHAAP A., FLOYD S., SHANAUBE K., BOND V., DUNBAR R., JAMES A., VAN PITTIUS N.C., CLAASSENS M., FIELDING K., SISMANIDIS C., HAYES R., BEYERS N., GODFREY-FAUSSETT P. Effect of household and community interventions on the burden of tuberculosis in southern Africa: the ZAMSTAR community-randomised trial. *Lancet* 2013; 382(9899): 1183-1194
5. BARDIEN S., BLANCKENBERG J., VAN DER MERWE L., FARRER M.J., ROSS O.A. Patient-control association study of the Leucine-Rich repeat kinase 2 (LRRK2) gene in South African Parkinson's disease patients. *Movement Disorders* 2013; 28(14): 2039-2040
6. BAUMANN R., KAEMPFER S., CHEGOU N., NENE N., VEENSTRA H., SPALLEK R., BOLLIGER C.T., LUKEY P.T., VAN HELDEN P.D., SINGH M., WALZL G. Serodiagnostic markers for the prediction of the outcome of intensive phase tuberculosis therapy. *Tuberculosis* 2013; 93:239-245
7. BEATTY K.E., WILLIAMS M., CARLSON B.L., SWARTS B.M., WARREN R.M., VAN HELDEN P.D., BERTOZZI C.R. Sulfatase-Activated Fluorophores for Rapid Discrimination of Mycobacterial Species and Strains. *Proceedings of the National Academy of Sciences of the United States of America* 2013; 110(32): 12911-12916
8. BLANCKENBERG J., BARDIEN S., GLANZMANN B., OKUBADEJO N.U., CARR J. The prevalence and genetics of Parkinson's disease in sub-Saharan Africans. *Journal of the Neurological Sciences* 2013; 335: 22-25
9. BOTHA L., GEY VAN PITTIUS N.C., VAN HELDEN P.D. Mycobacteria and disease in Southern Africa. *Transboundary and Emerging Diseases* 2013; 60: 147-156
10. CHEGOU N.N., DETJEN A.K., THIART L., WALTERS E., MANDALAKAS A.M., HESSELING A.C., WALZL G. Utility of host markers detected in Quantiferon supernatants for the diagnosis of tuberculosis in children in a high-burden setting. *PLoS ONE* 2013; 8(5): e64226
11. CHIHOTA V., VAN HALSEMA C.L., GRANT A.D., FIELDING K., VAN HELDEN P.D., CHURCHYARD G., GEY VAN PITTIUS N.C. Spectrum of non-tuberculous mycobacteria identified using standard biochemical testing versus 16S sequencing. *International Journal of Tuberculosis and Lung Disease* 2013; 17(2): 236-269
12. CHIMUSA E.R., DAYA M., MÖLLER M., RAMESAR R., HENN B.M., VAN HELDEN P.D., MULDER N.J., HOAL E.G. Determining Ancestry Proportions in Complex Admixture Scenarios in South Africa using a novel Proxy Ancestry Selection Method. *PLoS ONE* 2013; 8(9): e73971
13. CLAASSENS M., VAN SCHALKWYK C., DEN HAAN L., FLOYD S., DUNBAR R., VAN HELDEN P.D., GODFREY-FAUSSETT P., AYLES H., BORGDORFF M.W., ENARSON D.A., BEYERS N. High prevalence of tuberculosis and insufficient case detection in two communities in the Western Cape, South Africa. *PLoS ONE* 2013; 8(4): e58689
14. CLIFF J.M., LEE J.S., CONSTANTINOU N., CHO J.E., CLARK T., RONACHER K., LUKEY P.T., DUNCAN K., VAN HELDEN P.D., WALZL G., DOCKRELL H.M. Distinct phases of blood gene expression pattern through tuberculosis treatment reflect modulation of the humoral immune response. *Journal of Infectious Diseases* 2013; 207(1): 18-29
15. COBAT A., HOAL E.G., GALLANT C.J., SIMKIN L., BLACK G.F., STANLEY K., JAÏS J-P, YU T.H., BOLAND-AUGE A., GRANGE G., DELACOURT C., VAN HELDEN P.D., CASANOVA J-L, ABEL L., ALCAIS A., SCHURR E. Identification of a major locus, TNF1, which controls BCG-triggered TNF production by leukocytes in an area hyperendemic for tuberculosis. *Clinical Infectious Diseases* 2013; 57(7): 963-970

BIOMEDICAL SCIENCES

16. CRONJE L., WARREN R.M., KLUMPERMAN B. pH-Dependent adhesion of mycobacteria to surface-modified polymer nanofibers. *Journal of Materials Chemistry B* 2013; 1: 6608-6618
17. DANDERA C., GREENBERG J., LAMBIE L., LOMBARD Z., NAICKER T., RAMESAR R., RAMSAY M., ROBERTS .L, THERON M., VENTER P., BARDIEN-KRUGER S. Direct-to-consumer genetic testing: to test or not to test, that is the question. *SAMJ South African Medical Journal* 2013; 103(8): 510-512
18. DAYA M., VAN DER MERWE L., GALAL U., MÖLLER M., SALIE M., CHIMUSA E.R., GALANTER J.M., VAN HELDEN P.D., HENN B.M., GIGNOUX C.R., HOAL E.G. A panel of ancestry informative markers for the complex five-way admixed South African Coloured population. *PLoS ONE* 2013; 8(12): e82224
19. DE VOS M., MÜLLER B., BORRELL S., BLACK P.A., VAN HELDEN P.D., WARREN R.M., GAGNEUX S., VICTOR T.C. Putative compensatory mutations in the *rpoC* gene of rifampicin-resistant *Mycobacterium tuberculosis* are associated with ongoing transmission. *Antimicrobial Agents and Chemotherapy* 2013; 57(2): 827-832
20. DIACON A.H., DAWSON R., VON GROOTE-BIDLINGMAIER F., SYMONS G., VENTER A., DONALD P.R., CONRADIE A., ERONDU N., GINSBERG A.M., EGIZI E., WINTER H., BECKER P., MENDEL C.M. Randomised dose-ranging study of the 14-day early bactericidal activity of Bedaquiline (TMC207) in patients with sputum microscopy smear-positive pulmonary tuberculosis. *Antimicrobial Agents and Chemotherapy* 2013; 57(5): 2199-2203
21. DU PLESSIS N., KLEYNHANS L., THIART L., VAN HELDEN P.D., BROMBACHER F., HORSNELL W.G., WALZL G. Acute helminth infection enhances early macrophage mediated control of mycobacterial infection. *Mucosal Immunology* 2013; 6(5): 931-941
22. DU PLESSIS N., LOEBENBERG L., KRIEL M., VON GROOTE-BIDLINGMAIER F., RIBECHINI E., LOXTON A.G., VAN HELDEN P.D., LUTZ M.B, WALZL G. Increased frequency of myeloid-derived suppressor cells during active tuberculosis and after recent *Mycobacterium tuberculosis* infection suppresses T-cell function . *American Journal of Respiratory and Critical Care Medicine* 2013; 188(6): 724-732
23. DUDHIA ZE, LOUW J, MULLER C, JOUBERT E, DE BEER D, KINNEAR CJ, PHEIFFER C. *Cyclopia maculata* and *Cyclopia subternata* (honeybush tea) inhibits adipogenesis in 3T3-L1 pre-adipocytes. *Phytomedicine* 2013; 20: 401-408.
24. DUDHIA Z.E., LOUW J., MULLER C., JOUBERT E., DE BEER D., KINNEAR C.J., PHEIFFER C. *Cyclopia maculata* and *Cyclopia subternata* (honeybush tea) inhibits adipogenesis in 3T3-L1 pre-adipocytes. *Phytomedicine* 2013; 20(5): 401-408
25. DURR S., MÜLLER B., ALONSO S., HATTENHOFF J., LAISSE C.J.M., VAN HELDEN P.D., ZINSSTAG J. Differences in primary sites of infection between zoonotic and human tuberculosis: Results from a worldwide systematic review. *PLoS Neglected Tropical Diseases* 2013; 7(8): e2399.
26. FAHRAT M.R., SHAPIRO B.J., KIESER K.J., SULTANA R., JACOBSON K.R., VICTOR T.C., WARREN R.M., STREICHER E.M., CALVER A.D., SLOUTSKY A., KAUR D., POSEY J.E., PLIKATIS B.B., OGGIONI M.R., GARDY J.L., JOHNSON J.C., RODRIGUES M., TANG P.K., KATO-MAEDA M., BOROWSKY M.L., MUDDUKRISHNA B., KREISWIR. Genomic analysis identifies targets of convergent positive selection in drug-resistant *Mycobacterium tuberculosis*. *Nature Genetics* 2013; 45(10): 1183-1189

BIOMEDICAL SCIENCES

27. HANEKOM M., STREICHER E.M., VAN DE BERG D., COX H., MCDERMID C., BOSMAN M., GEY VAN PITTIUS N.C., VICTOR T.C., KIDD M., VAN SOOLINGEN D., VAN HELDEN P.D., WARREN R.M. Population Structure of Mixed Mycobacterium Tuberculosis infection is strain Genotype and Culture Medium Dependent. *PLoS ONE* 2013; 8(7): e70178
28. HECKMAN M.G., SOTO-ORTOLAZA A.I., AASLY J.O., ABAHUNI N., ANNESI G., BACON J.A., BARDIEN S., BOZI M., BRICE A., BRIGHINA L., CARR J., ET A.L. Population-specific frequencies for LRRK2 susceptibility variants in the genetic epidemiology of Parkinson's Disease (GEO-PD) consortium. *Movement Disorders* 2013; 28(12): 1740-1744
29. HEDLEY P., DURRHEIM G.A., HENDRICKS F., GOOSEN A., JESPERSGAARD C., STOVRING B., PHAM P.A., CHRISTIANSEN M., BRINK P.A., CORFIELD V.A. Long QT syndrome in South Africa: the results of comprehensive genetic screening. *Cardiovascular Journal of Africa* 2013; 24(6): 231-237
30. HEDLEY P.L., KANTERS J.K., DEMBIC M., JESPERSON T., SKIBSBY L., AIDT F.H., ESCHEN O., GRAFF C., BEHR E.R., SCHLAMOWITZ S., CORFIELD V.A., MCKENNA W.J., CHRISTIANSEN M. The Role of CAV3 in Long QT: Clinical and functional assessment of a caveolin-3/Kc11.1 compound heterozygote. *Circulation-Cardiovascular Genetics* 2013; 6(5): 452-461
31. HEMMINGS S.M.J, LOCHNER C., VAN DER MERWE L., CATH D.C., SEEDAT S., STEIN D.J. BDNF Val66Met modifies the risk of childhood trauma on OCD. *Journal of Psychiatric Research* 2013; 47(12): 1857-1863
32. HEMMINGS S.M.J, MARTIN L., TAIT M., VAN DER MERWE L., AITKEN L., DE WIT E., BLACK G.F., HOAL E.G., WALZL G., SEEDAT S. BDNF Val66Met and DRD2 Taq1A polymorphisms interact to influence PTSD symptom severity: a preliminary investigation in a South African population. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2013; 40: 273-280
33. JACOBSON K.R., THERON D., KENDALL E.A., FRANKE M.F., BARNARD M., VAN HELDEN P.D., VICTOR T.C., STREICHER E.M., MURRAY M.B., WARREN R.M. Implementation of GenoType MTBDRplus Reduces Time to Multidrug-Resistant Tuberculosis Therapy Initiation in South Africa. *Clinical Infectious Diseases* 2013; 56(4): 503-508
34. JOHNSON A.G., MOORE S.W. The Leu-Arg-Glu (LRE) adhesion motif in proteins of the neuromuscular junction with special reference to proteins of the carboxylesterase/cholinesterase family. *Comparative Biochemistry and Physiology D-Genomics & Proteomics* 2013; Part D8 231-243
35. KATALE B.Z., MBUGI E.V., KARIMURIBO E.D., KEYYU J.D., KENDAL S., KIBIKI G.S., GODFREY-FAUSSETT P., MICHEL A.L., KAZWALA R., VAN HELDEN P.D., MATEE M.I. Prevalence and risk factors for infection of bovine tuberculosis in indigenous cattle in the Serengeti ecosystem, Tanzania. *BMC VETERINARY RESEARCH* 2013; 9: 267
36. KAYIGIRE X.A., FRIEDRICH S.O., VENTER A., DAWSON R., GILLESPIE S.H., BOEREE M.J., HEINRICH N., HOELSCHER M., DIACON A.H. Direct Comparison of Xpert MTB/RIF Assay with Liquid and Solid Mycobacterial Culture for Quantification of Early Bactericidal Activity. *Journal of Clinical Microbiology* 2013; 51(6): 1894-1898
37. KENDALL E.A., THERON D., FRANKE M.F., VAN HELDEN P.D., VICTOR T.C., MURRAY M.B., WARREN R.M., JACOBSON K.R. Alcohol, hospital discharge, and socioeconomic risk factors for default from multidrug resistant tuberculosis treatment in rural South Africa: a retrospective cohort study. *PLoS ONE* 2013; 8(12): e83480

38. KLEINSTEUBER K., HEESCH K., SCHATTLING S., KOHNS M., SANDER-JULCH C., WALZL G., HESSELING A.C., MAYATEPEK E., FLEISCHER B., MARX F.M., JACOBSEN M. Decreased Expression of miR-21, miR-26a, miR-29a, and miR-142-3p in CD4(+) T Cells and Peripheral Blood from Tuberculosis Patients. *PLoS ONE* 2013; 8(4): e61609
39. KLEYNHANS L., DU PLESSIS N., ALLIE N., JACOBS M., KIDD M., VAN HELDEN P.D., WALZL G., RONACHER K. The Contraceptive Depot Medroxyprogesterone Acetate Impairs Mycobacterial Control and Inhibits Cytokine Secretion in Mice Infected with Mycobacterium tuberculosis. *Infection and Immunity* 2013; 81(4): 1234-1244
40. KLOPPER M., WARREN R.M., HAYES C., GEY VAN PITTIUS N.C., STREICHER E., MÜLLER B., SIRGEL F.A., CHABULA-NXIWENI E.M., HOOSAIN E., COETZEE G., VAN HELDEN P.D., VICTOR T.C., TROLLIP A. Emergence and spread of Extensively and Totally Drug Resistant Tuberculosis in South Africa. *Emerging Infectious Diseases* 2013; 19(3): 439-454
41. KOLWIJCK E., MITCHELL M., VENTER A., FRIEDRICH S.O., DAWSON R., DIACON A.H. Short-term storage does not affect the quantitative yield of Mycobacterium tuberculosis in sputum in early-bactericidal-activity studies. *Journal of Clinical Microbiology* 2013; 51(4): 1094-1098
42. LE ROEX N., KOETS A.P., VAN HELDEN P.D., HOAL E.G. Gene Polymorphisms in African Buffalo Associated with Susceptibility to Bovine Tuberculosis Infection. *PLoS ONE* 2013; 8(5): e64494
43. LE ROEX N., VAN HELDEN P.D., KOETS A.P., HOAL E.G. Bovine TB in livestock and wildlife: what's in the genes? *Physiological Genomics* 2013; 45(15): 631-637
44. LOOTS D.T., MEISSNER-ROLOFF R.J., NEWTON-FOOT M., GEY VAN PITTIUS N.C. A metabolomics approach exploring the function of the ESX-3 type VII secretion system of *M. smegmatis*. *Metabolomics* 2013; 9: 631-641
45. MALAN S., HEMMING S.M.J., SEEDAT S. Big effects of small RNAs: A review of microRNAs in Anxiety. *Molecular Neurobiology* 2013; 47(2): 726-739
46. MALAN-MÜLLER S., HEMMING S.M.J., SPIES G., KIDD M., FENNEMA-NOTESTINE C., SEEDAT S. Shorter Telomere Length – A Potential Susceptibility Factor for HIV-Associated Neurocognitive Impairments in South African Women. *PLoS ONE* 2013; 8(3): e58351
47. MANDALAKAS A.M., VAN WYK S.S., KIRCHNER H.L., WALZL G., COTTON M.F., RABIE H., KRIEL B., GIE R.P., SCHAAF H.S., HESSELING A.C. Detecting Tuberculosis Infection in HIV-infected children: A study of diagnostic accuracy, confounding and interaction. *Pediatric Infectious Disease Journal* 2013; 32(3): e111-e118
48. MARAIS B.J., MLAMBO C.K., RASTOGI N., ZOZIO T., DUSE A.G., VICTOR T.C., MARAIS E., WARREN R.M. Epidemic spread of multidrug-resistant (MDR) tuberculosis in Johannesburg, South Africa. *Journal of Clinical Microbiology* 2013; 51(6): 1818-1825
49. MARX I.J., VAN WYK N., SMIT S., JACOBSON D., VILJOEN-BLOOM M., VOLSCHENK H. Comparative secretome analysis of *Trichoderma asperellum* S4F8 and *Trichoderma reesei* Rut C30 during solid-state fermentation on sugarcane bagasse. *Biotechnology for Biofuels* 2013; 6: Art 172
50. MIHRET A., BEKELE Y., BOBOSHA K., KIDD M., ASEFFA A., HOWE R, WALZL G. Plasma cytokines and chemokines differentiate between active disease and non-active tuberculosis infection. *Journal of Infection* 2013; 66(4): 357-365

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51. MÜLLER B., CHIHOTA V., PILLAY M., KLOPPER M., STREICHER E.M., COETZEE G.J., TROLLIP A., HAYES C., BOSMAN M.E., GEY VAN PITTIUS .N.C., VICTOR .T.C., GAGNEUX S., VAN HELDEN P.D., WARREN R.M. Programmatically selected multidrug-resistant strains drive the emergence of extensively drug-resistant tuberculosis in South Africa. *PLoS ONE* 2013; 8(8): e70919
52. MÜLLER B., DURR S., ALONSO S., HATTENHOFF J., LAISSE CJM., PARSONS SDC, VAN HELDEN PD, ZINSSTAG J. Zoonotic Mycobacterium bovis-induced tuberculosis in humans. *Emerging Infectious Diseases* 2013; 19(6): 899-908
53. NEWTON-FOOT M., GEY VAN PITTIUS NC. The complex architecture of mycobacterial promoters. *Tuberculosis* 2013; 93: 60-74
54. OLIVIER L., URBAN M.F., CHERISH M., TEMMERMAN M., VILJOEN D. Burden of fetal alcohol syndrome in a rural West Coast area of South Africa. *SAMJ South African Medical Journal* 2013; 103(6) 402-405
55. PARSONS S.D.C., DREWE J.A., GEY VAN PITTIUS N.C., WARREN R.M., VAN HELDEN P.D. Novel Cause of Tuberculosis in Meerkats, South Africa. *Emerging Infectious Diseases* 2013; 19(12): 2004-2007
56. PHALANE K., KRIEL M., LOXTON A.G., MENEZES A.M., STANLEY K., VAN DER SPUY G.D., WALZL G., CHEGOU N. Differential expression of host biomarkers in saliva and serum samples from individuals with suspected pulmonary tuberculosis. *Mediators of Inflammation* 2013; 2013: 981984
57. SAO EMANI C., WILLIAMS M., WIID I.J.F., HITEN N.F., VILJOEN A, PIETERSEN RD, VAN HELDEN PD, BAKER B. Ergothioneine is a secreted antioxidant in Mycobacterium smegmatis. *Antimicrobial Agents and Chemotherapy* 2013; 57(7): 3202-3207
58. SCHOEMAN M., APFFELSTAEDT J.P., BAATJES K.J., URBAN M.F. Implementation of a breast cancer genetic service in South Africa – lessons learned. *SAMJ South African Medical Journal* 2013; 103(8): 529-533
59. SHANLEY C.A, STREICHER E.M., WARREN R.M., VICTOR T.C., ORME I.M. Characterisation of W-Beijing isolates of Mycobacterium tuberculosis from the Western Cape. *Vaccine* 2013; 31(50): 5934-5939
60. SHEAN K., STREICHER E.M., PIETERSON E., SYMONS G., VAN ZYL-SMIT R., THERON G., LEHLOENYA R., PADANILAM X., WILLCOX P., VICTOR T.C., VAN HELDEN P.D., GROBUSCH M., WARREN R.M., BADRI M., DHEDA K. Drug-associated adverse events and their relationship with outcomes in patients receiving treatment for extensively drug-resistant tuberculosis in South Africa. *PLoS ONE* 2013; 8(5): e63057
61. SHENAI S., AMISANO D., RONACHER K., KRIEL M., BANADA P., SONG T., LEE M., JOH J., WINTER J., THAYER R., VIA L., KIM S.C., BARRY C., WALZL G., ALLAND D. Exploring alternative bio-materials for diagnosis of pulmonary tuberculosis in HIV negative patients using the Xpert MTB/RIF assay. *Journal of Clinical Microbiology* 2013; 51(12): 4161-4166
62. SIRGEL F.A., WARREN R.M., BÖTTGER E.C., KLOPPER M., VICTOR T.C., VAN HELDEN P.D. The rationale for using Rifabutin in the treatment of MDR and XDR tuberculosis outbreaks. *PLoS ONE* 2013; 8(3): e59414
63. SUTHERLAND J., LALOR M.K., BLACK G.F., AMBROSE L., LOXTON A.G., CHEGOU N., KASSA D., MIHRET A., HOWE R., MAYANJA-KIZZA H., GOMEZ J., DONKOR S., FRANKEN K.L., BOOM W.H., THIEL B.A., CRAMPIN A.C., HANEKOM W., KLEIN M.R., PARIDA S.K., OTA M.O., WALZL G., OTTENHOFF T.H.M., DOCKRELL H.M., KAUFMA. Analysis of host responses to secreted, latent and reactivation

BIOMEDICAL SCIENCES

Mycobacterium tuberculosis antigens in a large multi-site study of subjects with different TB and HIV infection states in sub-Saharan Africa. PLoS ONE 2013; 8(9): e74080

64. URBAN M.F. Clinical issues in genetic testing for multifactorial diseases. SAMJ South African Medical Journal 2013; 103(8): 517
65. VAN HELDEN P.D., HOAL-VAN HELDEN E.G. A New TB Vaccine: fact or fiction? Comparative Immunology Microbiology and Infectious Diseases 2013; 36(3): 287-294
66. VAN HELDEN P.D., VAN HELDEN L.S., HOAL E.G. One world, one health. Embo Reports 2013; 14(6): 497-501
67. VAN HELDEN P.D.. Data-driven hypothesis. Embo Reports 2013; 14: 104
68. VIEGAS S., MACHADO A.D.C., GROENHEIT R., GHEBREMICHEL S., PENNHAG A., GUDO P., CUNA Z., LANGA E., MIOTTO P., CIRILLO D., RASTOGI N., WARREN R.M., VAN HELDEN .PD., KOIVULA T., KÄLLENIOUS G. Mycobacterium tuberculosis Beijing Genotype Is Associated with HIV Infection in Mozambique. PLoS ONE 2013; 8(8): e71999
69. VILJOEN A., KIRSTEN C.J., BAKER B., VAN HELDEN P.D., WIID I.J.F. The role of glutamine oxoglutarate aminotransferase and glutamate dehydrogenase in nitrogen metabolism in Mycobacterium bovis BCG. PLoS ONE 2013; 8(12): e84452

Journal Articles (NON-subsidised)

1. BORRELL S., TEO Y., GIARDINA F., STREICHER E.M., KLOPPER M., FELDMANN J., MÜLLER B., VICTOR T.C., GAGNEUX S. Epistasis between antibiotic resistance mutations drives the evolution of extensively drug-resistant tuberculosis. Evolution, Medicine and Public Health 2013; 3: 65-74

2. FRIEDRICH S.O., RACHOW A., SAATHOFF E., SINGH K., MANGU C.D., DAWSON R., PHILLIPS P.P.J., VENTER A., BATESON A., BOEHME C.C., HEINRICH N., HUNT R.D., BOEREE M.J., ZUMLA A., MCHUGH T.D., GILLESPIE S.H., DIACON A.H., HOELSCHER M. Assessment of the sensitivity and specificity of Xpert MTB/RIF assay as an early sputum biomarker of response to tuberculosis treatment. Lancet Respiratory Medicine 2013; 1(6): 462-470
3. GODIKSEN M.T.N., KINNEAR C.J., RAVNSBORG T., HOJRUP P., GRANSTROM S., LAURSEN I.A., HEDLEY P., MOOLMAN-SMOOK J.C., MCKENNA W.J., KOCH J., CHRISTIANSEN M. Feline Hypertrophic Cardiomyopathy Associated with the p.A31P Mutation in cMyBP-C Is Caused by Production of Mutated cMyBP-C with Reduced Binding to Actin. Open Journal of Veterinary Medicine 2013; 3: 95-103
4. STELLENBERG E.L., CORFIELD V.A. HIV/AIDS peer education initiative for learners in Kuils River Western Cape South Africa. African Journal of Physical, Health education, Recreation and Dance 2013; 19(1): 69-81
5. SULIMAN S., HEMMINGS S.M.J., SEEDAT S. Brain-Derived Neurotrophic Factor (BDNF) protein levels in anxiety disorders: systematic review and meta-regression analysis. Frontiers in Integrative Neuroscience 2013; 7: 55

Proceedings International

GELDENHUYS E., BURGER E.H., JORDAAN A.M., KOTZE S.H. The prevalence of emphysema in association with pulmonary tuberculosis in a cadaver population: a morphological study. 5th International Symposium of Clinical and Applied Anatomy (ISCAA), Karl-Fransens University, Graz, Austria, Rev Arg de Anat Clin 2013: 97-151

Proceedings National

ELLMANN A., GRIFFITH-RICHARDS S., NOLAN L.L., MALHERBE S.F., RONACHER K., WALZL G., WARWICK J.M. FDG/PET in tuberculosis patients: Before and after therapy.

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57th Academic Year Day, FMHS, Stellenbosch University, Stellenbosch University, Tygerberg Campus, FMHS, Parow, South Africa, 2013: 1

Graduates 2013 (March & December 2013)

PhD: 5
MSc: 5
Hons: 11

Teaching and Training (undergraduate-, postgraduate- and elective students)

Division of Medical Physiology

Dr Shantal Windvogel attended the Oxidative Stress Workshop at the University of Cape Town (6/03/2013)

Dr Shantal Windvogel attended the Spring Teaching Academy at Stellenbosch University (29/10/2013-6/04/2011).

Sonja Alberts attended a workshop "Building Effective Relationships" at Devon Valley, Stellenbosch – (12 – 13/02/2013.)

Research Interns (MRC):

Mrs Cindy George

NRF Sponsored Research Interns:

Mr Dirk Loubser was sponsored during his MSc first year

Career Development of Graduates:

Undergraduate teaching of MBChB first, second and third year students, as well as BChD first and second year students. Allied Health second year students (BSc Physiotherapy, Occupational Therapy, Dietetics students). Postgraduate teaching of BScHon (MedSci) and MMed students. Postgraduate research training for MSc students and PhD Students.

Several members of staff act as external examiners and moderators to other universities (both National and International universities) Prof. Stefan du Plessis – UNAM, UWC and SU, Prof. Hans Strijdom – WITS, UCT, UKZN; Prof. Barbara Huisamen – SU, UWC and Dr Shantal Windvogel – UWC, CPUT

Proff. Hans Strijdom and Stefan du Plessis act as internal examiners for MBChB IV and MBChB V elective portfolios.

Prof. Hans Strijdom serves on the MBChB Guidelines- and Selection Committee, as well as the Committee for Postgraduate Training. He is also serving on the executive councils of both the PSSA and SASCAR.

Prof. Du Plessis hosted an international exchange student from Saxion University in the Netherlands. She had to complete a laboratory research project towards her degree programme.

Clinical Genetics and Genetic Counselling Postgraduate:

- Training of two registrars in clinical genetics is ongoing
 - Co-supervision of one PhD student in Genetics started
- Undergraduate:
Nine lectures to second year medical students
- Participated in the MGEP course for in-service training of nurses and allied health practitioners
 - Clinical teaching of students attending our clinic
 - Chantelle Scott (intern genetic counsellor) was awarded a SANPAD RCI Doctoral Training Programme Scholarship for 2012/3
- Both registrars passed their FCMG Part 1 exams and are preparing for Part 2 examinations

Molecular Biology and Human Genetics

- Prof. Rob Warren ran PCR training courses in 2013 and trainees included Thobile Ngqaneka and Cebisa Mdladla from CCTR and for postgraduate students at the Honours level from the faculty of Health Sciences. All participants had hands-on experience for the extraction of DNA from *Mycobacteria tuberculosis*, restriction enzyme digests, southern blotting, probe labelling and hybridisation. The course equipped all participants with the necessary skill to enable them to perform PCR
- Tommie Victor and Annemie Jordaan successfully trained 20 participants from various countries in Africa in the use of molecular biology techniques to detect TB and Drug-resistant TB.

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This was funded by AFRA and as a result of the Designated regional training Centre, which is hosted in the CMCB

- Elizabeth Streicher and Annemie Jordaan hosted a TESA sponsored Spoligotyping workshop from 27 to 31 May 2013. It was attended by Simani Gaseitsiwe (Botswana); Sarika Mohabir (South Africa); Kathryn Boyd (Zimbabwe); Themba Nkosi (Malawi); Kebatshabile Nfanyana (Botswana) and Tasmiya Irá (Mozambique)
- A second TESA sponsored Spoligotyping workshop was hosted from 26 to 30 August 2013 and was attended by Manuel Gimo (Mozambique); Kapona Otridah (Zambia); Chilambwe Mwila (Zambia); Liezel Smith (South Africa) and Agness Farai Nhidza (Zimbabwe)
- Elizabeth Streicher hosted Dr Melissa Dalcina Chengalroyen for training in spoligotyping from 13 to 17 May 2013
- Ms Amour Venter also conducted initiation training for the laboratory personnel involved with clinical drug trials on the following protocols:
 1. Clinical drug trials overview on 27 March 2013
 2. PanACEA-MAMS-TB-01 on 27 March 2013
 3. NTP Bio-banking on 27 March 2013
 4. Early treatment response in smear-positive and smear-negative / GeneXpert positive adult TB patients

with HIV co-infection (BALL Study) on 04 December 2013

Other Workshops

- Prof. Warren was part of the organising committee for the Hain Lifescience symposium, Johannesburg, South Africa, in March 2013
- Prof. Warren was part of the organising committee for the XDR-TB Workshop, Cape Town, in November 2013
- Prof. Warren is part of the organising committee for the TB conference to be held in Durban in 2014.
- Prof. Corfield designed the Conference Communications skills workshop presented to:
 - BSc Hons students in the Department of Medical Biosciences (30 and 31 January)
 - Postgraduates and researchers at Stellenbosch University for the Department of Research Development (DRD) x2 (at STIAS 22 May and 14 November)
 - Postgraduate Skills Development, Postgraduate and International Office Stellenbosch University Main Campus (26 July)
- Understanding the NRF ratings system workshop given at:
 - Stellenbosch University at Lanzerac (5 March) and STIAS (6 September)
 - Central University of Technology Bloemfontein (4 September)
 - University of the Free State (5 September)

Training courses attended by staff and students

| Attendees | Training Course | Location/Web address | Start Date | End Date |
|--|--|---------------------------------------|------------|----------|
| Klopper M., Van der Merwe R., Siame K., Lucas L. | Next-Generation Sequencing and Bioinformatics Course | SANBI, University of the Western Cape | 12 Aug | 16 Aug |
| Swart C. | Proposal writing workshop | Tygerberg Medical School | 14 Feb | 15 Feb |
| Swart C. | Grant Writing Workshop | Stellenbosch University | 20 Feb | 20 Feb |
| Glanzmann B. | Referencing | Stellenbosch University Library | 1 Jun | 1 Jun |

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| Glanzmann B. | Roche NGS Workshop | SANBI, University of the Western Cape | 1 Aug | 1 Aug |
| Glanzmann B. | Article Writing Workshop | STIAS Conference Centre | 2 Jul | 2 Jul |
| Glanzmann B. | Ensembl Training Course | SANBI, University of the Western Cape | 3 Sep | 3 Sep |
| Glanzmann B. | National Bioinformatics Training Course | SANBI, University of the Western Cape | 11 Feb | 28 Mar |
| Ntsapi C. | Conference presentation skills workshop | Stellenbosch University, Sanlam Hall | 12 Aug | 12 Sep |
| Ntsapi C., Boolay S. | Ensembl-SANBI Workshop | SANBI University of the Western Cape | 5 Sep | 5 Sep |
| Various CMCB staff | Project Management for the research team | Tygerberg campus | 24 Jun | 25 Jun |
| Dippenaar A., De Vos M., Siame K., Lucas L. | Bioinformatics of Infectious Diseases: Comparative Genomics of M. tuberculosis | K-RITH | 16 Sep | 20 Sep |
| Muller L, Stanley K, Ehlers L | SANAS ISO 17025 Systems Course | Premier Hotel, Sea Point | 26 Aug | 28 Aug |
| Muller L., Stanley K., Ehlers L. | Internal Audit Course ISO 17025 | Premier Hotel, Sea Point | 31 Oct | 1 Nov |
| Muller L. | First Aid Level I | University of Stellenbosch | 5 Aug | 6 Aug |
| Various CMCB students | Workshop in Scientific Writing Skills for Theses and Dissertations | Stellenbosch University, Tygerberg Campus | 29 Apr | 30 Apr |
| Du Plessis N. | Leukapheresis Isolation Workshop | Washington DC, USA | 29 Jul | 2 Aug |
| Du Plessis W.J. | BD FACScanto II Operator Training | BD Flow Cytometry Training Centre, Stellenbosch University - Tygerberg | 1 Apr | 5 Apr |
| Warren R.M. | USAID National Summit on TB Diagnostics | Sheraton Hotel | 18 Nov | 19 Nov |

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| Ntsapi C. | NGS workshop at CHPC [Centre for Proteomic and Genomic Research (CPGR)] | Centre for Proteomic and Genomic Research UCT | 14 Nov | 15 Nov |
| Styger G. | Mass Spectrometry Based Proteomics | Stellenbosch University, Tygerberg Campus | 9 Jul | 10 Jul |
| Willemse D. | Mass Spectrometry of Small Molecules: GC-MS workshop | Stellenbosch University, Tygerberg Campus | 9 Jul | 10 Jul |
| Van der Merwe R., Pule C. | Stellenbosch Clinical Science Workshop: Drug discovery and development | Stellenbosch University, Tygerberg Campus | 16 Sep | 18 Sep |
| Hammond-Aryee K. | EMBO workshop on AIDS-related Mycoses | IIDMM University of Cape Town | 3 Jul | 5 Jul |
| Van der Spuy G.D. | Calculus One | Ohio State University - Coursera (http://www.coursera.org) | 21 Jan | 3 May |
| Van der Spuy G.D. | Algorithms: Design and Analysis, Part 1 | Stanford University - Coursera (https://www.coursera.org) | 28 Jan | 11 Mar |
| Van der Spuy G.D. | Mathematical Biostatistics Boot Camp | Johns Hopkins University - Coursera (https://www.coursera.org) | 16 Apr | 4 Jun |
| Van der Spuy G.D. | Machine Learning | Stanford University - Coursera (https://www.coursera.org/) | 22 Apr | 1 Jul |
| Van der Spuy G.D. | Introduction to Systems Biology | Icahn School of Medicine at Mount Sinai - Coursera (https://www.coursera.org/) | 3 Jun | 15 Jul |
| Van der Spuy G.D. | Introduction to Systematic Program Design - Part 1 | University of British Columbia - Coursera (https://www.coursera.org) | 3 Jun | 28 Jul |
| Van der Spuy G.D. | Calculus Two: Sequences and Series | Ohio State University - Coursera (https://www.coursera.org) | 07 Oct | 08 Nov |
| Werely C.J. | A Brief History of Mankind by Dr Yuval N. Harari | https://class.coursera.org/humankind-001/class/index | 11 Aug | 08 Dec |

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| Werely C.J. | Think Again: How to Reason and Argue by Walter Sinnott-Armstrong, Ram Neta | https://class.coursera.org/thinkagain-002/class | 26 Aug | 18 Nov |
| Van der Spuy G.D. | Network Analysis in Systems Biology | Icahn School of Medicine at Mount Sinai - Coursera (https://www.coursera.org) | 06 Oct | 24 Nov |

Other capacity development activities

- Prof. Warren presented one lecture in the MBChB module on Infections and Clinical Immunology in 2013. Title: Molecular Epidemiology of Drug Resistant TB in South Africa
- Prof. Warren presented two lectures on "Getting Published" as part of the Research Development training programme

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| Warren R.M. The Molecular Epidemiology of Drug-Resistant TB in SA. Talk presented at the third Pan-African Infectious Diseases Conference. Gallagher Convention Centre, Johannesburg, South Africa, 7 to 8 May 2013 |
| Warren R.M. The Molecular Epidemiology of Drug-Resistant TB in South Africa. Talk presented at the Southern African Consortium for Research Excellence TB Workshop. Vineyard Hotel, Cape Town, South Africa, 31 August to 2 September 2013 |
| Warren R.M. Rapid genetic detection of pyrazinamide susceptibility. Talk presented at The Critical Path to TB Drug Regimens Workshop. Marriott Renaissance Hotel, Washington, USA, 30 September to 1 October 2013 |
| Warren R.M. Virtual DNA sequencing: Lights-on/Lights-off assay platform rpoB as an example. Talk presented at The Critical Path to TB Drug Regimens Workshop. Marriott Renaissance Hotel, Washington, USA, 30 September to 1 October 2013 |
| Warren R.M. The Genesis and Transmission of Drug Resistant TB in SA: Molecular Epidemiologic View. Talk presented at the XDR-TB Workshop. University of Cape Town, Cape Town, South Africa, 16 to 17 November 2013 |
| Sampson S.L. Mice in TB Research – what's new and how is this useful in a Southern African context? Talk presented at the Southern African Consortium for Research Excellence, Workshop: Understanding and intervening in tuberculosis in Southern Africa. Vineyard Hotel, Cape Town, South Africa, 31 August 2013 |
| De Vos M., Louw G.E., Van Helden P.D., Victor T.C., Warren R.M. Understanding the biology of poly-rifampicin resistance in Mycobacterium tuberculosis. Talk presented at the 34th European Society of Mycobacteriology Annual Congress. Demidoff Hotel, Florence, Italy, 30 June to 3 July 2013 |
| Chegou N.N. Utility of M. tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic markers tuberculosis disease. Talk presented at the MRC Early Career Scientists Convention. MRC, Parow, Cape Town, South Africa, 16 October 2013 |
| Le Roex N., Van Helden P.D., Hoal E.G., Parsons S., Goosen W. Talk: BTB in African buffalo: what's in the genes? Talk presented at the BTB Study Group Meeting. Veterinary Wildlife Services, Skukuza, South Africa, 12 to 13 September 2013 |
| Van Helden P.D. Session chair. Talk presented at the Gordon Research Conference on Tuberculosis Drug Development. Renaissance Tuscany Il Ciocco Resort, Lucca (Barga), Italy, 21 to 26 July 2013 |

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| Van Helden P.D. Rapid genetic detection of pyrazinamide susceptibility. Talk presented at The Annual ACTG Network Meeting. Grand Hyatt Washington Hotel, Washington DC, USA, 29 July to 2 August 2013 |
| Van Helden P.D. Internationalisation in Science. Talk presented at the Christian Albrechts University Strategic Planning workshop. Christian Albrechts University, Kiel, Germany, 14 to 17 November 2013 |
| Steyn N.L, Newton-Foot M., Warren R.M., Van Helden P.D., Gey van Pittius N.C. Investigating the localisation of the ESX-3 secretion system in Mycobacterium smegmatis. Talk presented at the 57th FHSM Annual Academic Day. Stellenbosch University, Cape Town, South Africa, 14 and 15 August 2013 |
| Chegou N.N. Evaluation of M. tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic markers for active tuberculosis. Talk presented at the 2nd South African-German workshop on IT-based Technologies for Rural Health Care. Berlin University of Applied Sciences, Berlin, Germany, 25 to 28 February 2013 |
| Williams M.J., Peixoto B., Manca C., Kaplan G., Mizrahi V., Kana B.D. Biosynthesis of bis-molybdopterin guanine dinucleotide is dispensable for virulence of Mycobacterium tuberculosis. Talk presented at the 57th FHSM Annual Academic Day. Stellenbosch University, Cape Town, South Africa, 14 and 15 August 2013 |
| Klopper M., Streicher E.M., Warren R.M., Victor T.C. The evolution of Totally Drug-Resistant TB in South Africa. Talk presented at the Southern African Consortium for Research Excellence TB Meeting. The Vineyard Hotel, Cape Town, South Africa, 31 August to 4 September 2013 |
| Chegou N.N. Utility of M. tuberculosis specific host cytokine signatures in whole blood culture supernatants as diagnostic markers tuberculosis disease. Talk presented at the MRC Early Career Scientist Convention. MRC, Parow, Cape Town, South Africa, 16 October 2013 |
| Daya M. A panel of ancestry informative markers for the South African Coloured population. Talk presented at the DAAD conference. Stellenbosch Protea Hotel, Stellenbosch, South Africa, 8 to 10 November 2013 |
| Le Roex N. Bovine TB in buffalo: what's in the genes? Talk presented at the Annual Bovine Tuberculosis Meeting and Workshop. Veterinary Wildlife Services, Kruger National Park, South Africa, 12 and 13 September 2013 |
| Malherbe S., Walzl G. Recent, current and future biomarker discovery at SUN-IRG to aid TB diagnosis and cure. Talk presented at the Desmond Tutu Trial Centre Dissemination meeting. Klein Joostenberg, Cape Town, South Africa, 13 December 2013 |
| Fortuin S. Deciphering the impact of the evolution of drug resistance on the physiology of Mycobacterium tuberculosis. Talk presented at the Southern African Consortium for Research Excellence TB Workshop. Vineyard Hotel, Cape Town, South Africa, 31 August to 2 September 2013 |
| Fortuin S. Proteomic analysis of Mycobacterium tuberculosis strains demonstrating varying levels of virulence and drug resistance. Talk presented at the Southern African Consortium for Research Excellence TB Meeting. Vinyard Hotel, Cape Town, South Africa, 31 August to 2 September 2013 |
| Essone P. Diagnostic utility of antigen-stimulated host markers in an overnight whole blood culture assay. Talk presented at the EDCTP. Dakar Hotel, Dakar, Senegal, 20 October to 20 October 2013 |
| Du Plessis N. Innate Immunity in M.tb infections. Talk presented at the DST/NRF Centre for Excellence in TB Research (CBTBR) Symposium. DST/NRF Centre for Excellence, Cape Town, South Africa, 09 April and 10 April 2013 |
| Du Plessis N. MDSCs in TB. Talk presented at the Respiratory Unit Research Meeting. Tygerberg Pulmonary Division, Cape Town, South Africa, 16 October 2013 |
| Du Plessis N. Suppressive Innate Immunity to Mycobacterium tuberculosis infection. Talk presented at the Institute of Infectious Diseases Seminars. University of Cape Town, Cape Town, South Africa, 30 October 2013 |

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| Ronacher-Mansvelt K. Biomarkers of TB treatment response. Talk presented at the Meeting. Helmholtz Institute, Braunschweig, Germany, 28 October 2013 |
| Walzl G. TB biomarkers in peripheral blood. Talk presented at the Biomarkers for Tuberculosis: New Questions, New Tools Meeting. Washington, USA, 8 to 11 September 2013 |
| Walzl G. TB biomarkers in peripheral blood. Talk presented at the 34 th Annual Conference of the European Society of Mycobacteriology. Florence, Italy, 30 June to 3 July 2013 |
| Moller M. TB research in South Africa. Talk presented at the Christian Albrechts University Strategic Planning workshop. Christian Albrechts University, Kiel, Germany, 14 to 17 November 2013 |
| Hoal E.G. Life in South Africa: Political situation, recent history, social life. Talk presented at the Christian Albrechts University Strategic Planning workshop. Christian Albrechts University, Kiel, Germany, 14 to 17 November 2013 |

| Posters |
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| Hammond-Aryee K. Toxoplasma gondii seroprevalence studies in Africa. Poster presented at the 12th International Conference on Toxoplasmosis. St Cathrine's College, Oxford, United Kingdom, 22 to 27 June 2013 |
| Hammond-Aryee K. Toxoplasma gondii seroprevalence studies in Africa. Poster presented at the EMBO Aids related Mycoses conference 2013. University of Cape Town, Cape Town, South Africa, 3 to 5 July 2013 |
| Klopper M. Deciphering the evolution of totally drug-resistant tuberculosis - a catalogue of genome variation at single-base pair resolution. Poster presented at the Keystone Symposia. Tuberculosis: Understanding the Enemy. Whistler Conference Centre, Whistler, Canada, 13 to 18 March 2013 |
| Dippenaar A., Warren R.M., Gey van Pittius N.C., Van Helden P.D., McNerney R., Clark T., Abdallah A.M., Pain A. Deciphering the evolutionary history of the Mycobacterium tuberculosis Latin American Mediterranean (LAM) genotype. Poster presented at the 34th European Society of Mycobacteriology Annual Congress. Hotel Demidoff, Florence, Italy, 30 June to 3 July 2013 |
| Sao Emani, Williams M.J., Wiid I.J.F., Baker B. Ergothioneine is secreted by mycobacteria. Poster presented at the 57th FHSM Annual Academic Day. Stellenbosch University, Tygerberg Campus, Cape Town, South Africa, 14 to 15 August 2013 |
| Gallant J.L., Viljoen A.J., Tshoko S., van Helden P.D., Wiid I.J.F. Purification and characterisation of the aspartate aminotransferases from the mycobacteria. Poster presented at the 57th FHSM Annual Academic Day. Stellenbosch University, Tygerberg Campus, Cape Town, South Africa, 14 to 15 August 2013 |
| Chegou N.N., Walzl G., Loxton A., Ronacher-Mansvelt K., Malherbe S., Smith B. Utility of M.tuberculosis specific host cytokine signatures in whole blood culture supernatants for the diagnosis of TB disease. Poster presented at the Biomarkers for Tuberculosis, New Questions, New Tools and FDA Workshop on Immune Correlates of Protection against Tuberculosis Vaccines. Westfields Marriott, Chantilly, Virginia, USA, 8 to 11 September 2013 |
| Chegou N.N., Walzl G., Loxton A., Ronacher-Mansvelt K., Smith B. Beyond the IFN-gamma horizon: Biomarkers for immunodiagnosis of infection with M. Tuberculosis. Poster presented at the Biomarkers for Tuberculosis: New Questions, New Tools and FDA Workshop on Immune Correlates of Protection against Tuberculosis Vaccines. Westfields Marriott, Chantilly, Virginia, USA, 8 to 11 September 2013 |
| Newton-Foot M., Warren R.M., Van Helden P.D., Gey van Pittius N.C. The evolution of the mycobacterial Type VII ESX secretion system. Poster presented at the 57th FHSM Annual Academic Day. Stellenbosch University, Cape Town, South Africa, 14 to 15 August 2014 |
| Steyn N., Newton-Foot M., Warren R., Van Helden P.D., Gey van Pittius N.C. Investigating the localisation of the ESX-3 secretion system in Mycobacterium smegmatis. Poster presented at the Keystone Symposium: Tuberculosis Understanding the enemy. Whistler Conference Centre, Vancouver, Canada, 13 to 18 March 2013 |

BIOMEDICAL SCIENCES

| |
|---|
| Whitfield M., Streicher E., York T., Mardarowicz I., Scott L., Stevens W., Van Helden P., Van Rie A., Warren R.M. Association between Genotypic and Phenotypic Pyrazinamide Resistance in Rifampicin Resistant Mycobacterium tuberculosis Isolates. Poster presented at the 57th Annual Academic Day. Stellenbosch University, Tygerberg, South Africa, 14 and 15 August 2013 |
| Klopper M., Hill-Cawthorne G., Abdallah A.M., Rangkuti F., Hayes C., McNerney R., Clarke T., Dheda K., Trollip A., Van Helden P.D., Victor T.C., Warren R.M., Pain A. Deciphering the evolution of totally drug-resistant TB. Poster presented at the Keystone symposia:Tuberculosis: Understanding the enemy (x8). Whistler Conference Centre, Vancouver, Canada., 13 to 18 March 2013 |
| Chegou N.N., Ronacher-Mansvelt K., Loxton A., Walzl G. Utility of host markers detected in Quantiferon supernatants for the diagnosis of tuberculosis in children in a high-burden setting. Poster presented at the Keystone Symposium: Tuberculosis: Understanding the Enemy and Host Response in Tuberculosis. Whistler Conference Centre, Vancouver, Canada, 13 to 18 March 2013 |
| Chegou N.N., Walzl G. Utility of M.tuberculosis specific host cytokine signatures in whole blood culture supernatants for the diagnosis of TB disease. Poster presented at the Biomarkers for Tuberculosis, New Questions, New Tools. Washington Dulles, Chantilly, Virginia, USA, 8 to 11 September 2013 |
| Chegou N.N., Walzl G. Beyond the IFN-g horizon: Biomarkers for immunodiagnosis of infection with M. tuberculosis. Poster presented at the Biomarkers for Tuberculosis, New Questions, New Tools. Washington Dulles, Chantilly, Virginia, USA, 8 to 11 September 2013 |
| Loxton A.G. Immunogenicity of novel DosR candidate vaccine antigens of M.tb in ARV-naive HIV+ patients with a range of CD4 counts from a high-burden country (South Africa). Poster presented at the AIDS Vaccine 2013. Barcelona, Barcelona, Spain, 7 to 10 October 2013 |
| Ronacher-Mansvelt K., Kleynhans L., Ruzive S., Ehlers L., Thiar L., Walzl G. Hormones as markers of TB treatment response. Poster presented at the Keystone Meeting. Whistler Conference Centre, Vancouver, Canada, 13 to 18 March 2013 |

Special achievements and other highlights not covered by this template

Division of Medical Physiology

Prof. Stefan du Plessis was awarded the Lasec Excellence in Physiology award at the national PSSA Conference.

Several of our postgraduate students and staff were placed among the top presentations at the FMHS Annual Academic Research Day (Natalie Collop – Best Presentation: Basic Sciences; Johan Maartens – Best Presentation: Maternal and Fetal Health; Dr Sven Friedrich – Best Poster: Infectious Diseases (AAD); Corli Westcott – Runner up: Basic Sciences (AAD).

Prof. Stefan du Plessis serves as a member of the FMHS Research C Committee.

Prof. Stefan du Plessis was re-elected as Member of Council of Stellenbosch University.

Clinical Genetics and Genetic Counselling

In 2013 Dr M. Urban was Chairman of the Clinical Genetics Group of the Southern African Society of Human Genetics and Secretary of the College of Medical Geneticists of South Africa, and Ms M Schoeman was a committee member of HPCSA Committee for Medical Scientists.

Ms M Schoeman received the bronze medal for a poster presentation at the African Society for Immunology Conference at Sun City, South Africa.

BIOMEDICAL SCIENCES

Molecular biology and Human Genetics

Prof. PD van Helden was awarded the MRC Lifetime Achievement Award (Silver Medal) in 2013
MRC Flagship funding was awarded to Prof. P.D. van Helden for the project entitled "*Improving TB diagnosis and treatment through basic, applied and health systems research*"

Prof. R.M. Warren and Prof. G. Walzl were awarded the vice-rectors' award for outstanding publication numbers

CLINICAL PSYCHOLOGY

HEAD OF DEPARTMENT

Dr Debbie Alexander

Summary of Activities

The Clinical Psychology Department at Tygerberg Hospital provides psychology services to in- and outpatients. Psychology services are provided through Adult Psychiatry (J-LG), Child and Family Psychiatry (F-LG) and Medical Psychology (A-LG). The Medical Psychology Unit works in collaboration with Liaison Psychiatry and medical departments in the hospital. Staff from the Psychology Department also render services at community clinics. Clinical psychology services include assessment, diagnosis and treatment, as well as referral of patients to appropriate services and agencies.

In addition to clinical service delivery, the clinical psychologists also fulfill supervisory, teaching and research functions. They are also involved in other psychology related activities in the health, education and sport sectors.



Resources

| Posts (full-time) | Number | Filled |
|---|---------|--------|
| Principal Psychologist | 1 | 1 |
| Senior Clinical Psychologist | 3 | 3 |
| Intern (Number Only) | 5 | 5 |
| Posts (sessional – how many hours per week) | | |
| Senior Clinical Psychologist (External funding) 10:00 – 16:00 | 6 hours | |

Output

| Clinical Psychology Services – Statistics | | | |
|---|-------------|------------|---------|
| | Outpatients | Inpatients | Other |
| Patients | 1509.00 | 567.00 | |
| Consultations | 2354.25 | 807.50 | |
| Hours | 4719.90 | 1067.05 | |
| Other hours | | | 7246.40 |
| Psychometric Evaluations | | | |
| | Outpatients | Inpatients | |
| Patients | 154.00 | 46.00 | |
| Hours | 763.80 | 337.25 | |

CLINICAL PSYCHOLOGY

Comment on Output

The three clinical psychology service units offer specialist services which are labour intensive and time consuming. The Psychology output in respect of patient numbers is limited due to the nature of the service. Each patient consultation takes 1 to 1½ hours and sometimes requires repeat sessions over a longer period, depending on the patients' needs and circumstances. Efforts are directed at spreading available resources to assist with as many cases as possible, but waiting lists are unavoidable. Over and above direct index patient contact, there is contact with the family and other collateral sources to ensure a holistic approach to patient care.

Psychometric and neuropsychological assessments can take from 3 to 12 hours to process and write up. Despite the time and manpower challenges, these services are crucial to informing appropriate treatment and rehabilitation plans, suitable placement and referral of patients and the psycho-education of families and the community. Because the work is labour-intensive, there are insufficient psychologists to deal with the large demand despite attempts to make use of alternatives such as group therapy. Senior staff are also required to fulfill a variety of tasks, which impact on their time availability for direct patient contact.

Infrastructure Development

Physical Resources: Purchasing and updating test batteries for neuropsychological and psychometric assessment of adults and children remains an ongoing process.

Information Technology: Although the Department requires additional hardware, no new computers and printers were obtained during the year. The most pressing need is in ALG, where a computer and printer are essential to the delivery of basic administrative and communication services. Alignment of

the information reported via the Clinicom system with the current manual systems remains a challenge and a continued focus for 2014.

Human Resources: This area remains under-resourced from a clinical and administrative perspective. Professional development is ongoing. All staff members participate in and attend lectures and presentations three times a month to remain abreast of new developments. In addition senior staff members attended the following: a 3 day REBT program for social anxiety disorder (SAD); Statistica and Innovus workshop; SA Addictions Medical Society (SAAMS) – (Opioid dependency course); Grant writing workshop; How to draw up a simple research budget; Subsidy, Authorship; Understanding Legal-Ethical Practice in Psychology workshop; Assessing and targeting infant neurocognition; FAMSA McMaster Family Therapy training; American Psychological Association presentation on new products by Neil Lader; Nancy Suchman, Yale Child Study Center, Newhaven, NY - Seminar Series on Parenting from the Inside Out.

Community Outreach Programmes/ Community Service and Interaction

Clinical Psychology Interns were allocated to community clinics in the Bellville, Parow, Kraaifontein, Delft and Elsies River areas where they each worked 1 afternoon (3 hours) a week.

Other projects in which staff members were involved both internally and externally are:

1. Liaison with different schools districts re: patients management plans at school and in the community (local, George and Vredenburg)
2. Services were provided to the following committees:

CLINICAL PSYCHOLOGY

Internal:

University of Stellenbosch Medical and Health Sciences Faculty Board
Post Graduate Committee (Department Psychiatry)
MBChB Psychiatry Department Training Committee
Psychotherapy Committee
Supervisors Committee
Psychiatry Department Management Committee
Psychiatry Department Lecturers Committee
PhD Evaluation Committee

External:

SASCOC High Performance Advisory Committee
Triathlon South Africa Executive Board (President)
International Triathlon Union Executive Board
Member of the SARU Concussion Working Group
African Triathlon Union Executive Board

Partnerships

University of the Western Cape – Teaching of Neuropsychology to the Clinical Psychology Master's Students
2 Military Hospital – Teaching of Neuropsychology to the Clinical Psychology Interns and Clinical Psychologists

Collaboration and participation in Addictions Forum, academic platform for addictions field in Western Cape

Susan Bers (Yale Child Study Center, Newhaven, NY) visited Red Cross Hospital – provided training on mentalisation-based therapy as prerequisite for KMC (PIO-ZA) research project.

University of Cape Town – Guest lecture on the practical use of psychometric assessments for Psychology Master's students (May 2013)

Achievements with regard to research activities and research outputs.

1. Supervision Doctoral thesis (X2): Stellenbosch University (Health Sciences Faculty) – Dr Debbie Alexander
2. Collaboration with Lentegeur Hospital on the research project: "Validity and clinical utility of the Montreal Cognitive Assessment (MoCA) of cognitive impairment in a South African population."
3. Completion of PhD in Psychiatry: "Neurocognition and thought disorder: it's association, temporal stability and treatment outcomes in first-episode psychosis" – Riaan Olivier (awarded Harry Crossley funding)
4. Submission of article: "Assessing neurocognition with the MCCB in first-episode psychosis: A longitudinal study of treatment with a long-acting FGA and it's outcome correlates over a 12 month period" – Riaan Olivier
5. Examination of M-thesis in Baromedicine – Riaan Olivier
6. Dr Debbie Alexander, Dr Christina van der Merwe and Colin Mitchell began their participation in parent-infant research initiated by members of the Child Psychiatry team, headed by Dr Anusha Lachman. This research aligns with research being conducted by other groups in the Western Cape and internationally. The research aims to investigate the usefulness of cost-effective Mentalisation-based group therapy techniques for the enhancement of caregiver-infant relationships. Optimal caregiver-infant relationships offer the caregiver a positive experience of parenting and the infant the prospect of optimal psychological and neurological development.
7. Stellenbosch University, Medical and Health Sciences Faculty Academic Day, Neuroscience Category - Oral Presentations Judge – Dr Debbie Alexander

CLINICAL PSYCHOLOGY

Teaching and training (undergraduate-, postgraduate- and elective students)

In addition to the Department of Psychology and Department of Psychiatry Academic Programmes, the teaching of psychology to the following undergraduate and postgraduate students is undertaken by our Department: MBChB I-Interdisciplinary Phase, II, III, IV and V (Middle rotation) and (Late rotation); PAT AGB; BSc Dietetics III; M (Physiotherapy); MMed (Psychiatry) Psychology 178 Part 1 and 2 and M Nursing.

The Senior Clinical Psychologists are also responsible for the training and supervision of Intern Clinical Psychologists and Psychiatry Registrars.

Special achievements

1. During 2013, several chapters in the SU Psychiatry Department textbook were updated or rewritten by members of the TBH Clinical Psychology team, namely the chapters on Personality Disorders, Psychotherapy and Cognitive Behavioural Therapy and Behaviourism. Dr Alexander co-authored the latter two chapters, one of them with Colin Mitchell, and Riaan Olivier worked on the Personality Disorders chapter.
2. Conference Presentations:
SASMA Congress: **Long-term outcome of neurocognitive and academic performance of early adolescent rugby players versus non-contact sport controls** (Dr Debbie Alexander / Invited Speaker)
Discovery Vitality Summit: **Early versus late Specialisation: A psychosocial approach** (Dr Debbie Alexander / Invited Speaker)
3. Dr Alexander and Colin Mitchell attended the 14th International Congress of Neuropsychanalysis, held over 4 days in Cape Town in August 2013. The theme was on the clinical applications of neuropsychanalysis. This proved to be a highly stimulating experience which, inter alia, highlighted growth in research and clinical theory and practice which seeks to draw closer together the fields of neuroscience and psychoanalytic understanding and practice.

COMMUNITY HEALTH

DIVISION OF COMMUNITY HEALTH: OCCUPATIONAL HEALTH CLINIC/ MINOR AILMENT CLINIC

HEAD OF DEPARTMENT: Dr. Sydney Carstens

Summary of activities

The Minor Ailment Clinic provides a first-stop consultation service (primary medical care) to employees who are on duty. This ensures that employees do not have to remain out of work for extended periods to see a medical practitioner.

The Occupational Health (OH) Clinic primarily sees employees of Tygerberg Hospital and the Provincial Government of the Western Cape (Health Department) for work-related ill health. There are however several agreements with other organisations, for example the National Health Laboratory Service (NHLS), which allow for provision of services (from the OH clinic) to their employees.

The services rendered by the OH Clinic also involves the management of patient referrals from within the state sector, who have been diagnosed with occupational diseases or chronic occupational injuries, as well as retired mining employees who are entitled to free medical evaluations on grounds of their previous exposure to dust generated by mining activities.

Services rendered by this clinic span the whole spectrum of Occupational Health, including workplace hazard identification and risk assessment, risk-based medical surveillance (for example blood lead levels in lead workers, pre-placement medical evaluation of workers exposed to ionising radiation for example the radiographers), managing workers with occupational diseases (especially pulmonary tuberculosis), as well as those with chronic injuries which are work-related (for example sonographers with carpal tunnel syndrome). It also includes the evaluation of workers with impaired function to establish appropriate work placement or adaptation of work



clinic for counselling, serological evaluation and the provision of antiretroviral post exposure prophylaxis (this service is rendered by the Medical Emergency ward F1 after hours). Further follow-up of these employees will however be at the OH clinic.

The bulk of the training of medical specialists in Occupational Medicine is also primarily done at this clinic, with further practical rotations at Dermatology, Pulmonology, etc.

Professional staff of the clinic also plan and implement research aimed at improving the occupational health wellbeing of all employees at healthcare institutions.

Resources

Occupational Health Clinic

Principal Specialist in Occupational Medicine/Head of Clinical Unit: Dr S.E.

Carstens, MB, ChB; MMed Comm Health; FCPHM (SA) Occ. Med
Specialist in Occupational Medicine: Dr W.A.J. Meintjes, MB, ChB (Pret), DOM (Stell); FCPHM(SA) Occ. Med; MMed (Occ. Med)
Registrars in Occupational Medicine: Dr B. Andrews (Provincial); Dr U. Obike (Nigeria)

COMMUNITY HEALTH

Minor Ailment Clinic

Senior medical officer: Dr L. Joseph, BSc; MB, ChB

Nursing practitioners

Occupational Health Nursing Practitioner: Sr D.M. Arendse; Diploma in Nursing; B.Tech (Occupational Health); Diploma in Nursing Management

Registered Nurse Practitioner: Sr J.W. Samuels, Diploma in Nursing.

Staff nurse: Ms Cornelius

Administrative support

Ms Damonse

Output

Minor Ailment Clinic visits: A total of 1 951 patients were seen at the Minor Ailments Clinic during 2013

Occupational Health Clinic visits: A total of 1 765 persons were seen at the Occupational Health Clinic. The consultations included pre-placement medical examinations, fitness for work evaluations and disability management and management of occupational diseases and injuries (for example needlestick injuries and occupational tuberculosis). All consultations can be broken down as follow:

| | |
|--|--------------|
| Needlestick/splash injury | 334 |
| Occupational diseases/injuries (staff members) | 23 |
| Occupational diseases (referrals from outside the hospital) | 50 |
| Radiation worker medical evaluations | 93 |
| Ex-miner evaluations | 7 |
| Other | 1 258 |

Other activities: The Occupational Health team successfully combined with the staff at the Unit for Infection Prevention and Control (UIPC) to manage the exposure of staff and patients to hazardous biological agents in the hospital environment. The education of staff members regarding the use of N95 respirators (and fit-testing each staff member for specific respirator designs) when dealing with patients with active pulmonary tuberculosis, is a good example of this collaboration.

During 2013, Dr Jack Meintjes (Occupational Medicine Specialist) was appointed as the Manager of the UIPC at Tygerberg Hospital, which further strengthened the link between Occupational Health and Infection Prevention and Control. It is envisaged that several joint research projects, as well as service projects, will now be undertaken.

Risk assessments were also conducted in several areas within the hospital, but this is still an area that needs more in-depth attention from the whole occupational health and safety grouping in the hospital.

During the latter part of 2013, the Occupational Medicine Specialists and registrars were requested by the Provincial Health Department to assist in the development of medical surveillance protocols, which will be utilised on the whole Provincial healthcare institution platform. This project is still ongoing.

Comment on output

The Occupational Health Clinic has continued to see a gradual increase in referrals from other clinical disciplines, as well as other public health institutions in the Western Cape. We expect the caseload to increase as a result of more risk-based medical surveillance programs to be implemented.

As the information about services being provided by our clinic is spreading through the hospital, more and more staff members will also be requesting our services.

COMMUNITY HEALTH

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

No new infrastructure development was undertaken. We do however hope to get the finances needed (and budgeted for) to buy a screening audiometry booth. This will enable us to commence with our legal responsibility to monitor the hearing of employees exposed to workplace noise above 85 decibels averaged for an eight-hour workday. We did however receive some office equipment, including a fax machine and a printer, and some medical equipment, including a digital blood pressure meter.

A hand basin was also installed in the nursing office.

Partnerships

National

- Dr Meintjes serves on the Diving Advisory Board of the Chief Inspector of the Department of Labour and advises on policy in this field
- A formal partnership exists between Occupational Medicine at Stellenbosch University and the Southern African Undersea and Hyperbaric Medical Association, where Dr Meintjes is acting as Occupational Medicine Consultant
- Dr Meintjes chairs the Diving Medical Panel of Southern Africa

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

Textbooks and contributions to textbooks.

1. Meintjes W.A.J. Measuring the health status in a community. In: Community Health (6th Ed). Clarke M, ed. Vlok's. Juta. Cape Town 2014:59-83

2. Meintjes W.A.J. Dive Medicine. In: Baker L, ed. A guide to the practice of travel medicine in the South African context.: SASTM Publications 2012:141-151
3. Woodbury G.M., Meintjes W.A.J., Lindholm C. How to read, understand and interpret quantitative research. In: Chronic wound care (5th Ed). Krasner D.L, Rodeheaver G.T., Sibbald R.G. and Woo K.Y. 2012:131-140

Presentations at international conferences

1. Meintjes W.A.J, Cali-Corleo R. Telemedicine triage and decision-making issues – The issue of “remote locations”, its impact on hyperbaric treatment delay, on-site treatment vs. Medevac risk-benefit evaluation and related decision making. Tricontinental Scientific Meeting on Diving and Hyperbaric Medicine. Reunion Island, 22-29 September 2013
2. Meintjes W.A.J. Non-hyperbaric medical treatment: pros, cons, possible complications and when to medevac to a hyperbaric facility. Tricontinental Scientific Meeting on Diving and Hyperbaric Medicine. Reunion Island, 22-29 September 2013
3. Meintjes W.A.J. What are the issues with asthma and diving? Tricontinental Scientific Meeting on Diving and Hyperbaric Medicine. Reunion Island, 22-29 September 2013
4. Meintjes W.A.J. Asthma and diving in Southern Africa. Tricontinental Scientific Meeting on Diving and Hyperbaric Medicine. Reunion Island, 22-29 September 2013
5. Meintjes W.A.J. DCI management in remote geographical areas – compromise between cost/efficiency, including in-water recompression strategy or guidelines. Tricontinental Scientific Meeting on Diving and Hyperbaric Medicine. Reunion Island, 22-29 September 2013
6. Meintjes W.A.J. Applied ergonomics. International DAN Divers Day - Tricontinental Scientific Meeting on Diving

COMMUNITY HEALTH

and Hyperbaric Medicine. Reunion Island, 22-29 September 2013

7. Kharb M., Meintjes W.A.J. Male fertility in saturation. EUBS conference September 2012 Belgrade, Serbia
8. Meintjes W.A.J. Ergonomy. In: Mathieu D, Marroni A. and Kot J., editors. 9th ECHM Consensus Conference; 2012 11-12 September 2012; Belgrade, Serbia: Centre for Hyperbaric Medicine; 2012. p. 265-273

Teaching and Training (undergraduate-, postgraduate- and elective students).

1. Two registrars (Drs. Julius Ayuk and Ziyaad Essop) in the MMed (Occupational Medicine) degree programme successfully completed their studies and were admitted to the Division of Occupational Medicine of the College of Public Health Medicine of the SA Colleges of Medicine.
2. Sr Arendse mentored two B. Tech Occupational Health Nursing students from the Cape Peninsula University of Technology
3. The BScMedScHons (Underwater Medicine) degree programme and the BScMedScHons (Hyperbaric Medicine) degree programme had three successful candidates graduating
4. Sr Arendse was also involved in the orientation programme of the hospital for CPUT and UWC nursing students.

The following student research projects were supervised by staff members of the department:

1. Barrion, I.M. Risk factors for work-related noise-induced hearing loss in a cohort of mining and manufacturing industries – in process [For the M (Audiology) degree]
2. Burman F. A retrospective review of the most common safety concerns encountered at a range of international recompression facilities when applying the Risk Assessment Guide for Recompression Chambers over a period of 13 years. (For the MSc [Baromedical Sciences] degree) –

to graduate in April 2014 (aggregate mark of 85%)

3. Van Wijk C.H. A cross-over study investigating specific aspects of neuropsychological performance in hyperbaric environments. (For the MSc [Baromedical Sciences] degree) – To graduate in April 2014 (aggregate mark of 75,5%)
4. Ginindza-Ncube N.B.Q. Knowledge and awareness of non-occupational HIV post-exposure prophylaxis at Stellenbosch University. [For the MSc (Clinical Epidemiology) degree] – To graduate in April 2014
5. Ayuk J.N. A cross-sectional study of tuberculosis among workers in Tygerberg Academic Hospital, Western Cape province, South Africa. [For the MMed (Occupational Medicine) degree] – Graduated in December 2013 (aggregate mark of 69%)
6. Essop Z. Occupational blood and body fluid exposure incidents amongst undergraduate medical students over a period of 5 years. (For the MMed [Occupational Medicine] degree) – Graduated December 2013 (aggregate mark of 70%)

Internal/external examining by staff members:

1. Dr. Carstens served as internal examiner for the following two candidates:
 - Mr F. Burman, Master of Science in Baromedical Sciences (University of Stellenbosch)
 - Ms Y. Grobler, Masters in Occupational Therapy (University of Stellenbosch)

Special achievements

- Dr Meintjes acted as a core examiner for the Colleges of Medicine of South Africa, for the FCPHM(SA) Occ. Med candidates
- Dr Meintjes served as a member of the Postgraduate Education Committee of the Faculty of Medicine and Health Sciences
- Dr Meintjes served on the Radiation Advisory Committee of Tygerberg Hospital

FORENSIC MEDICINE

HEAD OF DEPARTMENT

Prof. Shabbir Ahmed Wadee

Summary of activities

From January 1 to 31 December 2013, 3 056 admissions were made to the Tygerberg Forensic Pathology Laboratory of the Forensic Pathology Services at the Tygerberg Complex. Of these, 1 851 were deaths due to unnatural causes, 428 due to natural causes and 251 are still under investigation. All unnatural deaths, deaths under investigation and some natural deaths had formal and complete autopsies performed with the necessary special investigations and tests taken where appropriate. During the course of the autopsy, tissue was procured for histological analysis by the pathologist and processed by the chief medical technologist in an in-house histology laboratory. Tissue was taken from 1 067 cases from the Tygerberg Forensic Pathology Services Facility or mortuary and 138 cases from referral centres (32 cases from Paarl, 17 cases from Stellenbosch, 39 cases from Worcester and 50 cases from George), comprising 1 205 cases in total. As a result, 16 851 blocks were processed from Tygerberg, 101 from Paarl, 196 from Stellenbosch, 420 from Worcester and 780 from George. A total of 15 608 Haematoxylin & Eosin (H&E) stains were performed from Tygerberg, 101 from Paarl, 196 from Stellenbosch, 420 from Worcester and 780 from George. A total of 380 special histological stains were performed when a more precise cause of death was required. In deaths where injuries involved the brain, spinal cord and related areas, selected brains were formalin-fixed for at least three weeks and kept for a weekly formal brain cutting conference with Neuropathologist Dr D. Zaharie. A total of 145 such cases were macroscopically examined at the brain-cutting meetings, and tissue was processed for histological examination, where necessary. Fourth- and fifth-year medical students, radiography students, anatomical pathology registrars, other rotating registrars and others



were accommodated and trained at these meetings. In addition, a monthly postgraduate session with the Division of Neurosurgery was held, with input from the Head, Prof. B. Hartzenberg, and academic and clinical staff. A total of 15 cases were macroscopically examined at the heart dissection meetings in consultation with Cardiothoracic Surgeon, Prof. J. Rossouw. During the course of 2013, 79 Death Investigation Dockets were received for second opinions. Some of these autopsies had been performed in the Division, whilst other dockets were referred for a second specialist opinion from outlying areas. Referrals were made by the Directorate of Public Prosecution and also investigating officers from the South African Police Services. During the year, a total of 57 subpoenas were received by the professional medical staff to attend both the High and Regional Court. Professional staff was required to present expert medical evidence arising from autopsies performed at the Division. A total of 454 telephonic consultations were handled by Medical Personnel in the Division and 16 crime or death investigation scenes were attended.

FORENSIC MEDICINE

Resources

| Posts (full-time) | Number | Filled |
|---|--------|-------------|
| Head of Clinical Department | 1 | 1 |
| Head of Clinical Unit | 1 | 1 |
| Senior Specialist | 1 | 1 |
| Specialist | 1 | 1 |
| Registrar | 5 | 5 |
| Medical Officers | 2 | 2 |
| Chief Medical Technologist | 1 | 1 |
| Lab Assistant | 1 | 1 |
| Principal Typist | 1 | 1 |
| Administrative Officer | 1 | 1 |
| Senior Administration Clerk | 1 | 1 |
| Posts (sessional – how many hours per week) | | |
| Specialists (sessional) | 2 | 4 hours p/w |

Comment on output

With the increasing population of the area and the high rate of homicide and motor vehicle collisions, autopsy numbers continue to remain high. Autopsies are done for Paarl, Stellenbosch and Worcester Forensic Pathology Services when their medical personnel are on leave and if required. As the number of autopsies and registrars in training increases, there is a concomitant increase in the volume of histology.

Part 2

Faculty on Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

The training of the forensic officers is an ongoing process, including practical skills transfer and information technology training. This is undertaken by the senior specialists jointly with the Division of Forensic

Medicine, Faculty of Health Science, University of Cape Town.

An advisory role was played by the Chief Specialist, Prof. Wadee, the Principal Specialist, Dr Johan Dempers, the Senior Specialist, Dr Lene Burger, and Dr Afonso in the maintenance of the Tygerberg Forensic Pathology Facility or mortuary.

As a member of the now defunct National Forensic Pathology Services Academic Subcommittee, Prof. Wadee, the Divisional Head, attended telephonic contributed to the revision of the national Code of Guidelines Forensic Pathology Practice in South Africa. The telephonic conferences were arranged by the National Forensic Pathology Service Directorate in the National Department of Health, the Heads of Forensic Medicine from the Medical and Health Science Faculties nationally and relevant role players.

Community outreach programmes / community service and interaction.

Partnerships

International:

The Division is actively involved in the PASS/Safe Passage Study on the Effects of Maternal Alcohol Consumption in Pregnancy and the Sudden Infant Death Syndrome and Stillbirths. This is in association with Anatomical Pathology, Neuropathology, Obstetrics and Gynaecology, as well as Paediatrics at the Medical and Health Science Faculty, University of Stellenbosch, and Pathology and Neuropathology Departments at Harvard University in Boston, Psychiatry and Paediatrics Departments at Columbia University in New York, Pathology Departments of the Universities of North and South Dakota, North and South Dakota, USA.

FORENSIC MEDICINE

Achievements wrt research activities and research outputs:

Number of publications from the department/division
Textbooks and contributions to textbooks.
Two articles were accepted and published in reputable journals nationally and internationally.

Teaching and Training (undergraduate-, postgraduate and elective students).

Undergraduate:

During the year 2013, 148 MBChB IV and 72 MBChB V students were trained in the Forensic Medicine undergraduate module. The lectures for the two-week academic rotation for MBChB IV students were also revised and standardised. The undergraduate module involves tutoring small groups of approximately 12 to 16 students who spend two weeks in the Division, undergoing intensive group teaching. This was undertaken primarily by the academic professional staff and with assistance from the administrative personnel. Undergraduate students for the module were very positive in their feedback of the module, undertaken by the Division and the Faculty of Medicine and Health Science.

Postgraduate:

Five registrars in the Division of Forensic Medicine underwent relevant training varying from Year I to IV of their specialist forensic pathology training. Two medical officers received pertinent training in Forensic Medicine.

One registrar from the Anatomical Pathology Division spent two months each as rotating registrar in a Postgraduate Autopsy Technique module and was supervised and trained by senior specialists of the Forensic Pathology Division.

One Registrar successfully completed the MMed Forensic Pathology Part 2 (FC For Path (SA)), and one Medical Officer the Dip For Med (SA) at the College of Forensic Pathologist at the College of Medicine of South Africa. The FPS Tygerberg Mortuary / Facility was also used as a venue for the final Autopsy Examination in the MMed Anatomical Pathology Part II Examination with the co-operation and assistance of the technical and administrative personnel

Forensic Pathology Officers:

The training of the new technical personnel is an ongoing process, including practical skills transfer and information technology training. This was undertaken jointly with the Division of Forensic Medicine, Faculty of Health Science, University of Cape Town.

MEDICAL IMAGING & CLINICAL ONCOLOGY

HEAD OF DEPARTMENT

Prof Richard Pitcher

Summary of activities:

Looking back at 2013, the Medical Physics Division may report achievements and progress in many areas, as well as setbacks. Medical Physics, under the capable leadership of Ms Annemari Rossouw, organised a most successful national workshop on "The use of ICT in the Management of Radiation Incidents in Clinical Practice" in the Pavilion Conference Centre, V&A Waterfront, Cape Town, from 26 to 30 November 2013. The workshop was a first in South Africa on the specific topic and enjoyed the support of the IAEA. Three invited international experts presented lectures and practical sessions. A total of 50 delegates from all over South Africa attended and the feedback from delegates were overwhelmingly positive.

Our Medical Physicists succeeded in establishing digital electronic communication between systems in the PET/CT Centre and Radiation Oncology. This communication link enabled integration of PET generated tumour volumes into treatment planning of oncology patients. The location of the PET facility within the Gene Louw Building offers the unique capability of a one step integration of PET imaging into radiation treatment with obvious benefits to our patients.

A setback that we have experienced, was the failure to apply Intensity Modulated Radiotherapy (IMRT) on the first patient selected for the technique. An investigation revealed a faulty digital export process of the treatment plan to the verification software that resulted in non-agreement of dose fluence maps. The software error was subsequently corrected and we plan to apply IMRT to selected patients early in 2014.

Medical Physics again met its teaching responsibilities. Courses in Radiation Physics and Medical Physics were presented to registrars, physics students and student radiographers. Professional services were rendered to our client divisions, viz. Radiation



Oncology, Nuclear Medicine and Diagnostic Radiology. We succeeded in providing an effective radiation monitoring service to radiation workers. Licensing of X-ray units and LASER devices was duly maintained.

Our medical physicists furthermore contributed to the advancement of Medical Physics education on the African Continent. This was enabled through our involvement with the health programmes of the IAEA (International Atomic Energy Agency).

Resources:

| Posts (Full-time) | Number | Filled |
|------------------------------------|--------|--------------|
| Senior Manager: Medical Physics | 1 | 1 |
| Deputy Manager: Medical Physics | 1 | 1 |
| Assistant Manager: Medical Physics | 1 | 1 |
| Medical Physicist | 2 | 2 |
| Intern Medical Physicist | 1 | 1 |
| Radiation Laboratory Technologist | 1 | 8/8 contract |
| Medical Technologist | 1 | 1 |
| Radiographer | 2 | 2 |
| Auxiliary Service Officer | 1 | 1 |
| Secretary | 1 | 1 |

MEDICAL IMAGING & CLINICAL ONCOLOGY

Output:

Medical Physics and Dosimetry

| | |
|--|-------|
| Quality control procedures on radiotherapy units | 204 |
| Patient treatment plans checked | 2 738 |
| Radionuclide administrations | 5 |
| Radiation monitors issued to TBH staff | 5 400 |
| In vivo diode dosimetry system calibrations | 8 |
| Stability tests on dosimeters | 12 |
| Brachytherapy procedures checked | 714 |

Nuclear Medicine

| | |
|-------------------------------|-------|
| Stability tests on dosimeters | 350 |
| Quality Control Procedures | 1 210 |

Radiation Technology Laboratory

| | |
|-------------------------|-----|
| Alloy shielding filters | 61 |
| Plaster impressions | 1 |
| Bite blocks | 80 |
| Wax build-ups | 113 |
| Special devices | 11 |
| Body Foams | 6 |

Comment on output:

As Medical Physics is a service provider to the Nuclear Medicine, Radiation Oncology and Diagnostic Radiology Divisions, the number of Medical Physics procedures is in general determined by the activities of our client divisions.

Part 2

Faculty of Health Sciences Infrastructure development

Medical Physics played a significant role in procuring and commissioning of new radiation equipment. In this respect we may mention the procurement of a High Energy Dual Modality Medical Linear Accelerator (LINAC) for use in the Radiation Oncology Division. The order for the LINAC to the amount of R30 000 000 was placed with ELEKTA on Tuesday 26 November 2013. Delivery of the LINAC and commencement of installation are scheduled for March 2014.

Community outreach programmes/ community services and interaction.

IAEA activities: In the past year, Medical Physics actively participated in activities of the IAEA (International Atomic Energy Agency) under auspices of AFRA (African Regional Co-operative Agreement for Research, Development and Training related to Nuclear Science and Technology).

Wilhelm Groenewald attended two IAEA Task Force meetings on:

1. Review and finalise requirements for the academic and clinical training programmes in Nuclear Medicine and Radiology Medical Physics in Vienna, Austria, from 4 to 6 February 2013.
2. Development of a harmonised regional academic syllabus for Medical Physics in Vienna, Austria, from 8 to 12 April 2013.

Mr M.S. Mohlapholi, Medical Physicist, was awarded a fellowship by IAEA that enabled him to work in a PET/CT Facility at the Catholic University of Leuven in Belgium for a period of two months from 21 April until 22 June 2013.

Wilhelm Groenewald performed an audit of the Medical Physics training programme of the Graduate School of Nuclear and Allied Sciences (GSNAS) of the University of Ghana in Accra, Ghana, from 16 to 18 September 2013.

Wilhelm Groenewald co-authored three IAEA reports that were published during 2013:

1. A regional postgraduate medical physics syllabus for academic programmes, April 2013
2. A regional clinical training programme for radiotherapy medical physics, June 2013
3. Template Portfolio for the regional clinical training programme in radiotherapy medical physics, November 2013

MEDICAL IMAGING & CLINICAL ONCOLOGY

Partnerships

National:

Medical Physics maintained active involvement in the operation of REMACSA (Radiation Emergency Medical Advisory Centre of South Africa). REMACSA is a joint venture, with ESKOM, the Stellenbosch University Faculty of Medicine and Health Sciences, the Western Cape Department of Health, Directorate: Radiation Control and iThemba LABS as stakeholders.

Research Achievements

Number of publications from the department/division

Textbooks and contributions to textbooks

A research paper, with the title, *In house development of a neonatal chest simulation phantom*, by Annemari Groenewald and Willem A Groenewald has been accepted for publication in Journal of Applied Clinical Medical Physics (JACMP) on 10 December 2013.

Cheryl Johnson presented a research paper, "Comparison of film, TLD and Mosfet Dosimetry for dose mapping of a blood irradiator" at the SASCRO/SASMO 16th National Congress, in the Drakensberg, KwaZulu-Natal during 29 August to 01 September 2012.

Medical Physics staff members presented three research papers at the Annual Academic Day of the Faculty of Medicine and Health Sciences.

Monique du Toit attended an ESTRO (European Society for Radiotherapy and Oncology) course on "Target volume determination: From imaging to margins" in Bangkok, Thailand from 20 to 23 October 2014.

Teaching and Training (undergraduate-, postgraduate- and elective students)

Radiation Physics courses were presented to MMed students in Nuclear Medicine, Radiation Oncology students and Diagnostic Radiology, M.Sc.-students, as well as Diploma and B.Tech. radiography students studying with Cape Peninsula University of Technology

(CPUT). In addition we lectured to Honours B.Sc. (Medical Physics) students, enrolled with the Department of Physics, Faculty of Natural Sciences.

Three staff members of the division are registered for the M.Sc. in Medical Physics. Ms Monique du Toit will commence her research for a Ph.D. degree in a joint venture between Stellenbosch University and the University of Groningen in the Netherlands.

Special achievements and other highlights not covered by this template

Annemari Rossouw organised an Ethics Seminar on "Ethical and legal considerations when disclosing adverse events to patients" in Gene Louw Building, on 17 May 2013. The presenters at the seminar were; Dr David Bass of the Medico-Legal Unit, the Western Cape Department of Health and Mr Johann Roux, an attorney with MacRobert Attorneys.

We hosted the Joint Western Cape Medical Physics Forum with the topic "Implementation of PET/CT at Tygerberg Hospital" on 10 October 2013. Medical physicists from Groote Schuur Hospital, iThemba LABS and the private sector attended this successful meeting.

NUCLEAR MEDICINE

Prof. Annare Ellmann

Summary of activities:

Both the general Nuclear Medicine and PET/CT activities thrived in 2013, in spite of several obstacles. Nuclear Technology Products (NTP), a subsidiary of the Nuclear Energy Corporation of South Africa (Necsa) and one of only four suppliers of Mo-99/Tc-99m generators worldwide, experienced production problems in the latter half of 2013. The supply of these generators, the backbone of all Nuclear Medicine services, was cut down drastically for the last few months of 2013. Nuclear Medicine therefore had to buy more expensive imported generators and re-arrange bookings to make optimal use of the limited supply of radioactivity. In spite of this, the general Nuclear Medicine activities did not decrease.

MEDICAL IMAGING & CLINICAL ONCOLOGY

Referrals for PET/CT studies grew significantly in 2013. FDG PET/CT studies for detection of myocardial viability and Ga-68 somatostatin analogue imaging were performed for the first time. The reporting of PET/CT studies is quite complicated and time-consuming, and requires the expertise of a Nuclear Medicine physician and a radiologist. There is excellent collaboration between Radiology and Nuclear Medicine in the reporting of these studies. Using PET/CT for radiotherapy planning was established after a workshop with international experts on the topic. This also led to good collaboration between the PET/CT and radiotherapy radiographers involved in planning. This activity unfortunately did not proceed as well as hoped, due to unexpected challenges during the year.

In September 2013, the Nuclear Medicine division was audited by an international external audit team from the International Atomic Energy Agency. The overall feedback from this audit was very positive, and the issues identified by the audit team will be addressed in 2014. One of the matters already addressed, was the need of strengthening the radiation protection standards in the division. A medical physics intern, Sune White, subsequently did research work on this. Her findings will be presented during a congress early in 2014.

Nuclear Medicine registrars performed well in the final assessments of the College of Nuclear Physicians (FCNP) of the Colleges of Medicine of South Africa (CMSA), with a 100% pass rate in 2013. The group of six registrars, five from our institution, receiving their fellowships from the CMSA during the May 2013 graduation ceremony, was the largest ever to receive the FCNP. Radiography students at the Cape Peninsula University of Technology also completed their final examinations successfully.

Due to a limited budget for equipment from the Western Cape Government, smaller equipment items were financed through Nuclear Medicine University funds. These include a gamma probe (acquired previously, and extensively serviced in 2013), computers and dictaphones.

Resources:

| Posts (Fulltime) | Number | Filled |
|--|--------|-----------------------|
| Professor / Chief Specialist | 1 | 1 |
| Specialist | 2 | 2 |
| Registrar (Number only) | 3 | 3 + 6 (supernumerary) |
| Radiopharmacist | 1 | 1 |
| Radiographers (Assistant director) | 1 | 1 |
| Radiographers chief | 3 | 3 |
| PET/CT radiographer chief | 1 | 1 |
| Radiographers grade 2 | 2 | 2 |
| Radiographers grade 1 | 5 | 5 |
| Radiographers community service | 3 | 3 |
| Nursing: Registered nurse | 2 | 1 |
| Staff nurse | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist | 1 | 39 hours per week |
| Locum Radiographers | 2 | 40 hours per week |

Comment:

Presently, there is only one full time radiographer post in the PET/CT Centre. The individual occupying this post does both clinical radiography work and management of the PET/CT Centre. When the Centre opened at the end of March 2012, we scanned approximately 30 patients per month. Presently we are scanning an average of 100 patients per month.

MEDICAL IMAGING & CLINICAL ONCOLOGY

Output:

| Types of Studies | |
|--|--------------|
| Cardiac: GSPECT | 1 046 |
| Cardiac: Myocardial Perfusion Scintigraphy | 942 |
| Cardiac: Ventricular Function | 150 |
| Cerebral Perfusion Studies and Receptor Imaging | 99 |
| Flow Studies | 144 |
| Gallium Scintigraphy | 3 |
| Gastrointestinal and Hepatobiliary studies | 109 |
| Haematologic studies | 11 |
| Infection Imaging | 31 |
| Lung Scintigraphy: Perfusion | 79 |
| Lung Scintigraphy: Ventilation | 78 |
| Lymph Imaging | 351 |
| Miscellaneous Scintigraphy | 37 |
| PET/CT studies | 966 |
| Renal Scintigraphy | 24 |
| Renal: GFR Measurement | 26 |
| Renography | 287 |
| Renography: Transplant | 45 |
| Skeletal Scintigraphy | 1 377 |
| Skeletal SPECT/CT | 633 |
| Thyroid Clinic First Visit | 229 |
| Thyroid Clinic Follow-up | 454 |
| Thyroid I-131 Therapy | 177 |
| Thyroid Scintigraphy | 248 |
| Thyroid Uptake | 245 |
| Thyroid: Whole Body Iodine Scintigraphy | 17 |
| Endocrine (other) | 113 |
| Tomography SPECT (miscellaneous) | 384 |
| Tomography with CT (SPECT/CT) | 1 682 |
| TOTAL / TOTAAL | 9 987 |

Comment on output:

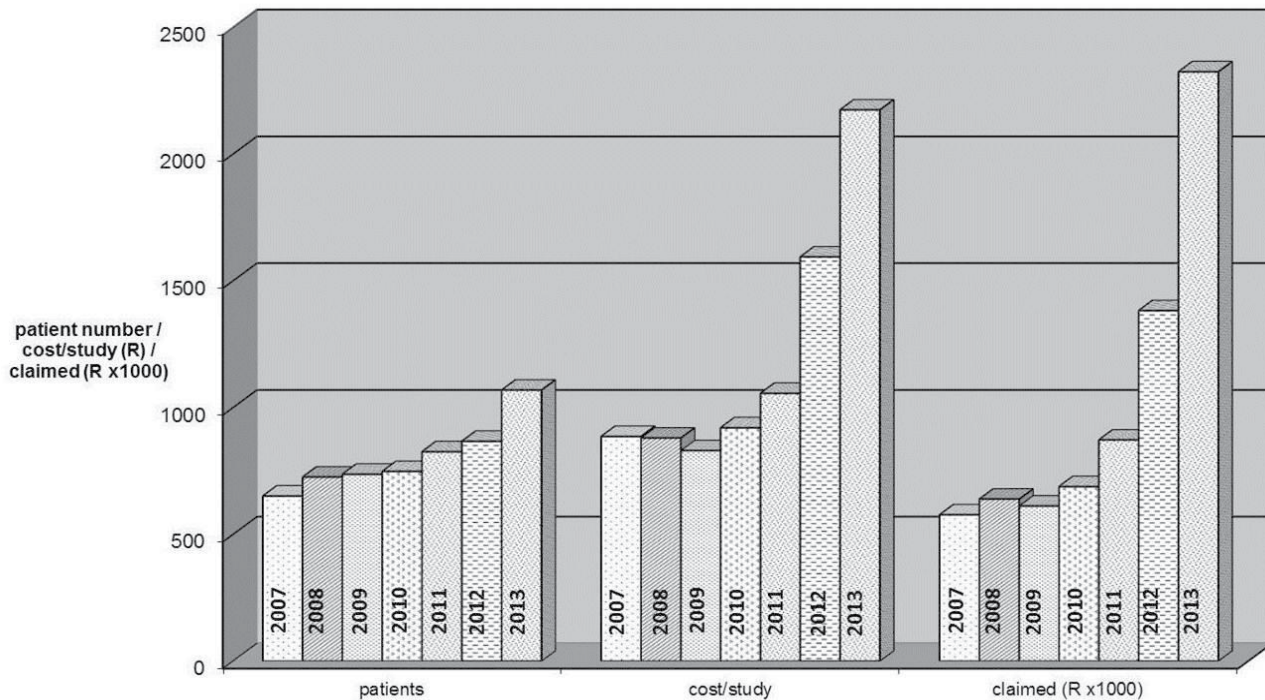
During 2013 the number of procedures performed increased by 8,3% in approximately 6,1% more patients. This included a significant increase in the number of PET/CT studies (46,4%). FDG PET/CT studies to detect myocardial viability and Ga-68 DOTANOC (somatostatin analogue) studies for the detection of neuroendocrine tumours were performed for the first time. The majority of the PET/CT studies (825, 85%) were clinical studies, of these three quarters were referred from Tygerberg Hospital, and one quarter from Groote Schuur and Red Cross Children's Hospitals. Research PET/CT scans comprised 15% of the total number of scans, and 9% of studies were referred from the private sector.

In the Nuclear Medicine Unit referrals for adrenal scintigraphy studies using MIBG increased with nearly 40%, while radioactive iodine therapy was administered to 9% more patients. There was a significant decrease in the number of glomerular filtration rate (GFR) determinations, due to a long delay in the upgrade of the well counter, necessary for this investigation. The upgrade has been completed late in 2013, and GFR studies will likely increase again in 2014. A study never before being performed in the division, was instituted, namely rhinograms, evaluating mucociliary clearance.

The number of private patients (H2, H3, private) increased by 23%, generating invoices of more than R2,3 million, which is 68% more than in 2012. Although the majority of private patients were referred to general Nuclear Medicine, the marked increase in invoices generated is mainly because of the greater number of PET/CT scans performed on private and research patients. This is demonstrated graphically in figure 1.

MEDICAL IMAGING & CLINICAL ONCOLOGY

Fig 1: Comparison of number of private patients, cost/study and claims from 2007 to 2013



Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

Much work has been performed planning the installation of a new single head gamma camera and upgrading the Hermes processing, reporting and archiving systems. These will both be implemented early in 2014.

A Technegas ventilation system, to perform lung ventilation studies, has been donated by AEC-Amersham. According to international literature, this is the best Tc-99m-based system to ensure good quality ventilation studies.

The very old well counter used for counting radioactive samples such as urine or blood samples, was upgraded, amongst others, with new software for the computer.

Because of limited funding for equipment a few years ago, Nuclear Medicine acquired a gamma probe using university funding. The probe had to be repaired and serviced in 2013. This was again done using university funding, although the probe is only used for clinical service delivery.

Community outreach

programmes/community services and interaction.

As Nuclear Medicine is a tertiary specialty, there are limited outreach possibilities locally and in South Africa. We however, have an active training programme for students from the rest of Africa. Requests are regularly received through the International Atomic Energy Agency (IAEA) for official Nuclear Medicine training of physicians and other scientists from Africa, but also directly from students themselves. In 2013 seven physicians from Africa were enrolled for the MMed (NucMed) programme, while one radiopharmacist continued her MSc studies. One radiopharmacist from Cameroon has registered for a PhD without approved research proposal. Technologists also receive fellowship training for periods of between six weeks and two years.

Partnerships

There is ongoing participation in multidisciplinary meetings with Haematology, the lung unit and Psychiatry. Regular academic meetings with Radiology also takes place.

MEDICAL IMAGING & CLINICAL ONCOLOGY

National:

Profs. Ellmann and Warwick served on the Council of the College of Nuclear Physicians (CNP) of the CMSA, with Prof Warwick also serving on the Senate of the CMSA. They were also involved as moderator and examiner respectively for the fellowship exams of the CNP. Prof. Warwick is vice-president of the South African Society of Nuclear Medicine (SASNM), and a member of the Directors Advisory Committee for iThemba LABS. Prof. S Rubow served on a committee of the Medicines Control Council. Dr Nisaar Korowlay is the chairman of the Association of Nuclear Physicians, a subsidiary body of the South African Medical Association. Mrs Shereen Bejai served as Secretary/Treasurer of the SASNM, and also as Nuclear Medicine representative of the Western Cape branch of the Society of Radiographers of South Africa (SORSA). She is also a council member of SORSA.

The department continued its interdisciplinary collaboration during 2013. Prof. Warwick was invited by colleagues to give lectures at combined meetings:

1. GEPNETs: advances in diagnostic modalities – Biennial Congress of the Hepato-Biliary Association of South Africa, Cape Town, October 2013
2. Lung Cancer Update 2013, Nuclear Medicine – Lung Cancer Workshop, Stellenbosch University, October 2013

Both Profs. Rubow and Ellmann were involved in training of radiography students at CPUT. Prof. Ellmann also advised Dr B Summers from the University of Limpopo on various aspects of awareness of referring physicians regarding NM, including the availability of informative material from the IAEA.

Profs. Ellmann, Warwick and Rubow participated in the activities of the Nuclear Technologies in Medicine and the Biosciences Initiative (NTEMBI), operated under the aegis of the South African Nuclear Energy Corporation (Necsa). This has resulted in significant funding towards both student research and equipment which is expected to benefit both research and service delivery.

The division also provided clinical advice to colleagues from other state hospitals e.g. Port Elizabeth Provincial Hospital. There was also regular interaction between the Nuclear Medicine physicians of the Western Cape Nuclear Medicine platform, including combined academic meetings and providing opinions on difficult or interesting cases. Registrars also spent training time in the other institutions in the Western Cape.

Dr Alex Doruyter assisted for six weeks at Groote Schuur Hospital's Nuclear Medicine Department during the absence of the Head of Department on extended leave.

Prof. Ellmann was consulted by Dr M Nel (NM, University of the Free State) regarding our involvement in undergraduate teaching of medical students as part of her research project: *Undergraduate medical Nuclear Medicine education*. Prof Ellmann was also appointed as external assessor for the M (Health Sciences Education) extended mini-dissertation of Dr M Nel, University of the Free State.

Prof. Warwick served as guest editor for a Continuing Medical Education (CME) edition on Nuclear Medicine. Several staff members contributed papers to this edition.

Private:

The good interaction between NM and the private NM practices continues. There is ongoing support for private colleagues including mutual assistance with imaging and consumables when problems arise, as well as assistance with interpretation of complex studies. The division's consultants, including the radiopharmacist, were consulted from time to time by private nuclear physicians for opinions on some of their difficult cases. Prof. Warwick and other members of the Division attend regular meetings of a multidisciplinary group of doctors from the private and public sectors with a special interest in neuroendocrine tumours.

MEDICAL IMAGING & CLINICAL ONCOLOGY

International:

Prof. Ellmann continued her work as member of the Standing Advisory Group on Nuclear Applications (SAGNA) of the International Atomic Energy Agency (IAEA), advising the director-general of the IAEA on strategic matters concerning the planning and implementation of Major Programme 2 activities in terms of their relevance to member states' needs and potential for contributing to national and development priorities. Prof. Ellmann also served as a member of an expert team to revise the programme on Quality Management in Nuclear Medicine (QUANUM), which supports quality management audits in Nuclear Medicine practices. She was also an expert during a train-the-trainer workshop for new quality assurance auditors at the IAEA. She contributed to an awareness brochure containing information on the most frequently performed Nuclear Medicine investigations, for use by referring clinicians. This brochure was published by the IAEA late in 2013 and can be distributed by Nuclear Medicine physicians to their referring clinicians.

Mr Hilton Thomas participated in a workshop on *quality management audits in Nuclear Medicine practices for the Africa region*, which was held in Vienna, Austria in January 2013. He was subsequently invited to form part of an audit team to audit the Nuclear Medicine practice in Dar es Salaam, Tanzania. This audit will take place in May 2014.

Both Profs. Patrick Dupont of the Laboratory for Cognitive Neurology and Medical Imaging Center, Catholic University, Belgium and Jan Pruijm of the Department of Nuclear Medicine and Molecular Imaging, University Medical Centre Groningen, Groningen, The Netherlands continued to serve as extraordinary professors in nuclear medicine. There is continuous close collaboration with Prof. Dupont, amongst others, giving advice on several physics related aspects and with postgraduate supervision. During 2013 there was a scientific visit to the Division by Prof. Patrick Dupont as part of this collaboration in research related to brain imaging analysis. Prof. Pruijm again visited the division in 2013,

lecturing to the postgraduate students and supporting collaborative research programmes.

Prof. Rubow was the project coordinator for South Africa for the IAEA/AFRA project RAF2008 *Strengthening and Expanding Radiopharmacy Services in Africa*. She was also invited speaker at the First Symposium on Radiopharmacy in Africa held in Addis Ababa (21 to 22 November 2013) and lecturer at the AFRA Regional Training Course on *Advanced Radiopharmacy Practices and Essentials of Therapeutic Radiopharmaceuticals* in Vienna, organised as part of the RAF2008 project.

A Belgian delegation visited the country in October 2013 to inform South African colleagues and decision makers on the possibilities for cooperation and services, both scientific and industrial, in the field of applications of radioactivity and particle physics in healthcare. Prof. Ellmann assisted with arrangements for this visit. The nuclear medicine physician member of the delegation visited the Nuclear Medicine division. Prof. Ellmann was also invited to a meeting between the academic members of the delegation and university management in Stellenbosch.

Two delegations from Africa visited the division for expert advice in their planning of new facilities in their respective countries. The delegation from Zambia consisted of an architect, a policy maker, environmental health officer, biomedical engineer and a clinician. The group from Uganda comprised a nuclear medicine physician and a technologist.

Prof. Kees Hoefnagel from Netherlands (one week) and Dr Liesbet Mesotten from Belgium (one week) visited the division to assist with postgraduate teaching and training, through financial support from the Department of Higher Education and Training's clinical teaching grant.

Profs. Ellmann and Warwick represented the South African Society of Nuclear Medicine during a Nuclear Medicine Global Initiative meeting of the Society of Nuclear Medicine in Lyon, France, October 2013. Prof. Ellmann is

MEDICAL IMAGING & CLINICAL ONCOLOGY

the past-president of the World Federation of Nuclear Medicine and Biology. Prof. Ellmann is a member of the editorial board of the European Journal of NM and Molecular Imaging Research. Prof. Warwick is a member of the Editorial Board of ISRN Molecular Imaging.

The division receives frequent requests from prospective trainees from the developing world, and recently also from the developed world. Following such a request, Ms Ilse Kant, a medical technology student from the University of Twente in the Netherlands, spent a 10 week internship performing software development in the division under the supervision of Prof. Warwick.

Research achievements

The division is involved in ongoing research collaboration in functional brain imaging with Prof. D Stein of Psychiatry at UCT and Prof. Patrick Dupont of the Catholic University of Leuven in Belgium. In addition there is ongoing research collaboration in kidney function measurement with Prof. John Fleming of the University of Southampton in the UK.

Profs. Ellmann, Warwick and Rubow continue to participate in the activities of the Nuclear Technologies in Medicine and the Biosciences Initiative (NTEMBl), operated under the aegis of the South African Nuclear Energy Corporation (Necsa). This has resulted in significant funding towards both student research and equipment, which is expected to benefit both research and service delivery.

In order to increase its research activities, the division is actively seeking external funding for clinical doctoral researchers. This has been a challenge, and about R500 000 of funding was generated during 2013. The division has also committed significant amounts of its own funds to supporting these researchers.

Drs Alex Doruyter, Emmanuel Modebe and Naima Tag completed their MMed dissertations.

Prof. Ellmann participated in a coordinated research project of the IAEA on *the value of SPECT/CT in sentinel node imaging*. The project was completed in 2013. Several abstracts have been prepared for international meetings and papers are being written.

During 2013, members of the division presented invited lectures at local and international meetings, including the 16th Congress of the International Society of Radiolabelled Blood Elements, the 1st South African National Pharmacy Conference, a meeting at the Clinical division of Nuclear Medicine, University of Vienna, Austria and a state-of-the-art lecture at the Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University. Four research presentations were held by members of the division at the congress of the European Association of Nuclear Medicine.

Seven journal articles were published by members of the Nuclear Medicine team during the course of 2013, including review papers in the Continuing Medical Education Journal of the South African Medical Association.

Teaching and Training (undergraduate-, postgraduate- and elective students)

Postgraduate students comprise the students enrolled for the MMed (NucMed) and MSc in Nuclear Medicine. Five registrars passed the final fellowship examinations of the College of Nuclear Physicians of the CMSA. This was the biggest group of fellows ever passing the fellowship exams of the College of Nuclear Physicians.

Undergraduate MBChB students rotate through the division during a week rotation in Radiology, Nuclear Medicine and Radiation Oncology. The aim is to provide the students with an introduction to the most commonly performed studies in nuclear medicine. Radiography students enrolled for the National Diploma in Radiography – Nuclear Medicine, as well as for the BTech degree from the Cape Peninsula University of Technology, do their clinical training in the division. Some staff

MEDICAL IMAGING & CLINICAL ONCOLOGY

members are also involved in their theoretical teaching.

Prof. Warwick acted as internal supervisor for in elective of Mr Stephan Nel at the Nuclear Medicine unit at Chief Albert Luthuli Hospital in Durban. Prof. Rubow served as moderator for Radiopharmacy for Radiography students at the Durban University of Technology.

A training course on the use of PET/CT for radiotherapy planning was presented in April 2013. The participation of three international experts, Prof. Bernard Sattler (Germany), and Drs Stefano Schipani (Scotland) and Giovanni Pepe (Italy), was sponsored by the International Atomic Energy Agency. After the training course, PET/CT was introduced as part of radiotherapy planning.

A very successful CT short course registered with the University of Stellenbosch was offered to all the nuclear medicine radiographers in the Western Cape. Forty-three nuclear medicine radiographers, two nuclear medicine consultants and a trainee medical physicist successfully completed the course.

A big nuclear medicine group, including radiographers, attended the international meeting of ISORBE (International Society of Blood labelled Elements) held in Pretoria in March 2013. The participation of all the delegates was supported with nuclear medicine funds.

Pravin Meyer, radiographer, attended the National workshop on the use of ICT in the management of radiation incidents organised by Medical Physics in conjunction with the IAEA. NM paid all expenses.

Special achievements

Prof. J Warwick is congratulated on receiving a C2 rating as an established researcher by the NRF.

The Western Cape Academic PET/CT Centre managed to retain its status as EARL accredited centre of excellence, the only centre outside Europe having this status. The cost of the accreditation process was covered by Stellenbosch University funds.

DIVISION OF RADIATION ONCOLOGY

Prof. Branislav Jeremic

Summary of activities:

The Division offers a full spectrum of oncological services; including, Proton beam therapy and neutron therapy through association with iThemba LABS. Big bore planning CT with 4D radiotherapy as well as PET/CT planning delineation opportunity. Continued training of registrars, supernumerary registrars and provide practical exposure to CPUT radiography students. Three nurses registered for specialised training in Oncology starting 2014. Successful purchase of a linear accelerator with VMAT capability.

Resources

| Posts (Full time) | Number | Filled |
|-----------------------|--------|--------------------------|
| Professor | 1 | 1 |
| Head of Clinical Unit | 1 | 1 |
| Specialist | 4 | 2 |
| Registrar | 5 | 5 + 2 (supernumerary) |
| Medical Officer | 6 | 6 |
| Radiographer | 23 | 23 |
| Social worker | 3 | 3 |
| Pharmacist | 2 | 2 |
| Pharmacy assistant | 1 | 1 |
| Nurses | 64 | 64 |
| Secretary | 1 | 1 |
| Typists | 3 | 3 |
| Clerks | 13 | 13 |
| Porters | 9 | 9 |
| Messengers | 2 | 2 |

Outputs

| | |
|---|---------------|
| New patients per year: | 2 001 |
| Outpatient visits: | 14 385 |
| Speciality Clinics: | 6 |
| Admissions: | 1 583 |
| Theatre procedures: | 714 |
| Planned patients: | 2 738 |
| Simulated patients: | 6 387 |
| Scanned patients: | 638 |
| Machine statistics (number of treatment fields): | 73 642 |
| Chemotherapy administrations: | 9 621 |

MEDICAL IMAGING & CLINICAL ONCOLOGY

Comment on output:

Outputs in terms of machines are restricted due to poor functioning and increased down time of 26 year old LINAC. Radiographer shortage, bed shortage and transport insufficiencies further lead to waiting lists.

Outputs in terms of chemotherapy are limited by lack of oncology trained sisters and use of old drug schedules. Staff shortage includes the shortage of support staff and Oncology Pharmacists. Improvement in later part of the year when two more substances got PRC approved.

Part 2

Faculty of Health Sciences

Infrastructure development

Two PET/CT planning deliniation courses ran in Division led by experts from the USA.

Innovations in Radiation Oncology symposium led by experts from the USA

Lung Cancer Symposium, and start of 4 D treatment planning for Lung Cancers.

Paliative care symposium led by experts from Germany in aim of international collibaration.

Consultant and radiographer went for IMRT training abroad. IMRT still can't be done, because of QA and infrastructure limitations.

Purchase of LINAC with VMAT capability, as well as basic MOSAIC patient management system.

Community outreach programmes

International co-operation by the training of a supernumerary registrar from Uganda and Kenya.

Two new supernumerary registrars from Zambia started in January 2013.

Several more supernumerary registrars to start in 2014 (from Namibia, Nigeria, etc.), as well as several short-term (on-job) radiation oncologists and radiation therapy technologists trainings through the IAEA.

The hostel in Protea Court is running successfully in collaboration with CANSA. Rural patients requiring daily treatment are accommodated. This facility houses 20 beds, provides food and help with social support and transport.

Radiography students from CPUT rotate and work in the Division as part of their training.

Partnerships

National

Continued clinical programme at iThemba LABS. Legal and organisational problems were address with the relationship between iThemba LABS and Tygerberg Division of Radiation and Clinical Oncology. A MOU were drawn up and signed, between the University and iThemba LABS to employ an extra consultant to review and upgrade the service.

International

Dr Magda Heunis attended three-month research fellowship at Columbia University, New York

A MOU with the University of Schlezwig Holstein in Germany was drafted (to include Stellenbosch University and Tygerberg Hospital) as preparatory step for applying for a collaboration through German DAAD scheme.

Prof. Jeremic elected as Honorary Member of Schlezwig Holstein Cancer Society in Germany

Research achievements

Publications in peer-reviewed Department of Education-accredited journals: 11

International Conference presentations: 6

National conference oral presentations: 2

Local conference oral presentations: 2

National conference poster presentations: 6

MEDICAL IMAGING & CLINICAL ONCOLOGY

Teaching and Training (undergraduate-, postgraduate- and elective students)

The department provides 1½ days training to fourth- and fifth-year medical students in their week middle clinical rotation.

Two supernumerary registrars from Kenya and Uganda.

Special achievements:

Prof. Jeremic elected as a member of Academy of Sciences of South Africa (ASSAf)

DIVISION OF RADIOBIOLOGY

Prof. John Akudugu

Summary of activities:

The Radiobiology Unit attained divisional status and radiobiology modules were offered, for the first time, as academic courses. Radiobiology curricula were developed for other MICO divisions. In line with University's recommendation, the Division's academic programme was hosted by the Division of Nuclear Medicine. The Division provided dosimetry advice to radiation oncology when unplanned treatment gaps occurred. Two students were registered for MSc degrees while one student was registered for a PhD degree. All students were fully funded through Faculty-, national- and international sources. The research output of the Division was very good. Prof. Akudugu was re-appointed member of the Faculty subcommittee C (Research), served on the NRF grants review panel, and retained his NRF rating. Prof. Akudugu attended a leadership and grant writing workshops. A number of research grants were applied for. Research collaboration with the Ghana Atomic Energy Commission was successful.

Resources:

| Posts (Full time) | Number | Filled |
|---|--------|--------|
| Scientists | 2 | 2 |
| General Assistants | 1 | 2 |
| PhD Students | 1 | 2 |
| MSc Students | 2 | 2 |
| Posts (sessional – how many hours worked per week) | | |
| Consultant | 1 | 16 |

Part 2

Faculty of Health Sciences

Infrastructure development

The cobalt irradiator at the Gene Louw Building was refurbished and fully serviced to be used solely for radiobiological research work.

Community outreach programmes/community services and interaction.

The collaboration that was initiated with the Ghana Atomic Energy Commission (Accra, Ghana) through Prof. Akudugu's scientific visit to Ghana in 2012 was strengthened via constant communication in 2013. The initial visit was jointly supported by a Stellenbosch University Africa Collaboration Grant and a Scientific Travel Grant from the Faculty of Medicine and Health Sciences. Three manuscripts are being prepared from data collected in 2013 for publication. A follow-up visit by Prof Akudugu is anticipated in 2014.

Partnerships

National:

The Division was involved in three collaborative/inter-divisional projects that were initiated with the Divisions of Nuclear Medicine, Radiodiagnosis, and Radiation Oncology. One of these developed into a MMed project. An NCI-D71 international research training and planning grant was submitted through a joint cross-faculty effort. Two MRC Self-Initiated Research grant applications were submitted in partnership with the Division of Radiation Oncology.

International:

Division was involved in the following collaborations: (1) between Prof. Akudugu and the Ghana Atomic Energy Commission through Stellenbosch University Africa Collaboration Initiative; (2) between Prof. Böhm and Dr Vetter (Head of Laboratory of Translational Research, Department of Gynaecology, University of Halle, Germany).

Achievements w.r.t research activities and research outputs:

Three papers were published in national and international peer-reviewed journals.

Journals published in: International Journal of Radiation Biology, Journal of Cancer Research and Clinical Oncology, and Journal of Endocrinology, Metabolism and Diabetes of South Africa.

Teaching and Training (under, postgraduate and elective students)

Two MSc students and one PhD student were registered for their studies/research projects in 2013. Two interns were recruited to begin in 2014 and will be financially supported by the NRF. One of two postdoctoral research fellowship applications was successful and recruitment of fellow will begin shortly. Radiobiology lectures were provided to the following groups: (1) Radiation Oncology registrars; (2) Radiobiologists (MSc and PhD students); (3) second year students of postgraduate diploma in Occupational Medicine at the Division of Community Health; and (4) radiology physics students.

Special achievements

Mr M Hamit (MSc student) received an NRF Freestanding, DST Innovation and Scarce Skills Development Scholarship. Mr S Maleka (MSc student) received a SU Harry Crossley bursary and project grant, and a DAAD-NRF Scholarship. Ms R Hamunyela (PhD student) received scholarships from the NRF, The Namibian Government and the International Atomic Energy Agency. Prof. Akudugu was invited to serve on the editorial board of the Indian Medical and Scientific Research Journal. CANSA research grant was renewed for Prof. Böhm's prostate cancer biomarker project. Prof. Akudugu was awarded NRF incentive funding for rated researchers, as well as, an NRF Knowledge, Interchange and Collaboration grant. Four papers were successfully presented the Faculty's annual Academic Year Day. One paper was presented at the AORTIC-South Africa Conference in Durban

DIVISION OF RADIODIAGNOSIS Prof. Richard Pitcher

Summary of activities:

A comprehensive diagnostic imaging service was maintained in the period under review, with 190 479 radiological examinations being performed, representing a 3,4% increase in service delivery compared to 2012.

There was a 6,7% increase in after-hour service load, with 71 932 studies performed. After-hour examinations currently represent 37,8% of the total Divisional workload.

The final phase of the roll-out of the Radiology Information System (RIS) within Tygerberg Hospital was completed in December 2013, with the introduction of electronic requests for radiological investigations.

MRI scanning times were maintained between 16:00 to 19:00 Tuesdays to Thursdays, and from February it was extended further to include Saturdays (08:00 to 14:00) and Sundays (08:00 to 13:00). The MR scanner was thus operational for 62 hours per week for most of the period under review.

Our Division holds regular radiological meetings with clinical colleagues in general surgery, paediatric surgery, orthopaedic surgery, neurosurgery, thoracic surgery, breast surgery, urology, otorhinolaryngology, adult and paediatric pulmonology, nuclear medicine, neonatology, rheumatology and endocrinology.

MEDICAL IMAGING & CLINICAL ONCOLOGY

Resources:

| Posts (Full time) | Number | Filled |
|---|--------|--------|
| Associate Professor/Chief Specialist | 1 | 1 |
| Supernumerary Associate Professor | 1 | 1 |
| Clinical Unit Head | 0 | 0 |
| Specialists | 8 | 8 |
| Registrars | 20 | 20 |
| Supernumerary Registrars | 5 | 5 |
| Assistant Director Radiography | 1 | 1 |
| Chief Radiographer: Supervisor | 15 | 15 |
| Diagnostic Radiographer: Grade 3 | 15 | 15 |
| Diagnostic Radiographer Grade 2 | 8 | 8 |
| Diagnostic Radiographer Grade 1 | 20 | 20 |
| Chief Sonographer: Supervisor | 1 | 1 |
| Sonographer: Grade 1 | 1 | 1 |
| Contract Sonographer | 1 | 1 |
| Community Service Radiographer | 4 | 4 |
| PACS-RIS Co-ordinator | 1 | 1 |
| PACS-RIS Administrator | 1 | 1 |
| Registered Nurse | 1 | 1 |
| Staff Nurse | 1 | 1 |
| Enrolled Nurse | 1 | 1 |
| Medical transcriptionist | 2 | 2 |
| Clerical Assistant | 2 | 2 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist (DoE funding – 20 hours) | 1 | 1 |

Outputs:

| Examination | 2011 | 2012 | 2013 | % Inc |
|----------------------------------|----------------|----------------|----------------|------------|
| Chest X-ray: | 60 488 | 62 546 | 63 464 | 1,5 |
| General X-ray: | 67 057 | 69 311 | 69 437 | 0,2 |
| Ultrasound: | 11 773 | 11 812 | 12 910 | 9,3 |
| Computed Tomography (CT) | 18 144 | 20 702 | 22 956 | 10,9 |
| Magnetic Resonance Imaging (MRI) | 2 960 | 3 208 | 4 005 | 24,8 |
| Mammography | 3 159 | 3 378 | 4 023 | 19,1 |
| Fluoroscopy and Angiography | 8 712 | 9 425 | 9 657 | 2,5 |
| Cardiac Theatre | 3 005 | 3 556 | 3 827 | 7,6 |
| Total | 175 298 | 183 938 | 190 279 | 3,4 |

Comment on outputs:

Plain radiographs (32 848), mobile X-rays (18 685), CT scans (11 286) and interventional procedures (1 936) are the most common imaging studies performed in the after-hour setting.

The extended MRI scanning times contributed to an overall 60% reduction in MRI outpatient waiting time from 125 days in December 2012 to 49 days in December 2013, and a 25% increase in MRI clinical outputs.

Restructuring of the ultrasound booking schedule contributed to a 75% reduction on outpatient ultrasound waiting time from 65 days in December 2012 to 15 days in December 2013.

The new mammography unit, commissioned in 2012, has significantly enhanced efficiency of the breast imaging service and contributed to an overall 19% increase in clinical outputs.

Part 2

Faculty of Health Sciences

Infrastructure development

The Division ran a Provincial Government tender for the acquisition of a new 1.5T MRI Unit, to replace the existing scanner which was installed in 2002. The new unit will be commissioned in Tygerberg Hospital in March 2014 and will have state-of-the-art neurological, orthopaedic and abdominal imaging functionality.

Through the Department of Education funding, the Division acquired two new diagnostic workstations, complete with 3MP monitors, which will enhance the registrar teaching platform, particularly for plain radiographs.

The Division's software platform for 3-D reconstructions and manipulation of CT images was upgraded in the period under review, enhancing reporting functionality and efficiency.

Partnerships:

International

Prof Richard Pitcher was an invited speaker at the European Congress of Radiology in Vienna, in March 2013, presenting his PhD research on the chest radiographic changes in HIV-infected children, as part of the "ECR meets South Africa" initiative of the Radiological Society of South Africa and the European Society of Radiology.

The collaborative teaching poster "How to mend a broken heart", by Dr Fourie Bezuidenhout (Registrar in Radiodiagnosis, SU), Prof Yutaka Sato (Iowa University), Dr Ebrahim Banderker (RCCH), Dr John Lawrenson (TBH) and Prof Richard Pitcher won the prize of the most viewed submission to the American Roentgen Ray Society (ARRS) Global Partner Society (GPS) Program in May 2013.

Prof Richard Pitcher was the representative of the African Continent on the European Society of Radiology (ESR) 2013 International Day of Radiology Program, and collaborated on the production of an ESR chest imaging booklet.

Dr Retha Hattingh attended a two-week breast imaging course at the Nottingham Breast Institute, Blamey Education Centre, University of Nottingham, UK, in November 2014.

The Division was extremely fortunate to have the continued services of Dr David Legge, a retired Irish interventional radiologist whose invaluable supervisory role in the vascular and interventional theatre received DoE funding throughout the period under review.

Our Division enjoyed educational visits following international academics:

Dr Lynwood Hammers
Medical Director, Ultrasound Specialties
Hammers Healthcare Imaging, LLC New Haven, CT

Professor Theodore J. Dubinsky MD 15-19 July 2013

The Laurence A. Mack Endowed Professor of Radiology, Obstetrics and Gynecology, and Reproductive Health Sciences University of Washington, School of Medicine
Editor in Chief, Ultrasound Quarterly

Professor Teresa Victoria, 30 July 2013
Professor of Radiology, Children's Hospital of Philadelphia,
University of Pennsylvania, School of Medicine

Dorothy Bulas MD FACR, FAIUM, FSRU 21 August 2013
Vice Chief of Academic Affairs
Fellowship Program Director
Division of Diagnostic Imaging and Radiology
Children's National Medical Center
Professor of Pediatrics and Radiology

Professor Kassa Darge
Professor of Radiology

Perelman School of Medicine
University of Pennsylvania

Chief, Division of Body Imaging, Department of Radiology,
The Children's Hospital of Philadelphia [CHOP]

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Professor Mary Rutherford
Perinatal Imaging Group
Robert Steiner MR Unit
Imaging Sciences
Imperial College
Hammersmith Hospital
Du Cane Road, London, W12 OHS

Our Division has five international supernumerary registrars:

Dr Archen Patel (India), Dr Joseph Kabongo (Zambia), Dr Patrick Ngoyo (Tanzania), Dr Tasginga Maboreke (Zimbabwe), Dr Fatmatu Bah (Sierra Leone)

National:

Prof Richard Pitcher served as a Councillor, Secretary of the Executive Committee and Convener of the Education Committee of the College of Radiologists of the Colleges of Medicine of South Africa (CMSA). Dr Christelle Ackermann served as a co-opted Councillor on the Council of the College of Radiologists of the CMSA and as a first semester Examiner for the FCRad(D) Part II Examination. Dr Anne-Marie du Plessis served as a second semester Examiner for the FCRad (D) Part II Examination. Drs Anne-Marie du Plessis and Razaan Davis participated in the 1st Semester Part II Pre-Exam course of the College of Radiologists in Pretoria.

Prof Richard Pitcher served as Secretary of the Committee of Academic HOD's, a Standing Committee of the Radiological Society of South Africa (RSSA).

Prof. Pitcher presented a national RSSA Webinar "Persistent chest radiographic changes in HIV-infected children" in August 2013.

Prof Pitcher served as Chairman and Dr Christelle Ackermann as a Board Member of the Cape Universities Brain Imaging Centre (CUBIC), the 3-Tesla Magnetic Resonance Imaging Centre for collaborative interdisciplinary research, which is based on the Tygerberg Campus.

Dr Razaan Davis served as Editor-in-Chief of the South African Journal of Radiology and Council Member of the Radiological Society of South Africa.

Our Division presented two Radiology Refresher Courses for General Practitioners and Medical Officers:

- i. "The adult chest radiograph", 24 July 2013, convened by Professor Jan Lotz
- ii. "The paediatric chest radiograph" 28 September 2013, convened by Professor Richard Pitcher, attended by 230 delegates.

Private:

Our Division enjoys close ties with, and generous support from, private sector radiologists by way of the Imaging Benefit Company, a registered non-profit organization established to further the education and training of radiologists in Southern Africa. We gratefully acknowledge the company's private funding of the supernumerary Ad Hominem appointment of Associate Professor Jan Lotz, whose academic mentorship continues to afford our Division immense benefit.

Teaching and Training

Undergraduate:

The Divisions within Medical Imaging and Clinical Oncology collaborated to formulate a new gynaecology portfolio for students in the Middle Clinical Rotations

Postgraduate

Under the auspices of Dr Wilhelm Groenewald and Professor John Akudugu, a Radiobiology module was introduced into the M.Med (Radiological Diagnosis) Part I Medical Physics curriculum and examination. Under the auspices of Prof. Jan Lotz, Radiological Anatomy lectures were introduced for M.Med (Radiological Diagnosis) Part I Anatomy students and a Radiological Anatomy spot test has been incorporated into the M.Med Part I Anatomy Examination.

Registrar Training Programme:

The four-year registrar training programme includes an initial 29-month structured rotation through all major imaging modalities. In-course assessments are conducted at the conclusion of training in each modality. The course includes a structured weekly Modular Academic Programme, which systematically

MEDICAL IMAGING & CLINICAL ONCOLOGY

covers the postgraduate curriculum in a 4-year cycle.

In collaboration with Professor Ellmann, a more comprehensive Nuclear Medicine rotation has been drafted for Radiology Registrars.

Our Division maintains close training and educational ties with the Red Cross War Memorial Children's Hospital.

The Fellowship of the College of Radiologists of the Colleges of Medicine of South Africa - FCRad(Diag) SA was conferred on: Drs Francois Roux, Adeeb Saban and Elrich Johannes

The Division's flourishing Modular Academic Program was run every Wednesday afternoon, under the supervision of Prof. Jan Lotz and Dr Razaan Davis, with each Consultant assuming responsibility for a specific teaching module.

Six international guest speakers and thirteen local guest speakers contributed to the teaching program

Special Postgraduate Students:

There were eleven enrolments for the M.Med Radiological Diagnosis (Part I) courses in Physics, Anatomy and Physiology.

Research Achievements:

The Division had 12 publications in accredited national and international peer-review journals and presented 21 papers at national or international congresses.

The Division has two research projects in the final stages of manuscript preparation and 16 research projects underway.

Special Achievements:

Prof Pitcher has been invited as a keynote speaker at the Society of Radiologists in Ultrasound Annual Meeting in Denver, Colorado and as a Visiting Professor to the University of Washington, Seattle, in October 2014.

The Division of Radiodiagnosis successfully motivated to be the beneficiary of the 2014 International Visiting Professor Program of the Radiological Society of North America. As a result, Prof Anil Khosla (St. Louis University) and Prof Rebecca Hulett (Malinckrodt Institute of Radiology) will spend 2 weeks teaching in our Division in August 2014 and will be honoured guests at our Division's Annual Academic Day.

HEAD OF DEPARTMENT

Prof. MR Moosa

Summary

The past year was a tumultuous one for the Department. The great challenge that the Department faced, was the steadily rising numbers of patients being seen and the pressure that this was placing primarily on ward F1, but filtered through to all divisions of the Department of Medicine. This resulted in the ward F1 being full to overflowing for most of the time, making it quite difficult to manage patients effectively (Fig. 1). Following several meetings between the various stakeholders, a number of strategies were agreed upon and implemented, which resulted in mitigating the situation. The planned commissioning of C1DW as the new emergency area, together with the appointment of additional staff, will address the immediate situation and provide significant relief.

On the service side, the commissioning of Ward D10 meant that all patients with suspected or proven tuberculosis could be cohorted. The bed occupancy in both General Internal Medicine and the Specialist Units remain high, with bed occupancy averaging 99% in GIM.



This image was used for the Departmental Physicians' Update held in the course of 2013.

Credit must also go to the Pulmonology ICU that increased the throughput of patients with no increase in the number of beds and with reduced complement of staff (Fig. 2). Most



Units are performing outreach to regional hospitals, with Cardiology increasing its reach to include Paarl Hospital. The Department with most of the Divisions represented undertook a site visit to Khayelitsha Hospital (KH) to familiarise themselves with the situation and came away appreciating the enormous pressures that KH functioned under. A business plan for a new Stroke Unit was presented to management that we hope will culminate in our own unit in the course of 2014.

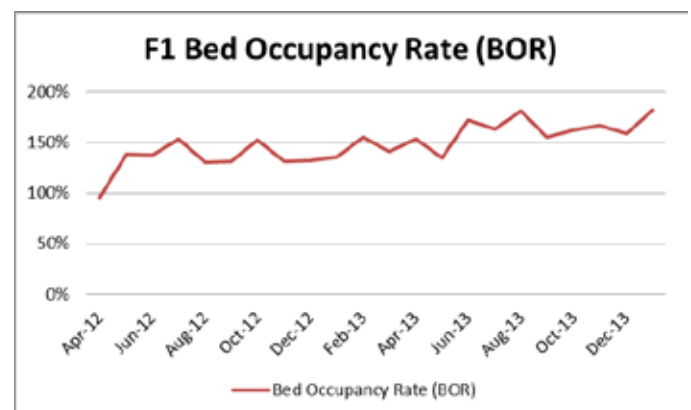


Fig. 1. The enormous workload carried by Ward F1 is clearly shown here. The increasing numbers of patients have placed considerably strain on staff in F1, who work tirelessly to maintain the turnover of patients. Of note, is that despite the very high bed occupancy rate, the mortality rate has actually declined (not shown).

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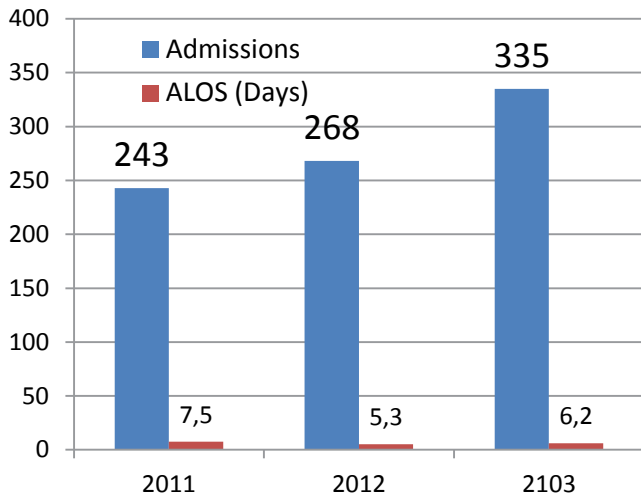


Fig 2. ICU admissions in 2013 compared with the preceding two years. (ALOS is average length of hospital stay)

On the academic front, the Department was very active. We hosted the Colleges of Physicians Examinations in May. It was highly successful, thanks to the cooperation of the staff in the Department and the hospital. In addition, the Department hosted its biennial Physicians' Update, which was themed "The Physician and the Pregnant Patient", which was highly successful with attendees from all around the country. The Department was also fortunate to receive several awards:

- **Discovery Awards**
Fellowship (Cardiology): Dr Kyriakakis
Subspeciality (Cardiology): Dr Annerie van Rensberg (*née* Coetzee)
- **Life Healthcare Award**
Dr Jane Moses (Cardiology)
- **Fresenius Award**
Dr Nabeel Bapoo (Nephrology)
- **SEMDSA Award**
Francois van Zyl (Endocrinology)

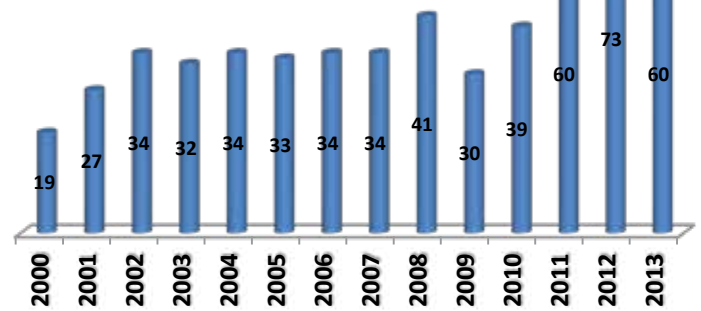


Fig. 3 The publication output of the Department over the past few years. This figure only represents articles appearing in accredited journals

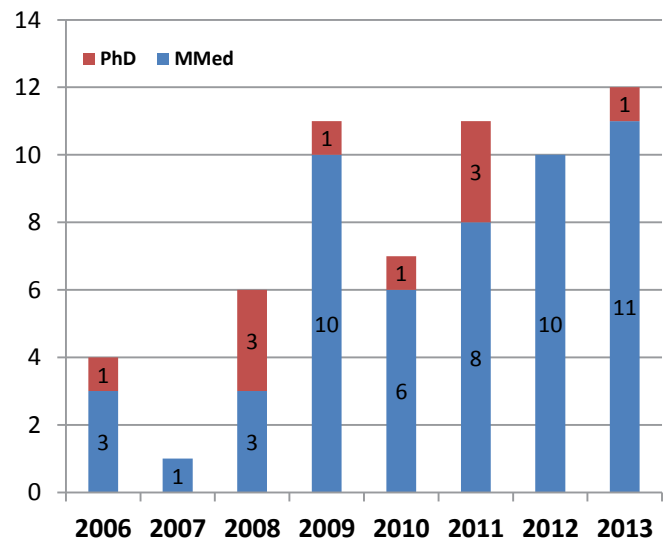


Fig. 4. Postgraduate degrees awarded to candidates in the Department of Medicine.

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Publications output was disappointing (Fig.3), but there was a slight uptick in the number of degrees awarded last year (Fig 4). The pass rate in the FCP Part I has shown a slight increase being 60% and 55% in the two semesters. The results of the Part II examination were disappointing and were 44% in both semesters. However, the Department fielded the top clinical candidates in both semesters, with Dr Anneri van Rensburg receiving the College of Physicians' Suzman Medal (best student in Part I and Part II) and Dr Mohamed Alteer receiving the Dubb Medal (best clinical performance). In addition, Drs van Rensburg and Cassimjee were both awarded their MMed degrees with distinction, which has not occurred for over a decade. The pass rate in the undergraduate Internal Medicine examination was 96%, the highest the Department has achieved. The Department was also one of the first in the Faculty to apply for MPhil degrees for its subspecialty training programmes.

By the end of the year several had been approved by the SUN, the regulatory authorities, while the remainder were expected to be approved early in the new year.

On the research front, the cardiologists made headlines with the percutaneous implantation of the first mitral valve in South Africa. The departmental research committee, that was chaired by the late Prof. Bolliger, was amalgamated with the Committee of Postgraduate Affairs under Prof. Koegelenberg.

The Division of Pharmacology appointed its first registrar in Clinical Pharmacology, together with a supernumerary registrar. Thus our site becomes only the second one in South Africa to provide training in Clinical Pharmacology; to date the feedback and experience of the two registrars has been excellent. Overall, the turnaround plan for Clinical Pharmacology is well on track. The Centre for Medical Ethics and Law (CMEL) hosted a very successful Advancing Research Ethics training in Southern Africa (ARESA) programme, which is funded by the NIH.

On the personnel side, Prof. Moosa was reappointed Executive Head of the Department of Medicine. New appointments were Dr Kannenberg, who commenced her duties in Dermatology, and Dr Pecoraro, who started as a consultant in Cardiology. The Department mourned the loss of Professor Jacobs, who sadly lost his battle with cancer. The post vacated by the demise of Prof. Bolliger, still remains unfilled as Faculty and Hospital management negotiate a restructuring of posts on the two platforms.

DIVISION OF CARDIOLOGY

HEAD OF DEPARTMENT: Prof. A.F. Doubell
MB Ch B, B Sc Hons, FCP (SA), M Med, PhD

SUMMARY:

The Cardiology Unit is an integral component of Tygerberg Hospital and the Faculty of Health Sciences, Stellenbosch University. The clinical activities of the unit centres around the 25 bed intensive care unit, the cardiac catheterisation laboratory, the echocardiography laboratory and the outpatient clinic (four clinics per week: three general cardiology clinics and one focussed cardiology clinic: Lipid disorders – first and third Monday of the month; GUCH [Grownup Congenital Heart Disease – second Monday of the month; Advanced heart failure – last Monday of the month). The service rendered and the teaching platform provided is very dependent on the ECG, Holter ECG, stress ECG, pacemaker, echocardiography and catheterisation service.

We have filled our fourth cardiologist post providing much needed capacity for our busy division. The lack of echocardiography facilities in the emergency areas in the hospital remains a challenge. As noted last year, the cardiac catheterisation laboratory (cathlab) installed in December 2011 (West-side cathlab) is still fully functional, but it must be noted that the backup cathlab (East-side cathlab) is now 14 years old and we are experiencing problems maintaining it in service. Planning will be initiated to replace this system with a cheaper

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(single plane) system as we depend heavily on this facility for pacemaker implantations. Despite the challenges we face, we can once again report:

- Cardiology has maintained its service excellence (albeit at great personal sacrifice of staff members)
- Good student teaching remains a hallmark of the unit
- The Unit has managed to maintain a reasonable academic output with 12 publications
- The Unit has remained an important role-player amongst academic cardiology centres in the country, with Prof. Doubell being on the executive committee of the South Africa Heart Association and also the editor of SA Heart, official Journal of the South Africa Heart Association

The Division has initiated a number of outreach programmes, notably an outreach to Paarl Hospital to provide better access to advanced cardiac care for patients from that area and also a rheumatic heart disease screening program in the Ravensmead and Khayelitsha areas. The latter programme is a collaborative project with the British Echocardiography Society. The division has established a new centre, SUNheart, to optimise our efforts to improve access to advanced cardiac care for all patients and SUNheart is playing a central role in realising the two outreach programmes noted here.

Staff

Professors

Prof. A.F. Doubell

Specialist Cardiologists

Dr H. Weich

Dr P. Herbst

The fourth cardiologist post was filled by a senior registrar to increase our training capacity. This was a temporary measure for a three-year training cycle ending 31 July 2013. The post was advertised and candidates interviewed in December 2013. Dr A. Pecoraro

was the successful applicant and it is expected that his appointment will be ratified in 2014. Dr Kyriakakis was also appointed in a term post for the duration of 2013. The planning is to extend his term appointment for a further two years in a research post in order to obtain his PhD. This will be made possible through the successful application for a Discovery Foundation grant.

Cardiologists in training

Dr A. Pecoraro (training cycle completed 31 July 2013)

Dr Mwazo (supernumerary trainee from Kenya – training cycle started in August 2011)

Dr P. van der Bijl (training cycle started 1 Feb 2012)

Dr P. Rossouw (training cycle started 1 Dec 2012)

Dr J. Moses (training cycle started 1 Jan 2013)

Medical Officers

Dr H.P. Cyster

5/8 Medical officer post in echocardiography vacant (this post is currently used to fund the post Dr Kyriakakis is appointed in – supplemented with a Discovery grant awarded to Dr Kyriakakis)

Research Staff – University of Stellenbosch appointments

Prof. L. Burgess

Ms M. Carstens (she will retire in 2014)

Technical Staff

Control Technologist 1

(Yanita Singh) – transferred to Red Cross Hospital on 31 January 2013

(Hamzah Kathree) – joined us in 1 December 2013

Technologists 4

(Marinda Swanepoel, Luzaan Papenfus resigned during 2013)

(Jorandi Loubser, Lusanda Matyeni, Inayaat Mahomed, Alet Meiring currently on staff)

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Technical Assistants 5

(M. Africa, C. Faroe, S. Baron, H. Charles, E. Kainda)

Technology students 4

(Sharlini Subramoney, Bathabile Mogaladi, Tiffy Wiggel, Menzi Maphumuno)

Administrative Staff

Secretary Ylana Waller
Typist Erika Burger

Registrars

Rotated for periods of six months

Dr Jacques van Deventer

Dr H.W. Snyman

Dr Yneisha Jooste

Dr Rudolf du Toit

Dr Zuraina Solomon

Dr Estelle Cornelissen

Dr Jocelyn Hellig

Dr Urishia Brijal

Senior Registrars from UCT rotating for Echocardiography training

Rotated for periods of six weeks

Dr Chevaan Hendriks

Emergency medicine registrars

Rotated for periods of three months

Dr Ilze von Watsdorf

Dr Ricardo Titus

Dr Caroline Delpont

Dr Clint Hendriks

Number of beds

Coronary intensive care unit: 8

Coronary high care: 17

D4 (elective admissions): 5

Factors impacting negatively on services in the unit

Staff shortages

Consultant

Dr Pecoraro applied successfully for the fourth consultant post in the Division providing much needed capacity. However, the administrative process was only completed in March 2014.

Medical officer

Dr Kyriakakis was appointed into a contract research post.

Technologists

Our control technologist, Yanita Singh, transferred to Red Cross Hospital in January 2013 and the post was vacant until 30 November. The post was filled on 1 December by Hamzah Kathree. There is an urgent need to promote one of our technologists to a chief technologist post. Although the post exists, it is currently unfunded.

Nursing staff

Nursing staff remains a challenge.

Lack of Equipment

Monitors

We have targeted 2014-2015 to optimise the monitors in A6.

Echocardiography machine

There is a growing need to provide echocardiography service at the point of contact in the emergency areas of the hospital, particularly in the CCU. This service is currently provided by transporting very expensive equipment from the echocardiography unit to the emergency area. The provision of echocardiography facilities for F1 and the obstetric high care unit are the next priorities. Thereafter the other intensive care units should be planned for.

Patient Statistics

a) **Inpatients**

A6 admissions

Unit

1 051

Ward

819

D4 elective admissions

463

Total

2 333

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| | | | |
|---|--------------|------------|--|
| Patients seen in the emergency room | 1 126 | | |
| Resuscitations | 61 | | |
| Streptokinase administered | 69 | | |
| b) Inpatient consultations | 4 093 | | |
| Written interdepartmental consultations | 1 383 | | |
| Direct consultation of doctor on call | 2 710 | | |
| * (new recording system-still to be audited) | | | |
| c) Outpatients | | | |
| Cardiac Clinic | | | |
| New patient consultations | 740 | | |
| Follow-up patient consultations | 3 497 | | |
| Lipid Clinic | | | |
| New patient consultations | 46 | | |
| Follow up patient consultations | 346 | | |
| GUCH Clinic | | | |
| New patient consultations | 25 | | |
| Follow-up patient consultations | 106 | | |
| Adult cardiology total | 4 759 | | |
| Paarl outreach clinic | 110 | | |
| Paediatric cardiology clinic | 916 | | |
| d) Electrocardiography | | | |
| Standard ECG | 14 714 | | |
| Exercise ECG | 1 045 | | |
| Holter recordings | 204 | | |
| Total | 15 963 | | |
| e) Echocardiograms | | | |
| TTE (adult) | 4 840 | | |
| TTE (paediatric) | 412 | | |
| TEE | 192 | | |
| Dobutamin stress echo | 80 | | |
| Exercise stress echo | 20 | | |
| Total | 5 544 | | |
| f) Cardiac catheterisation | | | |
| Left and coronary | 1 426 | | |
| Femoral: | 290 | | |
| Radial: | 1 136 | | |
| Grafts (incl. in above) | 32 | | |
| Aortograms (incl. in coronary stats) | 14 | | |
| FFR (incl. in coronary stats) | 79 | | |
| Pulmonary arteriogram (incl. under MVP) | 20 | | |
| Right heart studies | 29 | | |
| Total | 1455 | | |
| g) Coronary interventions | | | |
| PCI (number of patients) | | 581 | |
| PTCA balloons | | 354 | |
| Stents | | 346 | |
| Direct stents | | 170 | |
| Coronary aspirations (incl. above) | | 130 | |
| Intravascular ultrasound (IVUS) (inc. above) | | 25 | |
| h) Intra aortic balloon pump (IABP) | | 19 | |
| i) Percutaneous Mitral Balloon Valvuloplasty | | 19 | |
| j) Divers cardiac interventions | | 13 | |
| ASD closure | | 1 | |
| PDA closure | | 2 | |
| Aortic valvuloplasty | | 4 | |
| Pulmonary valvuloplasty | | 2 | |
| TAVI | | 2 | |
| Mitral valve replacement (TVI) | | 1 | |
| Coarctation stent | | 0 | |
| PFO closure | | 0 | |
| Myocardial biopsy | | 1 | |
| IVC stent | | 0 | |
| Renal denervation | | 0 | |
| AV fistula coiled | | 0 | |
| k) Valve screening (fluoroscopy) | | 62 | |
| l) Pericardial aspirations | | 58 | |
| Pericardioscopy | | 6 | |
| m) Pacemaker implantation | | | |
| New | | 96 | |
| Replacement | | 27 | |
| Lead replacement | | 1 | |
| Lead extraction | | 0 | |
| Epicardial lead | | 0 | |
| Total | | 124 | |
| VVI | | 14 | |
| VVIR | | 75 | |
| VDD | | 0 | |
| DDD | | 1 | |
| DDDR | | 19 | |
| CRT | | 3 | |
| ICD | | 11 | |
| Loop recorder | | 1 | |

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| | |
|-------------------------------|-----|
| n) Temporary pacing | 180 |
| A6 | 53 |
| Cathlab | 127 |
| o) Pacemaker follow-up | 948 |
| p) ICD insertion | 11 |
| q) Swan Ganz catheters | 0 |
| r) Arterial lines | 13 |
| s) Ventilation | 55 |

Academic Activities

The Unit is actively involved in the departmental teaching programme.

Under-graduate

- The Cardiology module was presented to the second-year students. The clinical content of the module is under chairmanship of Prof. Doubell. The module continues to receive high praise from participants. Student Interns (late rotation) rotate through Cardiology for a seven-day period during which intensive bedside teaching is presented. The middle rotation students attend an ECG seminar weekly (two visits per student during their two week rotation in internal medicine).
- Training of technologists (four posts) accommodates the curriculae of both the Central University of the Free State and the Durban Institute of Technology.

Postgraduate

- A structured teaching programme was presented for registrars rotating through Cardiology for six months at a time.
- The registrar training programme is the only programme in the country that includes structured and supervised echocardiography training.
- One senior registrar completed his cardiology training. Dr Pecoraro was the top candidate during the examination.

- Prof. Doubell hosted the Cert Cardiology examination in May 2013.

Continued medical education

- An outreach programme for Paarl Hospital has been presented to and accepted by the management of Tygerberg Hospital. The required equipment has been acquired (provided jointly by the Tygerberg Hospital management and the Stellenbosch University Division of Cardiology) and the programme is running well.

Outstanding achievements in 2013

- Produced the best research project by a final year medical student, Faculty of Medicine and Health Sciences (**Bovijn J.** Doubell AF and Herbst PG). Identifying predictors of mitral valve (MV) tears resulting from percutaneous balloon mitral valvuloplasty). This is the second year in a row that this award goes to a research project from the Division of Cardiology
- Produced the best poster at the Academic Year day, Department of Medicine, Faculty of Health Sciences (Jacques Liebenberg, Philip Herbst and Anton Doubell. Rheumatic fever: A South African perspective. Adherence, notification and secondary prophylaxis).
- Six abstracts accepted for presentation at the Sixth World Congress of Paediatric Cardiology and Cardiac Surgery
- A top-of-the-range 3D echocardiography machine valued at R1 600 000 was donated to the Division of Cardiology by General Electric as part of the SUNHEART initiative
- Dr Jane Moses became the first recipient of a Life Healthcare Fellowship in our institution, allowing her to initiate her subspecialisation in cardiology on 1 January 2013.
- The Division of Cardiology successfully competed for two Discovery Awards

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(Discovery Academic Fellowship Award received by Dr Kyriakakis and the Discovery Subspecialist Award received by Prof. Doubell [candidate Dr A. van Rensburg])

- Prof. Doubell served on the exco of the South African Heart Association and continues to serve as the Editor of SA Heart, the official Journal of the South African Heart Association

Research Output

A. Journal articles - Subsidised

1. **Jane Moses, Anton F. Doubell, Philip G. Herbst, Karl JC Klusmann, Hellmuth SVH Weich.** Non-ST Elevation Myocardial Infarction (NSTEMI) in Three Hospital Settings in South Africa. Does Geography influence Management and Outcome? A Retrospective Cohort Study. *Cardiovascular Journal of Africa* 2013 2013, 24; 110-116.
2. Kemp I, Dellimore K, Rodriguez R, Scheffer C, Blaine D, **Weich H** and **Doubell A.** Experimental validation of the fluid-structure interaction simulation of a bioprosthetic aortic heart valve. *Australas Phys Eng Sci Med* (2013) 36:363–373
3. Dellimore K, Kemp I, Scheffer C, **Weich H** and **Doubell A.** The influence of leaflet skin friction and stiffness on the performance of bioprosthetic aortic valves. *Australas Phys Eng Sci Med* (2013) 36: 473 - 486

B. Journal articles – non-subsidised

1. **Burgess LJ**, Pretorius D. The South African clinical trial industry: Implications of problems with the issuing of human tissue export permits. *South African Journal of Bioethics and Law*, 2013; 6(1): 13-15
2. **Kyriakakis C**, Mabin T, **Herbst PG**, **Doubell AF.** A pericardial effusion with an associated cystic mass. PCRonline: Interventions for structural heart disease. 2013

C. Chapters in books

1. **Anton Doubell** and **Philip Herbst.** Eisenmenger's Syndrome in South Africa. In: Kaemmerer H, Niwa K, Oechslin E, Ewert P, Webb GD, Hess J (eds). Pulmonary Arterial Hypertension in Congenital Heart Disease: Eisenmenger's Syndrome – A Global Perspective. Bremen: Uni-Med 2013: 87-89.

D. Proceedings National and International

1. Jacques Doubell, **Philip Herbst**, **Alfonso Pecoraro**, Coenraad Koegelenberg and **Anton Doubell.** Pulmonary haemosiderosis secondary to severe mitral stenosis in patients undergoing mitral valvuloplasty at Tygerberg Hospital. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 288
2. Jacques Liebenberg, **Philip Herbst** and **Anton Doubell.** Rheumatic fever: A South African perspective. Adherence, notification and secondary prophylaxis. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 310
3. Everhardus Smith, **Hellmuth Weich** and **Anton Doubell.** Improving the diagnostic yield of the ECG in tachyarrhythmias by routinely performing Lewis Lead recordings. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 289
4. **Herbst PG**, **Pecoraro AJK**, Cassimjee Z and **Doubell AF.** Diagnosis and assessment of subclinical rheumatic valve disease. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 356
5. Bovijn J, **Doubell AF** and **Herbst PG.** Identifying predictors of mitral valve (MV) tears resulting from percutaneous balloon mitral valvuloplasty (PBMV). Sixth World

Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 130

6. **Pieter van der Bijl**, Marshall Heradien, Paul Brink and **Anton Doubell**. QTc prolongation prior to angiography predicts poor outcome and associates significantly with lower left ventricular ejection fractions and higher left ventricular end-diastolic pressures. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. *SA Heart* 2013; 10(1): 241

E. Presentations at the Annual Academic Day of the Faculty of Health Sciences, Stellenbosch University.

1. Jacques Doubell, **Philip Herbst**, **Alfonso Pecoraro**, Coenraad Koegelenberg and **Anton Doubell**. Pulmonary haemosiderosis secondary to severe mitral stenosis in patients undergoing mitral valvuloplasty at Tygerberg Hospital. 2013.
2. Jacques Liebenberg, **Philip Herbst** and **Anton Doubell**. Rheumatic fever: A South African perspective. Adherence, notification and secondary prophylaxis. 2013.

F. Other Presentations at National and International Congresses (abstracts not published).

1. **Anton Doubell**. Valve lesions in pregnancy. Refresher Course, Department of Medicine, Stellenbosch University. Lord Charles, Somerset West. South Africa. 2013.
2. **Anton Doubell**. Mitral stenosis. SUNecho course. Stellenbosch. South Africa. 2013.
3. **Anton Doubell**. When to do Percutaneous Mitral Balloon Valvuloplasty. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town. South Africa. 2013.
4. **Anton Doubell**. Percutaneous Mitral Balloon Valvuloplasty: Patient selection and technique. Sixth World Congress of

Paediatric Cardiology and Cardiac Surgery. Cape Town. South Africa. 2013.

5. **Anton Doubell**. Introduction to Doppler. Bloemfontein Trans-oesophageal Echocardiography course. Bloemfontein. 2013.
6. **Anton Doubell**. Mitral valve assessment. Bloemfontein Trans-oesophageal Echocardiography course. Bloemfontein. 2013.
7. **Anton Doubell**. Left ventricular systolic function assessment. Bloemfontein Trans-oesophageal Echocardiography course. Bloemfontein. 2013.
8. **Doubell AF**. When to do Percutaneous Mitral Balloon Valvotomy (PMBV). Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
9. **Doubell AF**. Percutaneous Mitral Balloon Valvotomy (PMBV). Patient selection and technique. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
10. **Herbst PG**. Echocardiographic prosthetic valve assessment. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
11. **Herbst PG**. Troubleshooting during echocardiographic prosthetic valve assessment. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
12. **Weich HSVH**. TAVI live case presentation (3 cases). Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
13. **Weich HSVH**. Hybrid TAVI combined with CABG – case presentation. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
14. **Pecoraro A**. Medical therapy of Hypertrophic Cardiomyopathy. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
15. **Pecoraro A**. TAVI case presentation. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.

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16. **Kyriakakis C.** Constrictive pericarditis – How to treat. Africa PCR. Cape Town 2013.
17. **Van der Bijl P.** Case presentation – Management of a pericardial effusion complicated by paraparesis. Africa PCR. Cape Town 2013.

G. Degrees obtained

1. MMed (Medicine): Cassimjee Z. Assessing the diagnostic accuracy of commissural fusion as an early sign of rheumatic heart disease.
2. MSc (Clinical research): Burgess L. An evaluation of informed consent comprehension by adult trial participants in South Africa at the time of providing consent for clinical trial participation.

H. Other ongoing research

Pericardial disease

- The role of pericardioscopic percutaneous pericardial biopsies in the management of tuberculous effusions
- The diagnosis and natural history of effusive-constrictive pericarditis

Myocardial disease

- Assessment of left ventricular function in patients with severe pre-eclampsia

Valve disease

- Predicting the outcome of balloon mitral valvuloplasty
- Percutaneous valve replacement
- Novel echocardiographic assessment to determine the severity of mitral stenosis
- Developing new echocardiographic criteria for the diagnosis of rheumatic valvular heart disease

New technology

- Developing a blood culture device to improve the yield of positive blood cultures in infective endocarditis

Contract research

- The Unit has an active drug-trial unit and continues to be a leader in this field in the Faculty

H. National co-operation and partnerships

The echocardiography training platform created to assist with the training of Cape Town University cardiology trainees continues.

CENTRE FOR MEDICAL ETHICS & LAW

HEAD OF DEPARTMENT: Prof. Keymanthri Moodley

Summary of activities:

Teaching:

Undergraduate (MBChB 1, 2, 5)

Postgraduate (Postgraduate Diploma Health Research Ethics)

Research:

Projects, Publications, Supervision, Journal reviews

Consultancy Services:

Tygerberg Clinical Ethics Committee

Private practitioners

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|--------|
| HOD | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Administrative assistant | 25 | 1 |
| Research assistant | 20-30 | 1 |
| ARESA programme | 20-30 | 1 |
| Co-ordinator | | |

Output:

Prof. Moodley supervised three PG diploma students. 8/10 trainees graduated from second cohort of ARESA trainees. The remaining three students from the first cohort have all graduated.

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NIH (ARESA) grant of R12 000 000 secured from 2011 to 2016.

NIH (HIV Cure) grant of R 5 500 000 secured from 2013 to 2018.

GCP training and online GCP Refresher

program: 58 + 67 researchers trained

Online CPD program: 38 doctors completed training

Third stream income raised: **R 273 349,63**

(GCP+ERECCA+CPD+Bioethics Seminar)

Comment on output:

The Centre for Medical Ethics and Law is partially funded. Considerable effort is required to raise additional funds to sustain the Centre with skeleton staff.

PART 2

Faculty of Health Sciences

Infrastructure development – upgrading

For 2013 – no new equipment or office space

Community outreach programmes/ community services and interaction.

Ethics Hotmail and Ethics Hotline – queries on ethical issues from general practitioners and other healthcare providers are answered either via e-mail or telephonically by the Centre. The number of queries received increased substantially over the past year. Details are available on request within the limits of confidentiality.

Tygerberg Ethics Discussion Group:

Topics for 2013:

- 25 April 2013 – Resolving Ethical Dilemmas – Prof. Willie Pienaar

First Annual Bioethics Seminar – 30 May 2013

Topics:

Respecting patient autonomy – Prof.

Keymanthri Moodley

Enhancement: A sign of disenchantment? –

Prof. Anton van Niekerk

Euthanasia and the right to die with dignity: defining our humanity – Prof. Sean Davison

ARESA and ARESA Seminar 2013:

Trainees that were trained in our Capacity Development Program and delegates attended the Seminar from the following countries in 2013:

- South Africa
- Malawi
- Kenya
- Uganda
- Botswana
- Ethiopia
- Zambia

To date 22 mid-career professionals from the following countries have been trained in health research ethics:

- South Africa
- Malawi
- Kenya
- Uganda
- Botswana
- Ethiopia
- Zambia

Partnerships

Empirical Projects:

1. Principal investigator – An exploration of the ethical complexities inherent in the collection, use, storage and export of biological samples in research – perspectives from the Western Cape, South Africa. – Research Assistance Grant R20 000 and Strategic Funding grant R100 000.

Co-investigators: Dr Theresa Rossouw, Dr Ronell Leech and Nomathemba Sibanda, University of Pretoria

Phase 1 – semi-structured interviews of 200 research participants in Western Cape and Pretoria

Phase 2 – interviews of REC members, Western Cape and Gauteng – completed

Phase 3 – interviews of researchers/pathologists, Western Cape and Gauteng – awaiting publication – pending funding

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2. Principal Investigator – The experience of Research Ethics Committees (RECs) with using an accessible short form self assessment tool. Collaborators: Prof. Henry Silverman, University of Maryland, Prof. Sue Naidoo, University of the Western Cape – awaiting publication

Collaboration in grant applications:

1. NIH R01 grant: Ethical and social implications of HIV cure research – R24 million – to be shared amongst 3 sites: China, South Africa and USA
2. NIH Biorepository grant: 1UH2HG007092 – H3Africa Biorepository at Tygerberg Hospital, Pi: Dr Akin Abeyomi Phase 1 in progress, provisional approval of Phase 2 2014 to 2019. Prof. Moodley involved as co-investigator for oversight of ethics and governance

Achievements with regard to research activities and research outputs:

Prof. Moodley

Moodley K, Hardie K, Selgelid MJ, Waldman RJ, Strebel P, Rees H, Durrheim DN. Ethical considerations for vaccination programmes in acute humanitarian emergencies. *Bulletin of the World Health Organization*, 2013; 91(4): 290-297

Moodley K. Generalism in healthcare: Ethical challenges in the 21st century. *South African Family Practice*, 2013; 55(5): 410-411

Rowe K, Moodley K. Patients as consumers of health care in South Africa: the ethical and legal implications. *BMC Medical Ethics*, 2013; 14(15): 1-9

Staunton C, Moodley K. Challenges in biobank governance in Sub-Saharan Africa. *BMC Medical Ethics* 2013; 14(35): 1-8

Williams JR, Sprumont D, Hirtle M, Adebamowo C, Braunschweiger P, Bull S, Burri C, Czarkowski M, Te Fan C, Franck C, Gefenas E, Geissbuhler A, Klingmann I, Kouyaté B, Kraehenbuhl J, Kruger M, Moodley K, Ntoumi F, Nyirenda T, Pym A, Silverman H, Tenorio S. Consensus standards for introductory e-learning courses in human participants research ethics *Journal of Medical Ethics*, 2013, 0:1-3

Prof Kling

Kling S. The “difficult” patient – may I refuse to treat him? *Current Allergy and Clinical Immunology* 2013; 26(1): 37-39

Kling S. Allocating treatment for rare allergic diseases – the rule of rescue. *Current Allergy and Clinical Immunology* 2013; 26(2): 94-96.

Dr de Roubaix

De Roubaix JAM. Informed consent for anaesthesiological and intensive care unit research: a South African perspective. *Southern African Journal of Anaesthesia and Analgesia* 2013; 19(15): 233-238

BOOK CHAPTERS

Moodley K. Disaster Research Ethics – South African Perspective – in “Disaster Research” 2013 Springer

NEWSLETTER

Two ARESA *Newsletters* Vol. 3 No 1 and 2 were circulated to all Research Ethics Committees in SA in July and December 2013. The newsletter is also circulated internationally via the NIH listserve.

INVITED SPEAKER: 2013

International Presentations:

- 17 January – Developing standards for online training in research ethics and good clinical practice: the ERECCA program programme in South Africa, Brocher Foundation, **Hermance, Switzerland** (invited speaker)
- 16 July – Achievements of the Centre for Medical Ethics and Law, Stellenbosch University: 2003 to 2013. WHO Bioethics Collaborating Centre Network meeting, **University of Toronto, Canada** (invited speaker)

National Presentations:

- 11 May – Generalism in health care: ethical implications. South African Academy of Family Practice, Annual National Conference, Cape Town

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Local Presentations:

- 24 January – Termination of pregnancy, Health and Human Rights Program, University of Cape Town
- 25 January – Professionalism in Health care, GP Refresher Course, University of Cape Town
- 23 May – Use of Biological Samples in Research, Department of Medicine, Faculty of Health Sciences, Stellenbosch University
- 14 June – Feto-Maternal Conflicts in Pregnancy, Physicians Refresher Course, Department of Medicine, Faculty of Health Sciences, Stellenbosch University, Lord Charles Hotel, Somerset West
- 24 August – Organ Procurement Organisations: Ethical implications, Graduate School of Business, UCT
- 6 September – Compensation for Research-related Injuries in South Africa, South African Clinical Research Associates Organisation, Zevenwacht, Cape Town
- 23 October – Ethical Challenges in Clinical Trial Research, Guest Speaker, Young Researchers Symposium, College of Health Sciences, University of KwaZulu-Natal
- 5 November – Reporting of bioethics in the media: where are the boundaries of responsible journalism about medical matters? Science meets media symposium hosted by the Department of Journalism and the Department of Science and Technology, Stellenbosch main campus
- 19 November – Current neuroethical challenges for mental health research in Africa, STIAS, Stellenbosch

Teaching and Training (undergraduate-, postgraduate- and elective students)

A) Undergraduate Programme:

MBCHB 5

Ethics Module

The undergraduate teaching programme in medical ethics and law was offered to 180 fifth-year medical students in March 2013 for the 11th time since its inception.

Tutors: Keymanthri Moodley, Willie Pienaar and Sharon Kling. Four additional lecturers were invited to assist with tutorials and marking – Dr

A Bawoodien, Dr Malcolm de Roubaix, Dr Chris Verster and Dr Mariam Navsa. The invited lecturer on Medical Law was Johann Roux (MacRoberts Attorneys).

Students completed a **WEB CT** test and written exam with short modified essay questions. The final ethics marks ranged from 55% to 83%, with an average of 64%. Jonas Bovijn received the Ethics Prize sponsored by Mediclinic during the Oath taking ceremony in December 2013. He achieved the highest mark for the module in 2012.

MBCHB 1

Medical Ethics Lectures – Theme 3 in Health in Context Module

Six lectures were presented to 387 first-year health science students on ethics, law and human rights in April 2013. A range of topics were discussed and included:

1. Why is ethics important in health care?
2. Introduction to health law
3. Introduction to Health and Human Rights
4. The Health Professions Council of South Africa (HPCSA)
5. Scientific Integrity
6. Ethical Dilemmas in health care

The team was led by Prof. Moodley.

387 students wrote a WEB CT test with 20 Ethics MCQs. Results: 50% to 100%, with an average of 83%. Class attendance improved in 2013 compared to 2012.

MBChB 2

Medical Ethics Lectures – Introduction to Clinical Medicine

Five lectures were presented to 266 second-year medical students:

1. Ethics and professionalism in the hospital
2. Resolving ethical dilemmas
3. Philosophy and Medicine
4. Introduction to moral principles and theories
5. Ethical dilemmas – case studies

B) Postgraduate teaching

ARESA Postgraduate Programme:

2014 intake – Postgraduate Diploma in Health Research Ethics – 27 applications were received. Nine applicants met the eligibility criteria. These NIH sponsored trainees will

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attend module 1 of the program in February 2014.

Short Course: Introduction to Bioethics, Health

Law and Human Rights: 1 student attended

module 1 as a short course. **Dual Review of**

Research: 1 student attended week 1 of module 2 as a short course

PROMOTER:

DPhil – Applied Ethics – University of Stellenbosch

Dissertation: Reviewing the theory and practice of professional nursing ethics education in Namibia and South Africa.

Mrs E.J. de Villiers, Centre for Applied Ethics, Department of Philosophy, University of Stellenbosch

Student is set to graduate in December 2014.

CO-PROMOTER:

DPhil – Applied Ethics – University of Stellenbosch

Dissertation: Clinical Ethics Consultation in South Africa: A Critical Appraisal of their Structure and Functioning

Prof. Sharon Kling, Centre for Applied Ethics, Department of Philosophy

Postgraduate Diploma in Health Research Ethics – University of Stellenbosch

Christine Wasunna: Data sharing in International Collaborative Research in Africa

Alwyn Mwinga: A retrospective review of Engagement of Communities and formation of Community Advisory Boards in clinical trials in Lusaka, Zambia: identification of best practices and lessons learned.

Tyson Welzel: Data Sharing in Medical Research: beliefs and opinions of researchers utilising a Research Ethics Committee in the Western Cape, South Africa. 8/10 trainees graduated in 2013

APPOINTMENTS 2013

NATIONAL APPOINTMENTS:

- Board member – South African Medical Research Council (MRC) – appointed by the Minister of Health (Four Board meetings in Cape Town)
- Member – Audit, Risk and IT Committee, MRC (Five meetings at MRC Cape Town)

INTERNATIONAL APPOINTMENTS:

- African Data Safety Monitoring Board (DSMB) of the National Institutes of Health (United States) – 2013 to 2015
- Brocher Foundation in Geneva in 2013 – international research scholar

Second Annual ARESA Research Ethics Seminar 2013

One hundred and twenty delegates attended this annual seminar from various South African institutions, as well as from Kenya, Ethiopia, Uganda, Malawi, Zambia and Nigeria. A wide range of stimulating talks was delivered by South African speakers (Prof. Marc Blockman, Dr Theresa Rossouw, Prof. Anne Pope and Prof. Marc Cotton). International speakers hailed from the University of North Carolina (Prof. Eric Jeungst and Prof. Stuart Rennie) and University of Ibadan, Nigeria (Michael Igbe). Prof. Keymanthri Moodley, Dr Lesley Henley, Dr Malcolm de Roubaix and Dr Lyn Horn contributed to lively panel discussions along with some of the other speakers. On day 1 of the seminar, session 1 focused on HIV Cure research with presentations on the science, the ethics and the new WHO guidelines. Session 2 comprised of three papers given by 2013 ARESA trainees on early phase studies; this work completed as part of the ARESA 2013 programme.

On Day 2 biobanking in Africa was discussed and debated, with Prof. Eric Juengst (UNC) providing the ethical overview, Prof. Akin Abayomi (Stellenbosch University) discussing the scientific issues, Mr Michael Igbe (University of Ibadan, Nigeria) giving an overview of the views of lay people in Nigeria and Dr Ciara Staunton (Stellenbosch University) discussing the challenges to biobank governance. Day 2 and the seminar ended with a discussion of

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research related injuries by Prof Marc Blockman (UCT) and Prof Anne Pope (UCT) with the recent judgment in the *Venter v Roche Products* case the focus of discussion.

THIRD INCOME STREAM 2013:

1. Good Clinical Practice (GCP) Training Courses – both basic and refresher courses were presented. These courses in responsible research and technical issues related to research are deemed compulsory by the Medicines Control Council (MCC) for all investigators involved in clinical trial research.

Attendance courses:

Four courses were offered and **58** investigators, site co-ordinators and research ethics committee members were trained.
Income generated: **R148 100**

2. ERECCA programme

Number of delegates completed: **67**
Income generated: **R67 000**

3. Online Ethics CPD Programme:

Number of delegates completed in 2013: **38**
Income generated: **R18 926,73**

4. Research Ethics (ARESA) Short Courses:

| | |
|----------|--------------------|
| Module 1 | R 6 822,90 |
| Module 2 | R 3 500 |
| | R 10 322,90 |

5. Bioethics Seminar

One hundred and forty-nine delegates attended the first Annual Bioethics Seminar, which was held on 30 May 2013.
Income generated: **R29 000**

6. GRANTS = R2 219 801:

- Fogarty International Centre, NIH R25 grant – to develop a Postgraduate Diploma in Health Research Ethics: reviewers' score 20
- Value of grant over 5 years = **\$1,2 million (R12 million)** awarded
- For 2013: R1 793 220 – R199 369 (UNC) = **R1 593 851**
- NIH R01 HIV Cure grant: Ethical and social implications of HIV cure research involving 3

sites: China, South Africa and USA:
reviewers' score 18

- Value of grant over 5 years: **\$550 000 (R5,5 million)** awarded
- For 2013: **\$62,595 (R625 950)**
- Harry Crossley Grant – **R17 500**

TOTAL THIRD INCOME STREAM GENERATION VIA GRANTS AND COURSES:

Gross Income = **R 2 510 650-63**

DIVISION OF DERMATOLOGY

HEAD OF DEPARTMENT: **Dr W.I. Visser**

Summary of activities:

The missions of the division, namely effective administration, basic research, excellent service delivery, undergraduate- and postgraduate teaching and outreach were achieved satisfactorily

Resources:

| Posts (Full-time) | Number | Filled |
|--|------------------|--------|
| Head of Division | 1 | 1 |
| Consultant | 1 | 1 |
| Registrars | 4 | 4 |
| Supernumerary Registrars | 4 | 4 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist | 4 hours per week | 1 |

Output:

| | |
|--------------------|--------|
| Outpatient visits | 12 000 |
| Admissions | 350 |
| UV therapy | 60 |
| Patch tests | 50 |
| Theatre procedures | 1 500 |
| Biopsies | 1 100 |

Comment on output:

- The Division of Dermatology delivers a comprehensive and efficient clinical service at specialist level

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- Both in- and outpatients are referred from general practitioners, specialists (dermatology and other), community health centres and from other departments
- Consultation with other departments takes place virtually on a daily basis. Contact with the Department of Medicine, the Department of Paediatrics and Child Health, the Division of Rheumatology and the Division of Infectious Diseases from the bulk of these consultations
- Daily performance of skin biopsies, curettage and cautery and surgical excision of benign and malignant skin neoplasms. Only local anaesthetic is administered and surgery requiring flaps is not performed
- Providing teledermatology consultations to Dermatologists and other doctors
- The commonest conditions admitted are the following:
 - Patients with erythroderma
 - Patients with widespread plaque psoriasis. These patients are admitted for treatment consisting of topical steroids, ultraviolet light and systemic immunosuppressants
 - Patients with autoimmune blistering disorders (bullous pemphigoid, pemphigus, dermatitis herpetiformis)
 - Patients with severe cutaneous adverse drug reactions, including Stevens-Johnson syndrome and toxic epidermal necrolysis
 - Patients with complicated skin cancer
 - Patients with leg ulcers
 - Patients with complicated retroviral disease affecting the skin
- A quarter of patients seen at OPD are under the age of 12 years. In 2013, a dedicated paediatric dermatology service was started, headed by Dr F Ahmed. A specific child friendly area was developed. Dr Ahmed has departed for the UAE, but her place has been taken by the two resident consultants
- A monthly interdisciplinary skin cancer meeting, as well as a combined

Dermatology-Rheumatology clinic, was initiated

- We continue our close relationship with Anatomical Pathology with weekly CPC's and biweekly consultations to maximise clinicopathological correlation. A Pigmented Skin Lesion group convenes monthly

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading

- The Faculty of Medicine and Health Sciences Strategic Fund: Equipment Award 2013 was used to acquire a digital camera for the multi-headed teaching microscope and a flat screen monitor for projection. This has greatly enhanced the teaching and academic development in dermatopathology
- New upgraded lecture/seminar room for group discussions, student teaching and lectures in OPD
- Upgraded and revamped office and library area in OPD

Community outreach programmes/ community services and interaction.

- Monthly outreach clinic at Worcester Hospital
- Quarterly outreach clinic at Brewelskloof Hospital
- Primary Healthcare Clinic talk at Khayelitsha Hospital
- Regular presentations to private practitioners and specialists, namely oncologists, physicians and paediatricians
- Educational talks to members of the public
- Radio interviews – four per year
- Advice to public in popular magazines
- Three annual training workshops for nurses
- Prof. H.F. Jordaan presents a Dermatopathology seminar at Medunsa
- Dr W.I. Visser presents a HIV and the skin course at the University of Fort Hare, East

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London Campus, as part of an Advanced HIV Certificate for nurses

- Six lectures to the South-to-South Partnership for Comprehensive Paediatric HIV Care and Treatment Program – Dr SM Kannenberg

Partnerships

National:

- Monthly interdepartmental meetings with Dermatology at UCT
- Close relationship with Divisions of Dermatology at other South African Universities
- Dr W.I. Visser and Prof. H.F. Jordaan plays an active role in the College of Dermatology – Convener and moderator for examinations
- Dr W.I. Visser was the external examiner for the MMED Part 2 examination at the University of the Free State
- Dr W.I. Visser was the external moderator for the Nursing diploma in Dermatology at UCT

Private:

- Weekly journal club meetings with private dermatologists
- Monthly Problem Clinic with private dermatologists
- Cosmetic dermatology workshop for private dermatologists
- Dr W.I. Visser – advisory board for Eucerin and Immunology/Oncology advisory board for Bristol-Myers Squibb

International:

- The Division has numerous international contacts and experts in specific fields are electronically consulted regularly

Achievements with regard to research activities and research outputs:

Number of publications from the department/division: 8
Textbooks and contributions in textbooks: 1

Teaching and Training (undergraduate-, postgraduate- and elective students)

- Two hundred and thirty undergraduate students were accommodated in groups of 12 throughout the year in OPD as part of their clinical/practical rotation. A two week lecture block, 40 lectures, was well attended by students. The focus of the division is to enhance web-based learning and practical teaching methods. A surgical skills workshop was developed in conjunction with the surgical skills lab. Student feedback for both the clinical and theoretical rotations was outstanding.
- Currently there are eight registrars in training. The Division prides itself in a well-structured and comprehensive post-graduate teaching programme. Registrars work under direct consultant supervision. Newer teaching modules in cosmetic dermatology and dermatological surgery were introduced
- A new Short Course in Cosmetic Dermatology was established and is presented twice a year
- There are a large number of European elective students visiting our division – eight students in 2013, mostly from Germany

Special achievements and other highlights

- Dr W.I. Visser attended the second African-Middle East Psoriasis Forum in Istanbul, Turkey; The Congress of the European Academy of Dermatology and Venereology (EADV) in Istanbul, Turkey; eighth World Melanoma Congress in Hamburg, Germany
- Dr W.I. Visser was an invited speaker at an Oncology symposium in Prague, Czech Republic; invited speaker at the 34th Annual congress of the Medical Association of Namibia in Windhoek; invited speaker at The Annual Symposium on Diseases Relevant to South Africa in Potchefstroom; invited speaker and chair of session at the sixth Annual National Congress of the South African Society for Dermatological Surgery in Port Elizabeth; invited speaker at the seventh

MEDICINE

International Child TB Training Course at Goudini; speaker and session chair at the Annual Congress of the Dermatological Society of South Africa in Cape Town

- Dr F. Ahmed attended an Advanced Paediatric Dermatology Course in Dundee, Scotland and the 12th World Congress of Paediatric Dermatology in Madrid, Spain
- Dr W.I. Visser is one of the founding members of the newly launched Skin Cancer Foundation (SCF)
- Dr F. Ahmed, Dr J. du Toit and Dr B. Tod presented cases at the Annual Congress of the Dermatological Society of South Africa in Cape Town. Prof. H.F. Jordaan conducted a dermatopathology session
- Dr W.I. Visser was elected as the vice-president and Prof. H.F. Jordaan as a member of the EXCO of the Dermatological Society of South Africa
- Prof. H.F. Jordaan was an invited speaker at an International Dermatopathology Conference and Annual Meeting of the Dermatopathology Society of India (DOS) in Jaipur, India, in November. Prof. Jordaan was made an Honorary Member of the DOS.

DEPARTMENT OF ENDOCRINOLOGY HEAD OF DEPARTMENT: Prof. B.H. Ascott-Evans

Summary of activities:

Consolidation of teaching, training and outreach programmes

- Prof. Hough retired, but retained on part-time basis (Thursdays) for teaching and research
- Karen Barnard on short-term contract as consultant
- Basic lab increased number of students training there

SEMDSA Fellow in second year of training at our unit – two senior Registrars for first time.

Resources:

| Posts (Full-time) | Number | Filled |
|---|-------------------------|---|
| Specialist | 3 | 2 [1 permanent, 1 on short-term contract] |
| MO (x2), Senior Registrar (x1), Med tech (x1) | 4 | 5 (SEMDSA Fellow extra) |
| Posts (sessional – how many hours worked per week) | | |
| 1 x Consultant (x 4 hours) | 2 x MO (x 4 hours each) | 12 hours/week |

Output:

| | |
|--------------------------|-------|
| Admissions | 450 |
| Referrals | 3 275 |
| DEXA's | 1 128 |
| Outpatients – New | 402 |
| Outpatients – Follow-ups | 2 508 |

Comment on output:

- High load and turnover of often very complex cases requiring extensive investigation
- Quaternary referral centre for certain conditions
- 13% decrease in Diabetic OPD follow-up cases
- 5% increase in new cases to OPD (planned for)

PART 2

Faculty of Health Sciences Infrastructure development – upgrading

A 10 nil

Basic lab – various pieces of equipment
New office for students

MEDICINE

Community outreach programmes/community services and interaction.

Prof. FS Hough – Member of Scientific Advisory Committee of the International Osteoporosis Foundation – represents the whole Africa region. Heads IOF task group on diabetic bone disease.

BAE: Section leader Endocrinology) of 11th SAMF

W Ferris et al : Collaborations

Dr Wendy Macfarlane and Prof. Adrian Bone, Diabetes Research Group, Brighton University, UK

Prof. Nigel Crowther, NHLS labs, University of Witwatersrand, Johannesburg

Dr Carola Niesler, Department of Biochemistry, University of KwaZulu-Natal, Durban

Dr Johan Louw, Diabetes Discovery Platform, MRC, Tygerberg

Dr Venant Tchokonte-Nana, Department of Anatomy and Histology, Stellenbosch University

Partnerships

National:

Part of CDIA (BAE and Karen Barnard)

Private:

Multiple CMEs at all levels throughout Western Cape, Easter Cape, etc.

On many advisory boards – BAE, Zane Stevens

International: International – Various : multiple presentations at national and international conferences

FSH – Member of the Membership Committee of the International Bone and Mineral Society (IBMS)

Member of the Advisory Committee of the American Paget's Foundation

WF – Dr Wendy Macfarlane and Prof. Adrian Bone, Diabetes Research Group, Brighton University, UK

Achievements with regard to research activities and research outputs:

Number of publications from the department/division:

Five papers published. Four in high IF international journals
Plus four conference abstracts published.
One international
Textbooks and contributions textbooks: 2

Teaching and Training (undergraduate-, postgraduate- and elective students)

FSH: Promotor of five PhD students

WF: Promotor for three PhD and three post-doc students :

Cara-Lesley Bartlett (PhD)

Alex Jacobs (PhD)

Ellen Andrag (Post-Doc)

Ingrid Cockburn (Post-Doc)

Mari van der Vyver (Post-Doc)

Mariza Hoffman (PhD)

Funding and awards

Various grants and funding successfully applied for by FSH and WF:

- Medical Research Council (MRC) Self-Initiated Grant (WFF)
- NRF incentive funding (WFF)
- MRC career development grant (HSVG)
- MRC PhD bursary (CLB)

- NRF PhD bursary (AJ)
- NRF Post-doctoral bursary (EA)
- Faculty post-doctoral bursary (IC, MvdV)
- Harry Crossley Foundation Research Funding (WFF, MvdV, CLB, EA, AJ)

Special achievements and other highlights

a) William Ferris elected onto the Human Research Ethics Committee (HREC), Faculty of Medicine and Health Sciences

b) William Ferris achieved an NRF rating of C2

c) Basic labs personnel awards:

Awarded the SEMDSA prize for the best paper in 2011-2012 by South African investigators in the field of endocrinology for the manuscript 'Sadie-Van Gijsen H., Smith W., Du Toit E.F., Michie J., Hough F.S., Ferris W.F. Depot-specific and hypercaloric diet-induced effects on the osteoblast and adipocyte differentiation potential of adipose-derived stromal cells. Mol Cell Endocrinol, 2012 Jan 2; 348(1):55-66

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Awarded the National Osteoporosis Foundation of South Africa (NOFSA) prize for the best paper by South African investigators in the field of bone research for the manuscript 'Sadie-Van Gijsen H, Smith W, Du Toit EF, Michie J, Hough FS, **Ferris WF**. Depot-specific and hypercaloric diet-induced effects on the osteoblast and adipocyte differentiation potential of adipose-derived stromal cells. *Mol Cell Endocrinol*, 2012 Jan 2; 348(1):55-66

d) Clinical personnel awards
Zane Stevens won the SEMDSA top Fellow Award and Francois van Zyl won the runner-up award.

GASTROENETROLOGY AND HEPATOLOGY HEAD OF DEPARTMENT: Prof. C J van Rensburg

Summary of activities:

Service Delivery:

- Consultation of patients referred with Gastrointestinal and Liver Disease
- Diagnostic and therapeutic endoscopic service
- New service: Capsule endoscopy procedures since 1 February 2013
- Liver biopsies under ultrasound guidance
- Oesophageal, anorectal manometry and oesophageal pH and impedance studies
- Outreach programmes – media (radio and press) interviews and surveillance programmes

Teaching and training:

- Undergraduate- and postgraduate students in Gastrointestinal and Liver Disease and Diploma in Sedation and Pain management (both local and international students)
- Participate in Continued Medical Education programmes accredited with the HPCSA, for example Annual Congress of the Namibian Medical Society in Windhoek 18 – 19 October 2013
- Speaker at the Gastro update for healthcare providers organised by StellMed

- Participate in local and national undergraduate- and postgraduate examinations for degree and certification purposes with the HPCSA and the CMSA

Research and Publications:

- Collaborative projects with the Division of Colorectal, The International Centre for Genetic Engineering and Biotechnology, UCT and the Division of Infectious Diseases
- Supervise research projects by postgraduate students for master's degrees (Stellenbosch University) and certification purposes (CMSA)
- Colorectal workshop attended by Medical and Nursing staff: Crystal Towers, Century City, Cape Town

Committee obligations:

- Departmental: Management Committee, Continued Professional Development, Human Resources and Postgraduate
- National: HOD and SAGES (President and responsible for the academic portfolio)
- Co-chairman ISUCRS Congress 2014, Cape Town, South Africa, September 2014
- National: SAGINS – Area Representative PN S Mostert

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|------------------|
| Head of Clinical Division | 1 | 1 |
| Senior Consultant | 1 | 1 |
| Senior Registrar | 1 | 1 |
| Rotating Registrar | 2 | 2 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist | 1 | 4 hours per week |
| Medical Officer | 1 | 8 hours per week |

MEDICINE

Output:

Outpatient Visits

| | |
|--------------------|--------|
| New patients | 1 754 |
| Follow-up patients | 9 438 |
| Total | 11 192 |

Theatre procedures

| | |
|--|--------------|
| Gastrosopies | 3 971 |
| Colonoscopies | 1 780 |
| Flexible sigmoidoscopies | 158 |
| Interventional ERCP's | 359 |
| Capsule endoscopies | 22 |
| Endoscopic dilations | 35 |
| Oesophageal Manometry studies | 63 |
| Stent placements (oesophagus, duodenum and colon) | 162 |
| Polypectomies (upper and lower GIT) | 76 |
| Double balloon enteroscopy | 4 |

Inpatient referrals and telephonic consultations: 1 500
Inpatients: Two beds with 80% occupancy

Comment on output:

The Division of Gastroenterology experienced a significant increase in patient numbers ($\pm 20\%$) compared with 2012, partly accounted by diversification of the service. This includes much improved patient palliative care (stent placement for malignant obstruction) and the re-introduction of gut motility services and the examination of the small bowel by double balloon enteroscopy. There was also a significant increase in Hepatitis patients seen at the Liver Clinic on a Wednesday.

An additional ERCP list was incorporated to alleviate the need for ERCP procedures. A Gastroenterology Surgeon is currently responsible for this list.

PART 2

Faculty of Health Sciences

Infrastructure development – upgrading

The introduction of capsule endoscopy and double balloon enteroscopy for evaluation of the small bowel significantly improved the diagnostic yield to find a cause in occult gastrointestinal bleeding thereby improving morbidity and cost-effective patient care.

- i. Highly skilled and motivated nursing personnel that contributed to efficient service delivery and improved patient care.
- ii. The availability of biologics, pegylated interferon and ursodeoxycholic acid facilitated improved patient care and health related quality of life in individual cases selected on merit.
- iii. pH Manometry that was previously done at the Groote Schuur Hospital, are now performed here at Tygerberg again.

Community outreach programmes/ community services and interaction.

- i. West Coast and Northern Cape Colon cancer surveillance and awareness week – a joint initiative by the Divisions of Gastroenterology Stellenbosch University and Colo-rectal surgery of the University of Cape Town, took place during August 2013

Partnerships

National:

Research: Division of Colorectal, The International Centre for Genetic Engineering and Biotechnology, UCT and the Division of Infectious Diseases

Private:

Quintiles – a selected partner site for conducting contract pharmaceutical research (gastroenterology)

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

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Journals Accredited by the Department of Education: 3 articles
 Textbooks and contributions to textbooks:
 One chapter on Alcoholic and Non-alcoholic Liver Disease
 Other peer-reviewed journals: 6 articles

Abstract presented:

1. L.J. Jeffers, C.J. Van Rensburg, A..T Banks, et al. Antiviral Efficacy of Entecavir in Black/African American and Hispanic Patients with Chronic Hepatitis B who are Nucleos(t)ide-Naive. 63rd Annual Meeting of the American Association for the Study of Liver Diseases (AASLD 2012). Boston, November 9-13, 2012. Abstract 433.

Teaching and Training (undergraduate-, postgraduate- and elective students)

- i) Tutorials and post-intake ward rounds – under- and postgraduate students and elective students (± 6 per year)
- ii) Practical learning experiences in the Outpatient Department, Endoscopy theatre and Motility laboratory of the division of Gastroenterology
- iii) MB ChB II Digestive 271, lectures
- iv) Supervision of research projects postgraduate students (MMed and CMSA Certificate in Gastroenterology)
- v) Serve on committee for under- and postgraduate teaching (locally) and Heads of Departments Committee (nationally)
- vi) Examiners under- and postgraduate students (Stellenbosch University and CMSA)
- vii) External examiner for MPhil and PhD candidates

Special achievements and other highlights

- i) Recipient of the Astrazeneca Scholarship 2013 (Dr Marc Lambiotte) – “The role of H.Pylori infection in HIV immune reconstitution”.
- ii) President: South African Gastroenterology Society (SAGES) (Prof. C.J. van Rensburg)
- iii) Editor: Gastro Review – official journal of SAGES (Prof. C.J. van Rensburg)

- iv) Member of the Editorial board of *World Journal of Gastroenterology* (Prof. C.J. van Rensburg) and the *World Journal of Gastrointestinal Pharmacology and Therapeutics* (Prof. C.J. van Rensburg)

GENERAL INTERNAL MEDICINE

HEAD OF DEPARTMENT: Dr Neshaad Schrueder

Summary of activities:

- a) Provision of General Specialist Services in Internal Medicine
- b) Teaching and Training in Internal Medicine of Stellenbosch University Undergraduate- and Postgraduate students
- c) Outreach and Support to the east Metro Health District

Resources:

| Posts (Full-time) | Number | Filled |
|-------------------|--------|--------|
| Specialist | 7 | 7 |
| Registrars | 14 | 14 |
| Medical Officers | 6 | 6 |
| Interns | 13 | 13 |

Output:

Admissions:

| | |
|-------------------|--------|
| F1 Emergency Unit | 11 705 |
| Medical wards | 6 842 |
| Total for Gen Med | 18 547 |
| MOPD visits | 6 639 |

Comment on output:

The pressure on the medical emergency ward continued with F1 seeing an unprecedented number of patients over the calendar year. Most of the efforts over the year have been to stabilise the operational environment of F1 with streamlining of systems and patient flow management. The lack of space and adequate staffing to cater for the increased patient load began to take its toll on the staff.

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The pressure on the medical ward beds continued with an average bed occupancy of over 100%.

The Medical Outpatient Department saw a new screening system for new appointments implemented. This resulted in a reduction in waiting time for a new patient appointment from almost 3 months to 23 days.

The Outpatient Department now sees appropriate referrals and has reduced the overall numbers seen in OPD.

PART 2

Faculty of Health Sciences

Infrastructure development – upgrading

Motivations for additional space for the medical emergency ward continued to be made. This has been seen as a crucial requirement for improving conditions within F1.

The renovation of ward D10 continued through 2013 and was expected to be completed in January 2014. This will provide source isolation facilities for infectious patients helping to protect staff and other patients. Some additional medical and Information Technology equipment was procured for the emergency ward to assist with streamlining patient management.

Community outreach programmes/community services and interaction.

The outreach and support to the east Metro district continued to increase in 2013. Eerste River Hospital and Khayelitsha Hospital were the main recipients of this outreach and support. Helderberg Hospital was added to the divisions' regular outreach and support on a weekly basis. The division also committed to covering the physician at Helderberg Hospital during periods of annual leave.

Delft Community Health Centre (CHC) was supported with visiting physicians attending the academic programme several times in 2013.

Partnerships:

International:

MOA University of Botswana

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

1. Bari V, Valencia JF, Vallverdu M, Girardengo G, Bassani T, Marchi A, Calvillo L, Caminal P, Cerutti S, Brink PA, et al. Refined multiscale entropy analysis of heart period and QT interval variabilities in long QT syndrome type-1 patients. *Conf. Proc. IEEE Eng Med Biol Soc.* 2013; 2013:5 554-7. doi: 10.1109/EMBC.2013.6610808: 5554-7
 2. Brink PA. Article visibility: journal impact factor and availability of full text in PubMed Central and open access. *Cardiovasc. J Afr.* 2013 Sep; 24(8): 295-6
 3. Brink PA. Reflections on a range of cardiovascular issues. *Cardiovasc. J Afr.* 2013 Oct; 24(9-10): 343
 4. Duchatelet S, Crotti L, Peat RA, Denjoy I, Itoh H, Berthet M, Ohno S, Fressart V, Monti MC, Crocarno C, Pedrazzini M, Dagradi F, Vicentini A, Klug D, Brink PA, Goosen A, Swan H, Toivonen L, Lahtinen AM, Kontula K, Shimizu W, Horie M, George AL (Jnr), Tregouet DA, Guicheney P, Schwartz PJ. Identification of a KCNQ1 polymorphism acting as a protective modifier against arrhythmic risk in long-QT syndrome. *Circ.Cardiovasc.Genet.* 2013 Aug; 6(4): 354-61
 5. Hedley P, Durrheim G, Hendricks F, Corfield VA, Jespersgaard C, Stovring B, Phan TT, Christiansen M, Goosen A, Brink PA. Long QT syndrome in South Africa: the results of comprehensive genetic screening. *Cardiovasc J Afr.* 2013 Aug; 26(6): 231-7
- Textbooks and contributions to textbooks
Nil

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Teaching and Training (undergraduate-, postgraduate- and elective students)

Undergraduate:

Total number of students rotating through General Medicine:

3rd yrs – 4 weeks – 261

4th yrs – 6 weeks – 242

5th yrs – 4 weeks – 220

SI's – 7 weeks – 179

Elective students – 52 students (Total of 323 weeks between the 52 students)

Postgraduate:

14 Rotating registrars on the MMed programme are supervised in Gen Med on a continuous basis.

The teaching programme has evolved over the 2013 year now with registrar-led presentations weekly. The division continues to contribute to the departmental academic meeting as per roster.

The increasing undergraduate student numbers have been a concern over the last year. The ability to accommodate all the students within the operational environment has become increasingly difficult and challenging. The overcrowding in the F1 emergency ward led to a withdrawal of junior students from this environment.

Special achievements and other highlights not covered by this template

The issues around F1 ward were addressed at the level of the office of the Provincial Minister of Health and should lead to improvement in the challenges faced in that environment.

DIVISION OF HAEMATOLOGY

HEAD OF DEPARTMENT: Dr Fatima Bassa

Summary of activities

CLINICAL ACTIVITIES:

- Unit is running much better after opening of the special care unit in November 2012

- Chemotherapy administration is also more efficient after expansion of the chemotherapy suite
- We have commenced clinical trials in an attempt to raise funds for the unit and to obtain medication that is currently not available in the state sector
- Increasing numbers of medical aid funded patients being referred to us. This is labour intensive and places considerable strain on the consultants, who need to constantly draw up and submit plans and submit motivations

TEACHING AND TRAINING

We have recruited a new subspecialist registrar in December 2013.

Have a very active postgraduate programme with combined meetings.

We are also closely involved with the clinical haematology undergraduate module.

Resources:

| Posts (Full-time) | Number | Filled |
|-------------------------|--------|--------|
| Consultants | 2 | 2 |
| Subspeciality registrar | 1 | 1 |

Output:

OUTPATIENTS

New outpatient referrals: 439
Follow up visits: 7 257
Chemotherapy administrations: 1 471

INPATIENTS:

727

Comment on output:

- Continuing challenges with ensuring optimal care of both inpatients and outpatients with existing staff complement. Further exacerbated with opening of the special care ward as these patients are entirely managed by Haematology with no assistance from an intern. This is difficult especially in view of the distance between D8 and the outpatient clinic, particularly when

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patients are unstable. Procuring the services of an intern or medical officer would greatly improve inpatient care and also allow registrars to spend more time performing appropriate duties

- Quality of inpatient care of high risk patients has been significantly improved with opening of the special care unit. Patients are now appropriately isolated, thereby reducing infections. One of the challenges is deployment of trained nursing personnel. Sr. Windvogel, the manager of the unit, is doing an exceptional job trying to ensure optimal nursing care
- Despite referral of patients who are stable to regional and district level hospitals, our outpatient numbers continue to increase. This includes both new referrals and the number of follow-up visits for patients already in our care. In an attempt to try to limit admissions, we see patients with complex problems more frequently as outpatients
- We are still having difficulty with transfusion of blood and other products. Currently we are still admitting patients to D8 for their transfusions. This results in inappropriate occupation of a bed, is

labour-intensive and is not cost-effective. We have been trying to resolve the situation by motivating for a day unit, but this was not approved. Urgent consideration should be given to revisiting this proposal

Part 2

Community outreach programmes/ community services and interaction.

Nil

We are unable to embark on outreach with current workload at TBH

Partnerships

National:

Dr Bassa, member of several national advisory boards

Private:

We are involved with clinical trials with various pharmaceutical companies. Currently three ongoing trials and another two awaiting MCC and ethics approval

International:

Currently involved with the following international collaborations

- Development of Stem cell, and Nucleic acid H3 Africa Biorepository
- Blood NIH funded HIV+Tumour Molecular Characterization Project (collaboration Stellenbosch and George Washington Univ.) Title: "The East Coast AIDS and Cancer Specimen Resource Supplement"

Achievements with regard to research activities and research outputs:

Number of publications from the division: 3

Ongoing research

Dr Bassa

- Textbooks and contributions to textbooks: Have submitted a chapter towards the Handbook of Medicine, being compiled by Prof. MR Moosa
- Promoter: MMed: Dr Z. Solomons: A retrospective study of the clinical features of patients with Plasmablastic Lymphoma at Tygerberg Hospital
- Co-supervisor: Rapid, cost-effective, blood-based TB diagnostic test which characterises and distinguishes between BCG, latent and active TB using flow cytometry by measuring intracellular cytokines released by CD4 T helper cells – MMED Dr Leonard Mutema, Division of Haematopathology
- Co-investigator: A five-year prospective study to improve the understanding of how HIV is transforming the lymphoma incidence, pattern and prognosis in patients at Tygerberg Hospital, Western Cape

Dr Sissolak:

Promoter: Dr D Kotze's PhD thesis "Prospective Analysis of Activation-induced Cytidine

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Deaminase Levels and EBV infection in Patients with HIV-related Lymphoma" in collaboration with Medical Virology and Columbia University
Co-promoter: Mr B. Flepisi's PhD thesis
"Biomarkers of HIV associated malignancies and of drug interaction between antiretrovirals and chemotherapy" in collaboration with Pharmacology

Teaching and Training (undergraduate-, postgraduate- and elective students)

- Continued teaching and assessment of undergraduate medical students
- Supervision, training and assessment of registrars from the Department of Medicine
- Participation in postgraduate academic programme – Department of Medicine/Haematopathology
- Supervision and training of subspecialist registrar
- Supervision and training of rotating registrar from the Division of Haematopathology, NHL
- Dr Bassa: module chair: late clinical rotation: Internal Medicine and member of undergraduate committee
Dr Sissolak: chair – Haematology module

DIVISION OF INFECTIOUS DISEASES HEAD OF DEPARTMENT: Dr Jantjie Taljaard

Summary of activities:

Outpatient service:

The Tygerberg Hospital Infectious Diseases Clinic (IDC) has prepared and initiated more than 4 500 patients on ART since January 2004. This is a primary level service and the initiation of ART at Tygerberg Hospital was an interim measure to allow capacity development in the subdistrict. During 2012/2013 several new ART clinics started in the subdistrict, making it possible to down refer patients from TBH – IDC.

During the last two years, more than 700 patients were down referred. In 2013 we particularly focused on transferring patients out to Kasselsvlei, Reed Street and Ruyterwact Community Health Centres (CHCs). The PEPFAR project supporting the decanting process came to an end in September 2013. The HAST directorate has agreed to sponsor the services of a medical officer and data capturer previously employed by the PEPFAR project.

Another focus of the clinic was to increase our level 2/3 function as the primary care patient numbers decrease. This component of the clinic functions as a referral and assessment unit (RAU). Specific patients currently identified to be referred to the RAU includes Hepatitis B and HIV co-infected patients, HIV patients with renal disease, Kaposi's sarcoma patients, second line ARV failure patients, all HIV patients with lung cancer, difficult to manage/diagnose patients, primary immunodeficiency patients and patients with infections that need tertiary care services. The electronic database facilitating patient care and follow-up contributes significantly toward faster consultations, better communication with clinics and ability to audit output.

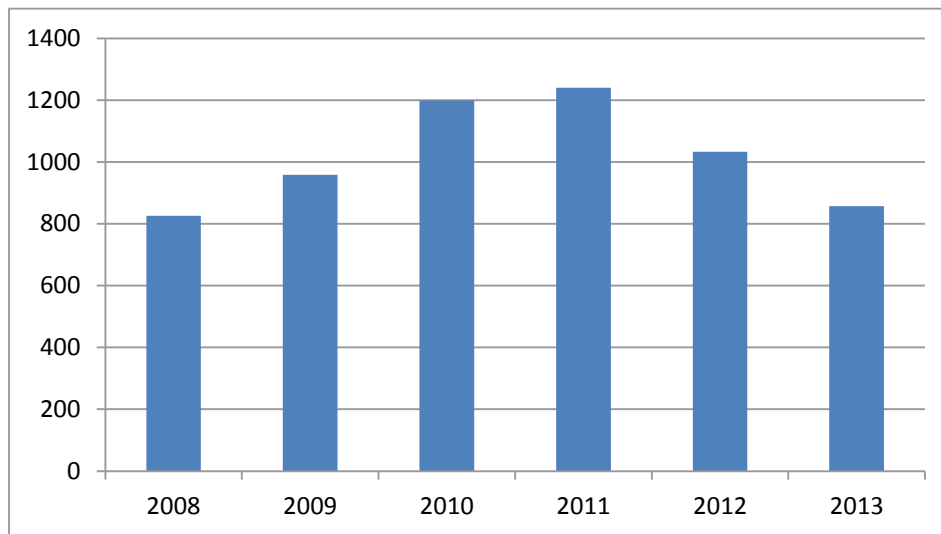
The onsite HIV pharmacy previously delivering easily accessible services to our patients and contributing significantly toward improving the patient experience has however been closed due to new pharmacy management. All patients now receive their medication from the main pharmacy.

Antibiotic Stewardship:

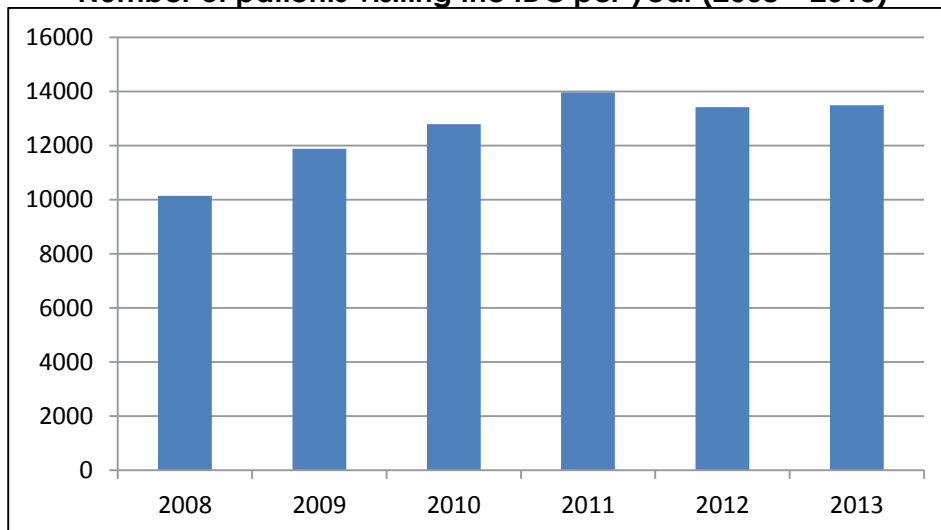
The Tygerberg Antibiotic Stewardship Committee continued with its work. A new antibiotic prescription sheet was developed for introduction early in 2014. An antibiotic restriction policy was developed to streamline access to broad spectrum antibiotics. Several new initiatives are being planned by the committee

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Number of patients on ART at TBH IDC (2008 – 2013)



Number of patients visiting the IDC per year (2008 – 2013)



In patient service:

Infectious diseases inpatient services are delivered on a consultative basis. Registrars will see the patients as soon as possible after referral and all cases will be discussed on the daily consultant round. The average number of consultations per week is 15, and most consultations originate from the general medicine wards, obstetrics high care and medical high care wards. Antibiotic stewardship rounds in surgical and medical ICU's and the internal medicine wards in collaboration with Medical Microbiology take place on a weekly basis.

Building of the new source isolation ward for medical patients (located in ward D10) was completed in December 2013. ID Ward rounds in the Divisions of Nephrology and Haematology continues.

Outreach and Support service

Monthly outreach visits to TC Newman, Paarl Hospital, Worcester and Brewelskloof Hospitals continued. Weekly outreach activities to Eersteriver Hospital were commenced in 2013. Antibiotic stewardship rounds also occur on the outreach platform. Karl Bremer and Paarl Hospital receive weekly stewardship rounds.

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Teaching:

Dr Arifa Parker was awarded the prestigious discovery subspecialisation grant for 2013 - 2014.

Dr Tabie Greyling was appointed in the new subspecialist registrar post in October 2013.

Dr Taljaard chaired the Infectious Diseases and Immunology theoretical module for the fourth year. All the members of the division, Drs Botha, Prozesky, Hugo, Van Schalkwyk, Zeier, Parker and Greyling were involved with undergraduate teaching.

All the members of the division was involved in CME activities during 2013 including STD management courses for nurses and HIV management courses for doctors, nurses and pharmacists.

Elective medical students from the Netherlands, Germany, USA and UK are exposed to HIV care and assist with research projects; this has been an enriching experience for staff and students alike.

Monthly clinical meeting with HAST subdistrict doctors continued.

The University of Fort Hare collaboration continued in 2013. The group of 40 registered nurses were the sixth group of students to

complete the one-year course in advanced management of HIV infected patients. As usual the course included highly successful practical mentorship visits to Tygerberg Hospital during September and October. This course aims to prepare and empower nurses to initiate antiretroviral therapy in the communities they serve, and is aligned to the National initiative, NIM-ART.

Research:

The HIV Research Unit located within the clinic is conducting a number of clinical research projects. This marriage of research and clinical care benefits patients by offering additional procedures and treatment and provides funding for additional health care team members – 40% of staff is funded by research. The unit has now been incorporated into the international clinical research group, ACTG, and forms part of FAMCRU (previously only a paediatric clinical trials unit – KIDCRU).

Dr Zeier completed her PhD studies at the end of 2013.

Dr Prozesky remained local PI of the highly successful leDEA database project.

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|--------|
| Sub Specialist Grd 2 | 2 | 2 |
| Senior Medical Officer | 3 | 3 |
| Subspecialist registrar | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist 6 hours | 6 | 6 |

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Output:

| ADULT ART STATS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-----------------|-------|-------|-------|-------|-------|------|
| Started on ART | 368 | 399 | 511 | 491 | 465 | 290 |
| Transfer out | 192 | 170 | 202 | 409 | 480 | 313 |
| Transfer in | 18 | 38 | 56 | 86 | 44 | 20 |
| Lost to follow | 12.5% | 11.5% | 11.5% | 14% | 14% | 15% |
| Total on ART | 826 | 958 | 1 199 | 1 240 | 1 033 | 857 |

| ADULT IDC VISITS | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------|--------|--------|--------|--------|--------|--------|
| Total clinic visits | 10 140 | 11 888 | 12 791 | 13 971 | 13 424 | 13 492 |

Comment on output:

Outpatient visits has remained stable in spite of continued focus on decanting of primary care patients. This probably reflects the increasing number of patients seen at the RAU and the slowing down of the decanting process due to unforeseen circumstances at primary care facilities.

Lost to follow-up numbers are slowly creeping up which is a phenomenon seen in more mature ARV programmes (11 years).

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading

Ward D10 was renovated to become a source isolation ward, mainly for the purpose of isolating TB patients in an effort to contain occupational and nosocomial TB. The ward opened in December 2013.

Partnerships

National:

- University of Fort Hare – HIV Management Course for Nurses

International:

- Dr Taljaard is project leader in the Stellenbosch University Rural Medical Education Initiative (SUR-MEPI), a multinational initiative including universities in KZN and Uganda
- Dr Prozesky is principle site investigator for the leDea Southern Africa HIV data collection initiative
- Drs Taljaard and Van Schalkwyk are management members of the newly established clinical trials unit, FAMCRU

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

1. Andersson MI, Preiser W, Maponga TG, **Heys I, Taljaard JJ**, van Rensburg C, Tedder RS, Ijaz S. Immune reconstitution hepatitis E: a neglected complication of antiretroviral therapy in Africa? AIDS. 2013 Jan 28;27(3):487-9. doi: 10.1097/QAD.0b013e32835b1074
2. Fenner L, Reid S, Fox MP, Garone D, Wellington M, **Prozesky HW**, Zwahlen M, Schomaker M, Wandeler G, Kancheya N, Boule A, Wood R, Henostroza G and Egger

2013 HIGHLIGHTS

Opening of Big Bore CT Scanner and Cancer Research and Training Centre



From left to right: Minister Theuns Botha, Prof. Nico Gey van Pijfs, Dr Matodzi Mukosi, Dr Paul Ciapparelli, Dr Magda Heunis and Prof Branislav Jeremic

CEO BALL



From left to right: Dr Andre Muller, Ms Denise Jefferies, Mr Ernest Tiervlei, Mr Desmond van der Linde, Ms Jennifer Sapto, Mr Aden Thomas and Ms Marchelle Hendricks

Cancerve visited the Oncology Wards



A very excited Cancerve group in front of Ward G3



Lee from Cancerve with a patient from Ward G3 and his mother

Casual Day



Various Departments participated in annual Casual Day



World Diabetes Day



Mr Gabriel Jansen van Vuuren being tested by Staff Nurse Mali



Ms Beukes and the team

2013 HIGHLIGHTS

New Adolescent Psychiatry Unit



At the cutting of the ribbon from left to right: Professional Nurse Cyster, Clinical Head Dr Sue Hawkrige, Head of the Adolescent Psychiatry Unit Dr Anusha Lachman, Deputy Director General: Secondary, Tertiary and Emergency Care, Dr Beth Engelbrecht, Minister of Health, Mr Theuns Botha and Chief Operational Officer, Dr Paul Ciapparelli



From left to right: Dr Anusha Lachman, Mr Theuns Botha, Dr Beth Engelbrecht and Dr Sue Hawkrige at the unveiling of the plaque

Women's Day



The South African Navy Band entertaining the crowd



Facility Board Chairperson, Ms Manette de Jager presenting a gift to patient Ms Marie Platjies



Ms Sipokazi Mtzula, Ms Patricia de Bruin (main hamper winner) and Mrs Lyn Williams who won the lucky draws sponsored by Capitec

Mandela Day



The staff who shared a birthday with Madiba was surprised with a gift from the Tygerberg Hospital's Facility Board

From left to right: Ms Khanyisa Jonas, Mrs Myra Matthee (Facility Board Member); Mr Philip Wolfaardt (Facility Board Member); Mrs Manette De Jager (Chairperson Facility Board) and Mr Xolani Kala



Die oudste pasiënt op Mandeladag in Tygerberghospitaal, was die 95 jarige Mej. Hendriena Visagie, wat verras was met 'n geskenk en gelukwense van die Tygerberg Hospitaal Fasiliteitsraad en die Bestuur van die hospitaal. Op die foto verskyn Mej. Visagie (pasiënt) saam met Mev. Latiefa Allie Fasiliteitsraads lid (van links) Dr. Paul Ciapparelli, Direkteur Kliniese dienste (regs) en Dr. Andre Muller (voor regs)



In aid of Mandela Day Tygerberg Hospital's crèche benefitted from Assupol Belville who generously donated R10 000 to the crèche. Here Mrs Rachel Basson, Director Nursing Services with a few of the crèches children accepts the cheque from Mr Gerhard Nel, Sales Executive Manager from Assupol Belville

Annual Children's Christmas Party



One of our sponsors from Spar took the time to come and assist by handing out gifts



Randall from Goosebumps brightened the patients' day with sweet treats



An excited patient with her gift that she received from Father Christmas

2013 HIGHLIGHTS

International Nurses Day



Tygerberg Hospital's Florence Nightingale, Ms Bertha Bailey from the Nephrology Department, wearing her nursing attire



From right to left: Mrs Rachel Basson (Head of the Nursing Department) awarded an overwhelmed Mrs Daniëna Irrera from the Stomatherapy Clinic with the Florence Nightingale Award sponsored by Bio-Oil

Infaith Service



Staff lighting the candles



Reverend Mpho Tutu and daughter Onalenna Buris lighting their candles

National Bandana Day



Staff of Supply Chain Management

2013 HIGHLIGHTS

New T-shirt



Provincial Pharmacist's Assistant of the Year



Two of Tygerberg Hospitals Pharmacist Assistants were awarded 1st and 2nd runner up in the whole Western Cape Province at the annual event organised by pharmacy services and sponsored by Aspen Pharmacare via the Pharmaceutical society of South Africa. Congratulations and well done on your accomplishment!

From Left to right: Dr Krish Vallabhjee (Chief Director: Strategy and Health Support), Anéll Koekemoer (1st Runner-up), Maritza Visser (Pharmacist's Assistant of the Year 2013), Willemien Charles (2nd Runner-up) and Dr Keith Cloete (Chief Director: Metro District Health Services)

Long Service Awards Ceremony



From Left to right: The 40 years' service recipients with Dr Dimitri Erasmus, Chief Executive Officer



From Left to right: Dr Beth Engelbrecht, Deputy Director General: Secondary, Tertiary and Emergency Care, Prof Craig Househam: Head of Health and Dr Dimitri Erasmus, Chief Executive Officer with Ms Anne Spocter, who started working at the hospital on 29 January 1973 as a Clerk and was promoted to an Admin Officer on 1 September 1998



From Left to right: Alistair Izobell and his band had the crowd shouting for more entertainment

Annual Open Day



Lucky draw winners

From left to right: Mr Adam Jones, Ms Charlene Felix, Radio Tygerberg presenter Rochelle Liedeman, Lauren Van Vuuren who celebrated her birthday on the day, Lee-Anne Strydom and Mr Ricardo Scott



Staff getting their blood pressure taken

- M for the International Epidemiologic Databases to Evaluate AIDS Southern Africa (IeDEA-SA) Collaboration. Tuberculosis and the risk of opportunistic infections and cancers in HIV-infected patients starting ART in Southern Africa. *Trop Med Int Health* Feb 2013; 18(2):194-198. doi:10.1111/tmi.12026. Epub 2012/11/30
3. Duwell MM, Knowlton AR, **Nachega JB**, Efron A, Goliath R, Morroni C, Maartens G, Chaisson RE. Patient-nominated, community-based HIV treatment supporters: patient perspectives, feasibility, challenges, and factors for success in HIV-infected South African adults. *AIDS Patient Care STDS*. 2013 Feb;27 (2):96-102. doi: 10.1089/apc.2012.0348
 4. Hong SY, Jerger L, Jonas A, Badi A, Cohen S, **Nachega JB**, Parienti JJ, Tang AM, Wanke C, Terrin N, Pereko D, Blom A, Trotter AB, Jordan MR. Medication possession ratio associated with short-term virologic response in individuals initiating antiretroviral therapy in Namibia. *PLoS One*. 2013; 8(2):e56307. doi: 10.1371/journal.pone.0056307. Epub 2013 February 28
 5. Johnson LF, Mossong J, Dorrington RE, Schomaker M, Hoffmann CJ, Keiser O, Fox M, Wood R, **Prozesky HW**, Giddy J, Garone DB, Cornell M, Egger M, Boule A for the International Epidemiologic Databases to Evaluate AIDS Southern Africa (IeDEA-SA) Collaboration. Life expectancies of adults receiving antiretroviral treatment in South Africa. *PLoS Med*. 2013 Apr;10(4):e1001418. doi: 10.1371/journal.pmed.1001418. Epub 2013 Apr 9.
 6. Hoffmann CJ, Schomaker M, Fox MP, Mutevedzi P, Giddy J, **Prozesky HW**, Wood R, Egger M, Boule A for the IeDEA Southern Africa Collaboration. CD4 slope and HIV RNA level as predictors of mortality independent of absolute CD4 count. *J Acquir Immune Defic Syndr*. 2013 May 1; 63(1): 34-41. Epub 2013/01/22
 7. Mills EJ, Funk A, Kanters S, Kawuma E, Cooper C, Mukasa B, Odit M, Karamagi Y, Mwehira D, **Nachega J**, Yaya S, Featherstone A, Ford N. Long-term health care interruptions among HIV-positive patients in Uganda. *J Acquir Immune Defic Syndr*. 2013 May 1; 63(1):e23-7. doi: 10.1097/QAI.0b013e31828a3fb8
 8. Schomaker M, Egger M, Maskew M, Garone D, **Prozesky HW**, Hoffmann C, Boule A and Fenner L for the International Epidemiologic Databases to Evaluate AIDS Southern Africa (IeDEA-SA) Collaboration. Immune recovery after starting ART in HIV-infected patients presenting and not presenting with tuberculosis in South Africa (Brief report). *J Acquir Immune Defic Syndr*. 2013 May 1; 63(1):142-145. Epub 2013/01/29
 9. **Van Schalkwyk M**, Andersson MI, **Zeier MD**, **La Grange M**, **Taljaard JJ**, Theron GB. The impact of revised PMTCT guidelines: a view from a public sector ARV clinic in Cape Town, South Africa. *J Acquir Immune Defic Syndr*. 2013 June 1; 63(2):234-8. doi: 10.1097/QAI.0b013e31828bb721
 10. Hosseinipour MC, Gupta RK, Van Zyl G, Eron JJ, **Nachega JB**. Emergence of HIV drug resistance during first- and second-line antiretroviral therapy in resource-limited settings. *J Infect Dis*. 2013 June 15; 207 Suppl 2:S49-56. doi: 10.1093/infdis/jit107. Review.
 11. Gupta RK, Wainberg MA, Brun-Vezinet F, Gatell JM, Albert J, Sönnnerborg A, **Nachega JB**. Oral antiretroviral drugs as public health tools for HIV prevention: global implications for adherence, drug resistance, and the success of HIV treatment programs. *J Infect Dis*. 2013 June 15; 207 Suppl 2:S101-6. doi: 10.1093/infdis/jit108

12. Chu R, Mills EJ, Beyene J, Pullenayegum E, Bakanda C, **Nachega JB**, Devereaux PJ, Thabane L. Impact of tuberculosis on mortality among HIV infected patients receiving antiretroviral therapy in Uganda: a prospective cohort analysis. *AIDS Res Ther.* 2013 July 13; 10(1):19. doi: 10.1186/1742-6405-10-19
13. Kanters S, **Nachega J**, Funk A, Mukasa B, Montaner JS, Ford N, Bucher HC, Mills EJ. CD4 T-cell recovery after initiation of antiretroviral therapy in a resource-limited setting: a prospective cohort analysis. *Antivir Ther.* 2013 Aug 20. doi: 10.3851/IMP2670. [Epub ahead of print]
14. Wandeler G, Gsponer T, Mulenga L, Garone D, Wood R, Maskew M, **Prozesky HW**, Hoffmann C, Ehmer J, Dickenson D, Davies M-A, Egger M, Keiser O for the IeDEA Southern Africa Collaboration. AZT impairs Immunological Recovery on First-line ART in Southern Africa: Collaborative analysis of cohort studies. *AIDS.* 2013 September 10; 27(14):2225-32. Epub 2013/05/08
15. Ndiaye M, Nyasulu P, Nguyen H, Lowenthal ED, Gross R, Mills EJ, **Nachega JB**. Risk factors for suboptimal antiretroviral therapy adherence in HIV-infected adolescents in Gaborone, Botswana: a pilot cross-sectional study. *Patient Prefer Adherence.* 2013 September 11; 7: 891-5. doi: 10.2147/PPA.S47628
16. Kenyon C, Bonorchis K, Corcoran C, Meintjes G, Locketz M, Lehloenyana R, Hester F, Vismar HF, Naicker P, **Prozesky HW**, Van Wyk M, Bamford C, Du Plooy M, Imrie G, Dlamini S, Borman A, Colebunders R, Yansouni CP, Mendelson M and Govender NP. A Dimorphic Fungus Causing Disseminated Infection in South Africa. *N Engl J Med.* 2013 October 10; 369(15):1416-1424
17. **Nachega JB**, Uthman OA, Mills EJ, Quinn TC. Adherence to Antiretroviral Therapy for the Success of Emerging Interventions to Prevent HIV Transmission: A Wake up Call. *J AIDS Clin Res.* 2013 October 22; 2012(Suppl 4). pii: 007
18. Wandeler G, Gerber F, Rohr J, Chi B, Orrell C, Chimbetete C, **Prozesky HW**, Boulle A, Hoffmann C, Gsponer T, Fox M, Zwahlen M, Matthias Egger M for IeDEA Southern Africa. Tenofovir or Zidovudine in Second-line ART after Stavudine Failure in Southern Africa. *Antivir Ther.* 2013 December 3. doi: 10.3851/IMP2710. Epub 2013/12/03
19. Marconi VC, Wu B, Hampton J, Ordóñez CE, Johnson BA, Singh D, John S, Gordon M, Hare A, Murphy R, **Nachega J**, Kuritzkes DR, Del Rio C, Sunpath And South Africa Resistance Cohort Study Team Group Authors H. Early warning indicators for first-line virologic failure independent of adherence measures in a South african urban clinic. *AIDS Patient Care STDS.* 2013 December; 27(12):657-68. doi: 10.1089/apc.2013.0263
20. An emmonsia species causing disseminated infection in South Africa. **Heys I, Taljaard J**, Orth H. *N Engl J Med.* 2014 January 16; 370(3):283-4

Textbooks and contributions to textbooks

Teaching and Training (undergraduate-, postgraduate- and elective students)

- Dr Taljaard – Chair of the Infectious Diseases and Clinical Immunology theoretical module for four years
- Dr Arifa Parker won the prestigious Discovery grant for subspecialist training in Infectious Diseases

The post for subspecialiste registrar in Infectious Diseases was created in 2013. Dr Tabie Greyling is the first to be appointed in this post.

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DIVISION OF NEPHROLOGY

HEAD OF DEPARTMENT: Prof. MR Davids

Summary of activities

Resources

| Posts (full-time) | Number | Filled |
|-------------------|--------|--------|
| Nephrologists | 3 | 3 |
| Registrars | 4 | 4 |

Output

Source:

Admissions:
Ward A7- total 303 admissions

Patients on chronic dialysis at year-end:
Haemodialysis – 72
peritoneal dialysis – 56

Visits for the year:
Nephrology OPD – 2 084
(new 291, follow-up 1 793)
Peritoneal Dialysis Clinic – 725
Transplant Clinic – 2479
Haemodialysis Units – 7 755

Procedures:

Haemodialysis: Chronic 7113, acute 656
Plasmapheresis: 172
Charcoal haemoperfusion: 4
Kidney biopsies: 143
Kidney Transplants:
New renal transplants – 14
Living donor transplants – 8
Surviving patients followed up at TBH – 165
Cumulative total transplants - 933

Assessments for dialysis/transplant programme:
Total assessed 139, accepted 43, not
accepted 92, no final decision 4.

Part 2

Faculty on Health Sciences

Infrastructure development – upgrading

New water treatment system providing dramatically improved water quality.

Community outreach programmes / community service and interaction.

Nephrology training of fellows from the developing world continues: Dr Kapembwa from Zambia completed his first year of nephrology training and will stay for two years. He is sponsored by the International Society of Nephrology.

PPIs with Paarl and Vredenburg Units of National Renal Care and Hermanus Unit of Fresenius Medical Care continue successfully. Improves access to dialysis and improves QOL of patients involved.

Partnerships

International:

Involvement in the PACT cohort study with other African centres and Harvard University School of Public Health. Collaboration with CID and others on HIV and renal disease project. Prof. Davids involved in establishing a national dialysis and transplantation registry.

Achievements wrt research activities and research outputs

Articles published:

1. **Davids MR**, Chikte U, Grimmer-Somers K, Halperin ML
Usability testing of a multimedia e-learning resource for electrolyte and acid-base disorders. *British Journal of Educational Technology*, 2014; 45:367-381. DOI: 10.1111/bjet.12042. First published online 10 April 2013.
2. **Davids MR**, Chikte UME, Halperin ML
An efficient approach to improve the usability of e-learning resources: the role of

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heuristic evaluation. Adv Physiol Educ, 2013; 37:242-248; DOI:10.1152/advan.00043.2013.

Supervision of Masters research Projects

Completed projects:

Dr Francois Bouwer – MMed in Internal Medicine at Stellenbosch University. Project title: Comparison of the outcome of patients with acute renal failure as a complication of HELLP syndrome before and after 36 weeks gestation. MMed, 2013. 17 pp. Supervisors: Dr E. Langenegger and Prof. M.R. Moosa

Ongoing projects:

1. **Dr Karla Bezuidenhout** – MMed in Internal Medicine at Stellenbosch University. Project title: The influence of storage time and temperature on the measurement of serum, plasma and urine osmolality. Supervisor: Prof MR Davids.
2. **Dr Elmo Pretorius** – MMed in Internal Medicine at Stellenbosch University. Project title: Oral versus pulse intravenous cyclophosphamide: a retrospective analysis of adverse events in a high infectious diseases burdened setting. Supervisors: Dr R. du Toit and Prof. M.R. Davids

Teaching and Training (undergraduate-, postgraduate- and elective students).

Internal Medicine registrars trained in nephrology (Drs Du Toit van der Merwe, Mazhar Amirali, Estelle Cornellison, Urisha Brijjal, Mahmoud Al-Naili, Dewald Barnard, Lloyd Joubert, Zarainah Solomons, Jane Shaw, Juliette Morrow, Tela Bulaya). Dr Sebastian completed his subspecialist training and passed his College Certificate examination. Good pass rate in nephrology for undergraduate MBChB students.

Special achievements

Prof. Davids conducted a teaching visit to Ghana as an Educational Ambassador of the International Society of Nephrology.

DIVISION OF NEUROLOGY

HEAD OF DEPARTMENT: Prof. J. Carr

Summary of activities:

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|--------|
| 3 | 3 | 3 |
| | | |
| Posts (sessional – how many hours worked per week) | | |
| 1 | | 10 |

Output:

| | |
|--------------------|-------|
| Outpatient visits: | 3 476 |
| Admissions: | 397 |
| EEG | 1341 |
| EMG | 633 |
| Sleep Studies | 30 |

Comment on output:

Output unchanged compared to previous years.

PART 2

Faculty of Health Sciences

Community outreach programmes/community services and interaction.

Ongoing outreach to Worcester and Helderberg hospitals. Establishment of video link with Constantiaberg Mediclinic for purpose of exchanging academic information and "virtual" attendance of neuroscience meeting held weekly at Constantiaberg Mediclinic.

Partnerships

International:

GEO-PD (Genetic Epidemiology of Parkinson's disease Consortium)

Movement Disorders Society: Task Force on Africa

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Achievements with regard to research activities and research outputs:

Number of publications from the department/division

- 1 Heckman MG, Soto-Ortolaza AI, Aasly JO, Abahuni N, Annesi G, Bacon JA, Bardien S, Bozi M, Brice A, Brighina L, Carr J, Chartier-Harlin MC, Dardiotis E, Dickson DW, Diehl NN, Elbaz A, Ferrarese C, Fiske B, Gibson JM, Gibson R, Hadjigeorgiou GM, Hattori N, Ioannidis JP, Boczarska-Jedynak M, Jasinska-Myga B, Jeon BS, Kim YJ, Klein C, Kruger R, Kyratzi E, Lesage S, Lin CH, Lynch T, Maraganore DM, Mellick GD, Mutez E, Nilsson C, Opala G, Park SS, Petrucci S, Puschmann A, Quattrone A, Sharma M, Silburn PA, Sohn YH, Stefanis L, Tadic V, Theuns J, Tomiyama H, Uitti RJ, Valente EM, Van Broeckhoven C, van de Loo S, Vassilatis DK, Vilariño-Güell C, White LR, Wirdefeldt K, Wszolek ZK, Wu RM, Hentati F, Farrer MJ, Ross OA; Genetic Epidemiology of Parkinson's Disease (GEO-PD) Consortium. Population-specific frequencies for LRRK2 susceptibility variants in the Genetic Epidemiology of Parkinson's disease (GEO-PD) Consortium. *Mov Disord*. 2013 Oct; 28(12):1740-4. doi: 10.1002/mds.25600. Epub 2013 Aug 2.
- 2 Glanzmann B, Lombard D, Carr J, Bardien S. Screening of two indel polymorphisms in the 5' UTR of the DJ-1 gene in South African Parkinson's disease patients. *J Neural Transm*. 2013 Sep 20. [Epub ahead of print]
- 3 Blanckenberg J, Bardien S, Glanzmann B, Okubadejo NU, Carr JA. The prevalence and genetics of Parkinson's disease in sub-Saharan Africans. *Journal of the Neurological Sciences* 2013; 335: 22-25.
- 4 Blanckenberg J, Ntsapi C, Carr JA, Bardien S. EIF4G1 R1205H and VPS35 D620N mutations are rare in Parkinson's disease from South Africa. *Neurobiology of Ageing* 2014 Feb; 35 (2):445.e1-3.

Teaching and Training (undergraduate-, postgraduate- and elective students)

Professor Carr is chairperson of the Neuroscience block.

Special achievements

Professor Carr was awarded the Dr Rana International Parkinson's Service Award (World Parkinson's Programme).

The Sailor Malan fund for the study of Parkinson's disease made an award of R105 000 to the Division of Neurology for the purpose of investigating the cause of Parkinson's.

DIVISION OF CLINICAL PHARMACOLOGY

HEAD OF DEPARTMENT: Prof B Rosenkranz

Summary of activities:

Service:

The service function of the Division of Clinical Pharmacology includes Therapeutic Drug Monitoring (TDM, 32 drugs) and the operation of the nationwide Tygerberg Poison Information Centre. A total number of 30 021 samples were analysed in the TDM laboratory in 2013, of which 46,2% were for Tygerberg Hospital as the main customer. The remainder of laboratory analyses was for other provincial hospitals and for various outreach services.

The Tygerberg Poison Information Centre in total provided 6 672 consultations; 43% of the cases were related to non-drug chemicals, 39% to drug overdoses, 11% to biological exposures and 7% were non-patient related calls. Thirty-five percent of the calls came from the Western Cape and as in previous years, most of them (65%) came from other provinces, some even from outside the country.

Members of the Division actively participated in the Drug and Therapeutics Committee, the Provincial Pharmacy and Therapeutics Committee and the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences.

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Teaching:

Under- and postgraduate programmes for medical and physiotherapy students were offered by the Division of Clinical Pharmacology.

In 2013, the first two students successfully completed the Postgraduate Diploma in Pharmaceutical Medicine course. Three students graduated in 2013 (one MSc, one PhD student in the Division, one PhD student in the Department of Paediatrics and Child Health, co-supervised by Prof. Rosenkranz). Four students (three PhD, one MSc) are busy working on their research projects. In addition, a German medical student (Wuerzburg University) performed the practical work of his medical thesis (Dr med) in the Division.

Research:

The clinical pharmacology research addressed biomarkers in HIV-associated malignancies and drug utilisation in children. These studies were performed together with clinical departments at Tygerberg Hospital and external clinics. Nonclinical projects addressed interactions between traditional medicines and conventional drugs (*in vitro* metabolism), and the use of surfactant to improve pulmonary drug absorption. Research performed by the Tygerberg Poison Information Centre included projects related to pesticide poisonings, methamphetamine exposures in the Western Cape, as well as an analysis of poison information centres in Africa. In collaboration with the University of Cape Town we are involved in research projects aimed at the therapeutics of HIV-associated neurocognitive impairment.

The research output has been presented in peer-reviewed publications and at scientific meetings.

Resources:

| Posts (Full-time) | Number | Filled |
|-------------------------------------|--------|--------|
| Professor (Head of Division) | 1 | 1 |
| Senior Specialist / Researcher | 4 | 3 |
| Principal Pharmacist / Scientist | 2 | 2 |
| Medical Officer (5/8) | 1 | - |
| Technologist | 6 | 6 |
| Administrative assistant | 1 | 1 |
| Technical assistant | 1 | 1 |
| Posts (sessional) | | |
| Specialists | 3 | 3 |

The Division was actively supported by two Honorary Lecturers, clinical consultants and external experts assisting with the teaching of undergraduate- and postgraduate students.

In January 2013, an Executive Committee was established for the Division of Clinical Pharmacology comprising of all senior staff members.

Output:

Tygerberg Poison Information Centre –
 Consultations: 6 672
 Laboratory services (TDM) – Analyses: 30 021

Comment on output:

In 2013, some changes were made to the staffing of the Division. In January 2013, a Senior Specialist (Clinical Pharmacologist), Dr Eric Decloedt, joined the Division, which led to a considerable improvement of the clinical activities of the Division, including clinical teaching, clinical pharmacology consultancy to Tygerberg Hospital and to the Division. Furthermore, a new head of the Bioanalytical Laboratory (Dr Gasen Naidoo) was recruited – after Dr Heiner Seifart's retirement in 2013 – and a Medical Officer (5/8) post as well as – for the first time – a registrar post in Clinical

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Pharmacology were created. A Senior Specialist (Clinical Pharmacologist) post is still frozen; filling of this post would support an expansion of the clinical pharmacology consultancy service to Tygerberg Hospital and to the Province.

The toxicology service provided by the Tygerberg Poison Information Centre remained threatened by the lack of financial support from the Province, especially for the after-hours service. Therefore, it is highly appreciated that – as in previous years – the Centre was kindly supported by dedicated experts from Emergency Medicine and from UCT Clinical Pharmacology.

Besides the participation in activities of the Faculty and the Hospital, members of the Division are actively engaged in national and international organisations.

The research output of the Division was presented in peer-reviewed publications and in presentations on international and national scientific meetings (see below).

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading

The scope of the Division has been reviewed extensively at the Strategic Planning Meeting in November 2012. This resulted in an Action Plan agreed by Executive Committee of the Division in January 2013. The increased clinical focus of the Division is reflected in a name change from Division of Pharmacology to Division of Clinical Pharmacology following approval by Faculty Management and the Senate.

Community outreach programmes/ community services and interaction

- C.J. Marks (member of steering committee): Multi-stakeholder meeting for WHO (World Health Organisation) and SAICM (Strategic Approach to International Chemicals Management), 21 to 24 May 2013, Lusaka, Zambia

Feasibility Studies for a Subregional Poison Centre in the East Africa Subregion

- C.J. Marks, C.A. Wium, A. du Plessis: Safety Expo: Table View Pick n Pay Centre. Participation in the Safety Expo by providing educational information on exposures to poisonous substances, 30 August 2013, Cape Town
- C.J. Marks, C.A. Wium, A. du Plessis: Contribution to the WHO antidote availability programme during the Lead Prevention Week, 21 – 25 October 2013
- Contributions in:
 - Die Rapport, February 2013. Afrika-by werklik “moordenaar”. E.H. Decloedt
 - Animal Talk, March 2013. Pets and Poison. C.J. Marks
 - Rooi Rose, August 2013. “Aspirien, wondermiddel”. C.J. Marks
- SABC3 TV interview, 4 December 2013
 - Snake and Scorpion Envenomation. Dr G.J. Muller
- Radio Interviews: 30 July 2013
 - 90.4 FM: Poisoning Exposures in the community: C.J. Marks
- Workshops:
 - Biological Toxins – Workshop for Environmental Resource Management Department (ERMD) of the City of Cape Town. 18 December 2013 – Ms C.J. Marks, Ms C.A. Wium
 - Workshop held at Mediclinic for the South African Society for Clinical Pharmacy: Biological Toxins, C.J. Marks. 8 April 2013
 - StellMed: Cape Town: Acute Poisoning – Ms C.J. Marks and Ms C.A. Wium. 22 February 2013
 - StellMed: Port Elizabeth: Acute Poisoning – Ms C.A. Wium. 12 September 2013
 - StellMed Namibia: Acute Poisoning – Ms C.A. Wium. 12 September 2013
 - Pharmaceutical Care Management Association (PCMA): Biological toxins, 21 November 2013, Kirstenbosch Botanical Gardens, Ms C.J. Marks

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Partnerships

National partnerships:

- Participation in the joint working group of the national Poison Information Centres under the umbrella of the Department of Environmental Health
- Regular joint research meetings with the Division of Clinical Pharmacology (UCT) and the School of Pharmacy (UWC) in order to facilitate research and teaching collaboration
- Research co-operation with the Tygerberg Department of Paediatrics and Child Health, the Desmond Tutu TB Centre, the Division of Haematology, the University of Cape Town and Synexa Life Sciences
- Prof. Rosenkranz is council member of the CMSA College of Clinical Pharmacologists, Vice-president of the South African Society for Basic and Clinical Pharmacology (SASBCP) and chair of the Finance Committee of the 17th World Conference of Basic and Clinical Pharmacology to be held in Cape Town in July 2014 (WCP2014). Capacity building is provided to one of the black PhD students who serve as a member of this Committee and as webmaster for SASBCP
- Prof. Rosenkranz is member of the HOPE Kapstadt Stiftung; HOPE Cape Town is closely affiliated with the Faculty of Medicine and Health Sciences
- In partnership with the Medicines Control Council (MCC), the South African Society for Basic and Clinical Pharmacology (SASBCP) and the Southern African Academy for Medicines Development (SAAMD), Prof. Rosenkranz organised the Regulatory Workshop "New Developments in Drug Regulation", Pretoria (26.-27.09.2013)
- Dr Decloedt is a reviewer of the MCC Central Clinical Committee

Private partnerships:

- Analysis of drugs for private pathologists and other institutions
- Biological tests for the WP Blood Transfusion Services
- Regular donations to the Tygerberg Poison Information Centre from the Agricultural Crop Protection Dealers Association of SA
- Sponsorship of the Pharmaceutical Medicine programme by GSK, Boehringer Ingelheim and Janssen Pharmaceutica
- Marketing support of the Tygerberg Poison Information Centre by Zoom Advertising, lead office for Ogilvy Earth in Africa
- Prof. Rosenkranz is an active member of the UK Faculty of Pharmaceutical Medicine (RCP) (International Committee) and of IUPHAR (Membership Committee)
- C. Marks, Director of the Tygerberg Poison Information Centre, is a member of a WHO working group preparing recommendations for the development of Poison Information Centres in Africa

International partnerships:

International research collaborations continued with the Clinics for Infectious Diseases, University of Wuerzburg, Germany and the Department of Pharmacy at University of Florida, Gainesville, USA. The cooperation with Wuerzburg was supported by the National Research Foundation South Africa, the Deutsche Forschungsgemeinschaft (DFG) and the Bavarian Federal Government (International Research Training Group project 1522 "HIV/AIDS and Associated Infectious Diseases in South Africa"). IRTG provided funding for a South African PhD student and a German medical student who spent five months in the Division of Clinical Pharmacology. One of the PhD students in the Division is supported by a US Fogarty grant in cooperation with Brown University (Rhode Island).

Achievements w.r.t research activities and research outputs:

Publications:

1. Van Zyl JM, Smith J and Hawtrey A. The effect of a peptide-containing synthetic lung surfactant on gas exchange and lung mechanics in a rabbit model of surfactant depletion. *Drug Design, Development and Therapy*. 7, 139-148, 2013
2. Hawtrey AO, Ariatti M and Van Zyl J.M. Polymerization of glycine and L-phenylalanine to short homooligopeptides by nitrobiuret under aqueous conditions. *International Journal of Scientific Research*, 2, 20-21, 2013
3. Van Zyl JM, Smith J. Surfactant treatment before first breath for respiratory distress syndrome on preterm lambs: comparison of a peptide-containing synthetic lung surfactant with porcine-derived surfactant. *Drug Design, Development and Therapy*. 7, 905-916, 2013
4. Veale DJH, Wium C, Muller GJ. Toxicovigilance I: A survey of acute poisonings in South Africa based on Tygerberg Poison Information Centre data. *SAMF* 2013; 103(5): 293 – 297
5. Veale DJH, Wium C, Muller GJ. Toxicovigilance II: A survey of the spectrum of acute poisonings and current practices in the initial management of poisoning cases admitted to South African hospitals. *SAMF* 2013; 103(5): 298 – 303
6. Fasinu PS, Gutmann H, Schiller H, Alexander-David J, Bouic PJ, Rosenkranz B. The potential of *Sutherlandia frutescens* for Herb-Drug interaction. *Drug Metab Dispos* 2013; 41: 488-497
7. Cawello W, Rosenkranz B, Schmid B, Wierich W. Pharmacodynamic and pharmacokinetic evaluation of coadministration of lacosamide and an oral contraceptive (levonorgestrel plus ethinylestradiol) in healthy female volunteers. *Epilepsia* 2013; 54(3): 530-536
8. Flepisi TB, Lochner A, Huisamen B. The Consequences of Long-Term Glycogen Synthase Kinase-3 Inhibition on Normal and Insulin Rat Hearts. *Cardiovasc Drug Ther* DOI 10.1007/s10557-013-6467-8
9. Fasinu PS, Gutmann H, Schiller H, Bouic PJ, Rosenkranz B. The potential of Hypoxis hemerocallidea for herb-drug interaction. *Pharm Biol* 51: 1499-1507 (2013)
10. Fasinu P, Orisakwe OE. Heavy Metal Pollution in Sub-Saharan Africa and Possible Implications in Cancer Epidemiology. *Asian Pacific Journal of Cancer Prevention* 2013; 14(6): 3393-3402.
11. Njovane XW, Fasinu PS, Rosenkranz B. Comparative evaluation of warfarin utilisation in two primary healthcare clinics in the Cape Town area. *Cardiovasc J Africa* 24: 19-23 (2013)
12. Liwa AC, Schaaf HS, Rosenkranz B, Seifart HI, Diacon AH, Donald PR: Para-aminosalicylic acid plasma concentrations in children in comparison with adults after receiving a granular slow-release preparation. *J. Trop Pediatr* 59(2):90-4 (2013)
13. Walubo A, Barnes K, Kwizera E, Greeff O, Rosenkranz B, Maartens . Clinical Pharmacology becomes a specialty in South Africa. *S Afr Med J* 103: 150-151 (2013)
14. Koegelenberg CFN, Nortje A, Lalla U, Enslin A, Iruken EM, Rosenkranz B, Seifart HI, Bolliger CT.: The pharmacokinetics of enteral antituberculosis drugs in patients requiring intensive care. *S Afr Med J* 103: 394-398 (2013)
15. Von Bibra M, Rosenkranz B, Pretorius E, Rabie H, Edso, C, Lenker U, Cotton M, Klinker H. Are lopinavir and efavirenz serum concentrations in HIV-infected children in the therapeutic range in clinical practice? *Paed Int Child Health*, accepted for publication (2013)
16. Sy S, Innes S, Derendorf H, Cotton M, Rosenkranz B. Estimation of intracellular concentration of stavudine-triphosphate in HIV-infected children given the reduced dose of 0.5 mg/kg twice daily. *Antimicrobial Agents Chemother*, published online ahead of print on 2 December 2013, doi:10.1128/AAC.01717-13

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Decloedt EH, Maartens G. Neuronal toxicity of efavirenz: a systematic review. *Expert Opin Drug Saf.* 12: 841-846 (2013)

Textbooks and contributions to textbooks

1. Marks CJ, Wium CA, Decloedt EH. Toxicology. In: Wallis L.A, Reynolds T.A (eds): *AFEM Handbook of Acute and Emergency Care*. First Ed. Oxford University Press Southern Africa, 2013, 652 – 724

Other contributions

1. Rosenkranz B: Chair of session "Living with HAE around the world". Eighth C1-INH Deficiency Workshop, Budapest, Hungary (23 to 26 May 2013)
2. Rosenkranz B.: Hereditary angioedema – The situation in South Africa. Eighth C1 Inhibitor Deficiency Workshop, Budapest, Hungary (23 to 26 May 2013)
3. Rosenkranz B.: Enhancement of education in Medicines Development in Africa. Fifth General Assembly of PharmaTrain IMI Project, Macclesfield, United Kingdom: (18 September 2013)
4. Clemens D, Lenker U, Pretorius E, Taljaard J, Rosenkranz B, Cotton M, Klinker H: Efavirenz-und Nevirapin-Plasmakonzentrationen im Rahmen der antiretroviralen Therapie bei HIV-infizierten Schwangeren in Südafrika. 6th German-Austrian AIDS Congress 2013, Innsbruck, Austria (12 to 15 June 2013)
5. Various scientific presentations were given at meetings of the South African Clinical Research Association (SACRA, March and September 2013, Prof. Rosenkranz), at the Medicines Update Course presented by the Department of Medicine (June 2013, Prof. Rosenkranz and Dr Decloedt), and at the 57th Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University (August 2013); Prof. Rosenkranz was also

Co-Chair of the Centre for Infectious Diseases Session

6. Prof. Rosenkranz is Associate Editor, *Frontiers in Pharmaceutical Medicine and Outcomes Research*

Teaching and Training (undergraduate-, postgraduate- and elective students)

Undergraduate

The Division was heavily involved in its academic lecturing service to undergraduate MBChB medical students beginning from the foundation phase and throughout the curriculum. This included second-year extended degree programme (EDP2) students preceding their incorporation in the mainstream programme. The main MBChB student teaching blocks include the first year "Principles of Therapy" and "Basic Therapeutic Principles" (chair: Prof. J. van Zyl), as well as "Clinical Pharmacology" (chair: Dr E. Decloedt) for the fifth year. Dr Decloedt organised clinical pharmacology student tutorials, and members of the Division provided lectures on drug treatment to second- through fourth-year students.

The year has also seen a further expansion in lecturing pharmacology to third-year physiotherapy students. This important input familiarises students with drug action that potentially could affect physical therapy of patients. Ultimately this course will improve the implications that pharmacology has for physiotherapy treatment and their patients in practice.

Postgraduate

In 2013, 18 students were enrolled in the Postgraduate Diploma in Pharmaceutical Medicine course, which had been established in 2010. The first two students graduated in March 2013. The course has become a member of the EU PharmaTrain Federation; this important network assists in international recognition and in joint teaching programmes with course providers internationally. External expert lecturers from South Africa and internationally participated in the presentation

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of the programme, which has already received very favourable feedback from MCC and industry.

Three students graduated in 2013 (L. de Kock [MSc student], P. Fasinu [PhD student] and S. Innes [PhD student]) in the Department of Paediatrics and Child Health, co-supervised by Prof. Rosenkranz. Four students (three PhD, one MSc) are busy working on their research projects. In addition, a German medical student (Wuerzburg University) performed the practical work of his medical thesis (Dr med) in the Division. In addition, three German medical students (Wuerzburg University) performed the practical work of their medical thesis (Dr med) in the Division as part of the International Research Training Group project 1522 'HIV/AIDS and Associated Infectious Diseases in South Africa', supported by the NRF, the Deutsche Forschungsgemeinschaft and the Bavarian Federal Government.

During the report year, the Division contributed to lecturing of MSc students in Physiotherapy. Nine pharmacist intern students were tutored individually during a two week period in the Tygerberg Poison Information Centre in aspects relating to pharmacology and toxicology as part of their requirements set by the HPCSA and the SA Pharmacy Council, respectively.

Staff of the Tygerberg Poison Information Centre contributed to the Emergency Medicine MMed Programme by a workshop on Toxicology (16 January 2013, held by C.J. Marks, A. du Plessis and C.A. Wium).

The Division was co-organiser of the third Annual Novartis and Stellenbosch University Clinical Science Workshop in September 2013. This workshop provides a platform for postgraduate students to learn about some interesting scientific aspects around medicine's development, such as epidemiology, population pharmacokinetics and ethical issues.

PULMONOLOGY AND MEDICAL ICU **HEAD OF DEPARTMENT: Prof. Elvis Irušen**

Summary of activities

A5 ICU

A5 ICU is a 7 bedded unit dedicated primarily to the care of critically ill medical patients. It is currently being managed by a critical care consultant, one senior registrar in critical care, two full-time pulmonologists and 2 part-time pulmonologists. The patient: nursing ratio is for the majority of the time (approximately 80%) 2:1.

In 2013 there were 334 patients admitted to the unit (268 in 2012) with a mean age of 41 and a mean Apache score of 19. Fifty-six patients were non-medical (surgical, obstetrics and gynaecology). The average length of ICU stay was six days and the mortality rate was 20% (67 deaths). The turnover had to be increased following a dramatic increase in the number of referrals primarily from Khayelitsha.

Three new ventilators were obtained for the unit. In addition, trials of high flow oxygen (for non-invasive ventilation) and oesophageal monitoring were undertaken.

The pursuit for excellence in infection prevention continued in 2013. Programmes to highlight prevention measures and adherence to both the Ventilator Associated Pneumonia bundles and catheter-related infection bundles were emphasised, with significant reduction in both these infections in the unit during the latter part of the year.

This dedication to infection prevention in A5ICU was recognised with the award of the Best Practice in Infection Prevention and Control and the Hand Hygiene award in 2013 at Tygerberg Hospital.

Two trials were undertaken in the ICU in 2013, the results of which are awaiting publication. The Provincial Critical Care Forum for the Western Cape was reconvened in 2013, the first task being the compilation of the ICU admission/discharge policy for the Western Cape.

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Bronchoscopy Theatre

In 2013 the bronchoscopy service at Tygerberg continued to deliver a world-class service with an exceptionally high turnover (more than a thousand procedures). The effective "same day" diagnostic service utilising transthoracic biopsy that was initiated in 2010 continued to flourish allowing for the outpatient management of many patients with lung cancer and TB. This service continued to be of great benefit to Tygerberg Hospital, reduced the burden on our Radiology Department and reduced cost.

Moreover, the unit pioneered an approach to undiagnosed effusion (based on ultrasound

and closed biopsy), thereby dramatically reducing the need for thoracoscopy (by 90%), and thus reducing cost and waiting times. The unit also trained numerous local and international fellows, confirming its status as a training facility of international standing.

Lung Function Laboratory and Technical Staff

This is an extremely busy group offering a service throughout the hospital especially where patients are ventilated. The overtime was cut by the hospital administration in April 2012. This had a negative influence on service delivery by technologists to the different ICU's and explained the slight fall in statistics over the last year.

Resources:

| Posts (Full-time) | Number | Filled |
|----------------------------------|--------|--------|
| Professor – Principal Specialist | 1 | 1 |
| Specialist | 3 | 2 |
| Registrars | 4 | 4 |
| Senior Registrars | 2 | 1 |
| Assistant Director Clin Tech | 1 | 1 |
| Chief Clinical Technologist | 2 | 2 |
| Clinical Technologist | 5 | 4 |
| Posts (sessional) | | |
| Specialist | 3 | 1 |

Output:

Lung Function Lab – Total procedures

5 926

| | |
|------------------------------|-------|
| Primary evaluations | 3 932 |
| Paediatric lung function | 927 |
| Plethysmography | 509 |
| Helium dilution lung volumes | 7 |
| Diffusion capacity | 430 |
| Exercise Studies | 121 |

Intensive Care – Total Procedures

104 546

| | Adult | Paediatric | Total |
|--|--------|------------|--------|
| Blood gasses | 10 351 | 12 347 | 22 698 |
| Haematocrits | 10 351 | 12 347 | 22 698 |
| Ventilator circuits | 100 | 364 | 464 |
| Ventilator calibrations | 1 772 | 3 948 | 5 720 |
| Arterial line placement/repair | 2 335 | 3 405 | 5 740 |
| Pulmonary artery catheter placement/repair | 47 | | 47 |
| CVP placement/repair | 1 358 | 34 | 1 392 |
| Haemodynamic studies | 100 | | 100 |

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| | | | |
|---|--------|--------|--------|
| MIP and MEP procedures | 25 | | 25 |
| Assistance with ventilation | 3 864 | 8 752 | 12 616 |
| Electrolytes/metabolites (Na, K, Ca, Cl, Glu and Lac) | 10 351 | 12 347 | 22 698 |
| Monitors assembled | 2 386 | 7 870 | 10 256 |

Bronchoscopy Theatre

| OUTPATIENT DEPARTMENT ANNUAL STATISTICS 2013 | | | |
|---|--|--------------|--------------|
| | | Respiratory | |
| | | Follow-up | New |
| Annual Total | | 1 734 | 995 |
| | | | 2 729 |

| | Bronchoscopy | Rigid Bronchoscopy | Forceps Biospy | Foreing body | Bronchial lavage | TBNA | EBUS – TBNA | Abrahms needle biopsy | TTNA | Thoracic ultrasound | ICD | Total |
|--------------|--------------|--------------------|----------------|--------------|------------------|----------|-------------|-----------------------|----------|---------------------|----------|-------------|
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2066 |

Part 2

Faculty of Health Sciences

Community outreach programmes

Four of the technologists were part of the Tygerberg Hospital/University of Stellenbosch team, who offered a course in Office Spirometry for the trade and primary healthcare clinics on behalf of the South African Thoracic Society.

Partnerships

National: Prof. E.M. Irusen:

Serves on advisory boards of GSK and MSD.

- Council Member
- Scholarship reviewer

College of Medicine examiner

National examiner: Masters and PhD

dissertations

CPD outreach: about 30 lectures per year on all aspects of Respiratory Disease

National: Prof. C. Koegelenberg:

SA Thoracic Society-treasurer. Chairman of the executive committee of the "Assembly on Interventional Pulmonology of the South African Thoracic Society" or IPSA

International:

Prof Irusen

i) **COPD Coalition:** on international executive. We've lobbied with the World Health Organisation (WHO) on anti-smoking strategies and work with healthcare professionals and governments to prioritise the care of COPD patients. We also cooperate on World COPD day.

ii) **GOLD National Leader** (GOLD-Global Initiative for Chronic Obstructive Lung Disease)

ii) National representative: European Respiratory Society

iii) **Collaborative Research in SADC:** Prof. T. Robbins, University of Michigan: Non-communicable Respiratory Disease

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Journal Reviewer: Clinical Drug Investigation
Clinical Infectious Diseases
Journal of IUTLD
European Respiratory
Journal

Prof. C. Koegelenberg:

Assistant Editor of the journal Respiration and editorial board member of Respirology Case Report Journal

Invited speaker (SECOND EUROPEAN CONGRESS FOR BRONCHOLOGY AND INTERVENTIONAL PULMONOLOGY (ECBIP) April 2013

Achievements with regard to research activities and research outputs:

Journal Articles (subsidised)

ZOLLNER EW, LOMBARD CJ, GALAL U, HOUGH FS, IRUSEN EM, WEINBERG E. Screening for hypothalamic-pituitary-adrenal axis suppression in asthmatic children remains problematic: a cross-sectional study. *BMJ Open*. 2013 August 1;3(8)

BRUNDYN K, KOEGELENBERG CFN, DIACON AH, LOUW M, SCHUBERT P, BOLLIGER CT, VAN DEN HEUVEL MM, WRIGHT CA. Transbronchial fine needle aspiration biopsy and rapid on-site evaluation in the setting of superior vena cava syndrome. *Diagnostic Cytopathology* 2013; 41(4): 324-329

KOEGELENBERG CFN, NORTJE AJ, LALLA U, ENSLIN A, IRUSEN E, ROSENKRANZ B, SEIFART HI, BOLLIGER CT. The pharmacokinetics of enteral antituberculosis drugs in patients requiring intensive care. *SAMJ South African Medical Journal* 2013; 103(6): 394-398

KOEGELENBERG CFN, SWART F, IRUSEN E. Guideline for office spirometry in adults, 2012. *SAMJ South African Medical Journal* 2013; 103(1): 52-61

KOEGELENBERG CFN, DIACON AH. Image-guided pleural biopsy. *Current Opinion in Pulmonary Medicine* 2013; 19(4): 11-22

KOEGELENBERG CFN, SWART F, IRUSEN E. Prediction equations for spirometry in South

Africa. *SAMJ South African Medical Journal* 2013; 103(9): 597
KOEGELENBERG CFN, CALLIGARO G, HOESS C, VON GROOTE-BIDLINGMAIER F. Transthoracic ultrasonography in respiratory medicine. *Panminerva Med* 2013; 55: 131-143

LALLOO UG, AINSLIE GM, ABDOOL-GAFFAR MS, AWOTEDU AA, FELDMAN C, WONG ML, GREENBLATT M, IRUSEN E, ET AL . Guideline for the management of acute asthma in adults: 2013 update. *SAMJ South African Medical Journal* 2013; 103(3): 189-198

THAKKAR MS, KOEGELENBERG CFN, BEZUIDENHOUT J, IRUSEN E. Mediastinal mass and hydatid disease. *QJM-An International Journal of Medicine* 2013; 106: 1127-1128

VON GROOTE-BIDLINGMAIER F, KOEGELENBERG CFN, BOLLIGER CT, CHUNG KF, RAUTENBACH C, WASSERMAN E, BERNASCONI M, FRIEDRICH SO, DIACON AH. The yield of different pleural fluid volumes for Mycobacterium tuberculosis culture. *Thorax* 2013; 68(3): 290-291

Journal Articles (NON-subsidised)

IRUSEN E M , W BRUWER. THE NEW GOLD COPD STRATEGY. *Specialist Forum*. August 2014

BRUWER JW, BATUBARA E, KOEGELENBERG CFN, BOLLIGER CT. Recent developments in interventional bronchoscopy: bronchoscopic lung volume reduction. *South African Respiratory Journal* 2013; 19(3): 91-93

BRUWER JW, BATUBARA E, KOEGELENBERG CFN. A practical approach to diagnosing pleural effusion in Southern Africa. *CME – Continuing Medical Education* 2013; 31(9): 320-325

BRUWER JW, KOEGELENBERG CFN, LALLA U, IRUSEN E. Malaria in the Intensive Care Unit of a tertiary hospital in a non-endemic area of South Africa: a nine-year retrospective descriptive study.

IRUSEN E. Breath-taking news. *South African Respiratory Journal* 2013; 19(3): 96

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KOEGELENBERG CFN, SWART F, IRUSEN E.
Guideline for office spirometry in adults, 2012.
South African Respiratory Journal 2013; 19(1):
12-24

Book:

White Book COPD in the Middle East and Africa
(Prof Irusen part of working group) Elsevier, IBN
978-0-444-63348.

Teaching and Training (undergraduate-, postgraduate- and elective students)

Prof. Irusen is head of the Respiratory Module and Chairman of the undergraduate programme in Internal Medicine. Prof. Koegelenberg is the Chairman of the Committee of Postgraduate Training and Research of the Department of Medicine, and both Prof. Irusen and Prof. Koegelenberg are members of the Departmental Resources and Management Committees. Prof. Koegelenberg is currently the supervisor of nine MMed (Internal Medicine) students. A number of postgraduate students train in pulmonology and intensive care during their physician training. The Lung Function laboratory was accredited to do practical training of technologists in Pulmonology and Critical Care by the HPCSA.

RHEUMATOLOGY

HEAD OF DEPARTMENT: Dr M Manie

Summary of activities:

This Division continues to face the challenge of having to run one side of the Thursday firm in addition to our running the Division of Rheumatology. We were happy to appoint a new career registrar, Dr R. Cooper, with effect from February 2013. We managed to maintain the services of Dr E. Richter, the previous incumbent, until March 2013. With respect to service delivery, one of the achievements worth mentioning is: Leading the rational implementation of the expensive biologics programme in the public

sector. Currently we have 15 patients on this programme – one of the largest in the country.

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|----------------|
| Head of clinical unit | 1 | 1 |
| Senior specialist | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| 2 | 8 | hours per week |

Output:

Outpatient visits: 3 753
of which 281 were new patients

Admissions: 248

Comment on output:

The outpatient numbers are slightly down on the previous year. This largely reflects the active efforts made to down refer patients to secondary and primary level care. The admissions are slightly higher. This in turn may reflect the reality that the tertiary centres remain the only resource to manage highly complex patients such as patients with SLE with complications such as cerebral lupus.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading

The Division was happy to be the recipient of a new state-of-the-art ultrasound machine for the examination of the musculoskeletal system, donated by the pharmaceutical company Abvie.

Community outreach programmes/ community services and interaction.

Our Division continued the rheumatology outreach programme to Worcester Hospital and supporting the secondary hospitals with rheumatology expertise.

MEDICINE

Teaching and Training (undergraduate-, postgraduate- and elective students)

The Division is actively involved in the undergraduate teaching of the musculoskeletal system with a group of 15 students rotating through the module every 5 weeks.

The Division has one full-time career registrar and also accommodates a new rotating medical registrar every three months. We accommodate an average of three elective students per year.

Dr Manie delivered a lecture on the diagnosis and treatment of osteoarthritis at the GP refresher course at SPIER in May 2013. Dr Manie and Dr Richter also delivered talks at the Physicians refresher course themed the "physician and the pregnant patient" in June 2013.

Special achievements

The DVD on the examination of the musculoskeletal system with lead rheumatologist, Allan Tooke, was completed in 2013.

OBSTETRICS & GYNAECOLOGY

HEAD OF DEPARTMENT

Prof. GB Theron

Brief History

Prof. JN de Villiers was the first Head of Department and he held this position up until 1970. Prof. WA van Niekerk then became head. This was the beginning of the Tygerberg Hospital (TBH) era. In 1983, Prof. HJ Odendaal succeeded Prof. van Niekerk. Prof. TF Kruger succeeded Prof. HJ Odendaal in 2003. These four heads of department made significant contributions towards the discipline of Obstetrics and Gynaecology, which led to the international recognition of TBH and the University of Stellenbosch, Department of Obstetrics and Gynaecology. Prof. Theron succeeded Prof. Kruger in March 2010.



Summary of activities

Our mission: We are committed to quality care, research and training. The Obstetric Service strives towards the improvement and extension of the infrastructure for the delivery of excellent service. The Gynaecology service strives to perform fewer conventional gynaecological procedures and more endoscopic procedures, as well as the use of a day theatre for minor gynaecological problems.

TBH serves as a level 2 and 3 referral hospital to Metro-East, with a population of 1 956 774 people. Karl Bremer, Khayelitsha, Helderberg

and Eerste River hospitals are the four district hospitals rendering a level 1 service in this urban area. In addition, TBH serves as a level 3 referral hospital to the West Coast and Winelands. West regions served by Paarl Hospital and Overberg and Winelands. East regions served by Worcester Hospital.

Generation of external funds for research and post-degree fellowships is a priority for the department. Fellows doing subspecialty training in Reproductive Medicine, Gynaecological Oncology and Maternal and Fetal Medicine will in future also register for Masters in Philosophy degrees.

Posts (full-time)

| | |
|--|--|
| Head of Clinical Department | |
| Head of Clinical Unit | |
| Natural Scientist (specialist) | |
| Specialist | |
| Registrar (1 each at Worcester + Paarl Hosp) | |
| Medical Officer | |
| Intern | |
| Technologist | |
| Radiographer | |

Number on establishment

| |
|----|
| 2 |
| 5 |
| 2 |
| 10 |
| 22 |
| 15 |
| 13 |
| 1 |
| 2 |

Number Filled

| |
|----|
| 2 |
| 5 |
| 2 |
| 10 |
| 22 |
| 15 |
| 13 |
| - |
| 2 |

OBSTETRICS & GYNAECOLOGY

Posts (sessional)

Specialists and Medical Officers

5 persons 35 hours per week

filled

filled

Part-time posts

2 specialist posts with 5/8th appointments

filled

filled

Number of beds

Obsterics

126

Gynaecology

46 (+ 15 radiation therapy beds)

OBSTETRIC REPORT:

| INPATIENTS: | 2012 | 2013 |
|---|------------------|------------------|
| Admissions : | 10 105 | 9 792 |
| Total number of deliveries | 7 576 | 7 855 |
| Normal vertex deliveries | 4 137 | 3 735 |
| Forceps deliveries | 33 | 23 |
| Vacuum extractions | 200 | 103 |
| Breech deliveries | 130 | 131 |
| Caesarean sections | (44%) | (45,2%) |
| Twins | 401 | 403 |
| Number of Low birth weight babies < 2 500 g | 3 079 (40,6%) | 3 188 (40,6%) |
| Very Low birth weight babies < 1 500 g | 1 017 (13,4%) | 1 074 (13,7%) |
| Extremely low birth weight babies < 1 000 g | 435 (6,3%) | 476 (6,1%) |
| Perinatal Mortality Rates (\geq 500 g - < 1 000 g) | 559/10000 | 413,9/1000 |
| (\geq 1 000 g) | 38,2/1000 | 29,3/1000 |
| MATERNAL DEATHS: | | |
| Total number | 14 | 26 |

FETAL EVALUATION CLINIC:

| ANTENATAL FETAL HEART RATE MONITORING: | 2012 | 2013 |
|--|-------|-------|
| Total number of patients | 1 293 | 1 488 |
| New patients | 1 068 | 1 141 |
| Follow-up patients | 225 | 347 |
| Twins | 90 | 134 |
| External cephalic versions | 30 | 24 |
| DOPPLERS: | | |
| Total number of patients | 4 907 | 5 213 |
| New patients | 2 898 | 3 488 |
| Follow-up patients | 1 199 | 1 725 |
| Fetal evaluation referrals (back to AN clinic, HRC or C2A) | 707 | 653 |

OBSTETRICS & GYNAECOLOGY

| OUTPATIENTS: | 2012 | 2013 |
|--|----------------|----------------------|
| OBSTETRICS: | 21 704 | 25 298 |
| Second visit and high risk patients | | |
| New patients | 87 | 61 |
| Post-natal patients | 516 | 438 |
| Diabetic clinic | 1 439 | 1 268 |
| Special care clinic | 745 | 941 |
| Anaesthetic referrals | 411 | 407 |
| Cardiac clinic (new information) | 123 new 111 | 158 follow-up 110 |
| TOTAL : | 23 772 | 28 634 |

GYNAECOLOGICAL REPORT

| INPATIENTS | 2012 | 2013 |
|-------------------|-------------|-------------|
| Seen on call | 3 907 | 3 640 |
| Total admissions | 2 932 | 3 214 |

| OPERATIONS: | 2012 | 2013 |
|--|-------------|-------------|
| Cold knife biopsies | - | |
| Operative hysteroscopies (general theatre) | 44 | 53 |
| Vaginal hysterectomies | 59 | 74 |
| Abdominal hysterectomies (including TAH and BSO) | 220 | 231 |
| Laparotomies | 79 | 60 |
| Radical hysterectomies | 10 | 12 |
| Vaginal repair anterior / posterior | 67 | 22 |

| OUT PATIENTS: | 2012 | 2013 |
|--|-------------|-------------|
| Follow-up patients (general gynaecology) | 4119 | 4359 |
| New patients (general gynaecology) | 2453 | 2617 |
| Endocrinology | 662 | 569 |
| Colposcopy clinic | 2108 | 2099 |
| Andrology | 358 | 374 |
| Oncology | 1788 | 1823 |
| Cytology | 221 | 167 |
| TOP (evaluations seen at Gynaecology) | 1060 | 1425 |

OBSTETRICS & GYNAECOLOGY

| GEC THEATRE | 2012 | 2012 |
|-----------------------------|--------------|--------------|
| Terminations of pregnancies | 1453 | 1132 |
| Day theatre cases | 143 | 125 |
| Hysteroscopies | 374 | 440 |
| GRAND TOTAL | 16751 | 22436 |

Statistics compiled by: Dr GS Gebhardt and Prof. GB Theron

General Specialist Services

Summary of activities:

The General Specialist Services (GSS) is the largest division of the Specialised and Highly Specialised O & G Services and oversees the complete acute service within Tygerberg Hospital (TBH) and the clinical governance of all O & G services within the Metro East.

Resources:

| Posts (Full-time) | Number | Filled |
|---|--------|--------|
| Chief Specialist/head clinical department | 1 | 1 |
| Medical Specialist grade 1-3 | 6 | 6 |
| Specialist District Obstetrician | 1 | 1 |
| Medical Officer | 14 | 14 |
| Registrars | 16 | 16 |

| Current bed status | Number |
|---|---|
| Total maternity beds | 145 (includes 19 labour ward delivery beds) |
| Currently designated and utilised at tertiary | 28 |
| Currently designated and utilised as regional | 98 |
| Total Gynaecology beds | 46 |
| Currently designated and utilised as tertiary | 15 |
| Currently designated and utilised as regional | 21 |

Output:

The GSS manages the emergency areas (19 bedded labour ward, obstetrics and gynaecology triage, elective Caesarean section and emergency theatres), as well as 113 ward beds: 42 antenatal; 44 postnatal and 21 gynaecology. This platform manages the critical service in which all undergraduate- and postgraduate training (apart from the registrar subspecialist training) takes place and all the general specialists are senior lecturers on the joint Stellenbosch University platform and share in the teaching, training and research activities of the academic department. During 2013, theatre time for elective obstetric cases increased to two full-day (until 19h00) and one half-day list.

Comment on output:

The emergency O and G triage area evaluated 13 432 women during 2013 and performed 4891 obstetric procedures (mostly caesarean sections - an average of 21 deliveries (of which 11 are Caesarean sections) every day of the year.

The long-awaited renovation of the labour ward started in October 2013 and the labour ward was decanted at the end of the year to make space for renovation during 2014. The new labour ward will improve patient flow with more single delivery rooms, a central nursing station where fetal monitoring can be centralised, as well as an improved triage area. The ever-increasing workload led to a labour ward bed-occupancy that is running around 150% most of the day, and a Caesarean section rate that increased to 45%, but despite this the perinatal mortality

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continued to decline (the PNMR was 45,7/100 in 2010, 40,5/1000 in 2011, 38,2/1000 in 2012 and 29,3/1000 for babies >1 000 g). This is a tribute to the staff who constantly work under tremendous pressure.

The GSS took over the complete second trimester termination of pregnancy (TOP) programme in Metro East during 2013. There are now weekly second TOP slates at TBH, one each in Khayelitsha and Karl Bremer hospitals, with all complications managed by TBH. A service delivery agreement was negotiated with a private service provider (Marie Stopes) to assist with the overflow.

Specialists:

All specialists are encouraged to develop managerial and leadership capabilities from when they are appointed and each are given specific managerial tasks within the platform and the larger department.

Dr Viju Thomas is actively developing laparoscopic surgery within the general domain of the department and established a unit (Stellenbosch University Unit for Minimally Invasive Therapy Training; SUMITT) dedicated to the training of minimally invasive gynaecological surgery. All cases are carefully selected and performed laparoscopically or hysteroscopically. This unit is now proud to include Dr Judy Kluge (head of the Family Planning Unit), who operates regularly with them. The focus for 2014 will be improving registrar skills by seeing more and more level 2 and 3 cases. We hope to see the benefits of this intervention in the upcoming year.

Training of registrars is one of the main priorities of SUMITT. Since they started, 12 registrars have been exposed to basic and advanced laparoscopic surgery with an ever increasing request from trainees for even more such surgeries. All these registrars are now capable of performing level 3 surgeries. Trainees who have since qualified keep in close contact with the unit and they try and assist them where possible with ongoing training. There were a couple of challenges in the past year and we

hope to tackle them in the upcoming year; these include adequate staffing of the unit and acquiring quality equipment, however, with the continued support of the department and Stellenbosch University, we hope solve the problems.

Dr van der Merwe completed his maternal-fetal subspecialist training during 2013 and successfully passed his fellowship certification examination, whilst still maintaining his full duties as consultant and manager of the acute labour ward. Dr Jenny Butt is now in her third year of training as a subspecialist in oncology (training is done over four years as part-time fellow whilst performing full duties as a general specialist). Dr Butt has taken over the demanding business of managing the duty rosters for the whole department; and streamlined this complicated process with the help of software developed by Dr Colin Marias, a registrar in the department. Dr Lindi Vollmer manages the interns and the emergency theatres. Dr Saleema Nosarka left the general specialist services due to a promotion as subspecialist in infertility. Two new consultants, Dr A Cloete and Dr J Rossouw, joined the general specialist team in 2013.

Community outreach programmes/community services and interaction:

The general specialist services do outreach to the surrounding district hospitals and midwife obstetric units within the eastern half of Cape Town metro, an area which encompasses the Helderberg area in the east (up to Grabouw), the whole of Khayelitsha and the Tygerberg/Northern substructure. There are three large district hospitals and eight midwife obstetric units (MOUs) in this area. The filling of the national ministerial District Specialist post at Tygerberg allowed a full-time equivalent (FTU) consultant to be available every week to fulfil the mandate of the district specialist teams as envisaged by the minister. This task is shared between four specialists and allows for interaction with the district hospitals and MOUs (distinct from the regular support and outreach provided). It is envisioned that the full district

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specialist team (including an anaesthetist, paediatrician and advanced midwife) will tackle issues of intra-partum and post-delivery care within the drainage area.

Due to the demand for colposcopy services, we doubled the number of patients seen at the outreach clinic in Helderberg by stepping up clinic time to a weekly clinic with a registrar and consultant from Tygerberg visiting the hospital. The outreach service at Helderberg also now includes a two-weekly academic consultant ward round on Tuesday mornings.

The ongoing drive to increase obstetric skills (ESMOE) was given a boost by the National Department of Health with a donation of mannequins to TBH, as well as all district hospitals and the larger MOUs. In addition, two master trainer courses were presented at TBH, where a number of midwives and family physician specialists were trained. This enables the district hospitals to present their own ESMOE courses to their interns and midwives, as well as to do fire drills at the MOUs, assisted by the district specialist team from TBH.

There is a two-weekly gynaecology clinic and colposcopy outreach service and a monthly theatre list at Eerste River Hospital and we started a weekly colposcopy clinic, as well as a Thursday sterilisation list at Khayelitsha Hospital. There is also a weekly academic ward round at Khayelitsha Hospital. Laparoscopic surgery training was initiated at Karl Bremer and a full outreach service was negotiated with them.

The regional and district outreach activities in Metro East are planned and governed by the Geographical Services Area (GSA) meeting - an important interface where senior management from the health department (at all levels of care) and hospital specialists, family physician specialists, district managers, allied health care and nursing personnel meet to plan service delivery and clinical governance issues. A smaller Obstetrics and Gynaecology technical work group monitors the outreach activities that also include intra-uterine contraceptive device training (including

outreach to West Coast and Winelands), the termination of pregnancy services at the community health centres, clinical governance issues such as risk reduction during obstetric surgery, colposcopy outreach services and family planning.

Publications:

Peer reviewed 3

Dr H van der Merwe

Engels AC, DeKoninck P, van der Merwe JL, Van Mieghem T, Stevens P, Power B, Nicolaides KN, Gratacos E, Deprest J. Does website based information add any value in counselling mothers expecting a baby with severe congenital diaphragmatic hernia? *Prenat Diagn.* 2013; DOI: 10.1002/pd.4190

Dr S Gebhardt

Drögemöller B, Plummer M, Korkie L, Agenbag G, Dunaiski A, Niehaus D, Koen L, Gebhardt S, Schneider N, Olckers A, Wright G, Warnich L. Characterisation of the genetic variation present in CYP3A4 in three South African populations. *Front Genet.* 2013; 4: 17.
Odendaal, Hein J; Gebhardt, G Stefan; Theron, Gerhard B. Stillbirth rates in singleton pregnancies in a stable population at Karl Bremer and Tygerberg hospitals over 50 years. *South African Journal of Obstetrics and Gynaecology*, [S.l.], v. 19, n. 3, p. 67-70, sep. 2013. ISSN 2305

Family Planning and Reproductive Health Unit

Summary of activities:

- Provision of family planning services including male and female methods
- Referral centre for peripheral clinics in the Metro East and the Greater Western Cape Province
- Training of nursing staff, medical students and registrars in the provision of family planning
- Outreach training of nursing staff

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Resources:

| Posts (fulltime) | Number | Filled |
|--|--------|--------|
| Clinical Head (Specialist) | 1 | 1 |
| Specialist | 1 | 1 |
| Rotating registrars (2 registrars in a 3 month period) | 2 | 2 |
| Nursing Unit Manager | 1 | 1 |
| Senior Nursing Staff | 2 | 2 |
| Senior Auxiliary nursing staff | 1 | 1 |
| Secretary | 1 | 1 |

Output:

| Female Programme | 2012 | 2013 |
|--|---------|---------|
| Patients counselled in clinic | 9 829 | 10 117 |
| Doctor consultations | 579 | 548 |
| Patients accepting a method (includes patients from Clinic, J2, J4 and J5) | 12 430 | 13 324 |
| Clinic | 7 664 | 8 246 |
| Post natal wards (J2, J5) | 4 263 | 4 618 |
| Gynaecology wards (J4, FG) | 503 | 460 |
| Sterilisations performed at time of caesarean section | | |
| Postpartum and interval | 1 064 | 1 548 |
| Referred for sterilisation | 254 | 363 |
| Female condom use | 1 460 | 2 760 |
| Emergency contraceptive use | 66 | 62 |
| Intra-uterine Contraceptive device (IUD) | 578 | 1 310 |
| Implanon Nxt® inserted (contraceptive implant) | - | 56 |
| Cervical smears | | |
| Total taken | 342 | 259 |
| Male programme | | |
| Consultation before vasectomy | 587 | 563 |
| Vasectomy done | 230 | 226 |
| Male condoms issued | 206 200 | 212 840 |

Comment on output:

Sterilisations performed post partum and at Caesarean Section

There has been a steady increase in the number sterilisations performed post partum and at the time of Caesarean sections. This may be a reflection of the number of patients requiring Caesarean sections due to previous Caesarean sections, but may also reflect the increasing number of obstetric patients that Tygerberg Hospital has to manage.

Provision and increased uptake of Long Acting Reversible Contraceptive (LARC) Methods

The National Contraception Clinical Guidelines (© Department of Health, RSA, 2012) were launched in the beginning of 2013. These state that "priority should be given to expanding the range of LARC methods available in the public health sector" as they have been shown to be "highly effective, have good continuation rates and are proven to be cost effective

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compared to other methods". Increasing the use of LARC methods "will reduce unwanted pregnancies in all groups of women". Intrauterine devices and implants are more cost effective than injectable contraceptives and the Tygerberg Obstetric and Gynaecology Department has actively encouraged training and provision of these two LARC methods as reflected by the yearly statistics.

Intrauterine device insertion increase

The increase in intrauterine device (IUD) insertions from 284 in 2011, and 578 in 2012 to 1310 in 2013 is significant. These IUD insertions occurred mainly post placental at the time of Caesarean sections.

Implanon NXT® insertion and Training

In December 2013, Implanon NXT® insertion training commenced in preparation for the nationwide launch of this contraceptive method by the Health Minister, Dr Aaron Motsoaledi, in February 2014. Twenty-two doctors and 5 professional nurses were trained on the insertion of the implant and 56 implants were inserted by the end of 2013.

Training:

Provided by Dr Kluge:

- IUD theoretical training was provided for nurses from the Tygerberg/ Northern substructure
Implanon Nxt® practical insertion training was provided for the following:
- 22 doctors from Tygerberg Hospital
- 1 Professional nurse from Khayelitsha District Hospital
- 1 Professional nurse from Tygerberg Hospital Family Planning Clinic
- 2 Department of Health (DOH) Women's Health Trainers from the Klipfontein/ Mitchells Plain Substructure (Metro West)
- 1 DOH Women's Health Trainers from the Tygerberg / Northern substructure (Metro East)

- 1 DOH women's Health Trainer from the South Western substructure (Metro West) Provided by Sr. Naude and Sr. Cupido:
- Nursing students from the Advance midwifery Course rotate through the family planning clinic

Part 2

Faculty of Health Sciences

Community outreach programmes/ community services and interaction.

As a secondary and tertiary referral hospital, our focus is on providing training of personnel, both doctors and nurses, who will subsequently strengthen contraception provision and services within communities. This was achieved by performing outreach IUD training for nurses from the Tygerberg / Northern Substructure. In addition, Implanon Nxt® training was provided for DOH trainers from both the Metro West and Metro East and a professional nurse working at the Reproductive Health Unit at Khayelitsha District Hospital.

Achievements with respect to research activities and research outputs:

Dr Kluge was the principal investigator of a randomised controlled trial involving Cervical Priming prior to Surgical Termination of Pregnancy which ended in 2013. The results of the study have been submitted for publication.

Teaching and Training (undergraduate-, postgraduate- and elective students)

Both undergraduate and elective students have to attend sessions at the family planning clinic as part of their rotation within Obstetrics and Gynaecology. The registrar in Obstetrics and Gynaecology conducts two clinics a week, where complex contraceptive problems are addressed.

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Obstetric Critical Care Unit

Summary of activities:

Admitted 554 critically ill patients during 2013 and provided effective critical care service for these patients and preventing long-term morbidity and mortality. Compared to 2012, there were 35 more admissions. In spite of the increase in workload, there were only five mortalities during this period.

A clinical support system and central nursing station was added to the new 4-bedded step-down unit. The unit was approved as an ongoing project by Royal Phillips (equipment supplied by Phillips, helped to increase OCCU admission rates, provide and additional critical care service when no OCCU beds available). Satellite emergency 2-bedded obstetric emergency unit will be established in Worcester with European Union funding. The newly established Maternal Cardiac Unit provides an effective service for patients with cardiac disorders in pregnancy.

Resources:

| Posts (Full-time) | Number | Filled |
|-------------------|--------|--------|
| Senior specialist | 1 | 1 |
| Medical officer | 2 | 2 |

| Output: | 2012 | 2013 |
|---------------------------------|------|------|
| Admissions | 519 | 554 |
| Invasive Ventilation | 56 | 93 |
| Intra-arterial lines placed | 368 | 409 |
| Central venous lines placed | 105 | 141 |
| Step-down unit | | |
| Admissions | 800 | 950 |
| A lines | - | 180 |
| Intravenous labetalol infusions | - | 90 |
| Central venous lines | - | 50 |

Comment on output:

There is a serious lack of critical care resources in the Western Cape and this is often one of the avoidable maternal death factors. By managing both of these units efficiently, additional critical care support could be provided. The interventions reflect the frequency of acute severe morbidity in the Western Cape Province.

Part 2

Faculty of Health Sciences Upgrading, new equipment etc.:

A combined clinical research project with Phillips made upgrading of equipment possible. This includes three high-tech monitors and a central monitoring system which enables vital data of patients in the step-down unit to be viewed in the OCCU.

Community outreach programmes / community service:

A new project is planned, which will be part of critical care outreach to Worcester Hospital, where two labour ward beds will be upgraded to high care beds. Dr Langenegger will provide clinical support and training, as well as outreach visits on a regular basis. Phillips will assist in providing equipment as part of a combined research project between the Stellenbosch University, Tygerberg Hospital, Worcester Hospital and Phillips International.

Partnerships:

National:

Phillips International, combined research project
ESMOE master trainer
ESMOE editorial board
Basic ICU course master trainer

International:

University of Nottingham UK
Royal Phillips
European development forum partner

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WHO Future (Advanced obstetric emergency and critical care services)

Basic ICU course master trainer

Research activities and outputs:

Number of publications from the division:

Lancet (peer reviewed) 1

Textbooks and contributions to textbooks:

1 chapter

Teaching and training:

New obstetric ventilation skills course train registrars, fellows and interns.

Master trainer for ESMOE and BASIC ICU programmes.

Dr Langenegger is making good progress with his PhD on obstetric critical care.

Special achievements and highlights:

Combined research programme with the University of Nottingham

Initiated and motivated funding from Phillips International to expand critical care resources

Lancet – publication in co-operation with University of Nottingham

Invited speaker – EU development summit European Union development partner

Obtained additional funding for AEMOC (Established Advanced Emergency Obstetric Units in level 1 and level 2 hospitals) project

Gynaecological Oncology

Summary of activities:

2013 was a busy and productive year for the Unit of Gynaecological Oncology. The first priority was patient-centred clinical service delivery to women with gynaecologic cancers. Patients presenting to the unit were managed by a multidisciplinary team with a holistic approach where patient dignity is of utmost importance. We appreciate the close working relations from colleagues in other departments. These include, but are not limited to, Dr Gerald Paris of Radiotherapy, Dr Pieter Barnard of

Chemotherapy, Dr Mercia Louw of Pathology, the departments of Urology, General Surgery and Radiology. Due to the impact of the HIV epidemic in our population, there is still immense pressure on the colposcopy service.

This year saw an increase in the number of outreach colposcopy clinics in regional and district hospitals in our area.

Important priorities of the unit include teaching, training and research. Dr M Dlamini finished his training as subspecialist in gynaecological oncology and Dr J Butt continues in the unit as fellow. The unit successfully applied for a Discovery Fellowship for Dr M Feketshane, who will join the team in 2014.

A large multi-centre study on vaccination and screening to prevent cervical cancer is entering a second phase. The community benefits directly from the study. More than 1 000 primary school girls received HPV vaccines and their mothers were screened for cervical cancer. This study will now continue in the Paarl region, with a two dose schedule HPV vaccination and self-testing for HPV as primary and secondary cancer prevention strategies. The EVRI HPV vaccination trial in co-operation with an international team led by the well-known Prof. Anna Giuliano, has now completed recruitment. The study results should provide important new information on cancer and HIV prevention.

Personnel:

| Posts (Full time) | Number | Filled |
|------------------------------|--------|--------|
| Head of Clinical Unit | 1 | 1 |
| Senior Specialist | 1 | 1 |
| Registrar (3 month rotation) | 1 | 1 |
| Chief Professional Nurse | 1 | 1 |
| Typist | 1 | 1 |
| Clinic Clerk | 1 | 1 |
| Fellows | 2 | 2 |

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| Output: | | |
|-------------------------------------|-----|-----|
| Carcinoma cervix | 271 | 251 |
| Carcinoma endometrium | 60 | 54 |
| Endometrial hyperplasia | - | 1 |
| Carcinoma ovary | 56 | 31 |
| Benign ovarian tumours | - | 18 |
| Carcinoma vagina | 3 | 6 |
| VAIN | - | 2 |
| Carcinoma Fallopian tube | 1 | - |
| Uterine sarcoma | 14 | 19 |
| Carcinoma vulva | 23 | 17 |
| Melanoma vulva | 1 | 5 |
| Bartholin gland | 1 | - |
| Other: Unknown primary | 6 | 2 |
| Retained placenta | - | 1 |
| Abdominal TB | - | 1 |
| Advanced Extra uterine pregnancy | - | 1 |
| Fibroid uterus (complicated) | - | 5 |
| Lymphoma | - | 2 |
| Primary Peritoneal carcinoma | - | 2 |
| Rectal carcinom | - | 2 |
| Colon | - | 2 |
| Anal | - | 1 |
| Breast Carcinoma | - | 1 |
| Other organs | 2 | 2 |
| Gestational trophoblastic disease | 19 | 7 |
| Gestational trophoblastic neoplasia | 9 | 12 |

| | | |
|-----------------------------------|-------|-------|
| Total cancer patients: New | 397 | 339 |
| Follow-up | 1 401 | 1 477 |
| Colposcopy clinic: New | 1 043 | 1 053 |
| Follow-up | 1 044 | 1 074 |
| Cytology clinic: New | 37 | 21 |
| Follow-up | 180 | 169 |
| Staging clinic | 631 | 618 |

| Procedures | | |
|-------------------|-------|-------|
| LLETZ | 682 | 743 |
| Cervical biopsies | 708 | 785 |
| Cytology cervix | 1 237 | 1 067 |

Outreach programs:

GYNAECOLOGICAL ONCOLOGY

- The unit for Gynaecological oncology visits Worcester and Paarl hospitals on a fortnightly rotation.
The aim of the visits:
 - Training of specialists, registrars and medical officers working in these hospitals
 - Evaluation of new patients in order to ascertain management in local hospital and relevant referral and follow-up of patients
- The Unit is involved in the provincial screening program for cervix carcinoma and also provides training in cervical cytology in the rural areas
- Continued medical education remains a priority of the unit and outreach programmes towards the rest of the public sector in the Province in terms of CME activities was an important focus
- The team continues outreach visits to the referral hospitals in East London

GYNAECOLOGICAL ONCOLOGY – MH BOTHA AND FH VAN DER MERWE

- The unit remains intimately involved in activities of the South African Society for Gynaecologic Oncology
- Prof. Botha and Dr Van der Merwe are involved in examinations for the Colleges of Medicine of South Africa

Dr MH Botha and Dr FH van der Merwe work with:

- The unit collaborates in a study on uptake of screening for cervical cancer in South Africa. The principal investigator is Prof. Greta Dreyer from the University of Pretoria

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- The Unit is involved in a HPV observation study in HIV positive patients. Dr M Zeier (Principal investigator) from the Infectious Diseases unit in Tygerberg Hospital will receive a
- PhD degree in April 2014

Public- Private co-operation

- Dr Feketshane has received a Discovery Fellowship to do subspecialist training.

Reproductive Medicine

Summary of activities:

Micro surgery is performed on Level II and Level III in the S and T theatres and our unit is one of the few endoscopic theatres providing a service in an academic hospital.

We have an outpatient theatre for endoscopic procedures (\pm 40 hysteroscopies per month), which results in a huge saving to the hospital [440 cases done for 2013]

The Andrology Department provides a service for the region and helps patients with infertility, cancer patients, family planning patients and urology patients. Freezing of semen is also offered for cancer patients requiring this service. The In Vitro Fertilisation unit also offers a low cost assisted reproduction service (IVF) to patients, reaching out to the needy and the marginalised.

The Unit provides a specialised endoscopic surgery outreach programme in Paarl Hospital to take service to the community and to train and develop skills at regional hospitals. We also support and continue development of skills amongst private gynaecologists in the Western Cape.

The unit is also an accredited HPCSA training facility for clinical technologists, medical biological scientists in Reproductive Biology and subspecialist fellows in Reproductive

Medicine. Each year, 2 to 5 students undergo theoretical as well as practical training in assisted reproduction techniques (ART) in both the Andrology and Fertility laboratories. Besides training in ART techniques, they also enrol as Honours- or MSc students under the guidance of chief- and senior specialist scientists in this unit.

Resources:

| Posts (full time) | Number | Filled |
|--|--------|--------|
| Head of Unit | 1 | 1 |
| Senior Specialist | 1 | 1 |
| Senior Specialist 5/8 post | 1 | 1 |
| Fellows | 4 | 4 |
| Registrars 1 (general gynae, 3 monthly) and 1 special rotation, 2 monthly) | 1 | 1 |
| PhD students | 1 | 1 |
| Chief specialist scientist | 1 | 1 |
| Senior specialist scientist | 1 | 1 |
| Control technologist | 1 | 1 |
| MSc students | 3 | 3 |

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| Output | 2012 | 2013 |
|---|-------|-------|
| Number of semen analyses | 595 | 612 |
| Number of post-vasectomy patients (Included in total) | 390 | 207 |
| Wet semen preparations examined | 595 | 612 |
| Semen counts performed | 205 | 405 |
| Samples examined after centrifugation | 405 | 220 |
| Supravital semen stains evaluated | 15 | 15 |
| Semen morphology smears prepared and stained | 1 200 | 1 250 |
| Sperm morphology evaluations performed | 2 241 | 2 450 |
| Antispermatozoa antibody tests performed | 205 | 320 |
| Reports placed on computer system | 595 | 612 |
| Fructose tests (Azoospermia samples) | 20 | 32 |
| In vitro fertilisation (IVF) | | |
| Patients aspirated | 112 | 97 |
| Number of ova handled | 672 | 620 |
| Semen samples prepared for ova inseminations | 112 | 97 |
| Number of patients receiving embryo transfers | 79 | 69 |
| Semen samples prepared for IUI | 35 | 53 |
| Testis biopsies performed | 9 | 7 |
| Embryo cryopreservation procedures performed | 3 | 4 |
| Semen samples cryopreserved | 10 | 10 |

Comment on output:

In 2013 there was a slight increase in total semen analyses performed, more morphology evaluations were performed. Due to the increased activity of the IVF programme (public / private partnership), there were remarkably more IVF patients treated, compared to 2012. That led to a high increase in the number of ova and embryos handled in the laboratory.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc (highlights):

The unit (IVF laboratory) managed to acquire a much needed incubator through funds from Stellenbosch University to further enable teaching and training of fellows and reproductive biology postgraduate students over and above service delivery obligations.

Community outreach programmes / community services and interaction:

The unit provides a specialised endoscopic surgery outreach programme at Paarl Hospital to take service to the community and to train and develop skills at regional hospitals. We also support and continue development of skills amongst private gynaecologists in the Western Cape. The effort has and continues to improve overall women's health.

Partnerships

National:

- Dr M-L de Beer serves as the new secretary for the South African Society for Reproductive Sciences and Surgery (SASREG)
- Dr Matsaseng is a member of SASREG
- Prof. Menkveld works in collaboration with Prof Ralf Henkel, Department of Biomedical Sciences,
- University of the Western Cape

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- Prof. Siebert chairs the endoscopic section of the Southern African Society of Reproductive Medicine and Gynaecological Endoscopy (SASREG)
- Prof. Kruger serves as a member and scientific program director of SASREG

International:

- Prof. Kruger works with Dr Oehninger, Howard Jones Institute, Norfolk, Virginia
- Prof. Franken works with WHO to present the workshop for performance of basic semen analysis for African countries
- Prof. Menkveld works with Dr J Rhemreve, Bronovo Hospital, The Hague, The Netherlands
Dr L Bjorndahl, Karolinska Institute, Stockholm, Sweden
Prof. C Barratt, Reproductive and Developmental Biology Group, Division of Medical Sciences, University of Dundee, Scotland, UK
Dr D Mortimer, Oozo Biomedical Inc., Vancouver, Canada
- Dr Matsaseng and Prof. Kruger work with Prof. Ombelet from Genk Institute in Belgium
- Hosted a successful international conference, American Association of Gynaecological Laparoscopy (AAGL), a first in approximately 15 years. Prof. Kruger, Prof. Siebert and Dr Matsaseng were members of the scientific committee. Prof. Siebert and Dr Matsaseng were convenors of laparoscopy and hysteroscopy workshops respectively

Number of publications from the Department / Division:

- Peer reviewed 11
- CME 2

Textbooks and contributions to textbooks:

Prof. Kruger is the editor of the prescribed gynaecology book for the undergraduate-

and postgraduate students. Prof. Siebert and Dr Matsaseng are contributing authors.

Teaching and Training (undergraduate-, postgraduate- and elective students):

The Unit is training four subspecialist fellows, Dr N Gumata (Discovery Foundation scholarship), whom is preparing for final CMSA exams in March/May 2014 and due to establish a training unit in Pretoria Academic Hospital. Dr Chris Venter (self-funded, Rustenburg), Dr Pieta Gyser (self-funded, Klerksdorp, are part-time fellows doing training over four years.) and Dr Vincent Molelekwa from Botswana (Botswana government funding) will commence training in 2014.

The Unit also continues to provide high standard of teaching and training to undergraduate- and postgraduate (MMed) students.

Special achievement and other highlights:

Dr Matsaseng recently completed a BBC TV and Radio Interview on Low Cost IFV in developing countries. As part of MDG we aim to improve the equal access to health and to improve overall health of women, hence the global interest in the matter.

Maternal and Fetal Medicine

Resources:

| Posts (Full-time) | Number | Filled |
|------------------------|--------|--------|
| Principal specialist | 3 | 3 |
| Specialist | 1 | 1 |
| *Fellows HPCSA numbers | 2 | 2 |

* One full-time fellow seconded by the Free State Department of Health completed her

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training. One full-time fellow seconded by the University of KZN commenced her training. One part-time general specialist (Stellenbosch/Tygerberg) continued his training.

| Output: | 2012 | 2013 |
|------------------------|---------------|-------|
| Diabetic Clinic | 1 439 | 1 268 |
| Special Care Clinic | 745 | 941 |
| Anaesthetic referrals | 411 | 407 |
| Cardiac Clinic | 123 new | 111 |
| | 158 follow-up | 110 |

Part 2

Faculty of Health Science:

Partnerships

National:

Co-ordinator and member of Maternal Mortality (NCCEMD) assessors in Western Cape (Prof D Hall) Member of Maternal Mortality (NCCEMD) assessors in Western Cape (Dr JL van der Merwe)

International:

Prof. DR Hall works with:

United Kingdom. Cochrane Collaboration: Working on systematic reviews

Status: ongoing

Australia. Preterm prelabour rupture of membranes close to term trial. National Principal Investigator for South Africa

Status: Recruitment completed

Canada. The Centre for Research in Women's Health, Director: ME Hannah, University of Toronto. Agreement to collaborate and/or share information

Status: Ongoing

Canada. PIERS Study. A WHO-funded, screening study for pre-eclampsia in developing countries

Status: Manuscript submitted

Canada. PIERS on the Move Study. An internationally funded study on pre-eclampsia using a screening score and cell phone technology

Status: Recruitment completed

Canada. Calcium and pre-eclampsia Study. A WHO co-ordinated study investigating the effect of pre-conception calcium on the incidence of pre-eclampsia

Status: Recruitment ongoing

United Kingdom. CRADLE (Community Blood Pressure Monitoring in Rural Africa and Asia: Detection of Underlying Pre-eclampsia and Shock

Status: Initial phase

Prof W Steyn works with:

- Prof. D Nieuhaus and associates on "Maternal Mental Health: a prospective naturalistic study of the short- and long-term outcome of pregnancy in women with major psychiatric disorders."
- Prof. D Nieuhaus and associates on "Medical students and implicit attitudes"
- PIERS Project – study together with the University of British Columbia, Vancouver – manuscript submitted
- Prof. A Shennan and associates, King's College, London. New initiative – initiating phase: Blood pressure measurement in pregnancy
- Dr J George, University of Dundee: Allopurinol – pre-eclampsia (planning phase)
- WHO Collaborating Centre for Research Synthesis in Reproductive Health, Geneva. Stepmag study
- Edgardo Abalos (Argentina), Lelia Duley (UK) and David Henderson-Smart (Australia) on Cochrane reviews on Moderate Hypertension in Pregnancy (Published 2013)
- Prof PS Steyn (WHO, Geneva) on Cochrane review on Dopamine in pregnancy

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Prof. G Theron works with:

- The International Maternal Paediatric Adolescent AIDS Clinical Trials Group (IMPAACT) as:
Principle investigator of the Promoting Maternal and Infant Survival Everywhere (PROMISE/1077) study
Protocol Vice-chair for a randomised double blind placebo-controlled trial to evaluate the safety of immediate (antepartum-initiated) versus deferred (postpartum-initiated) isoniazid preventative therapy among HIV infected women in high TB incidence settings. Also sponsored by The National Institute of Allergy and Infectious Diseases (NIAID), The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and Scientific Collaboration with the Tuberculosis Trials Consortium (TBTC) of the Centers for Disease Control and Prevention. The study has been approved by the Human Research Ethics Committee of the Stellenbosch University and the Medicine Control Council. Approval by the Provincial Health research Committee is pending prior to commencing the study
- The Wellcome Trust in the United Kingdom as a co-investigator of a study investigating Mother-Infant transmission of Drug-driven Immune-escape HBV variants
The International Maternal Paediatric Adolescent AIDS Clinical Trials Group (IMPAACT) as: Principle investigator of the Administration of Polysaccharide of Conjugated Pneumococcal Vaccines to HIV-infected Pregnant Women: Safety and Magnitude Persistence, and Transplacental Transfer of Vaccine-Serotype Pneumococcal Anti-capsular Antibodies - a multicenter international trial. The protocol has been approved by the Human Research Ethics Committee of the Stellenbosch University. Following the recompetition cycle IMPAACT decided not to fund the study. Other sources of funding are investigated

- Investigating the optimal age for early infant diagnosis of HIV in order to prevent HIV-associated disease and mortality with Jean Maritz¹, Gert U van Zyl¹, Wolfgang Preiser¹ and Mark F Cotton². ¹Division of Medical Virology, Department of Pathology, NHLS and ²Infectious Diseases, Department of Paediatrics, University of Stellenbosch
- Preparation for a phase 3 trial on the newly developed Group B Streptococcal vaccine to be administered during pregnancy together with Prof M Cotton and Novartis, the pharmaceutical firm based in Switzerland. Presently the GBS Site Assessment: Gap Analysis is being done at Kraaifontein Community Health Centre
- A new study (R01) with the goal to investigate the effectiveness and cost-effectiveness of mobile health (mHealth) technology using weekly SMS to improve adherence and retention in care during pregnancy and post-partum in HIV-infected South African patients with support from the Department of Epidemiology, Graduate School of Public health, University of Pittsburgh. Principle investigator Prof. J Nachega, Co-investigator Prof. M Cotton. Department of Obstetrics and Gynaecology, University of Oslo. Quarterly perinatal HIV lectures are given to undergraduate medical students via the internet

Private:

Provide ongoing consultation to patients at very high risk managed by private participating obstetricians.

Number of publications from department / division:

Publications:

Peer reviewed 10

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Teaching and Training (Postgraduate students only):

One PhD student. Two subspecialist fellows. Several Masters level students in O & G. One Masters level student in Pathology. One Masters level students in Nursing. Two Masters level students in Health Sciences Education.

Obstetric and Gynaecology Ultrasound and Fetal

Summary of activities:

The trend seen in previous years is maintained and the workload of the unit remains high and continues to climb. The output is mainly outpatient-based and the number of fetal medicine admissions remains limited because intensive outpatient surveillance is used to avoid long-term admissions.

Resources:

| Posts (Full-time) | Number | Filled |
|--|---------------------|--------|
| Principal specialist | 1 | 1 |
| Chief medical officer | 1 | 1 |
| Chief Sonographer | 2 | 2 |
| Registrar | 1 | 1 |
| Assistant nurse | 1 | 1 |
| Typist (shared with O and G) | 1 | 1 |
| Clinic clerk (shared with FEC) | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Senior specialist | 4 sessions per week | Filled |

Output:

| Obstetrics | 2012 | 2013 |
|----------------------|-------|-------|
| Total visits | 8 235 | 8 722 |
| Twin visits | 1 465 | 1 520 |
| Fetal anomaly visits | 1 064 | 1 982 |

| Doppler visits | 4 472 | 4 850 |
|---------------------------|-------|-------|
| Invasive procedures | 313 | 325 |
| Fetal medicine clinic | 332 | 463 |
| Fetal medicine admissions | 43 | 27 |
| Level III visits | 4 681 | 5 302 |
| Gynaecology | | |
| Total visits | 1 717 | 1 537 |
| Level III visits | 921 | 1 205 |

Comment on output:

The increasing obesity in the local population is very challenging and necessitates equipment of a higher standard than which is available. Higher end equipment needed to be assessed for the upcoming tender. The work is physically demanding and work-related injuries have resulted in staff resignation at short notice, followed by a temporary vacancy, during which period certain services had to be cut.

Part 2

Faculty of Health Sciences

Infrastructure and development:

Towards the end of the year, the extra rooms allocated to the unit for the purpose of family counseling eventually materialised after a very long delay and they have proved invaluable in coping with the increasing need. The subspecialist-lead fetal medicine clinics which deliver a holistic care package for women with complicated pregnancies requiring detailed fetal surveillance, have been able to expand this year due to the appointment of a subspecialist for four clinical sessions since July 2013, providing subspecialist cover for an extra morning each week.

Community outreach programmes / community service:

Prof. Geerts and her staff offered two ultrasound courses, involving both theoretical and practical training for private practitioners

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and staff members from the public sector. The courses have been upgraded to accreditation courses for those delegates who, after practicing these techniques in their own environment, later pass a formal assessment of their skills. The courses are unique in South Africa in this respect, in ensuring that delegates master essential skills to the ultimate benefit of their pregnant patients.

Partnerships:

(UK) D Kumar, Oxford University Press (chapter "**Prenatal diagnostic services and prevention of birth defects in South Africa**") in an international book on "Genomic variation and genetic disorders in developing countries" now published).

(USA) Harvard University, University of North and South Dakota, Columbia University and Boston University for the Safe Passage study. The topic of the main study is the effect of alcohol intake during pregnancy on still-births and sudden infant deaths. The ultrasound aspect focuses on the effects of alcohol on fetal development, growth and placental function. For this purpose a rigorous and objective quality assessment program was developed, that can be used in the clinical setting as well.

(Nigeria) Prof Geerts is working with Dr Ehigha Enabudoso, an obstetrician from Nigeria who was trained in Fetal Medicine at TBH for a period of 9 months | 2011, to offer an obstetric ultrasound workshop at his home university in Benin city in early 2014.

Achievements:

Prof. Geerts was an invited speaker at the SASUOG congress in Pretoria and acted as trainer in a practical ultrasound workshop at this Congress.

Prof. Geerts was invited to give state-of-the art lectures at the UCT O and G Refresher course, the O and G Department of UCT's fetal

medicine update and the academic meeting of the Department of Radiology at TBH.

In her capacity as president of SASUOG, Prof. Geerts has contributed to proposals to alter the SASUOG constitution and elections, to amend obstetric ultrasound training for registrars, to define scanning standards and to liaise with MPS regarding increasing litigation fees.

Prof. Geerts continues to be ESMOE trainer Staff members of the unit are actively involved in the training and formal assessment of CPUT students in BTech (Ultrasound)

Teaching and training:

The training programme for junior registrars to ensure their basic obstetric ultrasound skills has been highly effective in ensuring that they can meet the need for patient care from the early stages of their career. The training programme for senior registrars in detailed fetal assessment is now seen as the standard for registrar training in the country.

The staff of the ultrasound unit is also responsible for the practical training of successful CPUT students qualifying as sonographers BTech or National Diploma. Prof. Geerts and her staff were responsible for the subspecialty training of consultants of University of Free State, as well as University of Kwa-Zulu-Natal.

Prof. Geerts collaborates with the Division of Human Genetics for the development of an educational video for patients, regarding prenatal screening and diagnostic testing and Prof. Geerst assists two registrars and one MSc student of this Division with their research projects

Special achievements:

The formal one-day accreditation courses in obstetric ultrasound (aimed at different scanning levels and attended by private practitioners and employees of the public

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sector) were a first for South Africa and continue to be well-attended.
 For the subspecialty in Maternal and Fetal Medicine Prof. Geerts has been and is responsible for the Fetal Medicine module. During 2013 a consultant of the University of Free State was trained, as well as a consultant of the University of Kwa-Zulu-Natal. Routine teaching activities in the US Unit including tutorials for third years, including practical demonstration (two per clinical rotation), hands-on training and formal assessment of ultrasound skills for registrars in O and G and Radiology, medical officers and BTech (US) students of CPUT. Fetal medicine lectures for registrars (weekly) Journal Club (two-weekly) State-of-the-art lectures at national meetings, other universities and departments Prof Geerts is organising the Fetal Medicine Workshop for the SASOG congress May 2014. Prof Geerts is organising the next SASUOG Congress (March 2015)

Film and Television Unit

Summary of activities:

The unit continues to produce DVD footage of a high quality for training of undergraduate- and postgraduate students.

Resources:

| Posts (Full-time) | Number | Filled |
|------------------------------|--------|--------|
| *Manager and Cinematographer | 1 | 1 |

*Post is remunerated by Stellenbosch University

Output:

Productions during 2013

- Department of Radiology – PowerPoint recordings to DVD – series completed

- Face and jaw, spine, shoulder, elbow, wrist, hand hip 1 and 2
- Finished product exhibited at the SA Radiology Society's Congress (100 copies of the series supplied)
- Video recording of Prof. John Guillebaud at Groote Schuur Hospital (IUD's and implants)
- Laparoscopic sterilisation completed. This DVD, as well as the completed termination of pregnancy DVD, were made available to the WHO Reproductive Health Library

Comment on output:

- A number of projects were commenced during 2013 for the Department of Obstetrics and Gynaecology on surgical, endoscopic and reproductive medicine procedures

Part 2

Faculty of Health Sciences

Infrastructure development:

New professional DVD production equipment has been purchased with funds generated by the unit.

Teaching and training:

Continuous support provided to the department regarding multimedia educational activities and OSCE and OSPE examinations.

Urogynaecology and Reconstructive Pelvic Surgery

Summary of activities:

The Urogynaecology Unit experienced a productive year, but also experienced some difficulties during 2013, which may continue for some time and will present challenges for 2014.

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Urogynaecology has been accepted as a subspecialty as reported by the HPCSA. This process was driven by the SAUGA, of which Dr van Rensburg holds the secretarial position.

The Unit has established the needed infrastructure to accommodate a fellow on a temporary basis in the field of urogynaecology. This was made possible with a sessional position. Unfortunately the fellow resigned at the end of 2013.

The combined perineal clinic continued at the colorectal unit at GSH. Also a combined perineal clinic once a month at TBH was initiated with the general surgeons. With the help of the Stellenbosch University, a motivation for two sessional physiotherapists was accepted by the Director of Medical Services. These physiotherapists aimed to enter for their Master's degree. However, at the end of 2013, one of the physiotherapists resigned and the other enrolled for her Master's degree.

Resources:

| Posts (Full time) | Number | Filled |
|--|--------|--------|
| Specialist | 1 | 1 |
| Physiotherapist / Research Assistant (part-time) | 2 | 2 |
| Sessional post | 1 | 1 |

| Output: | 2012 | 2013 |
|--------------------------------|------|------|
| New patients seen | 219 | 215 |
| Follow-up patients seen | 804 | 829 |
| Urodynamic studies performed | - | 97 |
| Operative procedures performed | 100 | 139 |

Comment on output:

Surgery:

Good co-operation with WCG has been established over the previous years which involved the needed devices and equipment for complicated reconstructive surgery and incontinence surgery. The surgical time within the department was increased for the urogynaecological unit. The issue of equipment procurement needed to be addressed at the highest level to include a meeting with the senior Medical Superintendent, Procurement, Medical Superintendent responsible for theatre and representatives from Head Office. Dr van Rensburg took the initiative to write the guidelines with Dr Jeffery from GSH for the awaited tender process for the needed surgical devices and consumables. Outreach surgery at Paarl Hospital was provided in conjunction with the GSH Unit every three months.

New Urodynamics machine:

The urogynaecology unit is thankful for the new UDS machine provided by WCG. This is a state-of-the-art piece of equipment. Consumables were not available on a continuous basis, which has increased the waiting list for 2013. However, "Eyeball" urodynamics has been implemented for the patient not requiring formal urodynamic, but it does not reflect clearly in the annual statistics.

The combined perineal clinic continued the colorectal unit at GSH. Also a combined perineal clinic once a month at TBH was initiated with the general surgeons. Dr Tim Forgan was involved and has now received a fellowship at the colorectal unit at GSH. This combined clinic will continue in 2014 where Dr Conradie from general surgery will take responsibility.

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Part 2

Faculty of Health Sciences

Infrastructure development:

The urogynaecology unit has no access to ultrasound investigation for faecal incontinence. The O+G ultrasound unit obtained a 4-D Voluson machine. Dr A Steensma from the Netherlands introduced an Urogynaecology ultrasound program in Jan 2013 after the IUGA/SAUGA conference. Since then pelvic floor ultrasounds are offered for urogynaecology patients on a Friday.

Community outreach programmes:

Currently surgical list as outreach to the Paarl is shared between GSH and TBH.

Partnerships:

National:

Dr van Rensburg holds the position of secretary on the SAUGA committee and is also a member of the Cape Town Pelvic Floor Society.

Good working relationship has been established with the UCT urogynaecology unit and at present they contribute to a multicenter trial as research project.

International:

Dr van Rensburg is a member of the IUGA. Dr van Rensburg, with the help of Dr S Jeffery from UCT, hosted the IUGA/ SAUGA meeting at the Stellenbosch University campus end of January 2013.

A partnership with Prof. M Murphy from the University of Calgary is being established. Already one senior registrar visited the University of Stellenbosch and rotated through the department for a period of two months.

Urogynaecology unit and obstetrics :

Achievements with respect to research and research outputs.

Abstract "Pre-operative urodynamic studies: Is there value in predicting post-operative stress urinary incontinence in women undergoing prolapse surgery?" was accepted at the ICS international meeting in Barcelona with Dr K Janse van Rensburg as first author and Dr van Rensburg as second author.

Research:

Currently running two projects, of which one is local and one in collaboration with international partner in Northern America. Protocol is in progress of development for the Physiotherapist Master Degree thesis. Reviewer for the International Journal of Urogynaecology and South African Family Practice

Teaching and Training:

The urogynaecology unit is involved on an ongoing basis in undergraduate-, postgraduate- and fellowship training.

The PASS Network

Summary of activities:

The PASS Network was formed in 2003 through a cooperative granting mechanism jointly supported by two NIH Institutes – Eunice Kennedy Shriver National Institute for Child Health and Development (NICHD) and the National Institute for Alcohol Abuse and Alcoholism (NIAAA). Most recently, the National Institute for Deafness and Communicative Disorders (NIDCD) became a partner in this unprecedented effort. The PASS Network is comprised of five elements:

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- Two comprehensive clinical sites serving high risk populations for stillbirth, SIDS and FASD
- Developmental Biology and Pathology Center (Children's Hospital, Boston)
- Physiology Assessment Center (Columbia University, New York)
- Data Coordinating and Analysis Center (DM-stat, Boston)
- NICHD, NIAAA and NIDCD program scientists

The Safe Passage Study involves recruitment and analysis of a prospective cohort of 12 000 maternal/fetal pairs in a longitudinal and multidisciplinary study design. It is designed to answer critical questions regarding the relationship between prenatal alcohol and other adverse exposures, stillbirth, the sudden infant death syndrome (SIDS) and fetal alcohol spectrum disorders (FASD) in infancy. The Safe Passage Study is the largest study in underserved populations to investigate interactions between environmental, genetic, maternal and placental factors that affect fetal and infant growth, physiology and brain development, and how these interactions lead to adverse outcomes such as stillbirth and infant death. The extensive infrastructure and large investment in this cohort affords unique opportunities for collaboration and a well characterised cohort suitable for long-term follow-up and intervention studies.

Prof. Odendaal is the local principal investigator. Funding has been obtained up until the year 2016. Recruitment is proceeding well; as of the end of December 2013, more than 5 009 participants have been recruited of which the oldest child being followed-up is six years old.

This is an unique cohort with comprehensive information commencing with early pregnancy and presently extending to the neuro-developmental outcome of the children in the cohort.

Departmental Publications:

| Journal Articles (subsidised) | 2012 | 2013 |
|--|-------------|-------------|
| Maternal Fetal Medicine | 15 | 13 |
| Reproductive Medicine | 11 | 6 |
| Gynaecological Oncology | 2 | 4 |
| Gynaecology / Education | 2 | 5 |
| Other | 1 | 1 |
| Total | 31 | 29 |
| Journal Articles (non-subsidised) | | |
| Reproductive Medicine | - | 1 |
| Gynaecological Oncology | 4 | 1 |
| Maternal Fetal Medicine | 4 | - |
| Obstetrics and Gynaecology | 1 | - |
| Urogynaecology | 0 | 2 |
| Total | 9 | 4 |

PAEDIATRICS AND CHILD HEALTH

HEAD OF DEPARTMENT

Professor Mariana Kruger



EXECUTIVE SUMMARY – 2013

There were 16 957 admissions in 2013 (13% increase), of whom 11 113 were admitted to general paediatrics and 5 844 admitted for highly specialised paediatric care to the Department of Paediatrics and Child Health, Stellenbosch University in Tygerberg Hospital. The Department serves the East Metropolitan region of the greater Cape Town and the North-Eastern districts of the Western Cape. The average bed occupancy rate (BOR) was 85,7%. There were especially increased bed occupancy rates for the critical care beds – 138% and 87% respectively for the neonatal intensive care unit and the paediatric intensive care unit (PICU). Neonatology remained a very busy service with an average BOR of more than 80% at all times, but low early neonatal death rate (ENNDR >1000g) of 5/1000 live deliveries (ENNDR > 500g – 11.3/1000). It is especially the neonates born in TBH that had an increased average BOR of 104%. Important mortality causes were prematurity-related complications for neonates (53%) and lower respiratory tract infections for the older children (24.6%), with a case fatality rate of 1,5. A third of the children who died were underweight for their age (29.3%).

The unfortunate demise of Dr Louis Heyns and the promotion of Prof. Sharon Kling to clinical unit head of general paediatric services, created a loss of two senior staff members in the PICU service delivery, which was addressed by the creation of two new dedicated posts for paediatric intensivists.

Education output was good with an undergraduate pass rate of 95,6%, while 11 completed their Masters degree in paediatrics, and 9 registered as paediatricians. Another three paediatricians qualified as subspecialists (neurology, pulmonology and gastroenterology). Two staff members completed their PhD dissertation, another nine continued their PhD studies and three staff members obtained PhD scholarships.

There were peer 94 reviewed scientific papers and 2 books. The very important POPART study was initiated, which will investigate in a randomised control trial intervention to decrease HIV infections in 21 communities in both South Africa and Zambia. Twenty-six staff members received performance excellence awards (13 from TBH and 13 from SU). Seven staff members have NRF rating, with two as category A2.

Mariana Kruger

PAEDIATRICS AND CHILD HEALTH

RESOURCES AND OUTPUT

Human Resources

| Posts (full-time) | Number | Filled |
|---|-----------------------|-----------------------|
| Professor/Chief Specialists | 2 | 2 |
| Chief Specialist | 1 | 1 |
| Principal Specialists | 5 | 5 |
| Senior Specialists | 23+1 (5/8) | 23+1 (5/8) |
| Senior Registrars | 7 (WCG N=4) | 7 (WCG N=4) |
| Registrars | 30 (2 supernumerary) | 30 (2 supernumerary) |
| Medical Officer | 25 | 23 |
| Posts (sessional – hours per week) | | |
| Specialist | 6 (48 hours per week) | 6 (48 hours per week) |
| Number of beds | 268 | 268 |

| Summary of Output General Paediatrics | 2013 | 2012 | 2011 |
|--|--------------------------|--------------------------|-------------------------|
| Inpatients | 11 113 (13% growth) | 9 802 (15% growth) | 8 523 (-1,2% growth) |
| Outpatients | 13 392 (-5.5% growth) | 14 178 (12,8% growth) | 12 568 (4%growth) |
| Subspecialist Paediatrics | | | |
| Inpatients | 5 844 (10% growth) | 5 311 (13% growth) | 4 694 (-10% growth) |
| Outpatients | 14 039 (0.7% growth) | 14 152 (4,25% growth) | 13 574 (7,6% growth) |

Output

Subspecialist Paediatrics

Total patient admissions 2013 (Clinicom data)

| *A9 NICU | A9 PICU | A9 High Care | Trachea Unit | G1 | G3 | G7 | G9 | Total |
|-------------|------------|-----------------|-----------------|------|-----|------|------|-------------|
| 491 | 780 | 275 | 33 | 1030 | 684 | 1071 | 1480 | 5844 |

*A9 NICU includes High-care beds, since Clinicom cannot separate data.

Bed Occupancy Rate 2013 (Clinicom data)

| *A9 NICU | A9 PICU | A9 High Care | Trachea Unit | G1 | G3 | G7 | G9 | Total |
|-------------|------------|-----------------|-----------------|-------|-------|------|-----|--------------|
| 138% | 85,9% | 51,2% | 86,2% | 92,4% | 49,3% | 100% | 80% | 85,3% |

*A9 NICU includes High-care beds, since Clinicom cannot separate data.

PAEDIATRICS AND CHILD HEALTH

Neonatology

Staff: Profs. G Kirsten, J Smith, Drs A Bekker, S Holgate, G Kali, A Madide, S O’Ryan, Dr JCF du Preez, Dr H Hassan, 4 Registrars, 10 Medical Officers

A9 Intensive Care Unit

Staff: 1 Consultant (on rotation), 2 Registrars, 1 Medical Officer

| Beds n=8 | 2013 | 2012 | 2011 |
|-------------------------------|-----------------|-------------|------------|
| Admissions | 491 | 518 | 617 |
| Average Hospital Stay in Days | 8.4 | 5 | 6 |
| Average Bed Occupancy % | 138% | 92% | 93% |
| % Growth | -5,2% | 51% | 51% |
| Caesarean Sections | 3550,46 (45,2%) | 2821(40,5%) | 2521 (41%) |
| Deaths | 91 (18,5%) | 85 | 63 (10,2%) |

#Combined with PICU data

Ward G1: Neonatal Unit – Babies born outside TBH

Staff: 2 Consultants (on rotation), 2 Registrars, 2 Medical Officers, 1 Intern

| Beds n=30 | 2013 | 2012 | 2011 |
|-------------------------------|-----------|-------|-----------|
| Admissions | 1 030 | 1 150 | 1 029 |
| Average Hospital Stay in Days | 10,1 | 9 | 10 |
| Average Bed Occupancy % | 92% | 87% | 81% |
| % Growth | -10% | 7,4% | -1,5% |
| Deaths | 15 (1,4%) | 25 | 30 (2,9%) |

A9 Paediatric Intensive Care Unit

Staff: Profs. R Gie, S Kling¹, Drs L Heyns², 3 Registrars, N Parker³, Medical Officer

| Beds n=8 | 2013 | 2012 | 2011 |
|-------------------------------|------------|------------|------------|
| Admissions | 790 | 694 | 598 (PICU) |
| Average Hospital Stay in Days | 4,1 | 4,86 | 6 |
| Average Bed Occupancy % | 87% | 92% | 85% |
| % Growth | 12,2% | 34% | # |
| Deaths | 92 (11,6%) | 84 (11,9%) | 52 (8%) |

PAEDIATRICS AND CHILD HEALTH

A9 Paediatric High Care Unit

Staff as mentioned above. (High Care Unit opened May 2012)

| Beds n=8 | 2013 |
|-------------------------------|------|
| Admissions | 275 |
| Average Hospital Stay in Days | 3,7 |
| Average Bed Occupancy % | 55,4 |
| Deaths | 5 |

A9 Tracheostomy Unit

Staff as mentioned above:

| Beds n=10 | 2013 |
|-------------------------|------|
| Admissions | 33 |
| Average Bed Occupancy % | 85% |
| Deaths | 1 |

Ward G9 Paediatric Pulmonology and Allergy

Staff: Prof. R Gie, Drs P Goussard, Dr J Morrison, 2 Registrars, Shared Medical Officer in G9

| Pulmonology Beds n=10 | 2013 | 2012 | 2011 |
|-------------------------------|------|--------|------|
| Admissions Pulmonology | 640 | 656 | 511 |
| Average Hospital Stay in Days | 5,90 | 5,78 | 6,75 |
| Average Bed Occupancy % | 65% | 66,24% | 78% |
| % Growth | 0% | 27% | / |
| Deaths | 5 | 2 | 5 |

Theatre procedures and Other Activities

- Bronchoscopies: 285
- Thoracic surgery: 58

Ward G9 Neurology

Staff: Dr R van Toorn, Dr R Solomons, Dr P Springer, Dr H Saunders (15 hours per week)
Prof. JF Schoeman (4 hours per week), 2 Registrars

| Beds n=10 | 2013 | 2012 | 2011 |
|-------------------------------|---------|----------|----------|
| Admissions | 441 | 414 | 392 |
| Average Hospital Stay in Days | 6 | 5,7 | 6,75 |
| Referral other wards | 260 | 238 | |
| Average Bed Occupancy % | 77% | 75% | 67.5% |
| % Growth | 6,5% | 1% | None |
| Deaths | 2(0,4%) | 8 (1,9%) | 5 (1,2%) |

Other Activities

- Paediatric and Neonatal EEGs reported by 2 consultant: 630
- Six Outreach clinics to Paarl hospital (patients seen): 79
- Six Outreach clinics Worcester hospital (patients seen): 160
- Two Transcranial Doppler clinics (patients): 12
- Two Outreach clinics Alta du Toit (patients seen): 40
- Nine Clinics Paarl school (patients seen): 90
- Autism Diagnostic Observations Schedule (ADOS) (patients): 12

PAEDIATRICS AND CHILD HEALTH

Ward G9 Paediatric Endocrinology

Staff: Drs E Zöllner, D Abraham, Registrar and shared Medical Officer for G9

| Beds n=5 | 2013 | 2012 | 2011 |
|-------------------------------|---------------------|----------------------|----------------------|
| Patients admitted | 94 Diabetics | 79 Diabetics | 91 Diabetics |
| | 87 Endocrinology | 117 Endocrinology | 102 Endocrinology |
| Admission Total | 181 | 196 | 193 |
| Average Hospital Stay in Days | 8 | 5,5 | 7 |
| Average Bed Occupancy % | 74% | 56,6% | 74% |
| % Growth | -7,5% | 1,5% | 1,1% |
| Deaths | 0 | 0 | 0 |

Ward G7 Gastroenterology

Staff: Drs E Nel, Dr S Ströbele, Registrar and shared Medical Officer for G7

| Beds n=9 | 2013 | 2012 | 2011 |
|-------------------------------|------|-----------|-------|
| Admissions | 295 | 279 | 317 |
| Average Hospital Stay in Days | 8 | 18,09 | 12,6 |
| Average Bed Occupancy % | 100% | 83% | 89% |
| % Growth | 5,7% | -11,9% | 11,1% |
| Deaths | 2 | 10 (3,5%) | 9 |

Theatre procedures

- Gastroscopy (including colonoscopy): 42 Paediatric/608 Adults
- Colonoscopy: 5 Paediatric/222 Adults
- Liver Biopsy: 9

Ward G7 Infectious Diseases Unit

Staff: Prof. MF Cotton, Dr H Rabie (HIV Clinic), Registrar, Shared Medical Officer for G7

| Beds n=14 | 2013 | 2012 | 2011 |
|-------------------------------|-------|--------|-------|
| Admissions | 189 | 200 | 226 |
| Average Hospital Stay in Days | 21 | 17,3 | 16,4 |
| Average Bed Occupancy % | 8 | 83% | 89% |
| % Growth | -5,5% | -11,5% | 11,1% |
| Deaths | 1 | 4 | 7 |
| HIV related (CHIP) | All | All | All |
| Infected (CHIP data) | 1 | 4 | 7 |

* Clinicom data combined with gastroenterology

We reviewed 5 to 10 new referrals per week.

PAEDIATRICS AND CHILD HEALTH

HIV service:

- Total children followed up: 379
- New cases initiating and following at TBH: 92
- Transfers out: 55
- Transfers in: 6
- Patients lost to follow-up: 24

Ward G3 Oncology and Haematology

Staff: Profs. M Kruger, C Stefan, Drs A van Zyl, R Uys, 2 Registrars

| Beds n=9 | 2013 | 2012 | 2011 |
|-------------------------------|----------------|----------------|----------------|
| New patients | 37 Haematology | 42 Haematology | 51 Haematology |
| | 46 Oncology | 48 Oncology | 44 Oncology |
| Admissions | 413 | 415 | 343 |
| Average Hospital Stay in Days | 3,9 | 5 | 5,3 |
| Average Bed Occupancy % | 50% | 60,16% | 48,2% |
| % Growth | 0% | 21% | / |
| Deaths in G3 | 7 | 12 | 5 |
| Day patients (G3 outpatients) | 1 023 | 1 100 | 1 181 |

*Clinicom data

Ward G3 Rheumatology and Immunology

Staff: Dr M Esser, Registrar Shared with G3, Shared Medical Officer for G3

| Beds n=4 (shared with Nephrology) | 2013 |
|-----------------------------------|-------|
| Admissions | 75 |
| Average Hospital Stay in days | 5,6 |
| Average bed occupancy % | 49,3% |
| Deaths | 0 |

Ward G3 Nephrology

Staff: Dr C du Buisson, Dr JL Shires – part-time, Registrar, Shared Intern for G3

| Beds n=4 | 2013 | 2012 | 2011 |
|-------------------------------|------|------|------|
| Admissions | 155 | 126 | 168 |
| Average Hospital Stay in days | 2,3 | 6 | 12 |
| Average bed occupancy % | 60% | 52% | 92% |
| % Growth | 23% | -25% | / |
| Deaths | 1 | 2 | 1 |
| Renal Biopsies* | 33 | 24 | 33 |
| Acute Dialysis** | 23 | 12 | 7 |
| Outliers*** | 302 | 56 | 142 |
| Referrals**** | 410 | - | - |

PAEDIATRICS AND CHILD HEALTH

- * Done in C4B Theatre under general anaesthesia
- ** Three was in G3, 20 in PICU
- *** Most of our patients are not in our ward due to acute infections and some are neonates, diagnosed antenatally
- **** These are patients seen and only advise needed, not continuous care

Ward G3 and G10 Cardiology

Cross Platform Staff:

Tygerberg Hospital (TBH): Dr J Lawrenson, 1 Senior Registrar, 2 Registrars
 Red Cross War Memorial Children's Hospital (RXH): 2 Consultants, 1 Senior Registrar

| Beds n=10 (G3=5, G10=5) | 2013 | 2012 | 2011 |
|--------------------------------|-------------|-------------|-------------|
| Admissions | 204 | 155 | 148 |
| Average Hospital Stay in Days | * | * | * |
| Average Bed Occupancy % | * | * | * |
| Inpatient Echocardiography | 700 | 772 | 649 |
| Inpatient Consultations | 1 200 | 1 094 | 707 |
| Deaths | 1 | / | / |

* Clinicom data combined with nephrology and general paediatrics therefore not possible to calculate

Offered at TBH:

- Outreach clinic at Worcester Hospital ±90

Offered at RXH as common platform of service delivery

- RXH theatre procedures, operations 286
- RXH theatre catheterisations 259
- Outreach at East London ±140

PAEDIATRICS AND CHILD HEALTH

OUTPATIENT COMPLEX

Subspecialist Clinics

| Clinics | 2013 Total | 2012 Total | 2011 Total |
|--|-----------------------|-----------------------|-----------------------|
| Haematology | 298 | 261 | 259 |
| Immunology | 168 | 176 | 146 |
| Oncology | 334 | 418 | 448 |
| Pulmonology | 1 354 | 1 399 | 1 381 |
| Gastroenterology | 744 | 614 | 527 |
| High-risk Babies | 1 862 | 1 740 | 1 671 |
| Neurology and Developmental paediatrics | 2 515 | 2 687 | 2 685 |
| Allergy | 666 | 654 | 713 |
| Premature Follow-up | 307 | 284 | 277 |
| Nephrology | 1 333 | 1 343 | 1 201 |
| Cardiology | 916 | 937 | 1 076 |
| Bronchopulmonary Dysplasia | 19 | 21 | 22 |
| Diabetic | 620 | 610 | 598 |
| Endocrinology | 610 | 636 | 530 |
| Rheumatology | 337 | 280 | 183 |
| Infectious diseases | 1 184 | 1 392 | 1 308 |
| Genetics | 502 | 476 | 367 |
| Pharmacy prescriptions | 270 | 224 | 178 |
| Total | 14 039 | 14 152 | 13 574 |

General specialist services

Total Patient Admissions 2013 (Clinicom data)

| G2 | J3 | G8 | G10 | GG Short Stay | Total |
|-----------|-----------|-----------|------------|--------------------------|---------------|
| 2 376 | 918 | 941 | 1 237 | 5 641 | 11 113 |

PAEDIATRICS AND CHILD HEALTH

Bed Occupancy Rate 2013 (Clinicom data)

| G2 | J3 | G8 | G10 | GG Short Stay | Total |
|--------|------|-------|-----|------------------|--------------|
| 104,5% | 108% | 83,3% | 50% | 81% | 85,3% |

Neonatology

Ward G2 Neonatal Unit – Babies born in TBH

Staff: 2 Consultants (on rotation), 1 Senior Registrar, 1 Registrars, 2 Medical Officers, 1 Intern (if available)

| Beds n=27 | 2013 | 2012 | 2011 |
|-------------------------------|-----------|-------|-----------|
| Admissions | 2 376 | 2 087 | 1 845 |
| Average Hospital Stay in Days | 4,7 | 5 | 6,0 |
| Average Bed Occupancy | 104% | 93% | 85% |
| % Growth | +13,8% | 9,4% | -2,5% |
| Deaths | 71 (2,9%) | 71 | 66 (3,5%) |

* Data from Clinicom

Ward J3 Neonatal Unit – Babies born in TBH

Staff: 1 Consultant (on rotation), 1 Registrar, 2 Medical Officers

Ward opened April 2012

| Beds n=25 | 2013 |
|-------------------------------|----------|
| Admissions | 918 |
| Average Hospital Stay in Days | 11 |
| Average Bed Occupancy | 108% |
| % Growth | n/a |
| Deaths | 2 (0,2%) |

Ward G8 Neonate and Kangaroo Mother Care – Step-down Facility

Staff: 1 Consultant (on rotation), 1 Registrar, 1 Medical Officer, 2 Interns

| Beds n=30 | 2013 | 2012 | 2011 |
|-------------------------------|------|-------|-------|
| Admissions | 941 | 783 | 834 |
| Average Hospital Stay in Days | 9,9 | 12 | 11,1 |
| Average bed occupancy % | 83% | 86% | 80% |
| % Growth | 20% | -7,5% | -2,5% |
| Deaths | 0 | 4 | 0 |

*Data from Clinicom

PAEDIATRICS AND CHILD HEALTH

Ward G10 General Paediatrics

Staff: Dr H Finlayson, Prof. S Kling, 1 Registrar, 2 Medical Officers, 2 Interns

| Beds n=25 | 2013 | 2012 | 2011 |
|-------------------------------|-----------|------------|------------|
| Admissions | 1 267 | 1 429 | 1 119 |
| Increase in Admissions | -11% | 28% | 36% |
| Average Bed occupancy | 87,2% | 70%* | 70,8%* |
| Average Hospital Stay in Days | 4,4 | 5,4 | 6,33* |
| Deaths | 9 (0,75%) | 11 (0,77%) | 10 (0,89%) |

*Clinicom data

Short-stay G Ground: <48-hour Admissions

Staff: Prof. S Schaaf, Drs E Malek, L Smit, A Redfern, 2 Registrars, (1 Emergency Medicine Registrar), 2 Medical Officers, 2 Interns

| Beds n=24 | 2013 | 2012 | 2011 |
|---|-----------------|------------------|-------|
| Total Admissions to G Ground | 4 742 | 4 861 | 4 629 |
| % Increase in General Admissions | -2% | 5% | -2% |
| Average Admissions per day | 13 (range 9-16) | 13 (range 10-18) | 13 |
| Average Hospital Stay in Days | 1,3 | 1,0 | 1,2 |
| % Average Bed Occupancy | 87% | 72% | 73% |
| Average Gastro Beds Daily Occupancy % | 66% | 59% | 63% |
| Average Gastro Daily Occupancy % (Gastro Season Feb-May) – 8 Beds during Gastro Season instead of the usual 6 | 86% | 78% | 80% |
| Deaths | 17 | 16 | 13 |
| HIV-related Mortality | 3 | 0 | 3 |
| HIV Exposed | 2 | 1 | 2 |

General Paediatrics: Emergency and Clinics

| Clinics | 2013 | 2012 | 2011 |
|---|---------------------|---------------------|---------------------|
| | 8 467 | 8 825 | 7 668 |
| OPD 8am-4pm: Emergency and Routine | 5 630 New referrals | 6 247 New referrals | 5 512 New Referrals |
| | 2 346 Booked | 2 578 Booked | 2 156 Booked |
| | 491 (Delft CHC) | / | / |
| Daily average seen | 32 | 35 | 31 |
| Annual OPD after hours: 4pm-8am and weekend – Emergency | 5 172 | 5 353 | 4 900 |
| Daily average seen after hours (4pm-8am) | 14 | 15 | |
| OPD after hours: 4pm-8am % | 40% | 38% | 39% |
| Total | 13 639 | 14 178 | 12 568 |

PAEDIATRICS AND CHILD HEALTH

2013 Morbidity and Mortality

PPIP data

Total births in TCH (TBH): n = 6603

- Perinatal Mortality Rate (PNMR) ($\geq 500\text{g}$) = 61,5/1000
- Early Neonatal Death Rate (ENNDR) ($\geq 500\text{g}$) = 11,3/1000
- Perinatal Mortality Rate (PNMR) ($\geq 1000\text{g}$) = 35,5/1000
- Early Neonatal Death Rate (ENNDR) ($\geq 1000\text{g}$) = 5,0/1000

Mortality of babies born in TCH (TBH) per birth weight category: n=90

| Birth Weight | 2013 | % Mortality 2012 |
|-------------------------|------|------------------|
| $\leq 1\ 000\ \text{g}$ | 21,3 | 29,1 |
| 1 001 to 1 500 g | 3,4 | 3,3 |
| 1 501 to 1 999 g | 2,1 | 2,4 |
| 2 000 to 2 499 g | 0,5 | 1 |
| $\geq 2\ 500\ \text{g}$ | 0,1 | 0,3 |

Causes of death of babies born in TCH (TBH): n=97

| Cause of Death | % of Total 2013 | % of Total 2012 |
|-----------------------------------|---------------------------|-----------------|
| Prematurity-related Complications | 53,1 (Immaturity-related) | 52,0 |
| Infection-related | 13,1 | 17,1 |
| Peripartum Hypoxia | 11,5 | 8,9 |
| Congenital Anomalies | 14,6 | 17,1 |
| Other | 7,7 | 0,8 |

% Deaths of babies referred to TCH per weight category

| Birth Weight* | % Mortality 2013 (n = 46) | % Mortality 2012 (n = 74) |
|-------------------------|---------------------------|---------------------------|
| $< 1\ 000\ \text{g}$ | 28,2 | 14,5 |
| 1 000 to 1 499 g | 30,4 | 17,7 |
| 1 500 to 1 999 g | 6,5 | 9,7 |
| 2 000 to 2 499 g | 6,5 | 11,3 |
| $\geq 2\ 500\ \text{g}$ | 21,7 | 46,8 |

*Weight categories as a percentage of total deaths (outborn)

Outborn babies mortality according to referral area of origin

| Geographic Service Area | 2013 | % |
|------------------------------------|------|------|
| Metro East | 26 | 56,5 |
| Winelands (Paarl area) | 12 | 26 |
| Overberg (Worcester drainage area) | 6 | 13 |
| Unknown | 2 | 4,3 |

PAEDIATRICS AND CHILD HEALTH

Geographic distribution of the NICU admissions and death of babies born outside and referred to TCH

| Place of Origin (Hospital) | Number 2013 | Percentage 2013 |
|----------------------------|-------------|-----------------|
| Karl Bremer | 3/48 | 6,2 |
| Paarl | 3/23 | 13 |
| Helderberg | 4/37 | 10,8 |
| Worcester | 4/11 | 36 |
| Ander/Other | 5/19 | 26 |
| Swartland | 1/3 | 33 |
| Khayelitsha | 0/11 | 0 |
| Hermanus | 2/3 | 66 |
| Caledon | 0/2 | 0 |

CHIP MORTALITY for all subspecialist paediatric wards (2013)

| CHIP Mortality | Deaths | Hosp. Mortality Rate |
|-------------------------|------------|----------------------|
| *0-28 days | 16 | 3,4 |
| 28 days – 1 year | 66 | 2,3 |
| 1-5 year(s) | 25 | 0,9 |
| 5-13 years | 20 | 1,4 |
| 13-18 years | 2 | 1,4 |
| Number of deaths | 129 | 1,7 |

*Please note: Excluding neonatal deaths reported under the PPIP section

Case fatality rate for death under age 5 years:

| Category of illness | Number of admissions | Number of deaths | Case fatality rate |
|-----------------------------|----------------------|------------------|--------------------|
| Acute respiratory infection | 1 906 | 29 | 1,5 |
| Diarrhoeal disease | 970 | 13 | 1,3 |
| Other | 3 175 | 65 | 2 |
| Total | 6 051 | 107 | 1,8 |

| Length of Stay | Number | % |
|----------------|--------|------|
| DOA | 5 | 4 |
| <24 hours | 40 | 31,7 |
| 1-3 days | 34 | 27 |
| 4-7 days | 21 | 16,7 |
| 8-14 days | 16 | 12,7 |
| >14 days | 10 | 7,9 |

PAEDIATRICS AND CHILD HEALTH

| Gender | Number | % |
|---|--------|------|
| Female | 67 | 53,2 |
| Male | 59 | 46,8 |
| Main Causes of Death in Children* | Number | % |
| Septicaemia, Possible Serious Bacterial Infection | 38 | 30 |
| Pneumonia, ARI | 31 | 24,6 |
| Acute Diarrhoea with Hypovolaemic Shock | 8 | 6,3 |
| Cardiomyopathy | 7 | 5,5 |
| Other Nervous system | 6 | 4,7 |
| Congenital Heart Disease | 4 | 3,1 |
| Meningitis: Bacterial | 4 | 3,1 |
| Other circulatory Systems | 3 | 2,3 |
| Malignancy | 7 | 2,3 |
| <i>Status epilepticus</i> | 2 | 1,5 |

*Please note: Other co-morbidities not reflected.

Five facilities where most patients who died, were referred from

| Referring facility | Number | % |
|----------------------|--------|-----|
| Helderberg Hospital | 19 | 15 |
| Khayelitsha Hospital | 19 | 15 |
| Paarl Hospital | 11 | 8,7 |
| Karl Bremer Hospital | 10 | 7,9 |
| Delft CHC | 10 | 7,9 |

Deaths by Subdistrict:

| | | |
|-------------|----|------|
| Eastern | 40 | 31% |
| Khayelitsha | 23 | 18% |
| Tygerberg | 26 | 20% |
| Northern | 7 | 5,4 |
| Drakenstein | 12 | 9,4% |
| Other | 11 | 8,5% |

| HIV-mortality | Number | % |
|---------------|--------|------|
| Negative | 62 | 49,2 |
| Infected | 18 | 14,2 |
| Exposed | 17 | 13,4 |
| Not tested | 16 | 12,6 |
| Unknown | 11 | 8,7 |

PAEDIATRICS AND CHILD HEALTH

Mortality according to Weight Category

| Weight Category | Number | % |
|-----------------|--------|------|
| Normal | 70 | 55 |
| UWFA | 37 | 29,3 |
| Kwashiorkor | 10 | 7,9 |
| Unknown | 5 | 3,9 |
| Marasmus | 4 | 3,1 |

Mortality per Ward

| Ward | Number |
|---------------|------------|
| A9 PICU | 91 |
| G G Ground | 17 |
| G3 Onco | 7 |
| G10 – General | 5 |
| G7 – Gastro | 2 |
| G9 – Neuro | 2 |
| G7 – Infect | 1 |
| G9 – Resp | 1 |
| G3 – Nephro | 1 |
| Total | 127 |

Infrastructure Development

General Paediatrics

G10:

Renovation of the G10 Infectious Diseases Ward by the Western Cape Government (WCG) and Public Works has been initiated and will be completed in 2014.

GG:

Some renovations to the GG ward took place in 2013, and most of the ward has been painted with child friendly murals. The renovations have improved patient flow and triage, as well as the management of critically ill children. Discussions and planning regarding the new Paediatric OPD is ongoing.

PAEDIATRICS AND CHILD HEALTH

Tygerberg Children's Hospital Trust Contribution to Infrastructure

| DATE | SUPPLIER | EQUIPMENT | AMOUNT |
|--------------|---|--|---------------------|
| 2013/02/15 | University Stellenbosch (Supplier: Quentin Atkins, subcontractor Drake and Scull) | Video camera/intercom system for WardG3 | R5 955,08 |
| 2013/02/15 | Exclusive Business Furniture | Furnishing of Ward G3 | R47 828,70 |
| 2013/03/28 | Covidien | Purchase of 4 Saturation monitors | R47 880,00 |
| 2013/04/12 | Amtronix (Pty)Ltd | ABR Screener for neonatal audiology | R 96 715,32 |
| 2013/04/14 | Draeger Medical SA (Pty) Ltd | Two resuscitaire cribs | R130 000,00 |
| 2013/05/16 | Respiratory Care Africa (Pty) Ltd | 7 CPAP machines + 1 Neopuff kit for NICU & HCU | R258 540,50 |
| 2013/05/21 | GE Medical Systems | GE Vivid upgrade for neonatal ultrasound machine | R29 178,30 |
| 16/05/2013 | Stellenbosch Signs and Graphics | Frosted logos on glass doors at G Ground and signage at Paediatrics dept. | R1 863,90 |
| 16/07/2013 | FR Construction CC | Double glass doors installed at G ground | R19 950,00 |
| 16/08/2013 | Exclusive Business Furniture | Furniture upgrade of G Ground clerk office | R8 899,15 |
| 28/08/2013 | Chantal Ely | Murals in G Ground | R10 495,00 |
| 06/11/2013 | Exclusive Business Furniture | Furniture for clerk office at C3A | R11 074,22 |
| 2013/11/06 | Voicesource | Telephone answering machine for temporary office at TBH School during renovation of Faculty building | R 729,60 |
| TOTAL | | | R 658 614,77 |

PAEDIATRICS AND CHILD HEALTH

Part 2

Community Outreach Programmes/ Community Service and Interaction and Partnerships

Expert Members

- Prof. M Kruger:
 - International Society of Paediatric Oncology (SIOP) Board Member
 - SIOP Continental President for Africa
 - Health Professions Council of South Africa (HPCSA) Medical and Dental Professions Board Member
 - Executive Committee Member of the South African Children Cancer Study Group (SACCSG)
 - National principal investigator: National Retinoblastoma protocol
- Prof. Mark Cotton
 - Awarded life membership of the Federation of Infectious Diseases Societies of South Africa (FIDSSA) at the fifth conference held at Champagne Castle, Drakensberg, 10 to 12 October 2013 (previously eight life members)
- Prof. S Kling
 - Secretary of the Council of Paediatricians of the Colleges of Medicine of South Africa (CMSA), serves as a Senator of the CMSA and is a member of the management committee of the Financial and General Purposes Committee of the CMSA
 - Member of the Executive Committee of the Allergy Society of South Africa, and serves as the chair of the Research Subcommittee
- Prof. HS Schaaf
 - Appointed as Chair of the Adult and Child Lung Health section of The Union (International Union Against Tuberculosis and Lung Diseases)" and also Board Member of The Union Board of Directors
 - Served on an expert group for the World Health Organisation (WHO) on the use

of the new anti-TB drug (bedaquiline) in TB treatment regimens

- Prof DC Stefan
 - Appointed as vice-president Southern Africa AORTIC. She is also the founder and new chair of ACE-net (African cancer economics network)
- Dr Rabie
 - Served on the Paediatric and Adolescent committees of both the Western Cape Department of Health and the Southern African HIV Clinicians Society
- Ms J Coetzee
 - Appointed as Co-chair of the IMPAACT Training, Quality Assurance and Site Support Resource Committee beginning 1 July 2013. The committee focuses on maintaining and furthering development of site staff competence at established clinical research sites, in working with its partners at the Division of AIDS (DAIDS), Family Health International (FHI 360) and the other HIV and AIDS Network Collaborators, in identifying site needs and developing quality assurance/quality control (QA/QC) plans and training agendas to support protocol development and protocol implementation at the site level

International Outreach

- Prof. PB Hesseling and Prof. M Kruger
 - World Child Cancer (WCC) Twinning with The Cameroon Baptist Convention Health Board and Beryl Thyer Memorial Africa Trust
 - Prof. Hesseling visits to Banso Baptist Hospital, Mbingo Baptist Hospital and Mutengene Baptist Hospitals in Cameroon during May and November 2013

Partnerships

- Neurology:
 - Collaborative research with Prof. Marceline Van Furth from the Free

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University, Amsterdam. Supervision of one joint PhD – Dr R Solomons

- Infectious Diseases
 - The Pediatric HIV service is still part of the leDEA Southern Africa co-hort
 - PATA- funding patient advocates
- Gastroenterology:
 - Cooperation with ESPGHAN to provide postgraduate training in Paediatric Gastroenterology to paediatricians in southern Africa

National Partnerships

- Neurology
 - Provision of workshops through national organisation – PANDA (SA)
 - Paediatric Ambulatory Unit
 - Prof. Schaaf serves as invited paediatric expert on the National Paediatric Essential Medicines List committee. The third edition of the Standard Treatment Guidelines and Essential Medicines List for South Africa (Hospital Level Paediatrics) was published late in 2013 and is available at:
<http://www.health.gov.za/docs/EDP/PaedsSTG2013LR.pdf>
 - Prof. Schaaf also serves on the National MDR-TB Advisory Committee

Regional Education and Training

- Infectious Diseases
 - On 25 February 2013 the Medikidz book was launched at the Adolescent clinic. Activities were held at the H8 reception, with the children who performed a roll play on HIV issues
 - Life skills are provided by Mrs Goovadia since 12 August 2013. She is a social worker of occupation and did report via voluntary service
- Paediatric Pulmonology and Neonatology
 - “Here by Lungs” conferences held annually providing learning sessions

regarding pulmonology to medical professionals

- Paediatric Department
 - Paediatric Day of Academic Excellence held annually providing state-of-the-art lectures to medical professionals: Theme in 2013 – Neonatology

Outreach

- Endocrinology:
 - Link to St Joseph's Home is maintained by patient discussions with the staff and training visits by the DNE
- Neurology
 - Outreach clinics to Worcester Hospital and Paarl Hospital six times a year
- Paediatric Ambulatory Unit
 - District health forum initiated for the Tygerberg subdistrict – has been highly successful. Outreach and support to district hospitals (Helderberg, Khayelitsha, Eersteriver, Karl Bremer)
 - Support Delft CHC paediatric services with a weekly general paediatric clinic. See new and follow-up patients that would have been seen in GGround otherwise (a total of 491 patients were managed at Delft CHC in 2013)
 - TB outreach continues to Khayelitsha Town Two, Scottsdene and especially Brooklyn Chest Hospital children's wards, where essential support is provided regarding management of children with TB and mainly drug-resistant TB (disease and exposure)
- Paediatric Infectious Diseases
 - Doctors took 25 adolescents for an outing to the movies and a meal on 19 June 2013
 - HIV Outreach to:
 - Eersteriver Hospital weekly
 - Helderberg Hospital weekly
 - Paarl Hospital every second week
 - Ikwezi clinic weekly
 - Grabouw clinic monthly
 - Delft CHC weekly
 - Kraaifontein CHC weekly
- Paediatric Hematology-Oncology

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- Twice annually to Paarl, Worcester and as requested by clinics

Partnerships

- Paediatric Nephrology and Paediatric Oncology
 - Red Cross War Memorial Hospital
- Paediatric Infectious Diseases
 - HOPE (HIV Outreach Prevention and Education)

Partnerships in the Private Sector

- Paediatric Nephrology
 - Panorama Mediclinic Paediatric Intensive Care Unit
- Endocrinology:
 - Novo Nordisk donates the salary for the diabetics educator
- Infectious Diseases
 - On 27 November 2013 30 adolescents went on a bus trip round and about Cape Town, sponsored by the Anglican Church
- Paediatric Ambulatory Unit
 - Private: PEP stores Parow sponsored the mural paintings of the ward

Media Exposure

Radio Interviews:

Prof. M Kruger: RSG – Wat sê die dokter: Invited speaker – Internasionale Kinderkankerdag, 6 February 2013

Articles:

Name of publication: Sunday Argus

Name of article: Tutu's goodwill years ago triggers gift for Tygerberg

Date: 3 February 2013

Name of publication: TygerBurger

Name of article: Lighthouse a big contributor to children's hospital

Date: 6 March 2013

Name of publication: Rapport

Name of article: Tutu studeer medies

Date: 15 September 2013

Name of publication: Cape Times

Name of article: Tutu fulfills his childhood dream at last

Date: 10 September 2013

Name of publication: The Times

Name of article: More help for cancer kids

Date: 20 November 2013

Name of publication: TygerBurger

Name of article: All staff at Tygerberg praised for their work

Date: 18 December 2013

Part 3

Teaching and Training

Postgraduate Students

Successful PhD candidate, Stellenbosch University

- **Dr SEV Innes** – Lipoatrophy in pre-pubertal children on antiretroviral therapy in South Africa. Supervisors: Profs. MF Cotton, B Rosenkranz, Dr EWA Zöllner
- **Dr EWA Zöllner** – Hypothalamic-pituitary-adrenal axis suppression in asthmatic children on corticosteroids. Supervisors: Profs. FS Hough, EM Irusen

Enrolled PhD students

- **Dr A Bekker:** Title: Prevention And Treatment Of Perinatal And Infant Tuberculosis In The HIV Era. Supervisors: Proff. AC Hesselning, HS Schaaf
- **Dr A Dramowski:** Title: Determinants Of Healthcare-Associated Infections Among Hospitalised Children. Supervisors: Proff. MF Cotton, A Whitelaw
- **Dr UD Feucht:** Title: Evaluating and improving the care of HIV-infected and HIV-

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affected children in the first years of the implementation of a large-scale antiretroviral therapy programme in Pretoria, South Africa. Supervisors: Proff. M Kruger, B Forsythe

- **Dr P Goussard:** Title: Bronchoscopic assessment and management of children presenting with clinical significant airway obstruction due to tuberculosis. Supervisor: Proff. RP Gie
- **Dr GTJ Kali:** Title: A comparative study of neuroprotective strategies in neonatal hypoxic ischaemic encephalopathy. Supervisors: Prof. J Smith, M Rutherford
- **Dr AM Mandalakas:** Title: Development of a novel conceptual framework of childhood tuberculosis within which to study the impact of an IPT program for childhood TB prevention. Supervisors: Proff. AC Hesseling, RP Gie
- **Dr H Rabie:** Title: Pharmacokinetics and therapeutic outcomes of children with tuberculosis/HIV co-infection treated with lopinavir/ritonavir and a rifampicin-containing anti-tuberculosis regimen. Supervisors: Proff. MF Cotton, HS Schaaf, RP Gie
- **Dr RS Solomons:** Title: Improving early diagnosis of tuberculous meningitis in children. Supervisors: Proff. JF Schoeman, AM van Furth
- **Dr R van Toorn:** Title: Childhood tuberculous meningitis: challenging current management strategies. Supervisors: Proff. JF Schoeman, HS Schaaf
- **Mrs M Zunza:** Title: Prolonged Breastfeeding with Antiretroviral Prophylaxis or Commercial Infant Formula Milk and associated health outcomes: A comparative study of a birth cohort of HIV-exposed infants in public health care setting. Supervisors: Prof. MF Cotton, Dr MM Esser

PhD Applications Submitted

- **Dr P Bock:** Title: Impact of a Universal Test and Treat strategy on clinical outcomes

amongst HIV-infected adults in South Africa: Supervisor: Prof N Beyers, Dr S Fidler

- **Mr R Dunbar:** How can virtual implementation modelling inform the scale-up of new molecular diagnostic tools for tuberculosis? Supervisors: Prof N Beyers, Mr I Langley
- **Dr B Laughton:** Title: The effects of early versus delayed antiretroviral treatment on the short- and long-term neurodevelopmental outcome of children who are HIV positive. Supervisor: Prof MF Cotton, Prof M Kruger
- **Dr F Marx:** Title: Mathematical modelling to project the impact of interventions targeted to previously treated individuals on the trajectory of the tuberculosis epidemic in high tuberculosis prevalence settings. Supervisors: Prof N Beyers, Prof T Cohen
- **Ms S-A Meehan:** Title: The contribution of a community-based HIV counseling and testing (HCT) initiative in working towards increasing access to HIV counseling and testing in Cape Town, South Africa. Supervisors: Proff N Beyers, R Burger
- **Dr P Naidoo:** Title: Evaluating the Impact of an Xpert® MTB/RIF- based TB Diagnostic Algorithm in a Routine Operational Setting in Cape Town. Supervisors: Prof N Beyers, Dr C Lombard
- **Dr S Thee:** Title: Pharmacokinetics and safety of first- and second-line antituberculosis drugs in children. Supervisors: Proff HS Schaaf, AC Hesseling
- **Dr SS van Wyk:** Title: Development and validation of a prediction model to ESTIMATE an adults' probability of having active pulmonary tuberculosis in a high TB- and HIV- burden setting. Supervisors: Proff H-H Lin, Dr M Claassens
- **Dr E Walters:** Title: Novel diagnostic strategies and markers of treatment response for paediatric pulmonary tuberculosis. Supervisors: Proff AC Hesseling, RP Gie

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MMed (Paed)

- **Dr B Baadjes:** Title: A Survey of Paediatric Cancer presenting at the Windhoek Central Hospital, Namibia, from 2003 to 2010: A retrospective study. Supervisor: Prof DC Stefan (*Graduated 2013*)
- **Dr GP de Bruin:** Title: Children with Kaposi sarcoma in two Southern African hospitals – clinical presentation, management and outcome. Supervisor: Prof DC Stefan (*Graduate 2014*)
- **Dr MJ de Wet:** Title: Factors affecting final renal outcome in boys with posterior urethral valves at Tygerberg Hospital. Supervisor: Dr CJ du Buisson (*Graduate 2014*)
- **Dr TE Ferreira-van der Watt:** Title: Clinical characteristics and outcome of children evaluated and treated at Tygerberg Children's Hospital during a measles epidemic. Supervisor: Dr H Finlayson (*Graduate 2014*)
- **Dr H Hassan:** Title: The clinical manifestations and outcomes in HIV-infected children with Cryptococcus at Tygerberg Children's Hospital. Supervisor: Dr H Rabie (*Graduated 2013*)
- **Dr I Kruger:** Title: Paediatric and neonatal admissions to an intensive care unit at a regional hospital in the Western Cape. Supervisor: Prof M Kruger (*Graduate 2014*)
- **Dr R Lutchman:** Title: Burkitt's lymphoma – a 15 year review at Tygerberg Hospital, South Africa, from 1995-2010. Supervisor: Prof DC Stefan (*Graduate 2014*)
- **Dr G Morkel:** Title: Bloodstream infections and antimicrobial resistance patterns in a South African neonatal intensive care (ICU). Supervisor: DR A Bekker (*Graduated 2013*)
- **Dr A Thomas:** Title: "The use of unlicensed and off label drugs in Tygerberg Hospital Neonatal Intensive Care Unit". Supervisor: Prof M Kruger (*Graduate 2014*)
- **Dr SK van der Merwe:** Title: "Prevalence of and risk factors for retinopathy of prematurity in a cohort of preterm infants treated exclusively with non-invasive

ventilation in the first week of birth."

Supervisor: Dr A Bekker (*Graduated 2013*)

- **Dr M Wessels:** Title: "Clinical value of a uniform research case definition of tuberculous meningitis". Supervisor: Dr RS Solomons (*Graduate 2014*)

Successful Master's Candidate

Prof Cristina Stefan successfully completed her Master's degree in Science (Cancer Epidemiology) at the University of York.

Colleges of Medicine of South Africa (CMSA)

- **Cert Paediatric Neurology (SA)**
Dr PAM Brink
- **Cert Pulmonology (SA) Paed**
Dr TC Gray
- **Cert Paediatric Gastroenterology**
Dr S Ströbele
- **CMSA FC Paed Part II**
Drs M Bassier, R Lutchman, B Pohl, RJ Stander, A Thomas, Drs N Brown, MJ de Wet, T Ferreira-Van der Watt, T van der Westhuizen
- **CMSA FC Paed Part I**
Drs S Abumhara, K Carkeek, S Fry, Z Myeko, Drs E du Plooy, C Okwundu, MA Page, LO Scheepers, C Smit, L van Heerden, M Van Velden
- **DCH (SA)**
Drs E du Plooy, MA Page, GM Strydom, Drs S Moosa, KB Opper

Training Awards:

- **Dr A Bekker**
 - Discovery Academic Fellowship Award
 - SAMA PhD Supplementary Scholarship
 - MRC Clinician Research PhD scholarship
- **Dr A Dramowski**
 - Discovery Academic Fellowship Award
 - MRC Clinician Research PhD scholarship
- **Dr E Walters**
 - MRC Clinician Research PhD scholarship

PAEDIATRICS AND CHILD HEALTH

Undergraduate Students

95,6% pass rate

Education-related Activities

- The Education Committees of the Department comprised as follows:
 - Undergraduate: Prof S Kling (Chairperson)
 - MBChB II: Drs E Malek, R Uys
 - Early rotation: Drs CJ du Buisson (Chairperson), L Frigati, H Hassan, E Zöllner
 - Middle rotation: Drs G Kali (Chairperson), A Redfern, S Ströbele, SI: Dr L Smit (Chairperson)
 - Remedial: Drs D Abraham, M Morkel
 - Elective students: Dr H Finlayson, Prof M Kruger
 - Postgraduate: Drs ED Nel (chairperson), Dr S Holgate, G Kali, Prof M Kruger, Dr H Rabie, Prof DC Stefan
 - PhD: Profs M Kruger (Chairperson), N Beyers, MF Cotton, RP Gie, AC Hesselring, HS Schaaf
- All consultants are involved with under- and postgraduate teaching on a daily basis. Additional education activities included:
- External examiners at universities in South Africa:
 - Dr L Smit, University of Pretoria
 - Dr R Solomons, University of Limpopo
 - Dr A van Zyl, University of KwaZulu-Natal
- Senior registrars in training:
 - Paediatric Pulmonology: Dr J Morrison, and Dr TC Gray, funded by bursary from the Discovery Foundation
 - Neonatology: Dr JCF Du Preez, Dr S O’Ryan
 - Paediatric Infectious Diseases: Dr L Frigati, funded by bursary from the Discovery Foundation
 - Paediatric Gastroenterology: Dr S Ströbele, Dr T Afaa (Supernumerary), sponsored by a Nestle Nutrition Institute Fellowship endorsed by the European Society of Paediatric Gastroenterology
 - Paediatric Neurology: Dr PAM Brink
 - Paediatric Nephrology Dr AU Solarin (Supernumerary)
- Colleges of Medicine of South Africa (CMSA):
 - Convenors (C)/Moderator (M)/External Examiners (EE):
 - Cert Paediatric Gastroenterology: Dr ED Nel (E)
 - Cert Paediatric Oncology: Prof DC Stefan (C), Prof M Kruger (E)
 - Diploma in Child Health (DCH): Dr E Malek (C), assisted by Prof S Kling, S Holgate, H Finlayson; Dr L Smit (EE)
 - FCPaed II: Prof S Kling (M), Prof M Kruger (E)
 - FCPaed I: Dr S Holgate (EE)
- Postgraduate Diploma in Research Ethics: Prof S Kling (EE)
- South African Research Ethics Training Initiative (SARETI) UKZN, funded by Fogarty International Fogarty International Center (FIC) of the National Institutes of Health (NIH), grant number 6R25TW001599-13: Prof M Kruger (Co-principal Director)
- Faculty and University Committee Participation:
 - Prof M Kruger:
 - Member of the Senate Research Ethics Committee, Stellenbosch University
 - Member of the Research Committee, Stellenbosch University
 - Member of the Subcommittee C of the Research Committee, Faculty of Medicine and Health Sciences
 - Provincial Heads of Clinical Units Task Team, Provincial Government Health Department, Western Cape
 - Subcommittee C of the Research Committee, Faculty of Medicine and Health Sciences
 - Deputy Chair, Ethics Review Committee, Faculty of Medicine and Health Sciences
 - Prof N Beyers:
 - Stellenbosch University Committee: Office for Employment Equity and Promotion of Diversity

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- Stellenbosch University
Committee: Senate Research
Ethics Committee
- Stellenbosch University:
Institutional Forum
- Prof HS Schaaf
 - Subcommittee C of the Research
Committee, Faculty of Medicine
and Health Sciences
- Prof S Kling
 - Member, Management
Committee, Centre for Medical
Ethics and Law, Department of
Medicine, Faculty of Medicine
and Health Sciences
- Ethics accreditor, CPD
Committee, Faculty of Medicine
and Health Sciences
- Dr E Zöllner
 - Safety representative on Health
and Safety Committee, Faculty of
Medicine and Health Sciences

Courses Attended

| NAME | COURSES ATTENDED | DATES | TYPE OF TRAINING | LEVEL | PROVIDER |
|--------------------|--|----------------------------|------------------|---------------|----------|
| Consultants | | | | | |
| Abraham, Dr D | Short course: Teaching in the undergraduate classroom: Interactive and effective | 22 January 2013 | Short course | Adv | US |
| | Curriculum design: closing the loop: re- visiting the instructional educator | 20 February 2013 | Short course | Adv | US |
| Bekker, Dr A | ADA Summer School, Introduction to SPSS | 14-18 January 2013 | Course | Adv | US |
| Beyers, Prof N | ORAP Wave 4 workshop | 04-12 April 2013 | Workshop | Int | DTTC |
| | PopART PC Training | 03-05 September 2013 | Training | Int | DTTC |
| | PopART PC Training | 16 October 2013 | Training | Follow -up | DTTC |
| Finlayson, Dr H | GCP Course | 24-25 April 2013 | Refresher course | Adv | CREDE |
| | African Doctoral Academy Winter School: Dr H Finlayson -Course 2: Introduction to SPSS | 01 May 2013 | Course | Adv | SU |

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|----------------|---|--------------------|--------------|-----|---------------|
| | African Doctoral Academy Winter | | | | |
| Frigati, Dr L | Infection Control Workshop | 03 - 14 June 2013 | Workshop | Adv | SU |
| | EndNote Course | 15 April 2013 | Course | Adv | SU |
| Gie, Prof R | ORAP Proposal writing workshop | 8-12 April 2013 | Workshop | Adv | Somerset West |
| Heyns, Dr L | Curriculum Workshop | 27 March 2013 | Workshop | Adv | SU |
| Holgate, Dr S | Post graduate supervision course | 18 September 2013 | Workshop | Adv | STIAS, SU |
| Kruger, Prof M | Interactive NRF rating system Workshop, Stellenbosch | 06 March 2013 | Workshop | Adv | SU |
| Kali, Dr G | Bristol Neonatal Echo Course | 5-6 April 2013 | Course | Adv | |
| Kling, Prof S | Setting multiple choice questions | 17 July 2013 | Workshop | Adv | CHPE |
| Malek, Dr E | PRONTAK/PREDAC | 16-19 Julie 2013 | Workshop | Adv | SU |
| Morkel, Dr M | Technologies in medical Education | 04 November 2013 | Course | Adv | Cape Town |
| Morrison, Dr J | ORAP Proposal writing workshop | 8-12 April 2013 | Course | Adv | Somerset West |
| Nel, Dr E | Understanding policies relevant to management of research contracts | 25 February 2013 | Short course | Adv | SU |
| | Post Graduate Course in Paediatric Gastroenterology | 12 - 15/03/2013 | Short course | Adv | SU |
| Redfern, Dr A | PRONTAK/PREDAC | 16 - 19 Julie 2013 | Workshop | Adv | SU |
| | Short course in clinical supervision | 11 April 2013 | Course | Adv | CHSE |
| | Technologies in medical Education | 04 November 2013 | Course | Adv | Cape Town |
| Schaaf, Prof S | Post Graduate Supervision workshop | 18 September 2013 | Workshop | Adv | STIAS, SU |
| Slogrove, Dr A | Technologies in medical Education | 04 November 2013 | Workshop | Adv | Cape Town |

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|-------------------|--|------------------|----------------------------------|-----|-------------|
| Smit, Dr L | Advanced Paediatric Life Support Course | 07 - 08/03/2013 | Course | Adv | SU |
| | Postgraduate Supervision workshop | 19 April 2013 | Workshop | Adv | SU |
| Springer, Dr P | GCP refresher course | 19 April 2013 | Course | Adv | CREDE |
| | ADI-R Course | 10-11 June 2013 | Course | Adv | Red Cross |
| Van Zyl, Dr A | CHSE Curriculum Design Workshop | 20 February 2013 | Workshop | Adv | CHSE |
| Zöllner, Dr E | Interactive NRF rating system Workshop, Stellenbosch | 06 March 2013 | Workshop | Adv | SU |
| | Conference presentation skills | 22 May 2013 | Workshop | Adv | SU |
| Registrars | | | | | |
| Brown, N | APLS | March 2013 | Advanced Paediatric life support | Adv | Cardio Care |
| | Refresher course | March 2013 | Short course | Adv | |
| De Wet, MJ | APLS | March 2013 | Advanced Paediatric life support | Adv | Cardio Care |
| Geldenhuis, C | MMED/thesis workshop | March 2013 | Workshop | Adv | SU |
| Grantham, M | Refresher course | March 2013 | Short course | Adv | |
| Kay, C | NALS | February 2013 | Neonatal advanced life support | Adv | Cardio Care |
| Kooblal, Y | MMed thesis workshop | March 2013 | workshop | Adv | SU |
| | Refresher course | March 2013 | Short course | Adv | |
| Lutchman, R | Refresher course | March 2013 | Short course | Adv | |
| Netshituni, V | Refresher course | March 2013 | Short course | Adv | |
| Pohl, B | Refresher course | March 2013 | Short course | Adv | |
| Stander, R | Refresher course | March 2013 | Short course | Adv | |
| Satardien, M | Oscillation workshop | May 2013 | Workshop | Adv | SU |
| Thomas, A | Refresher course | March 2013 | Short course | Adv | |
| Van Der Watt, T | APLS | March 2013 | Advanced paediatric life support | Adv | Cardio Care |
| VD Westhuizen, T | Refresher course | March 2013 | Short course | Adv | |
| Visser, YT | MMED / Thesis workshop | March 2013 | Workshop | Adv | SU |
| | Training to Registrars to teach students | October 2013 | Training | Adv | SU |

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|-----------------------------|----------------------------------|---------------------------|----------|-------|-------------|
| Webster, I | MMED/Thesis workshop | March 2013 | Workshop | Adv | SU |
| Medical Officers | | | | | |
| Essack, G | Diploma in Family Medicine | three-year diploma course | | Adv | US |
| Thomas, A | NALS | 20-21 May 2013 | Course | Adv | |
| Van Niekerk, M | EMSSA | November 2013 | | Adv | |
| | PIPP | 15 August 2013 | Workshop | Adv | US |
| Administrative Staff | | | | | |
| Basson, S | Office Administration Management | 17 October 2013 | Workshop | Basic | SU |
| | Meeting customer care Service | 13 October 2013 | Workshop | Basic | SU |
| Engelbrecht, S | Project management | 09-13 September 2013 | Course | Int | Kromme Rhee |
| Fourie, AE | Microsoft Excel 2010 Advanced | 12 and 13 November | Course | Adv | SU |
| Permall, PCF | Office Administration Management | 11 April 2013 | Workshop | Basic | SU |
| | Productivity Pit Stop | 5 April 2013 | Workshop | Int | SU |

Part 4

Research

Achievements with regard to Research Activities and Research Outputs

NRF Rating – n=7

- Proff PR Donald, HS Schaaf – A2
- Prof BJ Marais – B1
- Prof MF Cotton – B3
- Proff J Smith, DC Stefan, Dr H Rabie – C3 rating
 - Excellent research publication awards: Proff MF Cotton, AC Hesseling, HS Schaaf, S Kling, Dr H Rabie
 - CIPHER grant awarded to Dr Steve Innes at Kuala Lumpur at seventh IAS

Conference on HIV Pathogenesis, by Nobel prize winner Françoise Barré-Sinoussi, who discovered the HIV virus in 1983. \$150 000 will be awarded over two years

- Proff M Kruger and PB Hesseling: Cameroon Twinning Project. World Child Cancer, Beryl Thyer Memorial Africa Trust and Stellenbosch University – R242 062,16

Publications

Journal Articles (Subsidised)

1. Andronikou S, Irving B, Hlabangana LT, Pillay T, Taylor P, **Goussard P, Gie R**. Technical developments in postprocessing of paediatric airway imaging. *Pediatric Radiology* 2013; **43**(3): 269-284.

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- Ayles H, Du Toit E, Schaap A, Floyd S, Simwinga M, Shanaube K, Chishinga N, Bond V, **Dunbar R**, De Haas P, **James A**, Gey van Pittius NC, **Claassens M**, Fielding K, Fenty J, Sismanididis C, Hayes R, **Beyers N**, **Godfrey-Fausset P** and the ZAMSTAR team. Effect of household and community interventions on the burden of tuberculosis in Southern Africa: the ZAMSTAR community-randomised trial. *Lancet* 2013; **382**(9899): 1183-1194.
- Bekker A**, **Goussard P**, **Gie R**, Andronikou S. Congenital anterior mediastinal teratoma causing severe airway compression in a neonate. *British Medical Journal* 2013; : 1. doi:10.1136/bcr-2013-201205
- Beneri CA, Zeldow B, Nachman S, Van der Linde M, Pillay E, Dittmer S, Kim S, Jean-Phillipe P, **Coetzee J**, Bobat R, Hawkins E, Violari A and the P1041 Team. Loss to follow-up among infants in a study of isoniazid prophylaxis (P1041) in South Africa. *International Journal of Tuberculosis and Lung Disease* 2013; **17**(1): 32-38.
- Calaminus G, Birch JR, Hollis R, Pau B, **Kruger M**. The Role of SIOP as a Platform for Communication in the Global Response to Childhood Cancer. *Paediatric Blood and Cancer* 2013; **60**(12): 2080-2086.
- Chantada G, Luna-Fineman S, Sitorus RS, **Kruger M**, Israels T, Leal-Leal C, Bahkshi S, Qaddoumi I, Abramson DH and Doz F. SIOP-PODC Recommendations for Graduated-Intensity treatment of retinoblastoma in developing countries. *Paediatric Blood and Cancer* 2013; **60**: 719-727.
- Chegou NN, **Detjen AK**, Thiart L, **Walters E**, Mandalakas AM, **Hesseling AC**, Walzl G. Utility of host markers detected in Quantiferon supernatants for the diagnosis of tuberculosis in children in a high-burden setting. *PLoS ONE* 2013; **8**(5): e64226.
- Claassens M**, Du Toit E, **Dunbar R**, Lombard CJ, Enarson DA, **Beyers N**, BORGDORFF MW. Tuberculosis patients in primary care do not start treatment. What role do health system delays play? *International Journal of Tuberculosis and Lung Disease* 2013; **17**(5): 603-607.
- Claassens M**, Jacobs E, Cyster E, Jennings K, **James A**, **Dunbar R**, Enarson DA, Borgdorff MW, **Beyers N**. Tuberculosis cases missed in primary health care facilities: should we redefine case finding? *International Journal of Tuberculosis and Lung Disease* 2013; **17**(5): 608-614.
- Claassens M**, Van Schalkwyk C, Den Haan L, Floyd S, **Dunbar R**, Van Helden P, Godfrey-Faussett P, Ayles H, Borgdorff M, Enarson D, **Beyers N**. High prevalence of tuberculosis and insufficient case detection in two communities in the Western Cape, South Africa. *PLoS ONE* 2013; **8**(4): e58689. Doi: 10.1371/journal.pone.0058689
- Claassens M**, Van Schalkwyk C, Du Toit E, Roest E, Lombard CJ, Enarson DA, **Beyers N**, Borgdorff MW. Tuberculosis in Healthcare Workers and Infection Control Measures at Primary Healthcare Facilities in South Africa. *PLoS ONE* 2013; **8**(10): e76272. Doi: 10.1371/journal.pone.0076272
- Cooke ML, **Cotton MF**. Pre-hospital management and risk factors in children with acute diarrhoea admitted to a short-stay ward in an urban South African hospital with a high HIV burden. *South African Journal of Child Health* 2013; **7**(3): 84-87.
- Cotton MF**, Violari A, Otwombe K, Pancia R, **Dobbels E**, **Rabie H**, Josipovic D, Liberty A, Lazarus E, **Innes S**, **Janse van Rensburg A**, Peiser W, Truter H, Madhi SA, Handelsman E, Jean-Philippe P, McIntyre JA, Gibb DM, Babiker AG on behalf of CHER study team. Early time-limited antiretroviral therapy versus deferred therapy in South African infants infected with HIV: results from the children with HIV early antiretroviral (CHER) randomised trial. *Lancet* 2013; **382**(9904): 1555-1563.
- De Bruin GP**, **Stefan DC**. Children with Kaposi Sarcoma in Two Southern African Hospitals: Clinical Presentation, Management, and Outcome. *Journal of*

- Tropical Medicine 2013;
<http://dx.doi.org/10.1155/2013/213490>
15. Dhanasekaran S, Jenum S, Stavrum R, Ritz C, Faurholt-Jepsen D, Kenneth J, Vaz M, Grewal HMS, Doherty TM, **Hesseling AC**, Jacob A, Jahnsen F, Kurpad AV, Lindtjorn B, Macaden R, Nelson J, Sumintra S, Walker R. Identification of biomarkers for Mycobacterium tuberculosis infection and disease in BCG-vaccinated young children in Southern India. *Genes and Immunity* 2013; **14**(6): 356-364.
 16. Diacon AH, Dawson R, Von Groote-Bidlingmaier F, Symons G, Venter A, **Donald PR**, Conradie A, Erondou N, Ginsberg AM, Egizi E, Winter H, Becker P, Mendel C. Randomized Dose-Ranging Study of the 14-Day Early Bactericidal Activity of Bedaquiline (TMC207) in Patients with Sputum Microscopy Smear-Positive Pulmonary Tuberculosis. *Antimicrobial Agents and Chemotherapy* 2013; **57**(5): 2199-2203.
 17. Diacon AH, **Donald PR**, Mendel C. Early bactericidal activity of new drug regimens for tuberculosis – Authors' reply. *Lancet* 2013; **381**(9861): 112-113.
 18. **Donald PR**, Ahmed A, Burman WJ, **Cotton MF**, Graham M, Mendel C, McIlleron H, MacKenzie WR, Nachman S, **Schaaf HS**, Starke JR, Winfield C, **Hesseling AC**. Requirements for the clinical evaluation of new anti-tuberculosis agents in children. *International Journal of Tuberculosis and Lung Disease* 2013; **17**(6): 794-799.
 19. **Donald PR**. Edith Lincoln, an American pioneer of childhood tuberculosis. *Paediatric Infectious Disease Journal* 2013; **32**(3): 241-245.
 20. Falzon D, Gandhi N, Migliori GB, Sotgiu G, Cox H, Holtz TH, Hollm-Delgado MG, Keshavjee S, Deriemer K, Centis R, D'Ambrosio L, Lange C, Bauer M, Menzies D on behalf of "The Collaborative Group for Meta-analysis of Individual Patient Data in MDR-TB", Members (in alphabetic order of surname, including authors of the paper): S. Ahuja, D. Ashkin, M. Avendaño, R. Banerjee, M. Bauer, M. Becerra, A. Benedetti, M. Burgos, R. Centis, E.D. Chan, C.Y. Chiang, F. Cobelens, H. Cox, L. D'Ambrosio, W.C.M. de Lange, K. DeRiemer, D. Enarson, D. Falzon, K.L. Flanagan, J. Flood, N. Gandhi, L. Garcia-Garcia, R.M. Granich, M.G. Hollm-Delgado, T.H. Holtz, P. Hopewell, M. Iseman, L.G. Jarlsberg, S. Keshavjee, H.R. Kim, W.J. Koh, J. Lancaster, C. Lange, V. Leimane, C.C. Leung, J. Li, D. Menzies, G.B. Migliori, C.M. Mitnick, M. Narita, E. Nathanson, R. Odendaal, P. O'Riordan, M. Pai, D. Palmero, S.K. Park, G. Pasvol, J. Pena, C. Pérez-Guzmán, A. Ponce-de-Leon, M.I.D. Quelapio, H.T. Quy, V. Riekstina, J. Robert, S. Royce, M. Salim, **H.S. Schaaf**, K.J. Seung, L. Shah, K. Shean, T.S. Shim, S.S. Shin, Y. Shiraishi, J. Sifuentes-Osornio, G. Sotgiu, M.J. Strand, S.W. Sung, P. Tabarsi, T.E. Tupasi, M.H. Vargas, R. van Altena, M. van der Walt, T.S. van der Werf, P. Viiklepp, J. Westenhouse, W.W. Yew, J.J. Yim. Resistance to fluoroquinolones and second-line injectable drugs: impact on MDR-TB outcomes. *European Respiratory Journal* 2013; **42**(1): 156-168.
 21. Ferreira A, Young T, Mathews C, **Zunza M**, LOW N. Strategies for partner notification for sexually transmitted infections, including HIV. *Cochrane Database of Systematic Reviews* 2013; **10**: CD002843. doi: 10.1002/14651858.CD002843.pub2.
 22. Feucht U, Rossouw T, Van Dyk G, Forsyth T, **Kruger M**. Consequences of Prior Use of Full-Dose Ritonavir as Single Protease Inhibitor as Part of Combination Antiretroviral Regimens on the Future Therapy Choices in HIV-1 Infected Children. *Paediatric Infectious Disease Journal* 2013; doi: 10.1097/INF.0b013e31829f2694.
 23. **Goussard P**, **Gie R**, Andronikou S, Fourie PR. A correctable cause of lung collapse in an adolescent with severe scoliosis causing compression of the bronchial tree. *British Medical Journal* 2013; doi: 10.1136/bcr-2013-202017.
 24. **Goussard P**, **Gie R**, Janson J, Schubert P. Intratracheal inflammatory myofibroblastic

- tumour mimicking severe acute asthma. *British Medical Journal* 2013; doi: 10.1136/bcr-2013-010232.
25. **Goussard PL, Gie RP, Kling S**, Andronikou S, Lucas S, Janson J, Rossouw G. Bronchoscopic Assessment of airway involvement in children presenting with clinically significant airway obstruction due to tuberculosis. *Paediatric Pulmonology* 2013; **48**(10): 1000-1007.
 26. **Goussard P, Gie R, Rabie H**, Andronikou S. Nocardia pneumonia in an HIV-infected neonate presenting as acute necrotising pneumonia. *British Medical Journal* 2013; doi: 10.1136/bcr-2013-010479.
 27. Govender BP, Meintjes G, Bicanic T, Dawood H, Harrison TS, Jarvis JN, Karstaedt AS, Maartens G, McCarthy KM, **Rabie H**, Variava E, Venter WDF, R Boulware D, Chiller T, Meya DB, Scriven J. Guideline for the prevention, diagnosis and management of cryptococcal meningitis among HIV-infected persons: 2013 update. *Southern African Journal of HIV Medicine* 2013; **14**(2): 76-86.
 28. Graham SM, Casenghi M, Jean-Philippe P, Hatherill M, **Hesseling AC**, Nachman S, Starke JR. Reply to Holm et al. *Journal of Infectious Diseases* 2013; **207**(5): 871-872.
 29. **Gray TC**, van Wyk AC, **Goussard P, Gie RP**. Lymphomatoid granulomatosis: A rare cause of cavitary lung disease in an HIV positive child. *Paediatric Pulmonology* 2013; **48**(2): 202-205.
 30. **Hesseling P**, Israels T, Harif M, Chantada G, Molyneux E. Practical Recommendations for the Management of Children with Endemic Burkitt Lymphoma (BL) in a Resource Limited Setting. *Paediatric Blood and Cancer* 2013; **60**: 357-362.
 31. **Innes S**, Schulte-Kemna E, **Cotton MF, Zöllner EW**, Haubrich R, Klinker H, Jain S, **Edson C**, Van Niekerk M, Innes ER, **Rabie H**, Browne SH. Biceps skin-fold thickness may detect and predict early lipodystrophy in HIV-infected children. *Paediatric Infectious Disease Journal* 2013; **32**(6): e254-e262.
 32. Israëls T, Kambugu J, Kouya F, El-Mallawany K, **Hesseling PB**, Kaspers GJL, Renner L, Molyneux EM. Clinical trials to improve childhood cancer care and survival in Sub-Saharan Africa. *Nature Reviews Clinical Oncology* 2013; **10**(10): 599-604.
 33. Israels T, Moreira C, Scanlan T, Molyneux L, Kampondeni S, **Hesseling P**, Heij H, Borgstein E, Vujanic G, Pritchard-Jones K, Hadley L. PODC. SIOP PODC: Clinical guidelines for the management of children with wilms tumour in a low income setting. *Paediatric Blood and Cancer* 2013; **60**: 5-11.
 34. Israels T, Renner L, Hendricks M, **Hesseling P**, Howard S, Molyneux E. SIOP PODC: Recommendations for Supportive care of children with cancer in a Low-Income setting. *Pediatric Blood and Cancer* 2013; **60**: 899-904.
 35. **Kalk E, Slogrove A**, Speert D, Bettinger JA, **Cotton MF**, Esser M. HIV sero-conversion during late pregnancy – when to retest. *Southern African Journal of HIV Medicine* 2013; **14**(2): 90-92.
 36. Kanyamuhunga A, McCall N, Tuyisenge L, Mumena C, **Stefan DC**. Aggressive desmoid fibromatosis: First case in a Rwandan child. *South African Journal of Child Health* 2013; **7**(3): 117-118.
 37. Kleinstauber K, Heesch K, Schattling S, Kohns M, Sander-Julch C, Walzl G, **Hesseling AC**, Mayatepek E, Fleischer B, Marx FM, Jacobsen M. Decreased Expression of miR-21, miR-26a, miR-29a, and miR-142-3p in CD4+ T Cells and Peripheral Blood from Tuberculosis Patients. *PLoS ONE* 2013; **8**(4): e61609.
 38. **Kling S**, Zar HJ, Levin ME, Green RJ, Jeena PM, Risenga SM, Thula SA, **Goussard P, Gie RP** for the South African Childhood Asthma Working Group (SACAWG). Guidelines for the management of acute asthma in children 2013 update. *SAMJ South African Medical Journal* 2013; **103**(3): 200-207.
 39. **Kling S**. Allocating treatment for rare allergic diseases - the rule of rescue. *Current Allergy and Clinical Immunology* 2013; **26**(2): 94-95.

40. **Kling S**. The 'Difficult' Patient – May I refuse to treat him? *Current Allergy and Clinical Immunology* 2013; **26**(1): 37-39.
41. **Kruger M**, Hendricks M, Davidson A, **Stefan DC**, Van Eysen AL, **Uys R**, **Van Zyl A**, **Hesseling PB**. Childhood Cancer in Africa. *Pediatric Blood and Cancer* 2013; DOI: 10.1002/pbc.24845
42. Langerak NG, Du Toit J, Burger M, **Cotton MF**, **Springer PE**, **Laughton B**. Spastic diplegia in children with HIV encephalopathy: first description of gait and physical status. *Developmental Medicine and Child Neurology* 2013; doi: 10.1111/dmcn.12319.
43. **Laughton B**, Cornell M, Boivin M, Van Rie A. Neurodevelopment in perinatally HIV-infected children: a concern for adolescence. *Journal of the International Aids Society* 2013; **16**: 18603. doi: 10.7448/IAS.16.1.18603.
44. Le Roux SM, **Cotton MF**, Myer L, Le Roux DM, **Schaaf HS**, Lombard CJ, Zar HJ. Safety of long-term isoniazid preventive therapy in children with HIV: a comparison of two dosing schedules. *International Journal of Tuberculosis and Lung Disease* 2012; **17**(1): 26-31.
45. Liwa AC, **Schaaf HS**, Rosenkranz B, Seifart HI, Diacon AH, **Donald PR**. Para-Aminosalicylic acid plasma concentrations in children in comparison with adults after receiving a granular slow-release preparation. *Journal of Tropical Paediatrics* 2013; **59**(2): 90-94.
46. Lodha R, Mukherjee A, Saini D, Saini S, Singh V, Grewal HMS, Kabra SK, Aneja S, Arya T, Bhatnagar S, et al, **Hesseling AC**. Role of the QuantiFERON®-TB Gold In-Tube test in the diagnosis of intrathoracic childhood tuberculosis. *International Journal of Tuberculosis and Lung Disease* 2013; **17**(11): 1383-1388.
47. Lucas S, Andronikou S, **Goussard P**, **Gie RP**. Tuberculous lymphadenopathy is not only obstructive, but also inflammatory – it can erode anything it touches. Reply to Marchiori et al. *Pediatric Radiology* 2013; **43**: 254-255.
48. Madhi SA, Izu A, Violari A, **Cotton MF**, Panchia R, **Dobbels E**, Sewraj P, van Niekerk N, Jean-Philippe P, Adrian PV; CIPRA-4 team (Children's Infectious Diseases Clinical Research Unit - Mark F Cotton, Helena Rabie, Anita Janse van Rensburg, Els Dobbels, George Fourie, Marietjie Bester, Wilma Orange, Ronelle Arendze, Catherine Andrea, Marlize Smuts, Kurt Smith, Theresa Louw, Alec Abrahams, Kenny Kelly, Amelia Bohle, Irene Mong, Jodie Howard, Tanya Cyster, Genevieve Solomon, Galroy Benjamin, Jennifer Mkalipi, Edward Barnes). Immunogenicity following the first and second doses of 7-valent pneumococcal conjugate vaccine in HIV-infected and -uninfected infants. *Vaccine* 2013; **31**(5): 777-783.
49. **Mandalakas AM**, **Hesseling AC**, **Gie RP**, **Schaaf HS**, **Marais BJ**, SINANOVIC E. Modelling the cost-effectiveness of strategies to prevent tuberculosis in child contacts in a high-burden setting. *Thorax* 2013; **68**(3): 247-255.
50. **Mandalakas AM**, Van Wyk S, Kirchner HL, Walzl G, **Cotton M**, **Rabie H**, Kriel B, **Gie RP**, **Schaaf HS**, **Hesseling AC**. Detecting Tuberculosis Infection in HIV-infected children: A study of diagnostic accuracy, confounding and interaction. *Paediatric Infectious Disease Journal* 2013; **32**(3): e111-e118.
51. **Marx FM**, **Dunbar R**, Enarson DA, **Beyers N**. Correction: The Rate of Sputum Smear-Positive Tuberculosis after Treatment Default in a High-Burden Setting: A Retrospective Cohort Study. *PLoS ONE* 2013; **8**(8); doi: 10.1371/journal.pone.0045724
52. Migliori GB, Sotgiu G, Gandhi NR, Falzon D, DeRiemer K, Centis R, Hollm-Delgado MG, Palmero D, Pérez-Guzmán C, Vargas MH, Ambrosio LD, Spanevello A, Bauer M, Chan ED, **Schaaf HS**, Keshavjee S, Holtz TH, Menzies D and The Collaborative Group for Meta-Analysis of Individual Patient Data in MDR-TB. Drug resistance beyond XDR-TB:

PAEDIATRICS AND CHILD HEALTH

- results from a large individual patient data meta-analysis. *European Respiratory Journal* 2013; **42**(1): 169-179.
53. Mofenson LM, **Cotton MF**. The challenges of success: adolescents with perinatal HIV infection. *Journal of the International Aids Society* 2013; **16**: 18650.
54. Mukherjee A, Singh S, Lodha R, Singh V, **Hesseling AC**, Grewel HMS, Kabra SK. Ambulatory Gastric Lavages Provide Better Yields of Mycobacterium Tuberculosis than Induced Sputum in Children with Intra-Thoracic Tuberculosis. *Pediatric Infectious Disease Journal* 2013; **32**(12): 1313-1317.
55. Nayak P, Kumar AMV, **Claassens M**, Enarson DA, Satyanarayana S, Kundu D, Khaparde K, Agrawal TK, Dapkekar S, Chandraker S, Nair SA. Comparing Same Day Sputum Microscopy with Conventional Sputum Microscopy for the Diagnosis of Tuberculosis – Chhattisgarh, India. *PLoS ONE* 2013; **8**(9): e74964.
56. Niyongabo T, Bukuru H, Nduwimana M, Kariyo P, Mbaya M, Mukumbi H, Ilunga B, Obama M-T, Kamgaing N, Akam W, Atibu J, Azinyue I, et al, **Rabie H**. A survey of paediatric HIV programmatic and clinical management practices in Asia and Sub-Saharan Africa – the International epidemiologic Databases to Evaluate AIDS (IeDEA). *Journal of the International Aids Society* 2013; **16**: 17998.
57. Nöthling J, Martin CL, **Laughton B, Cotton M**, Seedat S. Maternal post-traumatic stress disorder, depression and alcohol dependence and child behaviour outcomes in mother-child dyads infected with HIV: a longitudinal study. *British Medical Journal* 2013; **3**: e003638. doi:10.1136/bmjopen-2013-003638
58. Parashar D, Kabra SK, Lodha R, Singh V, Mukherjee A, Arya T, Grewal HMS, Singh S, Bhatnagar S, Saini S, Chandra J, Aneja S, Dutta AK, **Marais BJ, Hesseling AC**, FRIIS H, Doherty TM. Does Neutralisation of Gastric Aspirates from Children with Suspected Intrathoracic Tuberculosis Affect Mycobacterial Fields on MGIT Culture? *Journal of Clinical Microbiology* 2013; **51**(6): 1753-1756.
59. Pitcher RD, Lombard C, **Cotton MF**, Beningfield SJ, Zar HJ. Clinical and immunological correlates of chest X-ray abnormalities in HIV-infected South African children with limited access to antiretroviral therapy. *Paediatric Pulmonology* 2013; : 1. doi: 10.1002/ppul.22840
60. **Rabie H, Edson C, Cotton MF**, Klinker H. Are lopinavir and efavirenz serum concentrations in HIV-infected children in the therapeutic range in clinical practice? *Paediatrics and International Child Health* 2013; **1**(1): doi:10.1179/2046905513Y.0000000090
61. Reikie B, Naidoo S, Ruck CE, **Slogrove A**, De Beer C, La Grange H, Adams RC, Ho K, Smolen K, Speert D, **Cotton MF**, Preiser W, **Esser M**, Kollmann TR. Antibody responses to vaccination among South African HIV-exposed and -unexposed, -uninfected infants during the first two years of life. *Clinical and Vaccine Immunology* 2013; **20**(1): 33-38.
62. **Schaaf HS, Cotton MF**, Boon GPG, Jeena PM. Isoniazid preventive therapy in HIV-infected and -uninfected children (0-14 years). *SAMJ South African Medical Journal* 2013; **103**(10): 714-715.
63. Schomaker M, Egger M, Ndirangu J, Phiri S, Moultrie H, Technau K, Cox V, Giddy J, Chimbetete C, Wood R, Gsponer T, Bolton Moore C, **Rabie H**, Eley B, Muhe L, Penazzato M, Essajee S, Keiser O, Davies M-A for the International Epidemiologic Databases to Evaluate AIDS–Southern Africa (IeDEA-SA) Collaboration. When to start antiretroviral therapy in children aged 2-5 years: A collaborative causal modelling analysis of cohort studies from Southern Africa. *PloS Medicine* 2013; **10**(11): e1001555.
64. Schoonees A, Lombard M, Musekiwa A, **Nel E**, Volmink J. Ready-to-use therapeutic food for home-based treatment of severe acute malnutrition in children from six months to five years of age. *Cochrane Database of*

- Systematic Reviews 2013; **6**: CD009000. doi: 10.1002/14651858.CD009000.pub2.
65. Schulz SA, **Draper HR, Naidoo P**. A comparative study of tuberculosis patients initiated on ART and receiving different models of TB and HIV care. *International Journal of Tuberculosis and Lung Disease* 2013; **17**(12): 1558-1563.
 66. **Seddon JA, Hesselning AC, Finlayson H**, Fielding K, Cox H, Hughes J, Godfrey-Faussett P, **Schaaf HS**. Preventive Therapy for Child Contacts of Multidrug-Resistant Tuberculosis: A Prospective Cohort Study. *Clinical Infectious Diseases* 2013; **57**(12): 1676-1684.
 67. **Seddon JA, Hesselning AC**, Godfrey-Faussett P, Fielding K, **Schaaf HS**. Risk factors for infection and disease in child contacts of multidrug-resistant tuberculosis: a cross-sectional study. *BMC Infectious Diseases* 2013; **13**: 392.
 68. **Seddon JA, Hesselning AC**, Godfrey-Faussett P, **Schaaf HS**. High treatment success in children treated for multidrug-resistant tuberculosis: an observational cohort study. *Thorax* 2013; **1**. doi: 10.1136/thoraxjnl-2013-203900.
 69. **Seddon JA, Schaaf HS, Hesselning AC**. Retooling existing tuberculosis drugs for children. *Clinical Infectious Diseases* 2013; **56**: 167-168.
 70. **Seddon JA**, Thee S, Jacobs K, Ebrahim A, **Hesselning AC, Schaaf HS**. Hearing loss in children treated for multidrug-resistant tuberculosis. *Journal of Infection* 2013; **66**: 320-329.
 71. Simani OE, Adrian P, Violari A, Kuwanda L, Otworld K, Nunes MC, **Cotton MF**, Madhi SA. Effect of in-utero HIV exposure and antiretroviral treatment strategies on measles susceptibility and immunogenicity of measles vaccine. *Aids* 2013; **27**(10): 1583-1591.
 72. **Springer PE, Laughton B**, Kidd M. Characteristics of children with pervasive developmental disorders attending a developmental clinic in the Western Cape Province, South Africa. *South African Journal of Child Health* 2013; **7**(3): 95-99.
 73. **Stefan DC**, Elsawawy AM, Khaled HM, Ntaganda F, Asiimwe A, Addai BW, Wiafe S, Adewole IF. Developing cancer control plans in Africa: examples from five countries. *Lancet Oncology* 2013; **14**: e189-e195.
 74. **Stefan DC**, Stones DK. Children With Cancer and HIV Infection: What is Different About Them? *Journal of Pediatric Hematology Oncology* 2013; **35**(8): 590-596.
 75. **Stefan DC**. Hodgkin lymphoma in Africa: Present and future. *Transfusion and Apheresis Science* 2013; **49**(2): 144-146.
 76. Sullivan R, Kowalczyk JR, Agarwal B, Ladenstein R, Fitzgerald E, Barr R, Steliarova-Foucher E, Magrath I, Howard SC, **Kruger M**, Valsecchi MG, Biondi A, Grundy P, Smith MA, Adamson P, Vassal G, Pritchard-Jones K. New policies to address the global burden of childhood cancers. *Lancet Oncology* 2013; **14**(3): e125-e135.
 77. Sullivan R, Kowalczyk JR, Agarwal BR, Ladenstein R, Fitzgerald E, Barr RD, Steliarova-Foucher E, Magrath IT, Howard S, **Kruger M**, Valsecchi MG, Biondi A, Grundy P, Smith MA, Adamson P, Vassal G, Pritchard-Jones K. Improving cancer care for children and young people 4. New policies to address the global burden of childhood cancers. *Lancet Oncology* 2013; **14**: e125-e135.
 78. Thwaites GE, **Van Toorn R, Schoeman JF**. Tuberculous meningitis: more questions, still too few answers. *Lancet Neurology* 2013; **12**(10): 999-1010.
 79. Twomey M, Cheema B, Buys H, Cohen K, De Sa A, Louw P, Ismail M, **Finlayson H**, Cunningham C, Westwood A. Vital signs for children at triage: A multicentre validation of the revised South African Triage Scale (SATS) for children. *SAMJ South African Medical Journal* 2013; **103**(5): 304-308.
 80. Van der Merwe SK, Freeman N, Bekker A, Harvey J, Smith J. Prevalence of and risk factors for retinopathy of prematurity in a cohort of preterm infants treated

- exclusively with non-invasive ventilation in the first week after birth. *SAMJ South African Medical Journal* 2013; **103**(2): 96-101.
81. **Van Toorn R, Schaaf HS**, Laubscher JA, Elsland SL, **Donald PR, Schoeman JF**. Short Intensified Treatment in Children with Drug-Susceptible Tuberculous Meningitis. *Pediatric Infectious Disease Journal* 2013; doi: 10.1097/INF.000000000000065.
 82. **Van Zyl JM, Smith J, Hawtrey A**. The effect of a peptide-containing synthetic lung surfactant on gas exchange and lung mechanics in a rabbit model of surfactant depletion. *Drug Design Development and Therapy* 2013; **7**: 139-148.
 83. **Van Zyl JM, Smith J**. Surfactant treatment before first breath for respiratory distress syndrome in preterm lambs: comparison of a peptide-containing synthetic lung surfactant with porcine-derived surfactant. *Drug Design Development and Therapy* 2013; **7**: 905-916.
 84. Vanden Driessche K, **Marais BJ**, Wattenberg M, Magis-Escurra C, Reijers M, Tuinman IL, Boeree MJ, Van Soolingen D, De Groot R, **Cotton MF**. The Cough Cylinder: a tool to study measures against airborne spread of (myco-) bacteria. *International Journal of Tuberculosis and Lung Disease* 2013; **17**(1): 46-53.
 85. Vermund SH, Fidler SJ, Ayles H, **Beyers N**, Hayes RJ. Can Combination Prevention Strategies Reduce HIV transmission in generalised epidemic settings in Africa? The HPTN071 (PopART) study plan in South Africa and Zambia. *JAIDS-Journal of Acquired Immune Deficiency Syndromes* 2013; **63**(2): s221-s227.
 86. Versporten A, Sharland M, Bielicki J, Drapier N, Vankerckhoven V, Goossens H; ARPEC Project Group Members (**Finlayson H, Rabie H, Cotton MF**). The Antibiotic Resistance and Prescribing in European Children Project: a neonatal and paediatric antimicrobial web-based point prevalence survey in 73 hospitals worldwide. *Paediatric Infectious Disease Journal* 2013; **32**(6): e242-e251.
 87. Visser DH, **Schoeman JF**, Van Furth AM. Seasonal variation in the incidence rate of tuberculous meningitis is associated with sunshine hours. *Epidemiology and Infection* 2013; **141**: 459-462.
 88. **Walters E, Goussard P**, Bosch C, **Hesseling AC, Gie RP**. GeneXpert MTB/RIF on bronchoalveolar lavage samples in children with suspected complicated intrathoracic tuberculosis: A pilot study. *Paediatric Pulmonology* 2013; doi: 10.1002/ppul.22970.
 89. **Walters E**, Reichmuth K, Dramowski A, Marais BJ, **Cotton MF, Rabie H**. Antiretroviral regimens containing a single protease inhibitor increase risk of virologic failure in young HIV-infected children. *Paediatric Infectious Disease Journal* 2013; **32**(4): 361-363.
 90. Weber HC, **Gie RP, Cotton MF**. The challenge of chronic lung disease in HIV-infected children and adolescents. *Journal of the International Aids Society* 2013; **16**: 18633.
 91. Williams JR, Sprumont D, Hirtle M, Adebamowo C, Braunschweiger P, Bull S, Burri C, Czarkowski M, Te Fan C, Franck C, Gefenas E, Geissbuhler A, Klingmann I, Kouyaté B, Kraehenbuhl J-P, **Kruger M**, Moodley K, Ntoumi F, Nyirenda T, Pym A, Silverman H, Tenorio S. Consensus standards for introductory e-learning courses in human participants research ethics. *Journal of Medical Ethics* 2013; doi:10.1136/medethics-2013-101572
 92. Yao JJA, Couitchere L, Atimere Y, Koné D, Azagoh-Kouadio R, Oulai MS, **Stefan DC**. Childhood cancer in Côte d'Ivoire, 1995-2004 – challenges and hopes. *SAMJ South African Medical Journal* 2013; **103**(2): 113-115.
 93. **Zöllner EW**, Lombard C, Galal U, Hough S, Iruken EM, Weinberg. Screening for hypothalamic-pituitary-adrenal axis suppression in asthmatic children remains problematic: a cross-sectional study. *British Medical Journal* 2013; **3**(8). pii: e002935. doi: 10.1136/bmjopen-2013-002935.

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94. **Zunza M**, Mercer GD, Thabane L, Esser M, **Cotton MF**. Effects of postnatal interventions for the reduction of vertical HIV transmission on infant growth and non-HIV infections: a systematic review. *Journal of the International Aids Society* 2013; **16**: doi.org/10.7448/IAS.16.1.18865.

Journal Articles (Non-subsidised)

1. **Beyers N, Gie RP**. Childhood tuberculosis: no longer an orphan disease? *Public Health Action* 2013; **3**(3): 190.
2. **Dramowski A, Frigati L, Rabie H, Cotton M**. Malaria in Children – Prevention and Management. *Infectious Disorders – Drug Targets* 2013; **13**(4):303-11.
3. **Goussard P**. Preventative strategies against the development of childhood pneumonia. *Paediatric Focus* 2013; **4**(4): 8-10.
4. Hunt G, Mkhize N, **Cotton M**. The Mississippi Baby? Questions on a 'functional' cure. *Bioafrica.net* 2013; 1. <http://bioafrica.net/blogs.php?id=24>
5. **Kling S**. Stepping down Asthma treatment in children. *The Specialist Forum* 2013; **13**(6): 29-33.
6. **Kruger M**. The importance of standard treatment guidelines in paediatric practice in Africa. *Public Health Action* 2013; **3**(2): 94.
7. **Kruger M**, Schoeman J, Reynders D, Omar F, Wedi O. Outcome of patients with primary pulmonary metastases at diagnosis of nephroblastoma in a developing country. *Paediatric Blood and Cancer* 2013; **60**(S3): 97.
8. **Kruger M**, Chantada G, Luna-Fineman S, Sitorus RS, Israels T, Leal-Leal C, Bahkshi S, Qaddoumi I, Abramson DH, Doz F. SIOP-PODC recommendations for graduated-intensity treatment of retinoblastoma in developing countries. *Paediatric Blood and Cancer* 2013; **60**(S3): 126.
9. Leroy V, Malateste K, **Rabie H**, Lumbiganon P, Ayaya S, Dicko F, Davies M-A, Kariminia A, Wools-Kaloustian K, Aka E, Phiri S, et al . Outcomes of Antiretroviral Therapy in Children in Asia and Africa: A Comparative Analysis of the leDEA Pediatric Multiregional Collaboration. *Journal of Acquired Immune Deficiency Syndrome* 2012; **62**(2): 208-219.
10. Murray EJ, Bond VA, Marais BJ, Godfrey-Faussett P, Ayles HM, **Beyers N**. High levels of vulnerability and anticipated stigma reduce the impetus for tuberculosis diagnosis in Cape Town, South Africa. *Health Policy Plan* 2013; **28**(4): 410-418.
11. **Nel ED**. A brief review of the history of paediatric gastroenterology. *The South African Gastroenterology Review* 2013; **11**(2): 16-18.
12. Osman M, **Hesseling AC, Beyers N**, Enarson DA, Rusen ID, Lombard C, **Van Wyk SS**. Routine programmatic delivery of isoniazid preventive therapy to children in Cape Town, South Africa. *Public Health Action* 2013; **3**(3): 199-203.
13. Palanivel C, Kumar AMV, Mahalakshmi T, Govindarajan S, **Claassens M**, Satyanarayana S, Gurusurthy D, Vasudevan K, Purty A, Paulraj AK, Raman KV. Uptake of HIV testing and HIV positivity among presumptive tuberculosis patients at Puducherry, South India. *Public Health Action* 2012; **3**(3): 220-223.
14. **Rose PC, Schaaf HS, Du Preez, Seddon JA, Garcia-Prats AJ, Zimri K, Dunbar R, Hesseling AC**. Completeness and accuracy of electronic recording of paediatric drug-resistant tuberculosis in Cape Town, South Africa. *Public Health Action* 2013; **3**(3): 214-219.
15. **Seddon J**, Perez-Velez CM, **Schaaf HS**, Furin JJ, Marais BJ, Tebruegge M, Detjen A, **Hesseling AC**, Shah S, Adams LV, Starke JR, Swaminathan S, Becerra MC. Consensus Statement on Research Definitions for Drug-Resistant Tuberculosis in Children. *Journal of the Infectious Diseases Society* 2013; **2**(2): 100-109.
16. **Skinner D, Hesseling AC, Francis C, Mandalakas AM**. It's hard work, but it's worth it: the task of keeping children adherent to isoniazid preventive therapy. *Public Health Action* 2013; **3**(3): 191-198.
17. **Ströbele S, Nel E**. Functional abdominal pain – not exclusively an adult condition.

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The South African Gastroenterology Review 2013; **11**(1): 33-36.

18. Tripathy JP, Srinath S, **Naidoo P**, Ananthakrishnan R, Bhaskar R. Is physical access an impediment to tuberculosis diagnosis and treatment? A study from a rural district in North India. Public Health Action 2013; **3**(3): 235-239.

Proceedings – International

1. Pitcher R, Lombard C, **Cotton M**, Beningfield S, Zar HJ. Chronic chest radiographic changes in a cohort of HIV-infected South African children. ECR 2013, Austria Center Vienna, Vienna, Austria, Insights Imaging 2013: 64-65.

Books

1. **Stefan DC**, Rodriguez-Galindo C. Paediatric Hematology-Oncology in Countries with Limited Resources. Springer, New York, USA 2013:415 pp.
- a. **Stefan DC**. Childhood Cancer in Low-Income and Middle-Income Countries in the Twenty-first Century. In Paediatric Hematology-Oncology in Countries with Limited Resources, Springer, New York, USA, 2013: 1-5.
- b. **Stefan DC**. HIV and malignancy in children. In Paediatric Hematology-Oncology in Countries with Limited Resources, Springer, New York, USA, 2013: 377-391.
2. **Schaaf HS** (co-author): World Health Organisation. The use of bedaquiline in the treatment of multidrug-resistant tuberculosis. Interim policy guidance. WHO, Geneva, Switzerland, 2013. WHO/HTM/TB/2013.6 (Part of Expert Group Meeting, WHO, 29-30 January 2013)

Chapters in Books

1. **Marais BJ Schaaf HS**, Menzies D. Prevention of TB in areas of high incidence. In European Respiratory Monograph, European Respiratory Society, Sheffield, United Kingdom, 2012: 84-94.

2. **Schoeman JF, Donald PR**. Tuberculous meningitis. In Handbook of Clinical Neurology, Elsevier, 2013: 1135-1138.
3. **Smit L**. Pneumonia in Children. AFEM Handbook of Acute and Emergency Care. Oxford University Press, First Edition 2013. Smit L. Approach to Breathing Difficulties in Children. AFEM Handbook of Acute and Emergency Care. Oxford University Press, First Edition 2013.
4. **Ströbele S**. Rapid Assessment of Abdominal Pain in Children, Oxford Handbook of Emergency Care for Africa, Published 2013,

Special Achievements and Highlights

- Performance awards for exceptional service:
 - TBH = 13
 - US = 13
- Prof Sharon Kling
 - Appointed as Head of Clinical Services: General Paediatrics
- Prof MF Cotton:
 - Appointed as Head of Clinical Services: Paediatric Infectious Diseases
- Prof J Smith
 - International patent registration of SynSurf® - a synthetic surfactant by INNOVUS

Conferences/Workshops/Training Courses: Participants and Attendees

International

1. Prof M Kruger
- a. Forty-fifth SIOP Congress of the International Society of Paediatric Oncology (SIOP): September 25-28, 2013 in Hong Kong, China. Poster presentations: SIOP-PODC recommendations for graduated-intensity treatment of retinoblastoma in developing countries and outcome of patients with primary pulmonary metastases at diagnosis of Nephroblastoma in a developing country

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- b. SIOB Advocacy Meeting: Presented an overview of advocacy group's role in SIOB
 - c. Prof M Kruger. Invited to attend the Developing High Quality Standards for e-Learning Programs in Research Ethics and Regulation in North-South Partnerships, Brocher Foundation, Geneva, 16 to 18 January 2013
 - d. Attended the SIOB Board of Directors Meeting on 27 April 2013 in Amsterdam
 - e. Invited to attend the HIV Scientific Cure Committee Think Tank during the 2013 IMPAACT Leadership Retreat Meeting, Washington, on 7 May 2013
2. Prof DC Stefan
- a. Organiser of an international workshop "Cost and cost-effectiveness treatment of cancer in Africa" - sponsored by vice-rector office Stellenbosch University (International Office)
 - b. Organiser of the paediatric oncology session at AORTIC 2013
 - c. Faculty member and mentor ALCI (African Leaders Cancer Institute)
Speaker: National Cancer Control Plans. (Session: AORTIC African Cancer Leaders Inst). Ninth AORTIC international conference on Cancer in Africa, Durban, South African, 21 to 24 November 2013
 - d. Attended the Grant Writing Workshop, second Sub-Saharan Africa CFAR Biannual meeting, 6 December 2013.
 - e. -Chair: Session – Emblem (NCI BL project) ninth AORTIC International Conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - f. -Speaker: Burkitt lymphoma in African HIV positive children - what is different about them? (Session - Emblem + Selected NCI Funded Res on BL). Ninth AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - g. -Speaker: Cost-effectiveness of treating cancer in Africa Childhood cancer (Session – DEPT PAEDS). 9th AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - h. -Chair: Session – Palliative Care II. Ninth AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - i. -Speaker: Childhood cancer registration in Africa. (Session: Africa Cancer Reg Network). Ninth AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - j. Chair: Session – Paediatric Oncology. Ninth AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - k. Speaker: Discussion: How to improve the survival of nephroblastoma in Africa? (Session: Paediatric Oncology). Ninth AORTIC international conference on Cancer in Africa, Durban, South Africa, 21 to 24 November 2013.
 - l. Invited to the World Cancer Leaders' Summit - UICC, 18 to 19 November 2013, Cape Town
 - m. Invited Speaker: Cancer Registry and its utilisation in cancer control in South Africa. Workshop on Cancer Registration and Cancer Control, Chandigarh, India, 10 to 12 October 2013.
 - n. Invited Speaker: Option for cancer prevention and treatment: Global perspectives. Workshop on Cancer Registration and Cancer Control, Chandigarh, India, 10 to 12 October 2013.
 - o. Chair: Statistical methods for Cancer Registry. Workshop on Cancer Registration and Cancer Control, Chandigarh, India, 10 to 12 October 2013.
 - p. Invited Speaker: Preparation of report by Cancer Registries. Workshop on Cancer Registration and Cancer Control, Chandigarh, India, 10 to 12 October 2013.

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- q. Invited Speaker Oral Presentation: Survival rates of childhood cancer in South Africa, 35th International Association of Cancer Registries (IACR) Conference, 22 to 24 October 2013, Buenos Aires, Argentina.
 - r. Presented a poster on Distribution of childhood cancers in Sub-Saharan Africa. Forty-fifth congress of the International Society of Paediatric Oncology (SIOP), Hong Kong, China, 25 to 28 September 2013.
 - s. Invited to the Annual French GFAOP meeting, Paris 25 to 28 June 2013
 - t. Invited by IARC and WHO for site visits to Cancer Registries in Vietnam (part of IARC Regional Hub) 13 to 14 June 2013
 - u. Invited to the Hopitaux Publique de Paris Meeting, Paris, France, 18 April 2013
 - v. Invited to the IARC Reg Hub Mtg and Evid.based Man.Mtg, Mumbai, India, 27 Feb to 01 March 2013
 - w. Speaker at the Annual review meeting of AFCRN, Mombasa, Kenya, 29 to 30 Jan 2013
 - x. Faculty Member, invited by ASCO – Kaposi sarcoma, head and neck and prostate cancer as a Facilitator, second American Society of Clinical Oncology (ASCO) and (AMPATH)-Oncology Inst., 22 to 24 Jan 2013.
3. Dr A Van Zyl attended the XXIV Congress of the International Society of Thrombosis and Haemostasis, Amsterdam, The Netherlands, 28 June to 4 July 2013
 4. Prof MF Cotton. Chair of local organising committee: WSPID 2013 conference, November 2013.
 5. Prof MF Cotton. Seventh IAS conference on HIV Pathogenesis, Treatment and Prevention, 30 June to 3 July 2013, Kuala Lumpur. Prof MF Cotton. Session chair and case presentation: Child with suspected tuberculosis – how to use newer diagnostic tests and plan treatment in parallel with ART
 6. Dr E Malek. International Paediatric Congress, Australia, 23 to 30 August 2013. Presentation: Facilitating Focused Health Care Interventions In Response To Geographic Mapping Of Childhood Diarrhoeal Disease Seasonal Deaths In Cape Town, South Africa
 7. Dr Finlayson. TB Union World Conference, 31 October to 2 November 2013, Paris. Poster presentation on the changing pattern of Paediatric Tuberculosis Infection during two time periods in Tygerberg Hospital, Cape Town
 8. Dr Liezl Smit (US Dept of Paediatrics and Child Health) – The impact of a referral pathways change regarding respiratory burden of disease in children, Cape Town. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013
 9. Dr Adrie Bekker. Barriers to care preventing tuberculosis-exposed newborns from completing TB therapy. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
 10. Prof AC Hesselting, Prof S Schaaf, Dr A Bekker. Seventh International Childhood TB training course was held at Goudini, Western Cape, from 30 September to 4 October 2013 with 45 participants from 20 countries represented – all presenters, except two were from Stellenbosch University. Excellent feedback from participants. Course coordinators Simon Schaaf and Anneke Hesselting
 11. Prof HS Schaaf:
 - a) Taught at the following two courses organised by CDC and University of Pretoria:
 - o Fifth International Clinician's TB and HIV Course. 9 to 12 May 2013, Bela-Bela, Limpopo, South Africa. Invited Presenter (3 lectures).
 - o Sixth International Clinician's TB and HIV Course. 14 to 16 November 2013, Bloemfontein, Free State, South Africa (Invited presenter – 3 lectures)
 - b) New recommendations for the treatment of pan-susceptible and drug-resistant intrathoracic tuberculosis in children. ATS 2013 (American Thoracic

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- Society International Conference, 17 to 22 May 2013, Philadelphia, NJ, USA.
- c) Invited Expert/Speaker: State of current treatment for MDR-TB in children. Workshop: Towards earlier involvement of children and pregnant women in trials of new TB drugs. 22 and 23 May 2013, Bethesda (NIH), MD, USA
 - d) Caring for children with MDR/XDR-TB. PGC: MDR and XDR-TB: clinical and programmatic management of treatment and suffering. Forty-fourth Union World Conference on Lung Health, 30 October to 3 November 2013, Paris, France.
 - e) Treatment of DR-TB in children and preventive therapy for children exposed to DR-TB. PGC: Managing children with drug-resistant tuberculosis: a practical approach. Forty-fourth Union World Conference on Lung Health, 30 October to 3 November 2013, Paris, France.
 - f) Drug-resistance surveillance in children with culture-confirmed TB in the Western Cape: a downward trend? Forty-fourth Union World Conference on Lung Health, 30 October to 3 November 2013, Paris, France.
 - g) Clinical care of children with tuberculosis. Educational Workshop for Fellows. Eighth World Congress of the World Society of Paediatric Infectious Diseases (WSPID), 19 to 22 November, Cape Town, South Africa (Invited speaker).
 - h) Managing multidrug-resistant tuberculosis in children. Eighth World Congress of the World Society of Paediatric Infectious Diseases (WSPID), 19 to 22 November, Cape Town, South Africa. (Invited speaker).
 - i) What is the best regimen for tuberculous meningitis? Fifth FIDSSA Conference, 10 to 12 October 2013, Champagne Sports Resort, Drakensberg, South Africa.
12. Prof PR Donald. Invited speaker: Seventeenth Annual Conference of the IUATLD of North America: The George Comstock Lecture – The Place of Children in the Global Epidemiology of TB, Vancouver, Canada, 28 February to 2 March 2013
 13. Prof PR Donald. Invited speaker: International Meeting on Childhood tuberculosis, Pardia, Italy, 22 to 23 March 2013. Presentations on: Central Nervous System tuberculosis in children and PK and PD of TB drugs: what do we know and what are the implication
 14. Dr L Smit. TB Union World Conference, 31 October to 2 November 2013, Paris. Poster presentation on the impact of a referral pathways change regarding respiratory burden of disease in children, Cape Town.
 15. Dr H Finlayson. TB Union World Conference, 31 October to 2 November 2013, Paris. Poster presentation on The changing pattern of Paediatric Tuberculosis Infection during two time periods in Tygerberg Hospital, Cape Town
 16. Profs. Johan Smith, Robert Gie and Dr Pierre Goussard. Organised the Here be Lungs Confence, which was held from 21 to 22 March 2013 at the Lanzerac Hotel and were attended by three international and numerous national experts on childhood lung disease.
 17. Prof Robert Gie. Lead a delegation to Republic of Uganda for Global Drug facility of the WHO to aid with TB drug procurement. February 2013.
 18. Dr John Lawrenson. The sixth World Congress of Paediatric Cardiology and Cardiac Surgery took place from 18 to 22 February at the CTICC. Dr Lawrenson was one of the co-chairs of the scientific committee and members of staff from adult cardiology and cardiothoracic surgery took part in the meeting as faculty. The meeting was attended by just over 3 000 people and was an outstanding success.
 19. Dr ED Nel. Organised: ESPGAHN Goes Africa course (March and October 2013)

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20. Dr ED Nel. Organised: SAGES Fellow Weekend: Co-organiser of paediatric module
21. Dr ED Nel. Presented: New developments in the diagnosis of Gastroesophageal Reflux in Children. Here Be Lungs Conference. Stellenbosch, 21 and 22//2013

National

1. Prof M Kruger. Twenty-sixth South African Children's Cancer Study Group Meeting, Hemingways, East London, 25 to 28 October 2013
2. Prof M Kruger. Oral presentations: SIOP-PODC recommendations for graduated-intensity treatment of retinoblastoma in developing countries and outcome of patients with primary pulmonary metastases at diagnosis of Nephroblastoma in a developing country
3. Prof M Kruger. SARETI Institutionalising Ethical Review of Health Research Lecture Series, 9 to 11 September 2013 at UKZN
4. Dr R van Toorn. Organiser and speaker at a Paediatric Stroke workshop in the Drakensberg, which was attended by 50 PANDA members
5. Dr E Malek. Child Health Priorities Conference, 31 October to 2 November 2013, Johannesburg
6. Dr E Malek. Presentation: Facilitating focused healthcare interventions in response to geographic mapping of childhood diarrhoeal disease seasonal deaths in Cape Town.
7. Prof HS Schaaf. Invited speaker: What is the best regimen for tuberculous meningitis? Fifth FIDSSA Conference, 10 to 12 October 2013, Champagne Sports Resort, Drakensberg, South Africa.
8. Prof Johan Smith. Conferences organised:
 1. High-frequency oscillation workshop, Faculty of Medicine and Health Sciences, 15 to 17 May 2013

2. United South African Neonatal Association (USANA) conference, Spier Estate, 19 to 21 September 2013
9. Prof Johan Smith. Thirty-fifth Annual International Conference of the IEEE EMBS, Osaka, Japan, 3 to 7 July 2013. Presentation: Development of a diagnostic glove for unobtrusive measurement of chest compression force and depth during neonatal CPR.
10. Dr S Holgate. Sixth World Congress of Paediatric Cardiology and Cardiac Surgery, CTICC, Cape Town, 17 to 22 February 2013
11. Dr S Holgate. United South African Neonatal Association (USANA) conference, Spier Estate, 19 to 21 September 2013
12. Dr ED Nel. Why Paediatric Gastroenterology. Paediatric Gastroenterology Interest Group. Cape Town. 20 April 2013.
13. Dr ED Nel. Inflammatory Bowel Disease in Children. Update 2013. University of Pretoria. 1 to 3 March 2013
14. Dr ED Nel. Approach to chronic diarrhoeal disease in childhood. GP Refresher Course, Spier, Stellenbosch, May 2013
15. Dr S Ströbele. Gastroesophageal Reflux in Children. GP Refresher Course, Spier, Stellenbosch, May 2013
16. Dr GP de Bruin. Twenty-sixth South African Children's Cancer Study Group Meeting, Hemingways, East London, 25 to 28 October 2013. Oral presentation: Survival rates of childhood cancer in South Africa
17. Dr Y Visser. Twenty-sixth South African Children's Cancer Study Group Meeting, Hemingways, East London, 25 to 28 October 2013. Oral presentation: Nephroblastoma – which protocol to use in South Africa?

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Regional

1. Prof HS Schaaf, Dr AJ Garcia-Prats, Ms H Draper, Ms K Zimri, Prof AC Hesselning. Drug Resistance Surveillance in children with culture-confirmed TB in the Western Cape: a downward trend? SUN Annual Academic Day 2013. 14 August 2013
2. Prof S Kling. ARESA Diploma Module 3, Stellenbosch University, 9 to 20 September 2013 Presentation: Ethical issues in paediatric research
3. Dr R van Toorn. Organised a neonatal neurology workshop at Canal Walk, which was attended by more than 80 delegates.

Part 5

CENTRES

THE CHILDREN'S INFECTIOUS DISEASES CLINICAL RESEARCH UNIT (KID-CRU)

Director: Prof MF Cotton

| Posts (full-time) | Number | Filled |
|----------------------------------|--------|--------|
| Director | 1 | 1 |
| Deputy Director | 1 | 1 |
| Neurodevelopmental Paediatrician | 1 | 1 |
| General Paediatrician | 0 | 0 |
| Medical Officers | 9 | 9 |
| Pharmacists | 3 | 3 |
| Pharmacist assistant | 1 | 1 |
| Social Worker | 1 | 1 |
| Regulatory Officer | 1 | 1 |
| Project Managers | 4 | 4 |
| Manager, Logistics and HR | 1 | 1 |
| Admin Officers | 2 | 2 |
| PA and assistant Project Manager | 1 | 1 |
| Cleaners | 2 | 2 |
| Data Manager | 1 | 1 |
| Data Entry Officers | 3 | 3 |
| Drivers | 3 | 3 |

Outpatient Facility

| | |
|------------------------------|-------|
| Number of active studies: | 16 |
| Number of patients on study: | 924 |
| Number of study visits: | 3 202 |

Community Advisory Board (CAB) activities (monthly meetings)

- Elections for new chair, vice-chair, secretary and RCAB repr.
- Review of roles and responsibilities of members and leaders
- Preparation for regional CAB meeting in Durban – review of scientific priorities
- Valentine's Day treat for mothers in waiting room
- Orientation of new members - Joan Coetzee
- Overview of IMPAACT studies – k Mercia van der Linde (efavirenz in young children)
- Launch of Medikidz book at Tygerberg Hospital
- Update of IMPAACT LEADERSHIP retreat-topics review
- Discussions – Current studies – Barbara Laughton; Using hair to measure adherence, Mississippi baby – Prof. Cotton; Stavudine – Steve Innes; Nutrition – Helen Payne
- Goudini Retreat – assessment of training needs identified at retreat,

Adolescent Activities (monthly meetings on Saturdays)

- Selection of new leadership
- Goal setting workshop facilitated by C Jordaan
- Fun walk at Camps Bay
- Debate on disclosure – “my right to tell or not to tell”
- Role-plays workshop – “In my world” (theme)
- Understanding the virus – Prof. Cotton
- Adherence issues question and answer session
- Debate workshop. “Knowing my status” facilitated by adolescents

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- Discussion on self-identity “Who Am I” facilitated by Shaun from UWC
- Choir performance at KIDCRU 10th birthday
- Goudini Retreat with adults - three-day programme, topics of discussion included Hero Book
- Adolescent Choir at WISPD Conference
- END OF YEAR GET TOGETHER - vote of thanks

Partnerships

1. National: Guideline Committees, EDL consultations
2. NGO: HOPE South Africa
3. International: IMPAACT, ACTG and PENTA

Teaching and Training (under, postgraduate and elective students)

1. PhD – Steve Innes
2. 10 elective students – 5 from USA, 2 from Germany, 1 from Austria and 2 from Holland
3. One volunteer research assistant – Cherie Martin (USA)

Special achievements and other highlights

1. KIDCRU 10 Year Anniversary – 20 September 2013
2. Celebrity Visit: Annie Lennox – 6 December 2013
3. Mark Cotton – Opinion piece in Cape Argus – World AIDS day – 1 December 2013
4. M Theunissen elected as International Community Advisory Board Chairperson
5. Successful recompetition as NIAID Clinical Trial unit with inclusion of adults in ACTG trials

SOUTH2SOUTH PROGRAMME FOR COMPREHENSIVE FAMILY HIV CARE AND TREATMENT

Director: Dr K van der Walt

Summary of activities

South to South's strategic goal is to develop and institutionalise innovative capacity-

building programmes to support the South African Government's health priorities and to improve HIV/TB health outcomes of priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB. The programmatic goal is aligned with Stellenbosch University's strategic priorities, i.e. research, training, community interaction and collaboration with African universities.

Objective 1: Provide individual-level capacity building to health workers and relevant stakeholders in the area of HIV and TB health outcomes for priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB.

Objective 2: Provide organisational-level capacity building by means of quality-improvement (QI) strategies to improve provincial and district health system performance in the area of HIV and TB health outcomes for priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB.

Objective 3: Provide systems and policy-level capacity building by means of support for national expert dialogue fora to improve the policy context for capacity building in the area of HIV and TB health outcomes for priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB.

Objective 4: Conduct programme evaluation and improvement science research to document evidence-based capacity-building activities in the area of HIV/TB health outcomes for priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB.

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Resources:

All positions are funded 100% by PEPFAR/USAID funds.

| Posts (Full-time) | Number | Filled |
|---|--------|----------------|
| Principle Investigator (10% FTE) | 1 | 1 |
| Clinical Program Director | 1 | 1 |
| Operations Director | 1 | 1 |
| Program Manager: Health Systems Strengthening | 1 | 1 |
| Program Manager: Training and Development | 1 | 1 |
| Program Manager: Strategic Information | 1 | 1 |
| Administrative assistant | 1 | 1 |
| Travel and Logistics officer | 1 | 1 |
| Financial Officer | 1 | 1 |
| Data and IT Manager | 1 | 1 |
| Program coordinator | 2 | 2 |
| Data capturer | 1 | 1 |
| M&E Officer | 1 | 1 |
| Research Field Assistant | 2 | Y – 1 N – 1 |
| Strategic Information Officer | 1 | 1 |
| Paediatric Clinical Advisor | 1 | 1 |
| PMTCT Clinical Advisor | 3 | 3 |
| HIV/TB Nurse Advisor | 6 | 6 |
| Psychosocial Advisor | 3 | 3 |
| Pharmacist Advisor | 1 | 1 |

Infrastructure development – upgrading, new equipment, etc. (highlights)

1. Establishment of the data systems and research equipment and software required to conduct health systems and program evaluation research within the program.
2. Implementation of various productivity and collaboration software, such as Lync, SharePoint and Smartsheet, to support staff in project management and collaboration.

Community outreach programmes/community services and interaction.

1. Right to Care sub-award capacity building program 2010-2013:

- a) In September 2013, the capacity building programme funded by the Right to Care sub-award was

concluded with all deliverables and targets achieved.

- b) South2South completed a 24-month quality improvement project in the Moretele subdistrict, Bojanala District (North West Province). The combined PCR MTCT rate for all facilities in the subdistrict decreased from 28,4% (2009) to 2,6% (2011). Improvements in critical steps along the PMTCT care pathway were demonstrated, potentially explaining the improved MTCT rate. The capacity building program resulted in innovative training, mentoring, and quality improvement tools and resources being developed, piloted, and implemented, that have since been scaled up at a national level.
- c) South2South successfully developed and refined an integrated district support model, based on the Institute of

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Healthcare Improvement's Breakthrough Series Collaborative Model.

- d) South2South successfully developed and piloted numerous training and mentoring tools to improve the quality of care of mothers and children affected by HIV (see our resources page for training and mentoring tools)
- e) The programme supported over 45 healthcare facilities across 5 provinces.
- f) The programme conducted 44 structured training events in 2013, with 660 healthcare workers trained. Over the three-year programme period, 1 105 healthcare workers received training.
- g) In 2013 the programme delivered unstructured training to 864 healthcare workers and delivered 749 mentoring contact sessions to healthcare workers in rural primary healthcare centres.

2. Breastfeeding training material development: National Department of Health

- a) S2S was awarded a contract by USAID to develop breastfeeding training material for the Nutrition Directorate of the National Department of Health.
- b) During 2013, the project made critical progress with finalising the following deliverables:

South2South successfully developed breastfeeding training material for the National Department of Health:

- Literature and Existing Training Material Review Report
- Breastfeeding course for policy and decision makers and managers
- Breastfeeding course for frontline health workers
- Breastfeeding course for people with existing training skills

3. HIV-Innovations for Improved Patient Outcomes in South Africa

- a) The capacity building programme funded by USAID aims to develop innovations and plans for capacity building and support for scale-up of effective and efficient models and approaches for HIV-related services in line with SAG priorities.
- b) During 2013, programme activities consisted mainly of planning, preparation, pre-fieldwork research activities and piloting of training approaches.
- c) The following programme outputs were achieved:
 - Project planning meetings with provincial and national DOH stakeholders
 - Comprehensive resource mapping of existing training resources available in South Africa
 - Development and approval a training needs assessment research study protocol, including pre-fieldwork planning and preparation for research
 - Development and approval of a program evaluation research study protocol, including pre-fieldwork planning and preparation for research
 - Development of the first draft of competency dictionaries of six healthcare worker cadres
 - Planning, preparation and development of the components of two quality improvement collaboratives: The eMTCT QI Collaborative, and the Blue Print for Action for Paediatric and Adolescent HIV/TB QI Collaborative
 - Technical assistance to the NDOH Paediatric and Adolescent and PMTCT Technical Working Groups on numerous projects, including development of a national guideline for Disclosure of HIV status for

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children, caregivers and healthcare workers, finalisation of the National Psychosocial Support booklet and roll-out of the national PMPTCT quality improvement workshops

Partnerships

1. South African Government

S2S has agreements with the following provinces to conduct research, training and quality improvement support:

- a) Western Cape: Cape Winelands District
- b) Northern Cape: Pixley-ka-Seme District
- c) Eastern Cape: Amathole District

S2S has established representation at the following forums at the National Department of Health:

- a) NDOH Paediatric and Adolescent Technical Working Group
- b) NDOH PMTCT Technical Working Group
- c) NDOH PMTCT Steering Committee
- d) NDOH Human Resources Directorate (Regional Training Centres)
- e) NDOH Nutrition Directorate

2. Non-governmental organisations

The S2S capacity building programme is part of a wide range of NGO funded by PEPFAR to support the South African Government to improve HIV/TB health outcomes. S2S specifically works closely with the following organisations:

- a) ANOVA Health Institute: PEPFAR implementing partner in the Cape Winelands District
- b) Health Systems Trust: PEPFAR implementing partner in the Pixley-ka-Seme District
- c) IYDSA: PEPFAR implementing partner in the Amathole District
- d) ITECH: Specialist training support partner to the NDOH Human Resources Directorate and Regional Training Centres

- e) Keth'Impilo: Training collaboration on paediatric and adolescent HIV/TB
- f) Broadreach: Training collaboration and technical assistance on paediatric and adolescent HIV/TB and eMTCT
- g) 20,000+ UKZN: A quality improvement partner organisation
- h) Aurum Institute: Co-support of the NDOH PMTCT Steering Committee on quality improvement
- i) WRHI: Co-support of the NDOH PMTCT Steering Committee on quality improvement
- j) Institute of Healthcare Improvement: S2S awarded a tender to IHI to provide technical assistance and training to S2S staff in quality improvement methods
- k) ICAP-Columbia University: S2S is potentially a sub-award recipient under a CDC global technical assistance grant awarded to ICAP as primary recipient
- l) Paediatric AIDS Treatment Africa (PATA): PATA uses the S2S Paediatric HIV/TB Toolkit for training events
- m) Numerous other NGOs and training institutions utilize training material developed by S2S

Achievements with regard to research activities and research outputs:

Number of research reports/presentations from the programme: 4

Media exposure:

1. Building the capacity of the health workforce to achieve quality HIV and TB care – Tygerland, October 2013
2. South Africa's HIV/AIDS success should be celebrated – Cape Argus, 2 December 2013
3. The South2South Programme supports World Breastfeeding Week – Impromptu, Faculty of Medicine and Health Sciences, August 2013

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Teaching and Training (undergraduate-, postgraduate- and elective students)

The S2S Programme does not offer undergraduate- or postgraduate training to students. The current focus of the programme is on in-service training of healthcare workers through educational outreach. The table below is a summary of S2S staff and their current postgraduate studies.

| S2S staff member | Degree course | Institution |
|-----------------------|---|----------------------------|
| Admire Chirowodza | PhD Social Sciences | University of Johannesburg |
| Puni Mamdoo | MMed Public Health | Stellenbosch University |
| Beryl Green | M Phil Health Professions Education | Stellenbosch University |
| Katherine Brittin | MPH | University of Cape Town |
| Madoda Sitshange | PhD Social Work | University of Pretoria |
| Justine Geiger | M Phil Health Professions Education | Stellenbosch University |
| Christalien Husselman | MSc Clinical Epidemiology | Stellenbosch University |
| Justin Engelbrecht | M Phil Health Systems and Services Research | Stellenbosch University |
| Irma Kruger | MSc Clinical Epidemiology | Stellenbosch University |
| Carmen Louw | M Phil Monitoring & Evaluation | Stellenbosch University |

In addition to the above, the following staff completed a 12-month Improvement Advisor training course offered by the Institute of Healthcare Improvement:

- Katherine Brittin
- Puni Mamdoo
- Maxime Molisho
- Madoda Sitshange
- Dorothy Williams
- Kobus van der Walt

DESMOND TUTU TB CENTRE (DTTC)

Director: Prof N Beyers

Resources:

| Posts (Full-time) | Number | Filled |
|---|--------|--------|
| Researchers and Principal Investigators | 443 | All |
| Posts (sessional) | | |
| Research clinicians | 7 | All |

Infrastructure development:

- Central DTTC offices have been completed as "open office" environment
- The DTTC Garden is ready and used daily by Rory Dunbar's guide dog, Vaughn
- The two field offices in Ravensmead and Uitsig are being maintained
- Field site in Khayelitsha maintained
- PK unit
- All equipment, including desktops and printers that were purchased for the Community TB/HIV Integration centres project, has been donated to NGOs. The final close-out documentation for the project was sent to the funders in March 2013. Once the funder confirms the close-out, all the assets (>\$ 5000) will be donated. Delays on the side of the funder have resulted in the close-out not being completed in 2013
- The fleet of vehicles has been maintained and six new vehicles purchased
- Nine new field sites and offices developed

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New equipment:

- 8 printers for home office and site offices
- 13 desktops for site offices
- 171 Gectac Electronic Capturing Devices
- 10 Multipurpose printers
- 8 Laptops
- 50 WinPad IO Tablet Electronic Capturing Devices

Community outreach programmes/community services and interaction

- Quarterly DTTC meetings with City of Cape Town and Western Cape Government to jointly decide on activities
- Monthly Trial Management Committee Meetings with City of Cape Town, Western Cape Government, NGOs, NHLS to jointly discuss challenges in PopART
- PopART (a community-randomised trial in South Africa and Zambia) had a public randomisation event and was activated in all nine communities and clinics
- COMAPP (Community AIDS Prevention Project) continues in four health subdistricts of Cape Town
- Strengthening of health systems and improving access, quality and collaboration between HIV and TB services. Many health system strengthening activities, including training and mentoring, in all 101 TB clinics in Cape Town
- A wide range of interventions to improve TB case finding, TB cure rates infection control and to reduce susceptibility to TB and HIV happen in all the 101 clinics as well as on subdistrict level in Cape Town
- TB-RID (TB reduce Initial Default). DTTC has partnered with Department of Health to establish a data management system for managing the results from the centralised laboratories of the NHLS in an attempt to increase the number of TB cases diagnosed. A pilot intervention was initiated in the Tygerberg subdistrict to reduce the number of TB defaulters
- The TB-free Kids Project (Flagship Project of SU) in Ravensmead and Uitsig changed its

scope and became involved in Social Capital Development. The project was presented at Community Interaction at Stellenbosch and received another round of funding. In discussions with Profs. Kruger and Volmink it was decided to transfer this project to the Faculty for wider inclusion of students

- The community paediatric studies at DTTC are done mainly in Ravensmead, Uitsig and Site C, Khayelitsha. Although these are research studies, the focus is on improving the health systems and by doing household contact studies and piloting IPT registers, the care of children in contact with TB cases is improved
- PK studies at BCH
- Data collection was completed on the PROVE-IT study. This three-year project assessed the implementation of molecular tests for the diagnosis of TB in public Health Services in Cape Town. This study aims to provide information at a national as well as global level on how to optimise the implementation of new diagnostic tools, including the magnitude and nature of the inputs required to implement molecular tests as part of diagnostic algorithms in routine health services; and the magnitude and range of benefits for patients and their clinical management
- The study on Evaluation of New Diagnostics focus on strengthening health services and the link between health services and NHLS is improved. A database has been developed to track the results of TB tests
- Women in Networks (WIN) project is continuing in Site C Khayelitsha. We partner with the Philani Nutrition Centre in a project aimed at ensuring that children access the child care grant. Additional funding has been awarded by Virgin Unite and the final report was submitted in 2013. Through this project 1265 home visits were done, 336 cases identified of whom 61 were assisted in getting child grants and received social relief

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- DTTC is closely aligned with the National, Provincial and Local health departments and assist on all levels in the development of guidelines, manuals and training material
- A five-day Operational Research Protocol Development Workshop for colleagues from the Department of Health (National DoH) was hosted again and was attended by 15 Participants – 8 from National Department of Health (NODH), 4 from Foundation for Professional Development (FPD)/that's it, 1 from University Research Corporation (URC) and 2 from Dept of Paeds and Child Health
- A successful dissemination meeting was held in December 2013 to disseminate results back to our partners and stakeholders
- DTTC supported the City/MDHS Annual TB/HIV Ceremony in celebration of World TB Day 2013
- On request of and in partnership with the health Directorate of City of Cape Town, DTTC presents a TB Clinical Forum once a month which is attended by clinicians working in the City clinics. In 2013 there were 10 TB Clinical Forums and 738 health care workers attended

Partnerships

National:

- DTTC is closely aligned with the National, Provincial and Local Health departments
 - DTTC is closely aligned with and assist on all levels in the development of guidelines, manuals and training material
 - All activities are planned in close collaboration with the various levels of the department of health. A quarterly meeting is held with Government partners
 - DTTC study findings are disseminated at National TB Programme that has requested that DTTC presents research data at the quarterly National meetings
- Many activities planned and implemented with the support of the local Community Advisory Boards (CABs) have been established for several projects and

activities are planned and implemented with the support of local stakeholders

- South African TB Vaccine Initiative (SATVI), University of Cape Town
- University of Cape Town:
 - Division of Clinical Pharmacology
 - Division of Health Economics Unit
 - Division of Social and Behavioural Sciences
- University of Western Cape: Human Nutrition Division
- South African MRC: Centre for Biostatistics, Health Systems Research Unit
- South African Centre for Epidemiological Modelling and Analysis (SACEMA)
- University Research Co. (URC)

International:

- DTTC remains a Collaborating Centre of the International Union Against TB and Lung Disease
- DTTC has numerous ongoing collaborations with the following:
 - London School of Hygiene and Tropical Medicine
 - Liverpool School of Tropical Medicine
 - Columbia University
 - Johns Hopkins University
 - TB Alliance
 - University of California San Francisco (UCSF)
 - Baylor College of Medicine
 - University of Zambia
 - KNCV
 - University of Amsterdam
 - HPTN (HIV Prevention Trials Network)
 - IMPAACT with > 24 US and international sites
 - CDC Tuberculosis Clinical Trials Consortium (TBTC): with >20 international sites
 - Imperial College, London
 - All India Institute of Medicine
 - St John Medical College, India
 - Charite Hospital, Berlin, Germany
 - McGill University, Canada
 - International Union Against Tuberculosis and Lung Disease
 - University of Warwick, UK

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Achievements with regard to research activities and research outputs:

Number of publications from the department/division: 34

Textbooks and contributions to textbooks

- Naidoo P, Smuts B, Claassens, M, Rusen ID, Enarson D, Beyers N. Operational Research to Improve Health Services A guide for proposal development (2013) ISBN 978-0-620-57795-3. The Union, Paris

Media exposure:

Name of publication: Weekend Argus
Name of study: MVA85A Vaccine Trial
Name of article: New TB vaccine trial phase 3
Date: 4 February 2013

Name of publication: Eikestad-nuus
Name of study: PopART
Name of article: Cloetesville selected for HIV research
Date: 1 March 2013

Name of publication: Cape Times
Name of study: LPA
Name of article: We must work together on TB in SA, urge researchers
Date: 15 April 2013

Name of publication: The New Age
Name of study: LPA
Name of article: TB is the country's No 1 Killer
Date: 15 April 2013

Name of publication: The Times
Name of study: LPA
Name of article: Researchers must work with TB Doctors
Date: 15 April 2013

Name of publication: Tygerburger
Name of study: PopART
Name of article: Fired up for HIV prevention
Date: 05 June 2013

Name of publication: The Cape Times
Name of study: COMAPP
Name of article: Excited trio get the chance to talk to an American President
Date: 02 July 2013

Name of publication: Weekend Argus (Sunday)
Name of study: COMAPP
Name of article: Princess Stephanie keeps her word to Nyanga
Date: 14 July 2013

Name of publication: Stellenbosch/
Franschhoek/Pniel/ Kylemore Gazette
Name of study: DTTC
Name of article: Knitting spree for Mandela Day
Date: 30 July 2013

Name of publication/event (e.g. newspaper, radio): Star Africa
Name of study/person: Nulda Beyers
Name of article: Dr Tutu presume
Date: 10 September 2013

Name of publication/event (e.g. newspaper, radio): Cape Times
Name of study/person: Nulda Beyers
Name of article: Tutu fulfils his childhood dream at last
Date: 10 September 2013

Name of publication/event (e.g. newspaper, radio): Mercury
Name of study/person: Nulda Beyers
Name of article: "Doctor" Tutu gets to fulfill his childhood dream
Date: 10 September 2013

Name of publication/event (e.g. newspaper, radio): Pretoria News
Name of study/person: Nulda Beyers
Name of article: Tutu finally lives his childhood dream
Date: 10 September 2013

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Name of publication/event (e.g. newspaper, radio): Cape Talk, John Maytham Show
Name of study/person: Nulda Beyers
Name of article: The presenter interviews Director of the Desmond Tutu TB Centre at the University of Stellenbosch, Nulda Beyers. They talk about HIV and AIDS rates in South Africa, as they have increased amongst adults
Date: 25 September 2013

Name of publication/event (e.g. newspaper, radio): Argus
Name of study/person: Nulda Beyers
Name of article: Western Cape TB records poor, study finds
Date: 25 September 2013

Name of publication/event (e.g. newspaper, radio): Die Burger
Name of study/person: Nulda Beyers
Name of article: SA deel van Vigs-studie
Date: 1 October 2013

Name of publication/event (e.g. newspaper, radio): Cape Times
Name of study/person: Nulda Beyers
Name of article: Huge study seeks to curb HIV spread
Date: 2 October 2013

Name of publication/event (e.g. newspaper, radio): Health Systems Trust website
Name of study/person: Nulda Beyers/Kim Cloete
Name of article: South Africa sets its sights on getting on top of TB
Date: 3 November

Name of publication/event (e.g. newspaper, radio): Health Systems Trust website
Name of study/person: Nulda Beyers/Kim Cloete
Name of article: Funding for TB Research drops sharply
Date: 3 November

Name of publication/event (e.g. newspaper, radio): The Times
Name of study/person: Nulda Beyers/Kim Cloete
Name of article: New weapon on war in TB
Date: 7 November

Name of publication/event (e.g. newspaper, radio): Health 24
Name of study/person: Nulda Beyers/Kim Cloete
Name of article: Revolutionary test for some TB poses challenges
Date: 7 November

Name of publication/event (e.g. newspaper, radio): AllAfrica.com
Name of study/person: Nulda Beyers/Kim Cloete
Name of article: South Africa sets its sights on Getting on top of TB
Date: 20 November

Name of publication/event (e.g. newspaper, radio): Pocket Media SA
Name of study: COMAPP
Name of article: The Desmond Tutu TB Centre picks a Z-CARD to educate public about male circumcision
Date: 27 November

Teaching and Training (under, postgraduate and elective students)

- On request of and in partnership with the health Directorate of City of Cape Town, DTIC presents a TB Clinical Forum once a month which is attended by clinicians working in the City clinics. In 2013 there were 10 TB Clinical Forums and 738 health care workers attended
- A three-day workshop on manuscript writing was hosted for participants of the Operational Research Assistance Project colleagues from the Department of Health in November and 17 manuscripts are in the process of being finalised for submission

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- The Annual Childhood TB Course was again held at Goudini in 2013 and participants from more than 20 countries attended. The course will be repeated in 2014
- Prof. Donald Enarson visited DTTC twice to teach and mentor the staff of DTTC
- All staff on studies receive regular updates in study-specific training
- Mareli Claassens attended Joint External Monitoring Mission for TB in Jakarta, Indonesia
- Mareli Claassens taught at an Operational Research Course in Chennai, India

Poster/presentation:

1. Anje Coetzer, Sue-Ann Meehan. Piloting a counselor evaluation tool to maintain a consistent quality of counseling at community HIV Counseling and Testing sites in Cape Town, South Africa. SA AIDS Conference. 19 to 21 June 2013
2. Dr S Thee, Dr AJ Garcia-Prats, Ms HR Draper, Prof. HM Mcilleron, Ms J Norman, Prof. PJ Smith, Prof. AC Hesselning, Prof. HS Schaaf. Pharmacokinetics of Ofloxacin and Levofloxacin in children with Multidrug-resistant Tuberculosis. SUN Annual Academic Day 2013. 14 to August 2013
3. Dr AJ Garcia-Prats, Ms K Zimri, Ms Z Mramba, Prof HS Schaaf, Prof AC Hesselning. Children exposed to multidrug-resistant tuberculosis with additional amikacin resistance at a home-based day-care centre: a contact investigation. SUN Annual Academic Day 2013. 14-August 2013
4. E Walters, C Bosch, RP Gie , AC Hesselning. Urinary lipoarabinomannan (LAM) for the diagnosis of paediatric pulmonary tuberculosis: a pilot study. SUN Annual Academic Day 2013. 14 August 2013
5. E Walters, J Duvenhage, H Draper, AC Hesselning, SS Van Wyk, and H Rabie. Clinical spectrum of tuberculosis in HIV-infected children initiating antiretroviral therapy before two years of age. SUN Annual Academic Day 2013. 14 August 2013
6. E Walters, P Goussard, C Bosch, AC Hesselning, RP Gie. Xpert MTB/RIF on bronchoalveolar lavage samples in children with suspected tuberculosis: a pilot study. SUN Annual Academic Day 2013. 14 August 2013
7. Ms S Meehan, P Naidoo, H Draper and N Beyers. An Integrated Community HIV and TB Testing Model: Using routine data to compare stand-alone and mobile services. SUN Annual Academic Day 2013. 14 August 2013
8. Dr Ute Hallbauer (UFS) and Mrs Matseliso Morighlane (Free State DOH) – The association between HIV-infection and child TB deaths. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
9. Dr Eve Mendel (Western Cape City Health Dept) and Dr Elke Maritz (DTTC). Falling through the Cracks: Challenges of Severe Childhood Tuberculosis Reporting in Cape Town, South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013
10. Mrs Anelet James (DTTC). Association between Elevated Blood Glucose and the presence of Nontuberculous Mycobacteria. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013
11. Mrs Jackie Smith (HST) and Mrs Shoba Seethal (KZN Dept of Health). Is there is an association between delayed MDR-TB initiation and distance to the treatment initiation sites in KwaZulu-Natal? South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013
12. Dr Eugene Elliot (UFS) and Mrs Phyllis Baitsiwe (Northern Cape DOH). Auditing Drug-resistant (DR) Tuberculosis (TB) case management to determine factors affecting cure rates. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.

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13. Mrs Sandra Smit (WC DOH Eden District). Accuracy of classification of relapse tuberculosis cases in the Eden District, Western Cape Province, South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
14. Dr Mareli Claassens. What determines initial loss to follow-up in TB patients at primary healthcare facilities in South Africa? Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
15. Dr Pren Naidoo. Did the introduction of Xpert MTB/RIF reduce MDR-TB treatment commencement times in Cape Town, South Africa? Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
16. Ms Sue-Ann Meehan, Ms Heather Draper, Dr Pren Naidoo and Prof. Nulda Beyers. An Integrated Community HIV and TB Testing Model: Using routine data to compare stand-alone and mobile HCT services. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
17. Dr Elizabeth du Toit. Laboratory Costing for New Molecular Diagnostics in Cape Town, South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
18. Dr Kwame Shanaube. Are household contacts with high levels of interferon gamma in response to Mtb specific antigens in the QuantiFERON-TB Gold in-Tube assay at high risk of developing TB? Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
19. Dr Pren Naidoo. Lessons from Xpert deployment: How can past experience apply to future innovation TB Diagnostics? Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
20. Dr Catherine Wiseman (Prof Anneke Hesselning presented on her behalf). Validation of the NIH consensus case definitions for evaluation of diagnostic tests for childhood TB. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
21. Ms Ronelle Burger and Ms Anja Smith. TB screening specificity and sensitivity in models of discretion, protocol adherence and randomness in South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
22. Ms Ronelle Burger and Ms Anja Smith. Gender inequality in the detection of tuberculosis in South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
23. Ms Margaret van Niekerk. Patients experiences of accessing MDR-TB diagnosis and treatment in the Xpert MTB/RIF era in Cape Town. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
24. Dr Virginia Azevedo. 10 years of TB control in Cape Town, Western Cape, South Africa. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
25. Mr Rory Dunbar. Tuberculosis diagnostic research: providing comprehensive evidence to support local and national strategy. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
26. Dr Elizabeth Walters. Urinary lipoarabinomannan (LAM) for the diagnosis of paediatric pulmonary tuberculosis: a pilot study. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.
27. Dr Elizabeth Walters. Clinical spectrum of tuberculosis in HIV-infected children initiating antiretroviral therapy before two years of age. Forty-fourth Union World Conference on Lung Health. Paris, France. 30 October to 3 November 2013.

PAEDIATRICS AND CHILD HEALTH

Special achievements and other highlights not covered by this template

- Etafeni Day Care Centre and DTTC received funding from Fight AIDS Monaco for the food garden at Etafeni and meals for children. Fight AIDS Monaco awarded 10 800 euro
- COMAPP shortlisted for Impumelelo Award
- Mareli Claassens: HD Brede Award for Tuberculosis Research 2013
- Tony Garcia-Pratts received the Baylor College of Medicine Young Alumnus 2013
- Anneke Hesseling received an award from the University based on her 2011 publication outputs
- Twenty three abstracts were accepted for 2013 44th Union Conference on Lung Health Conference in Paris from 31 October to 3 November 2013
- Best Oral Presentation at the Paediatric Annual Academic Day 2013 – Dr S Thee, DR AJ Garcia-Prats, Ms HR Draper, Prof. HM Mcilleron, Ms J Norman, Prof. PJ Smith, Prof. AC Hesseling, Prof. HS Schaaf. Pharmacokinetics of Ofloxacin and Levofloxacin in children with Multi-drug resistant Tuberculosis
- Best Poster Presentation at the Paediatric Annual Academic Day 2013 – Ms S Meehan. An Integrated Community HIV and TB Testing Model: Using routine data to compare stand-alone and mobile services
- Best Poster Presentation at the Paediatric Annual Academic Day 2013 – Dr E Walters. Clinical spectrum of tuberculosis in HIV-infected children initiating antiretroviral therapy before two years of age

PSYCHIATRY

HEAD OF DEPARTMENT Professor Soraya Seedat

Summary of activities:

2013 was a very active and productive year for the Department of Psychiatry, both on the clinical service delivery and academic fronts. Five registrars successfully completed their FC Psych Part II examinations, two specialists completed MPhil degrees and there was one PhD graduate. A highlight was the opening of the Child and Adolescent Inpatient Psychiatric Unit (G Lower Ground), which was formally opened in June 2013

Resources:

| Posts (Full time) | Number | Filled |
|--|------------------------|----------------------------|
| Head of Department | 1 | 1 |
| Heads of Clinical Unit | 2 | 2 |
| Specialists | 5 | 5 |
| Registrars | 8 | 8 |
| Medical Officers | 0 | 0 |
| Posts (sessional – how many hours worked per week) | | |
| Specialists | 1 | 1 (until end October 2013) |
| Part time posts | 0 | 0 |
| Locum posts | 1 | 1 (4 months) |
| Full Time equivalents | 0 | 0 |
| Number of beds (usable) | 42 (+4 seclusion beds) | (42 + 4 seclusion beds) |



**Head of Clinical Unit: Adult Psychiatry
Dr Gerhard Jordaan**



**Head of Clinical Unit: Children and Adolescent Psychiatry
Dr Sue Hawkrige**

PSYCHIATRY

Output:

| Buite-pasiënt besoeke / Outpatient visits | | |
|--|-------------|-------------|
| | 2012 | 2013 |
| J.LG Adults | 1 317 | 1 635 |
| Liaison/Emergency Psychiatry - Adults | 1 572 | 1 758 |
| F.LG – C&A | 2 816 | 2 768 |
| Total Outpatient visits | 5 705 | 6 161 |
| Opnames / Admissions | | |
| DG Adults | 192 | 258 |
| D.LG -Adults | 251 | 181 |
| DG - C&A | 107 | * |
| D.LG – C&A | 116 | * |
| G.Lg – C&A | * | 167 |
| Total admissions | 666 | 606 |
| Theater prosedures /Theatre procedures: | | |
| EKB/ ECT | 57(9 pt's) | 0 |
| The Department also delivers a full clinical service at Stikland Hospital and shared input at Lentegeur Hospital, for which the statistics are not included here. (Statistics for Clinical Psychology are also not included here). | | |

Comment on output:

Increase of admissions to ward D.G and concurrent decrease of admissions to ward D.LG reflect a higher turnover of patients with less severe disorders and lower turnover of patients with more severe psychopathology and general medical comorbidity. Lower patient turnover is usually associated with increased length of stay and saturated waiting lists for admission. This is in keeping with the experience at grass roots level whereby patients stay longer because of concurrent chronic general medical conditions, such as HIV, and simultaneous difficulties to discharge patients often due to lack of adequate care and supervision resources in the community. Increased outpatient numbers reflect the increasing need for tertiary psychiatric assessment and care. These trends were echoed in the child and adolescent psychiatry service, with particular difficulties associated

with the discharge of young patients who have psychiatric difficulties and are not able to be cared for at home.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

The child and adolescent psychiatry service continues to provide outreach and support to specialist mental health services in the relevant rural and metro catchment areas, as well as in-service training where requested to children's services and district and school health services. CPD for general psychiatrists, other medical specialists, psychologists and educators is also provided where possible. Intensive support services are provided to selected children's homes that admit and manage children or adolescents with challenging behaviour.

A child and adolescent forensic psychiatry service has been established at Valkenberg Hospital, which is staffed by a visiting consultant from Tygerberg and a psychologist from the private sector. The aim of the service is to provide the Department of Justice with criminal capacity/forensic psychiatry assessments of children in conflict with the law. The long-awaited independent inpatient unit for Child and Adolescent Psychiatry was opened in April 2013. Sixteen C&A beds were transferred from the existing Adult Psychiatry units, leaving both units with more appropriate and consumer friendly therapeutic environments. In addition, this move allowed for the introduction of a sleep over facility for psychiatry registrars in ward DG. Future phases of change include the renovation and switch of the adult (J.Lg) and child and adolescent (F.Lg) outpatient departments and the provision of washroom facilities for the sleep over facility in ward DG.

PSYCHIATRY

Community outreach programmes/community services and interaction.

The Department of Psychiatry has been an active partner in a collaborative hub mental health network that brings together outstanding researchers from institutions in the north and in a number of Sub-Saharan African countries (Ghana, Nigeria, Liberia, Kenya and South Africa) to address the clinical needs of the region through innovative, cutting-edge research. The community interaction within the hub includes capacity building of young clinicians and researchers through skills development courses, leadership workshops and one-on-one mentoring. Lecturers in the department have been involved in clinical training and seminars of registrars at Walter Sisulu University (WSU). In addition, Dr Hawkridge (child psychiatrist) provides in-service training in child and adolescent psychiatry for the Fort England Hospital staff in Grahamstown on an annual basis.

MHIC – The Mental Health Information Centre

The Mental Health Information Centre of Southern Africa (MHIC), directed by Ms Janine Roos since 2011, had numerous activities during 2013. In this report we give feedback of some of these activities.

Brain Awareness Week

In March 2013, we organised several radio talks, distributed booklets on brain matters and ran a campaign on our facebook page to create awareness about brain health, brain disorders and the newest brain research.

Radio Tygerberg: Prof. Charl Cilliers - student wellness

Radio Sonder Grense: Thania van Greunen (clinical psychologist) and Coenie Hattingh (Lecturer – Clinical Neuroanatomy, Neuropathology and Neuroimaging UCT) – mental disorders... causes, treatment, etc.)

Radio Sonder Grense: Dr Belinda Bruwer and Janine Roos – mental disorders/health, Brain Awareness

*Martelize Brink (RSG), Janine Roos (MHIC)
and Dr Belinda Bruwer (psychiatrist) in studio
during Brain Awareness Week*



*Booklets and information from the DANA
Alliance for Brain Research were distributed
at workshops for mental health professionals
and schools during Brain Awareness Week*



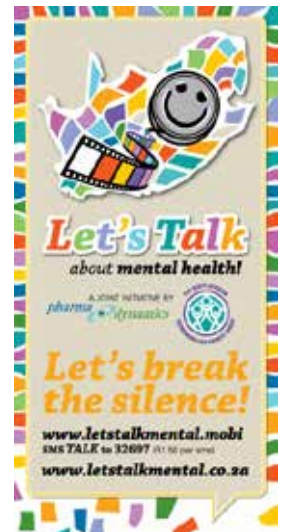
PSYCHIATRY

During 2013, the Film Industry Learner Mentorship (F.I.L.M.) programme has joined forces with Pharma Dynamics as part of its Let's Talk campaign to get the country talking about mental health conditions, which affect millions of South Africans, many of whom go through life undiagnosed and untreated.

About 40 interns at F.I.L.M. – guided by experts from the Mental Health Information Centre (MHIC) at Stellenbosch University – have produced eight striking and emotionally charged short films for the Let's Talk campaign.

This formed part of **Mental Health Awareness Month** (October 2013). The films dealt with the following critical challenges in South Africa: depression and unemployment; post-traumatic stress disorder (PTSD); and depression and suicide in young people.

The Let's Talk campaign was aired on SABC 3's Expresso show, as well as on SABC 3's Doctor's Orders.



PSYCHIATRY

MHIC brochures

The MHIC, with the help of Pharmadynamics, translated all their mental health brochures into isiXhosa.



MHIC website, database, facebook

The MHIC website has been revamped and made mobile-friendly with assistance from Pharmadynamics.

The MHIC mental health professional's database is growing in popularity and currently has 660 registered individuals and organisations. The database is accessible to anyone in need of a mental health professional.



The MHIC aims to be in touch with the whole community of Southern Africa by means of a call- or e-mail centre and also run an SMS service to be able to get information to people in rural areas that do not have access to the internet. Via the call centre, with a 24-hour turnaround period, the MHIC provides information on mental health or disorders and do referrals by means of the database of mental health professionals.

We are proud to announce that we broadened our database to African countries during 2013. Members of the public can contact professionals via the website. Here are some examples of mental health professionals or organisations in African countries listed on the MHIC database:

- Kenya ([Africa Mental Health Foundation](#))
- Namibia ([Mensah-Husselmann, Edwina \(Mrs E.E.\) \(Muriuki, Arthur \(Mr A.N.M\)\)](#))
- Zimbabwe ([Chiedza Mental Health and Art Therapy Project](#)) ([Filippa, Olga Maddalena \(Ms OM\)](#)) ([January, James \(Mr J\)](#))
- Uganda ([International Counselling - Kampala](#)) ([Myler PhD \(Psych\)](#), [Dr Stephen F \(Prof SFM\)](#))
- Mozambique ([Papane, Lionel \(Dr LP\)](#))
- Tanzania ([Tanzania Counsellors Associates \(TACOA\)](#))

PSYCHIATRY

Conferences

Janine Roos (MHIC) attended the **PHASA (Public Health Association of South Africa) conference** in September 2013 and presented a poster "The Mental Health Information Centre: narrowing the science-to-service gap". This conference was held in collaboration with the African Federation of Public Health Associations (AFPHA) with the theme "Africa's Public Health Legacy – Beyond the MDG's".

Via the MHIC, the Department of Psychiatry maintains contact with consumer support groups such as the South African Depression and Anxiety Group (SADAG), Cape Mental Health, SA Federation for Mental Health, BIG/MIND, the Postnatal Depression Support Group, the Centre for Public Mental Health, as well as different support groups run by members of the public. Other important partners are the Department of Health, professional organisations such as the SA Society of Psychiatrists, the SA Medical Association, the Medical Research Council, the Health Professionals Council of SA and the pharmaceutical industry.

Partnerships

National:

Annual child and adolescent psychiatry outreach was provided to Fort England Hospital in the Eastern Cape in conjunction with Rhodes University Psychology Clinic. In addition, the Maternal and Infant Mental Health Research group established collaborations with Prof. Stoffel Grobler, Clinical Head at the Elizabeth Donkin Psychiatric Hospital to extend the maternal mental health research project to the Eastern Cape.

International:

The Maternal and Infant Mental Health Research group established collaborations with Prof. Jukka Leppanen and Prof. Kaija Puura from the University of Tampere, Finland, with regards to the Mother-Infant Attachment

and Facial Affect Recognition Project. NRF funding was granted for this project.

Achievements w.r.t research activities and research outputs:

Number of publications (journals and textbooks contributions) from the department: 67

Conference presentations: 66

Text books and contributions to text books: 1

❖ Journal Articles (subsidised)

BURNHAMS NH, DADA S, LINDA B, MYERS BJ, PARRY CDH. The extent of problematic alcohol and other drug use within selected South African workplaces. *SAMJ South African Medical Journal* 2013; **103**(11): 845-847.

CANAS F, ALPTEKIN K, AZORIN JM, DUBOIS V, EMSLEY RA, GARCIA AG, GORWOOD P, HADDAD PM, NABER D, OLIVARES JM, PAPAGEORGIU G, ROCA M. Improving treatment adherence in your patients with schizophrenia - The STAY initiative. *Clinical Drug Investigation* 2013; **33**: 97-107.

CUZEN NL, ANDREW C, THOMAS KGF, STEIN DJ, FEIN G. Absence of P300 reduction in South African treatment-naïve adolescents with alcohol dependence. *Alcoholism-Clinical and Experimental Research* 2013; **37**(1): 40-48.

DAVIS LK, YU D, KEENAN CL, GAMAZON ER, KONKASHBAEV AI, DERKS EM, NEALE BM, YANG J, LEE SH, EVANS P, BARR CL, BELLODI L, BENARROCH F, BERRIO GB, BIENVENU OJ, BLOCH MH, BLOM RM, BRUUN RD, BUDMAN CL, CAMARENA B, CAMPBELL D, CAPPI C, SILGADO JCC, CATH DC, CAV. Partitioning the heritability of Tourette syndrome and obsessive compulsive disorder reveals differences in genetic architecture. *PLoS Genetics* 2013; **9**(10): e1003864.

DELL'OSSO B, BENATTI B, BUOLI M, ALTAMURA AC, MARAZZITI D, HOLLANDER E, FINEBERG N, STEIN DJ, PALLANTI S, NICOLINI H, VAN AMERINGEN M, LOCHNER C, HRANOV G, KARAMUSTAFALIOGLU O, HRANOV L, MENCHON JM, ZOHAR J. The influence of age at onset and duration of illness on long-term

outcome in patients with obsessive-compulsive disorder: A report from the International College of Obsessive Compulsive Spectrum Disorders (ICOCS). *European Neuropsychopharmacology* 2013; **23**: 865-871.

DROGEMOLLER BI, WRIGHT GEB, NIEHAUS DJH, EMSLEY RA, WARNICH L. Next-generation sequencing of pharmacogenes: a critical analysis focusing on schizophrenia treatment. *Pharmacogenetics and Genomics* 2013; **23**: 666-674.

EMSLEY RA, CHILIZA B, ASMAL L, HARVEY BH. The nature of relapse in schizophrenia. *BMC Psychiatry* 2013; **13**: 50-58.

EMSLEY RA, CHILIZA B, ASMAL L, MASHILE M, FUSAR-POLI P. Long-acting injectable antipsychotics in early psychosis: a literature review. *Early intervention in Psychiatry* 2013; **7**: 247-254.

EMSLEY RA, CHILIZA B, ASMAL L. The evidence for illness progression after relapse in schizophrenia. *Schizophrenia Research* 2013; **148**: 117-121.

EMSLEY RA, FLEISCHHACKER WW. Is the ongoing use of placebo in relapse-prevention clinical trials in schizophrenia justified? *Schizophrenia Research* 2013; **150**: 427-433.

EMSLEY RA, OOSTHUIZEN PP, KOEN L, NIEHAUS DJH, MARTINEZ L. Comparison of treatment response in second-episode versus first-episode schizophrenia. *Journal of Clinical Psychopharmacology* 2013; **33**: 80-83.

FISHER DS, VAN SCHALKWYK GI, SEEDAT S, CURRAN SR, FLANAGAN RJ. Plasma, oral fluid and whole-blood distribution of antipsychotics and metabolites in clinical samples. *Therapeutic Drug Monitoring* 2013; **35**: 345-351.

FLISHER AJ, HAWKRIDGE S. Attention deficit hyperactivity disorder in children and adolescents. *South African Journal of Psychiatry* 2013; **19**(3): 136-140.

FOUCHE JP, VAN DER WEE NJA, ROELOFS K, STEIN DJ. Recent advances in the brain imaging of social anxiety disorder. *Human Psychopharmacology-Clinical and Experimental* 2013; **28**: 102-105.

GOODWIN GM, BOYER P, EMSLEY RA, ROUILLON F, DE BODINAT C. Is it time to shift to better

characterization of patients in trials assessing novel antidepressants? An example of two relapse prevention studies with agomelatine. *International Clinical Psychopharmacology* 2013; **28**: 20-28.

GREGOROWSKI C, SEEDAT S, JORDAAN GP. A clinical approach to the assessment and management of co-morbid eating disorders and substance use disorders. *BMC Psychiatry* 2013; **13**: 289-301.

GREGOROWSKI C, SEEDAT S. Addressing childhood trauma in a developmental context. *Journal of Child and Adolescent Mental Health* 2013; **25**(2): 1-14.

HAGAN S, SWARTZ L, KILLIAN S, CHILIZA B, BISOGNO P, JOSKA JA. The accuracy of interpreting key psychiatric terms by ad hoc interpreters at a South African psychiatric hospital. *African Journal of Psychiatry* 2013; **16**: 424-429.

HEMMINGS SMJ, LOCHNER C, VAN DER MERWE L, CATH DC, SEEDAT S, STEIN DJ. BDNF Val66Met modifies the risk of childhood trauma on OCD. *Journal of Psychiatric Research* 2013; **47**(12): 1857-1863.

HEMMINGS SMJ, MARTIN L, TAIT M, VAN DER MERWE L, AITKEN L, DE WIT E, BLACK GF, HOAL EG, WALZL G, SEEDAT S. BDNF Val66Met and DRD2 Taq1A polymorphisms interact to influence PTSD symptom severity: a preliminary investigation in a South African population. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2013; **40**: 273-280.

HOARE J, WESTGARTH-TAYLOR J, FOUICHE JP, COMBRINCK M, SPOTTISWOODE BS, STEIN DJ, JOSKA JA. Relationship between apolipoprotein E4 genotype and white matter integrity in HIV-positive young adults in South Africa. *European Archives of Psychiatry and Clinical Neuroscience* 2013; **263**: 189-195.

LOCHNER C, STEIN DJ, RAIKES J, PEARSON C. Consumer advocacy meetings: An innovative therapeutic tool. *Annals of Clinical Psychiatry* 2013; **25**(2): 91-96.

LUCKHOFF M, JORDAAN E, SWART YE, CLOETE KJ, KOEN L, NIEHAUS DJH. Retrospective review of trends in assaults and seclusion at an acute psychiatric ward over a 5-year period. *Journal*

of *Psychiatric and Mental Health Nursing* 2013; **20**: 687-695.

MALAN S, HEMMINGS SMJ, SEEDAT S. Big effects of small RNAs: A review of microRNAs in Anxiety. *Molecular Neurobiology* 2013; **47**(2): 726-739.

MALAN S, HEMMINGS SMJ, SPIES G, KIDD M, FENNEMA-NOTESTINE C, SEEDAT S. Shorter Telomere Length - A Potential Susceptibility Factor for HIV-Associated Neurocognitive Impairments in South African Women. *PLoS ONE* 2013; **8**(3): e58351.

MALAN-MÜLLER S, HEMMINGS SMJ, SPIES G, KIDD M, FENNEMA-NOTESTINE C, SEEDAT S. Shorter Telomere Length - A Potential Susceptibility Factor for HIV-Associated Neurocognitive Impairments in South African Women. *PLoS ONE* 2013; **8**(3): e58351.

MARTIN L, REVINGTON N, SEEDAT S. The 39-Item Child Exposure to Community Violence (CECV) Scale: exploratory factor analysis and relationship to PTSD symptomatology in trauma-exposed children and adolescents. *International Journal of Behavioral Medicine* 2013; **20**: 599-608.

MAY PA, BLANKENSHIP J, MARAIS AS, GOSSAGE JP, KALBERG WO, BARNARD R, DE VRIES MM, ROBINSON LK, ADNAMS CM, BUCKLEY DG, MANNING M, JONES KL, PARRY CDH, HOYME HE, SEEDAT S. Approaching the prevalence of the full spectrum of fetal alcohol spectrum disorders in a South African population-based study. *Alcoholism-Clinical and Experimental Research* 2013; **37**(5): 818-830.

MAY PA, BLANKENSHIP J, MARAIS AS, GOSSAGE JP, KALBERG WO, JOUBERT B, CLOETE M, BARNARD R, DE VRIES MM, HASKEN J, ROBINSON LK, ADNAMS CM, BUCKLEY DG, MANNING M, PARRY CDH, HOYME HE, TABACHNICK BG, SEEDAT S. Maternal alcohol consumption producing fetal alcohol spectrum disorders (FASD): Quantity, frequency, and timing of drinking. *Drug and Alcohol Dependence* 2013; **133**: 502-512.

MAY PA, TABACHNICK BG, GOSSAGE JP, KALBERG WO, MARAIS AS, ROBINSON LK, MANNING M, BLANKENSHIP J, BUCKLEY DG, HOYME HE, ADNAMS CM. Maternal factors

predicting cognitive and behavioral characteristics of children with fetal alcohol spectrum disorders. *Journal of Developmental and Behavioral Pediatrics* 2013; **34**: 314-325.

MCLOUGHLIN J-A, LITTLE F, MAZOK C, PARRY CDH, LONDON L. Prevalence of and associations with papsak wine consumption among farm workers in the Western Cape Province, South Africa. *Journal of Studies on Alcohol and Drugs* 2013; **74**: 879-888.

MOLLER M, DU PREEZ JL, VILJOEN FP, BERK M, EMSLEY RA, HARVEY BH. Social isolation rearing induces mitochondrial, immunological, neurochemical and behavioural deficits in rats, and is reversed by clozapine or N-acetyl cysteine. *Brain Behavior and Immunity* 2013; **30**: 156-167.

MORRIS T, NAIDOO P, CLOETE KJ, HARVEY J, SEEDAT S. No association between cumulative traumatic experiences and sex in risk for posttraumatic stress disorder among human immunodeficiency virus-positive adults. *Journal of Nervous and Mental Disease* 2013; **201**(6): 504-509.

MYERS BJ, PARRY CDH. Re-examining the evidence for a total ban on alcohol advertising in South Africa. *South African Journal of Psychology* 2013; **43**(4): 402-405.

NORTJE G, SEEDAT S. Recruiting medical students into psychiatry in lower income countries. *International Review of Psychiatry* 2013; **25**(4): 385-398.

NOTHLING J, KAGEE SA. Acceptability of routine HIV counselling and testing among a sample of South African students: Testing the Health Belief Model. *African Journal of Aids Research (AJAR)* 2013; **12**(3): 141-150.

O'CONNELL R, CHISHINGA N, KINYANDA E, PATEL V, AYLES H, WEISS HA, SEEDAT S. Prevalence and correlates of alcohol dependence disorder among TB and HIV infected patients in Zambia. *PLoS ONE* 2013; **8**(9): e74406.

OLIVARES JM, ALPTEKIN K, AZORIN JM, CANAS F, DUBOIS V, EMSLEY RA, GORWOOD P, HADDAD PM, NABER D, PAPAGEORGIOU G, ROCA M, THOMAS P, MARTINEZ G, SCHREINER A. Psychiatrists' awareness of adherence to

antipsychotic medication in patients with schizophrenia: results from a survey conducted across Europe, the Middle East, and Africa. *Patient Preference and Adherence* 2013; **7**: 121-132.

ORTEGA M, HEAPS JM, JOSKA JA, VAIDA F, SEEDAT S, STEIN DJ, PAUL R, ANCES BM. HIV clades B and C are associated with reduced brain volumetrics. *Journal of Neurovirology* 2013; **19**: 479-487.

PEREZ AM, AYO-YUSUF OA, HOFMAN K, KALIDEEN S, MAKER A, MOKONOTO D, MOROJELE N, NAIDOO P, PARRY CDH, RENDALL-MKOSI K, SALOOJEE Y. Establishing a health promotion and development foundation in South Africa. *SAMJ South African Medical Journal* 2013; **103**(3) : 147-149.

PETERSEN Z, MYERS BJ, VAN HOUT M-C, PLUDDAMAN A, PARRY CDH. Availability of HIV prevention and treatment services for people who inject drugs: findings from 21 countries. *Harm Reduction Journal* 2013; **10**: 13-19.

PLUDDAMAN A, DADA S, PARRY CDH, KADER R, PARKER JS, TEMMINGH H, VAN HEERDEN MS, DE CLERCQ C, LEWIS I. Monitoring the prevalence of methamphetamine-related presentations at psychiatric hospitals in Cape Town, South Africa. *African Journal of Psychiatry* 2013; **16**: 45-49.

POTOCNIK FCV. Dementia. *South African Journal of Psychiatry* 2013; **19**(3): 141-151.

ROOS A, FAURE SC, LOCHNER C, VYTHILINGUM B, STEIN DJ. Predictors of distress and anxiety during pregnancy. *African Journal of Psychiatry* 2013; **16**: 118-122.

ROOS A, FOUCHE JP, STEIN DJ, LOCHNER C. White matter integrity in hair-pulling disorder (trichotillomania). *Psychiatry Research-Neuroimaging* 2013; **211**: 246-250.

ROSSOUW L, SEEDAT S, EMSLEY RA, SULIMAN S, HAGEMEISTER D. The prevalence of burnout and depression in medical doctors working in the Cape Town Metropolitan Municipality community healthcare clinics and district hospitals of the Provincial Government of the Western Cape: a cross-sectional study. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2013; **55**(6): 567-573.

SEEDAT S. Post-traumatic stress disorder. *South African Journal of Psychiatry* 2013; **19**(3): 187-190.

SEEDAT S. Social anxiety disorder. *South African Journal of Psychiatry* 2013; **19**(3): 192-195.

SMITH J, SWARTZ L, KILLIAN S, CHILIZA B. Mediating words, mediating worlds: Interpreting as hidden care work in a South African psychiatric institution. *Transcultural Psychiatry* 2013; **50**(4): 493-514.

SORSDAHL K, BLANCO C, RAE DS, PINCUS H, NARROW WE, SULIMAN S, STEIN DJ. Treatment of anxiety disorders by psychiatrists from the American Psychiatric Practice Research Network. *Revista Brasileira de Psiquiatria* 2013; **35**: 136-141.

SPIES G, ASMAL L, SEEDAT S. Cognitive-behavioural interventions for mood and anxiety disorders in HIV: A systematic review. *Journal of Affective Disorders* 2013; **150**: 171-180.

SPOTTISWOODE BS, VAN DEN HEEVER DJ, CHANG Y, ENGELHARDT S, DU PLESSIS S, NICOLLS F, HARTZENBERG HB, GRETSCHEL A. Preoperative Three-Dimensional Model Creation of Magnetic Resonance Brain Images as a Tool to Assist Neurosurgical Planning. *Stereotactic and Functional Neurosurgery* 2013; **91**: 162-169.

STEIN DJ. Generalized anxiety disorder. *South African Journal of Psychiatry* 2013; **19**(3): 175-178.

STEIN DJ. Obsessive-compulsive disorder. *South African Journal of Psychiatry* 2013; **19**(3): 180-185.

STEWART SE, YU D, SCHARF JM, NEALE BM, FAGERNESS JA, MATHEWS CA, ARNOLD PD, EVANS PD, GAMAZON ER, OSIECKI L, MCGRATH L, HADDAD S, CRANE J, HEZEL D, ILLMAN C, MAYERFELD C, KONKASHBAEV A, LIU C, PLUZHNIKOV A, TIKHOMIROV A, EDLUND CK, RAUCH SL, MOESSNER R, F. Genome-wide association study of obsessive-compulsive disorder. *Molecular Psychiatry* 2013; **18**: 788-798.

SULIMAN S, TROEMAN ZCE, STEIN DJ, SEEDAT S. Predictors of acute stress disorder severity.

Journal of Affective Disorders 2013; **149**: 277-281.

VAN DEN HEUVEL L, SEEDAT S. Screening and diagnostic considerations in childhood post-traumatic stress disorder. *Neuropsychiatry* 2013; **3**(5): 497-511.

VAN DEN HEUVEL LL, CHISHINGA N, KINYANDA E, WEISS HA, PATEL V, AYLES H, HARVEY J, CLOETE KJ, SEEDAT S. Frequency and correlates of anxiety and mood disorders among TB- and HIV-infected Zambians. *Aids Care* 2013; **25**(12): 1527-1535.

WECHSBERG WM, JEWKES R, NOVAK SP, KLINE T, MYERS BJ, BROWNE FA, CARNEY T, LOPEZ AAM, PARRY CDH. A brief intervention for drug use, sexual risk behaviours and violence prevention with vulnerable women in South Africa: a randomised trial of the Women's Health CoOp. *BMJ Open* 2013; **3**: e002622.

❖ Journal Articles (NON-subsidised)

DEL ZOMPO M, DELEUZE JF, CHILLOTTI C, COUSIN E, NIEHAUS DJH, EBSTEIN RP, ARDAU R, MACE S, WARNICH L, MUJAHED M, SEVERINO G, DIB C, JORDAAN E, MURAD I, SOUBIGOU S, KOEN L, BANNOURA I, ROCHER C, LAURENT C, DEROCK M, BIGUET NF, MALLET J, MELONI R.

Association study in three different populations between the GPR88 gene and major psychoses. *Molecular Genetics & Genomic Medicine* 2013; **2**(1): 1-8.

DROGEMOLLER BI, PLUMMER M, KORKIE LJ, AGENBAG GM, DUNAISKI A, NIEHAUS DJH, KOEN L, GEBHARDT S, SCHNEIDER N, OLCKERS A, WRIGHT GEB, WARNICH L. Characterization of the genetic variation present in CYP3A4 in three South African populations. *Frontiers in Genetics* 2013; **4**: 1-11.

LOCHNER C, MYERS BJ. What is the research experience of young scientists in South Africa?. *South African Journal of Science* 2013; **109**(11): 1-2.

MAY PA, MARAIS AS, GOSSAGE JP, BARNARD R, JOUBERT B, CLOETE M, HENDRICKS N, ROUX S, BLOM A, STEENEKAMP J, ALEXANDER T, ANDREAS R, HUMAN S, SNELL CL, SEEDAT S, PARRY CDH, KALBERG WO, BUCKLEY DG,

BLANKENSHIP J. Case management reduces drinking during pregnancy among high-risk women. *International Journal of Alcohol and Drug Research* 2013; **2**(3): 61-70.

NOTHLING J, MARTIN CL, LAUGHTON B, COTTON MF, SEEDAT S. Maternal post-traumatic stress disorder, depression and alcohol dependence and child behaviour outcomes in mother-child dyads infected with HIV: a longitudinal study. *BMJ Open* 2013; **3**: e003638.

SCHUTTE AE, WRIGHT CY, LANGDON G, LOCHNER C, MYERS BJ. What is the research experience of young scientists in South Africa?. *South African Journal of Science* 2013; **109**(11/12): 1-2.

SULIMAN S, HEMMINGS SMJ, SEEDAT S. Brain-Derived Neurotrophic Factor (BDNF) protein levels in anxiety disorders: systematic review and meta-regression analysis. *Frontiers in Integrative Neuroscience* 2013; **7**: 1-11.

SULIMAN S, HEMMINGS SMJ, SEEDAT S. Brain-Derived Neurotrophic Factor (BDNF) protein levels in anxiety disorders: systematic review and meta-regression analysis. *Frontiers in Integrative Neuroscience* 2013; **7**: 55.

❖ Proceedings International

FOUCHE JP. Examining cortical thickness in subjects with obsessive-compulsive disorder: a freesurfer analysis of a multi-site cohort. International Anxiety Disorders Symposium, Spier Estate, Stellenbosch, South Africa, 2013: 1.

HEMMINGS SMJ. Candidate genes and novel polymorphisms for anxiety disorders in a South African cohort. World Congress of Psychiatric Genetics, Boston, USA, 2013: 1.

HEMMINGS SMJ. Molecular mechanisms of d-cycloserine in fear extinction: insights from RNA and microRNA sequencing. World Congress of Psychiatric Genetics, Boston, USA, 2013: 1.

MALAN S. Molecular mechanisms of d-cycloserine in a fear extinction posttraumatic stress disorders (PTSD) animal model. World Congress on Psychiatric Genetics, Hamburg, Germany, 2013: 1.

MALAN-MÜLLER S. Molecular mechanisms of d-cycloserine in fear extinction: insights from

epigenetics. Epigenomics of Common Diseases, Wellcome Trust Campus, Cambridge, United Kingdom, 2013: 1.

MALAN-MÜLLER S. *Molecular mechanisms of d-cycloserine in fear extinction: insights from RNA sequencing.* 15th Annual Meeting of the International Behavioural and Neural Society, Leuven, Belgium, 2013: 1.

ROOS J. *The Mental Health Information Centre of Southern Africa: narrowing the science-to-service gap in mental health.* 9th Public Health Association of South Africa in collaboration with the African Federation of Public Health Associations:, KIKS, Cape Town, South Africa, 2013: 1.

❖ Proceedings National

AHMED F. *Structural brain changes in HIV infected women with and without childhood trauma.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 212-213.

BAKELAAR S. *Neuropsychological deficits in social anxiety disorder in the context of early developmental trauma.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 111.

BAKELAAR S. *Social anxiety disorder in patients with or without early childhood trauma: relationship to behavioral inhibition and activation and quality of life.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 111.

BAKELAAR SY. *Neuropsychological deficits in social anxiety disorder in the context of early developmental trauma.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 213.

BOTHA UA. *The rise of assertive community interventions in South Africa: assessing the impact of a modified assertive intervention on readmission rates.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 214.

BREET E. *Exploring altered affective processing in obsessive-compulsive disorder symptom subtypes.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 215.

BREET E. *Exploring altered affective processing in obsessive-compulsive disorder symptom subtypes.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 111-112.

BREET E. *The impact of an escitalopram challenge in bias toward disgust recognition in obsessive-compulsive disorder.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 215-216.

BREET E. *To investigate the bias toward recognising facial expression of disgust in obsessive compulsive disorder as well as the effect of escitalopram.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 112.

CHILIZA B. *Effectiveness of a long-acting injectable antipsychotic plus an assertive monitoring programme in first-episode schizophrenia.* SASOP Biological Psychiatry Congress 2013, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 93.

DANNATT L. *Prevalence and correlates of comorbid psychiatric illness in patients with heroin use disorder admitted to Stikland opioid detoxification unit.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 216.

DANNATT L. *Prevalence and correlates of comorbid psychiatric illness in patients with heroin use disorder admitted to Stikland Opioid Detoxification Unit.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 94.

DOMINGO AK. *Investigating the association between diabetes mellitus, depression and psychological distress in a cohort of South African teachers.* SASOP Biological Psychiatry

PSYCHIATRY

Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 94-95.

DU PLESSIS S. *The effects of HIV on the fronto-striatal system.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 211-212.

DU PLESSIS S. *The effects of HIV on the fronto-striatal system.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 96.

DU PLESSIS S. *The effects of HIV on the ventral-striatal reward system.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 217.

DU PLESSIS S. *The effects of HIV on the ventral-striatal reward system.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 114-115.

DU PLESSIS S. *Xenomelia relates to asymmetrical insular activity: a case study in fMRI.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 218.

DU PLESSIS S. *Xenomelia relates to asymmetrical insular activity: a case study in fMRI.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 115.

DU TOIT E. *Maternal mental health: a prospective naturalistic study of the outcome of pregnancy in women with major psychiatric disorders in an African country.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 115-116.

EMSLEY RA. *Effects of acute antipsychotic treatment on brain morphology in schizophrenia.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 96.

FOUCHE JP. *Cortical thickness in obsessive-compulsive disorder: analysis of a multi-site cohort.* Annual Academic Day, Faculty of

Medicine and Health Sciences, Tygerberg, South Africa, 2013: 218-219.

FOUCHE JP. *Prefrontal cortical thinning and subcortical volume decrease in HIV-positive children with encephalopathy.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 116.

HEMMINGS SMJ. *Molecular mechanisms of d-cycloserine in fear extinction: insights from RNA sequencing.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 98.

HEMMINGS SMJ. *Telomere length as a predictor of posttraumatic stress disorder.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 219.

JORDAAN GP. *Alcohol-induced psychotic disorder: brain perfusion and psychopathology - before and after antipsychotic treatment.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 100.

LACHMAN A. *Adolescent neuropsychiatry - an emerging field in South African adolescent psychiatric services.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 100-101.

LACHMAN A. *Kleine-Levin syndrome: case in an adolescent psychiatric unit.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 118.

MALAN-MÜLLER S. *Molecular mechanisms of d-cycloserine in fear extinction: insights from RNA sequencing and epigenetics.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 208-209.

MARTIN L. *Relationship between anxiety sensitivity and childhood trauma in a random sample of adolescents from secondary schools in Cape Town.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South

PSYCHIATRY

Africa, South African Journal of Psychiatry 2013: 119.

MARTIN L. *The relationship between childhood trauma and self-reported depression in a representative sample of adolescents from secondary schools in Cape Town.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 219-220.

MCGREGOR N. *Candidate genes and novel polymorphisms for anxiety disorder in a South African cohort.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 101-102.

MCGREGOR NW. *Candidate genes and novel polymorphisms for anxiety disorder in a South African cohort.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 220.

NORTJE G. *Recruiting psychiatrists in lower-income countries: challenges and strategies.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 221.

NORTJE G. *The attitude of medical students towards psychiatry.* 3rd Annual Malawi Mental Health Conference, Mzuzu, Malawi, 2013: 1.

NORTJE G. *What do Stellenbosch University medical students think about psychiatry - and why should we care?.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 211.

NORTJE G. *What do Stellenbosch University medical students think about psychiatry - and why should we care?.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 103-104.

NOTHLING J. *Maternal PTSD, depression and alcohol dependence and child behaviour outcomes in HIV infected mother-child dyads.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 221-222.

OJAGBEMI A. *Neurological soft skins in Nigerian Africans with first episode schizophrenia: factor structure and clinical correlates.* SASOP

Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 104.

PHAHLADIRA L. *Clinical and functional outcome of treatment refractory first episode schizophrenia.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 222.

PHAHLADIRA L. *Clinical and functional outcome of treatment refractory first-episode schizophrenia.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 104-105.

PIENAAR WP. *Bioethics by case discussion.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 105.

PIENAAR WP. *Reviewing our social contract pertaining to psychiatric research in children, research in developing countries and distributive justice in pharmacy.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 105.

ROOS A. *Volumetric brain changes in prenatal methamphetamine exposed children compared to healthy unexposed controls.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 209.

ROOS A. *Volumetric brain changes in prenatal methamphetamine-exposed children compared with healthy unexposed controls.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 106.

ROSENSTEIN D. *Single voxel proton magnetic resonance spectroscopy (1H-MRS) of the amygdala in social anxiety disorder in the context of early developmental trauma.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 208.

ROSENSTEIN D. *Single voxel proton magnetic resonance spectroscopy of the amygdala in social anxiety disorder in the context of early developmental trauma.* SASOP Biological

PSYCHIATRY

Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 106.

SCHUMANN C. *Prevalence and clinical correlates of police contact prior to a first diagnosis of schizophrenia.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 210-211.

SCHUMANN C. *Prevalence and clinical correlates of police contact prior to a first diagnosis of schizophrenia.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 107.

SPIES G. *Depression and resilience in HIV-infected women with early life stress: does trauma play a mediating role?* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 222-223.

SPIES G. *Depression and resilience in HIV-infected women with early life stress: does trauma play a mediating role?* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 108.

SPIES G. *Neurocognitive deficits in HIV-infected women and victims of childhood trauma.* MRC Early Career Scientist Convention, Medical Research Council, Tygerberg, South Africa, 2013: 1.

SPIES G. *Structural brain changes in HIV-infected women with and without childhood trauma.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 123.

SULIMAN S. *Brain-derived neurotrophic factor (BDNF) protein levels in anxiety disorders: systematic review and meta-regression analysis.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 124.

SULIMAN S. *Escitalopram in the prevention of post-traumatic stress disorder: a pilot randomised controlled trial.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 108-109.

SULIMAN S. *Neuropsychological predictors of posttraumatic stress disorder.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 223.

SULIMAN S. *Role of ethnicity and ethnic interactions in social anxiety among health science students.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 223-224.

THOMAS E. *A 12-month retrospective audit of the demographic and clinical profile of mental healthcare users admitted to a district level hospital in the Western Cape, South Africa.* SASOP Biological Psychiatry Congress, Wild Coast Sun, Port Edward, South Africa, South African Journal of Psychiatry 2013: 124-125.

VAN DER MERWE C. *Identification of an alpha-synuclein triplication in a South African family affected with atypical Parkinson's disease.* Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, 2013: 224.

❖ Chapters in Books

SEEDAT S, SULIMAN S. Posttraumatic stress disorder. In *Women and health*, Elsevier, Oxford, United Kingdom, 2013: 1271-1282.

Teaching and Training (under, postgraduate and elective students)

Number of MMed students registered for above period: 22

Number of MMed students currently registered: 22

Number of DMed students registered: 2

Number of MPhil students: 8

Number of PhD students: 14

Number of FC Psych Part II successful candidates: 5

MMed Degrees Completed: 5

Masters Degrees Completed: 3

PhD Degrees Completed: 1

The following candidates passed MMed Part I this year:

PSYCHIATRY

Dr Tessa Roos (with distinctions in all three subjects) and Dr Lucy Jarvis
Passed FCPsych Part II examinations – Zureida Khan, Marlize Luckhoff, Johan Ras, Inge Smit, Janine Pingo.

❖ Masters completed

BAKELAAR S. *A comparison of cognitive functioning, resilience, and childhood trauma among individuals with SAD and PTSD.* MA, 2013. 100 pp. Studieleier: Seedat S. Medestudieleier: Kagee A.

LUCKHOFF M. *Suicide in schizophrenia population - 10 year follow-up and review of trends in assaults and seclusion in an acute psychiatric ward.* MMed, 2013. 20 pp. Studieleier: Koen L, Niehaus DJH.

RAS J. *Profile of general outpatient services at a specialized psychiatric hospital.* MMed, 2013. 20 pp. Studieleier: Koen L, Niehaus DJH.

SMIT I. *Neurological soft signs in a Xhosa schizophrenia population.* MMed, 2013. 20 pp. Studieleier: Koen L, Niehaus DJH.

VAN DEN HEUVEL L. *Frequency and correlates of anxiety and mood disorders among TB-and HIV-infected Zambians.* MMed, 2013. 20 pp. Studieleier: Seedat S.

New Staff

Consultants: Dr Lebogang Phaladira and Dr Johan Ras

Senior/specialist registrars: Dr Fiona Schulte, Dr Zureida Khan (Discovery Fellow)

Registrars: Dr Pieter Aartsma, Dr Caro de Witt, Dr Jean Louis Du Plooy, Dr Charnotte Gabriels, Dr Matthew Mausling, Dr Tina Malan, Dr Graham Mitchie and Dr Hannelie Williams

Research: Dr Gareth Nortje, Ms Elsie Breet, Ms Gaby Jones, Ms Jani Nothling and Ms Candice Simmmons

Faser-SA: Miss Andrea Engelbrecht, Ms Suzanne Human, Ms Marlene de Vries, Ms Marise Cloete, Ms Natalie Hendricks, Ms Belinda Joubert, Ms Theresa Alexander, Ms Frederline Philander, Ms Isobel Botha, Ms Sumien Roux, Ms Cecile Kriel, Ms Paula Hess, Ms Florette Kamfer and Ms Anna-Susan Marais

Special achievements and other highlights not covered by this template

Professor Soraya Seedat:

- Humboldt Research Award in Memory of Neville Alexander, an award to the value of 60 000 Euro's
- Department of Science and Technology's Distinguished Women in Science Award 2013 (Life Sciences)
- Elected as an International Fellow of the American Psychiatric Association
- Appointed to Discovery Foundation Awards Screening Committee

MRC Flagship Project:

- Understanding the SHARED ROOTS of Neuropsychiatric Disorders and Modifiable Risk Factors for Cardiovascular Disease – Prof. Soraya Seedat

Prof. Soraya Seedat and Prof. Liezl Koen:

- Appointed as Associate Editors of the South African Journal of Psychiatry (SAJP)

Dr Laila Asmal:

- Graduated M Clin Epi cum laude
Received HPCSA accreditation as subspecialist in neuropsychiatry under the grandfather clause

Dr Felix Potocnik:

- Received HPCSA accreditation as subspecialist in Old Age Psychiatry under the grandfather clause

PSYCHIATRY

Dr Anusha Lachman:

- Nominated for the IAMP Young Physician Leaders Programme in conjunction with World Health Summit
- Also selected to attend the Inter-academy Medical Panel Young Physician Leaders programme and the 2013 World Health Summit in Berlin in October 2013

Dr Bonga Chiliza

- SAMA South African Registrar Association Award for Academic Excellence
- Deputy Chair of the Board of Life Choices
- Chair, Western Cape Subgroup of South African Society of Psychiatrists
- Chair, Stellenbosch University Faculty of Medicine and Health Sciences Annual Academic Day Committee Member, Stellenbosch University Faculty of Medicine and Health Sciences MBChB Selection Committee

Dr Rene Nassen:

- The establishment of the Child and Adolescent Mental Health Forum, in Khayelitsha
- Also the HIV project, which hopefully will see the establishment of a dedicated HIV and mental health clinic for children and their families, in collaboration with medical colleagues at primary level. The storytelling group, run by ex-registrar Lindiwe Booie, has been a huge success and has contributed to improved attendance and hopefully adherence amongst a group of adolescent girls. I will be adding a HIV drumming group in the new year. Also the newsletter, an innovative initiative which I got off the ground with the help of Tamara Boers and medical students from Harvard

Dr Leigh van den Heuvel

- Awarded the Novartis medal by College of Psychiatrists

Dr Sian Hemmings

- MRC Self-Initiated Research Grant 2013 - 2015.
- KIC travel award
- NRF travel funding

Dr Georgina Spies:

- Awarded MRC Postdoctoral grant
- Awarded Claude Leon Foundation Postdoctoral Scholarship

Sharain Suliman

- Harry Crossley Support for Research
- Hendrik Vrouwes Research Scholarship
- National Research Foundation (South Africa) Thuthuka Grant
- Best Oral Presentation award at the Biological Psychiatry Congress, South Africa

Susanne Bakelaar

- Hendrik Vrouwes Foundation
- NRF Grantholder Linked Doctoral Bursary (SARcHI)
- NRF S&F – Innovation Doctoral Scholarship

Lindi Martin:

- NRF Freestanding Innovation Doctoral Scholarship
- Hendrik Vrouwes

FASER-SA:

- NIH/NIAAA, U01 grant titled "Trajectory of Fetal Alcohol Spectrum Disorders across the Life Span: New Understandings and Interventions". Budget subcontract to SU is \$3,059,609 (over 5 years). Local Principal Investigator: Prof Soraya Seedat.
- Marise Cloete from the Wellington office obtained her Master's degree in Social Work – March 2013.

PSYCHIATRY

Registrars

- Dr. Zuraida Kahn received the Discovery subspecialist training fellowship in Child and Adolescent Psychiatry

Departmental Awards:

- Best Registrar 2013 – Dr Johan Ras Janus Steyn Award for first year registrar with cum laude in at least two subjects goes to Dr Tessa Roos. She ac

SURGICAL SCIENCE

HEAD OF DEPARTMENT

Professor BL Warren

HEAD OF GENERAL SPECIALIST SERVICES:

Surgery - Dr JdeV Odendaal

UNITS AND STAFFING

- Surgical Gastroenterology – Professor BL Warren, Dr AvV Lambrechts, Dr J Lübbe, Dr W Conradie, Dr T Forgan
- Vascular Surgery – Professor DF du Toit, Dr JdeV Odendaal, Dr H Louwrens
- Head-, Neck- and Breast Surgery – Professor JP Apffelstaedt, Dr KJ Baatjes
- Surgical Intensive Care – Dr CE Fourie, Dr N Ahmed, Dr SW van der Merwe
- Burn Unit – Dr W Kleintjes, Dr M Jansen
- Trauma Surgery – Dr LP Taylor
- Karl Bremer Hospital Surgical Service – Dr AE Victor

Twenty-one Registrars on Tygerberg Hospital staff establishment, plus one each employed by Karl Bremer, Paarl and Worcester hospitals and two supernumerary Registrars (Nigeria and Namibia) rotate on a three-monthly basis to do service in above-mentioned units and also cover the affiliated Provincial Hospitals.

SELECTED STATISTICS (Figures in parenthesis indicated percentage change from 2012)

- Average bed occupancy C1D-East Surgical admissions ward – 192% (+ 22%)
- Admissions C1D-East Surgical admissions ward – per month 543 (- 10%)
- Trauma Patients Treated – 19888 (+ 5.9%)
- Patients admitted to Resuscitation Unit – 1031 (- 6.1%)
- Average bed occupancy in Resuscitation Unit – 117% (+ 8%)



COMMENT

The aforementioned statistics reflect an ongoing burden of trauma and non-trauma emergency admissions. Increased bed occupancy in the surgical admissions ward and resuscitation areas, despite unchanged, or slightly decreased, absolute admission numbers are indicative of the inner-hospital being saturated. This was despite certain improvements in capacity, such as the opening of a third emergency theatre list during week nights and increased surgical ICU capacity from 12 to 14 beds.

Emergencies are only part of day-to-day surgical practice in a level 3 teaching hospital, with semi-elective admission for malignant disease and critical limb ischaemia competing for available theatre time, ICU- and general ward beds.

Staff of the Division of Surgery continued to meet these challenges with dedicated clinical service and ongoing innovation. More than 75% of all colorectal work was conducted laparoscopically, with associated decrease in postoperative hospitalisation and increased patient well-being. Outreach to all affiliated hospitals continued and as many less challenging procedures as possible were diverted to these facilities.

SURGICAL SCIENCE

PERSONNEL AND ACADEMIC

Early 2013 saw the retirement of Dr AE (Elbie) van der Merwe after 16 years of distinguished service as Head of the Burns Unit, the tertiary facility for adult burn wounds in the Western Cape Province. She was replaced by Dr Wayne Kleintjes, a Plastic and Reconstructive Surgeon with special interest in burn wound care.

Five of out five candidates from the Division passed the final examination of the College of Surgeons of South Africa and two MMed (Chir) degrees (Drs Nadiya Ahmed and Hennie van Zyl) were awarded at year end.

CARDIOTHORACIC SURGERY

HEAD OF DEPARTMENT: Prof G Rossouw

Summary of activities:

Provision of Cardiothoracic Surgical Service of outstanding quality Training of Registrars and auxillary personnel

Resources:

| Posts (Full-time) | Number | Filled |
|-------------------|--------|--------|
| Sisters | 35 | 28 |
| Staff nurse | 12 | 10 |
| Nurse | 10 | 8 |
| Administrative | 3 | 3 |
| Domestic | 7 | 7 |
| Theatre | 6 | 6 |
| Perfusion | 3 | 2 |
| Registrars | 4 | 4 |
| Specialists | 3.5 | 3.5 |

Output:

| | |
|---------------------------------|------|
| Outpatient consultations | 1400 |
| Multidisciplinary team meetings | 147 |
| Admissions | 1530 |
| Open heart surgery | 392 |
| Thoracic surgery | 204 |
| Endoscopy | 32 |
| Major Trauma | 61 |
| Other cases | 101 |

Comment on output:

Despite major challenges, our output has increased since 2012. However, due to infrastructure challenges, staff shortages, outdated and broken equipment, I doubt that any further improvement in output could be expected. Staff morale is just keeping up considering the workload and circumstances. Changing referral patterns, specifically pressure from Khayelitsha. Hospital has further increased the workload.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

No major infrastructure development in 2013

Community outreach programmes/ community services and interaction.

Due to workload it was not possible to allocate personnel for outreach programmes

Partnerships

National:

On national level the department attended the SA Heart Congress and Registrars Symposium, as well as the Wet lab sessions where lectures was presented

Private:

There was good interdepartmental relationship between Tygerberg and Panorama and Kuils River private hospitals where registrars and consultants took part in Journal Club activities. Private consultants also spent time helping with training at Tygerberg Hospital.

Achievements with regard to research activities and research outputs:

A PhD study is currently being produced.

Teaching and Training (undergraduate-, postgraduate- and elective students)

A total of 50 undergraduate lectures were presented

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A total of 90 postgraduate training sessions (accredited for CPD) opportunities were presented

Approximately 30 elective students rotated in the department

Monthly lecture to nursing staff

New library books were bought

NEUROSURGERY

HEAD OF DEPARTMENT: Dr AJ Vlok

Summary of activities:

The Division of Neurosurgery is involved in clinical and service work on the Tygerberg Hospital platform, but performs a vital function on the academic platform with the Faculty of Medicine and Health sciences in undergraduate and postgraduate training. Teaching, training research and community outreach remain the core functions of this division.

Resources:

| Posts (Full-time) | Number | Filled |
|--|----------|--------|
| Chief Specialist Prof HB Hartzenberg | 1 | 1 |
| Specialist Neurosurgeons Dr AJ Vlok – HOD Dr A Gretschel | 2 | 2 |
| Principal Medical Officer Dr H Govender | 1 | 1 |
| Registrars Dr S Naidoo Dr D Mutyaba Dr S Lachman Dr C Steyn Dr Z Ebrahim | 5 | 5 |
| Supernumerary Registrars Dr K Mensah (Ghana) Dr K Albibi (Libya) | 2 | 2 |
| Posts (sessional – how many hours worked per week) | | |
| Specialist Neurosurgeon Dr H Vivier | 20 hours | 1 |

Output:

Elective surgery 379 (2012) to 559 (2013)

Comment on output:

The OPD visits show an increase of 666 patients. This constant increase in patients to be seen, as well as the increasing population in the Western Cape, does not match any increase in capacity to perform surgery

The A4West high care stats indicate a sustained average of around 130%, again indicating that we are functioning at service capacity and capabilities and struggle to accommodate the increasing volumes. The reality is shown in the volume without reciprocal increase in staff and infrastructure.

Elective theatre cases have increased from 379 to 559, with the efficiency of our Friday list becoming remarkable and good association with our anaesthetic colleagues.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

Procurement of two high speed drills (sponsored) and one from budget

Community outreach programmes/ community services and interaction.

Lectures are given via the Stellmed system in both spinal pathologies and cranial pathologies and their management to community health doctors and GP's. The spinal service to Worcester Hospital was halted in 2013 by the Department of Orthopaedics there. This has now been replaced by a service to Namibia, which incorporates a neurosurgery service to their public health system and lecturing of the UNAM students. Several workshops are held to educate specialist neurosurgeons from both nationally and internationally (for example Namibia) in the form of cadaver workshops.

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Partnerships

National:

Interdepartmental collaboration with other departments, for example ENT, Anatomy, plastic surgery

Private:

Specialist Neurosurgeon, Dr D Lamprecht, employed for registrar teaching and training with DOE sponsorship. Very limited RWOPS by consultants are geared to aid in difficult or very specialised cases in private practice. A number of workshops are arranged with private companies for teaching purposes.

International:

Research association with the London School of Tropical Medicine and Public Health

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

Outcomes following prehospital airway management in severe traumatic brain injury: The Kimberley Hospital Rule (KHR) for urgent computed tomography of the brain in a resource-limited environment:

S Sobuwa, HB Hartzenberg, H Geduld, C Uys
AF Bezuidenhout, D Hurter, AT Maydell, F van Niekerk, SAB de Figueiredo, J Harvey, AJ Vlok, RD Pitcher
Spinal Cadaver Workshop

Surgery – DR AJ Vlok, Dr A Gretschel, Dr D Lubbe – Endoscopic Chordoma removal/debulking surgery – This surgery was performed successfully in the youngest patient in the known literature. Dr A Gretschel attended an international training course in endoscopic skull-based surgery in the USA – this led to the abovementioned surgery as well as the developing of a comprehensive endoscopic clinical and training service. This has led to the first successful endoscopic pineal tumour removal in SA.

Seven current research projects with ethics approval (registrars)

Textbooks and contributions to textbooks

Dr AJ Vlok has been approached to help with the revision of the following textbook –

http://www.amazon.co.uk/Neurosurgery-Explained-Basic-Essential-Introduction/dp/0954881303/ref=sr_1_1?s=books&ie=UTF8&qid=1381924011&sr=1-1

Teaching and Training (undergraduate-, postgraduate- and elective students)

Lectures and tutorials give to undergraduate medical students in the Neuroscience module, as well during surgery rotations.

In addition lectures are given to the undergraduate Physiotherapy and Occupational therapy students.

There is a regular weekly programme of teaching and training of Neurosurgery postgraduate training (didactic sessions, journal reviews, practical cadaver training, interactive session)

Prof. HB Hartzenberg was supervisor of Master's students in Emergency Medicine from the University of Cape Town. We have had elective students from Australia, Germany and Britain throughout 2013.

Special achievements and other highlights not covered by this template

Dr S Naidoo received an award for best paper at the academic year day in the surgical sciences

Dr Vlok was invited as speaker at the AO Masters course in Pretoria based on unique surgery performed in Cape Town (paediatric chordoma)

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DIVISION OF OPHTHALMOLOGY

HEAD OF DEPARTMENT: Prof David Meyer

Summary of activities

This annual report reflects the dedicated work of all the committed staff of the Division of Ophthalmology who, under conditions of high patient loads, rendered an exceptional tertiary service to the patients in our drainage area and beyond.

During 2013, **23 949** patients visited our Outpatient Department (4% less than in 2012), making it the busiest surgical clinic in the hospital. During 2013, **859** (624 in 2012) premature babies were screened for retinopathy of prematurity (ROP), of whom 6 (3 in 2012) required retinal laser treatment. This represents 27% more babies screened than the previous year in keeping with the provincial wide thrust to optimise screening of premature babies for ROP.

Patient admissions to our wards (D7, D4 and G4) totalled **3 036** (3 105 in 2012).

Surgical cases totalled **2 825** operations (2 781 in 2012 = 1,5% increase) divided into **678** day surgery cases (a 12,5% increase from 2012); **1 127** general ophthalmic cases and **1 020** cataract operations (27% increase over 2012). As cataract surgery was placed on the "dash board" of the Provincial Premier, this increase is significant. Trauma still contributes markedly to our general ophthalmic surgical load, especially as emergency operations. The increase in day surgery cases is primarily driven by Avastin intravitreal injections for diabetic patients. Ophthalmic laser procedures totalled about **820** cases.

During outreach efforts, **36** additional operations and **109** consultations were performed in Namibia, **53** cataract cases were screened and **40** were operated in the Northern Cape Province.

The maintenance of the service delivery is remarkable given the number of doctors and high support and nursing staff shortages. The service delivery took place in parallel with a very active academic and research programme. Sincere gratitude is expressed to every single dedicated staff member.

Resources:

| Posts (Full-time) | Number | Filled |
|---|-------------------|-------------------|
| CONSULTANTS | 4 | 4 |
| OPTOMETRIST | 1 | 1 |
| ULTRASONOGRA PHER | 1 | 1 |
| MEDICAL OFFICERS | 3 | 3 |
| REGISTRARS | 7 + 3 Supernumery | 7 + 3 Supernumery |
| Posts (sessional – how many hours worked per week) | | |
| SPECIALIST | 2 | 31 hours |

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Output:

Outpatient visits **Total: 24 968**

Sub-Specialist Clinics serving Ophthalmology:

1. Medical Retina
2. Surgical Retina
3. Pediatric Ophthalmology
4. Oculoplastics
5. Cornea and anterior segment
6. Refraction (1 100 refraction clinic visits)

Admissions: D4=47, G4=204, D7=2785

Total: 3 036

| Theatre procedures: | |
|----------------------------|--------------|
| General ophthalmic | 1 127 |
| Day surgery | 678 |
| Cataract | 1 020 |
| Total | 2 825 |

| ROP Screening | 859 |
|------------------|------------|
| Laser procedures | |
| Yag laser | 251 |
| Argon laser | 522 |
| Diode laser | 41 (est) |
| ROP laser | 6 |
| Total | 820 |

Part 2

Faculty of Health Sciences Infrastructure development – upgrading, new equipment, etc. (highlights)

No significant purchases made.

Community outreach programmes/ community services and interaction.

The Division's main outreach programme focusses on the country of Namibia. This initiative is driven by Prof. Meyer. It has been a 12-year initiative focussing on assisting the specialists in Namibia to manage difficult ophthalmic cases and performing surgery on these patients. In 2013, he visited Windhoek on 2 occasions, consulting 109 patients and operating on 36 cases.

He also lectured during meetings of the NMA Ophthalmic Group meetings.

Our collaboration with the Northern Cape Province continued and 53 cases were screened and 40 cataract operations performed in that province.

Partnerships

National:

1. The divisions of Ophthalmology at Groote Schuur, Red Cross and Tygerberg hospitals academically and clinically co-operate in combined meetings on a quarterly basis via the Ophthalmological Society of South Africa and by exchanging lecturers. A positive and cordial relationship exists between the two institutions. Regular registrar inter-institutional study group meetings help with preparation for the College of Ophthalmologists examinations.
2. This Division trains one registrar at a time for the National Defence Force at 2 Military Hospital. This collaboration has existed successfully for about 20 years. The new registrar joined our Division in 2011 and continued training in 2013.
3. The first specialist graduate fully sponsored by the Northern Cape Province returned to Kimberley and two new registrars from the same province commenced their training in January 2012 and continued training successfully in 2013.

Private:

1. The Cape Eye Hospital, as part of the postgraduate-accredited accredited teaching platform, renders academic as well as technical support with instrumentation and training (e.g. Excimer Laser refractive surgery and corneal

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transplant surgery) not readily available to our registrars at Tygerberg Hospital.

2. Tygervalley Eye and Laser Centre has also agreed to allow registrars/consultants from the Faculty of Health Sciences to do observerships. This is especially valuable as they possess the only Femtosecond laser in the Western Cape.

International:

The first supernumerary registrar from an African country fully sponsored by the Namibian Department of Health and Social Welfare returned early in 2012 as a fully qualified ophthalmologist to serve the country of Namibia. Negotiations continued in 2013 to train the next registrar from that country.

Achievements with regard to research activities and research outputs:

| Seq | Type | Title | Report Year | Output Year | Authors |
|-----|-------------------------------|--|-------------|-------------|---|
| 1 | Journal Articles (subsidised) | A novel syndrome caused by the E410K amino acid substitution in the neuronal B-tubulin isotype 3 | 2013 | 2013 | Chew S, Balasubramanian R, Chan W, Kang PB, Andrews C, Webb BD, MacKinnon SE, Engle EC, Oystreck DT, Rankin J, Crawford TO, Geraaghty M, Pomeroy SL, Crowley WF, Jabs EW, Hunter DG, Grant PE |
| 2 | Journal Articles (subsidised) | Anti-allergic ophthalmic drugs in general practice: which, why and when? | 2013 | 2013 | Mohamed N, Smit DP |
| 3 | Journal Articles (subsidised) | Congenital cranial dysinnervation disorders: a concept in evolution | 2013 | 2013 | Bosley TM, Abu-Amero KK, Oystreck DT |
| 4 | Journal Articles (subsidised) | Congenital iris ectropionuveae presenting with glaucoma in infancy | 2013 | 2013 | Laaks D, Freeman N |
| 5 | Journal Articles (subsidised) | Immune reconstitution hepatitis E: a neglected complication of antiretroviral therapy in Africa? | 2013 | 2013 | Laaks D, Smit DP, Meyer D |
| 6 | Journal Articles (subsidised) | Intralesional bleomycin injection for periocular capillary hemangiomas | 2013 | 2013 | Smit DP, Meyer D |

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|----|-------------------------------|--|------|------|--|
| 7 | Journal Articles (subsidised) | Intralesional Bleomycin: a Potential Treatment for Refractory Orbital Lymphangiomas | 2013 | 2013 | Gooding C, Meyer D |
| 8 | Journal Articles (subsidised) | Nicotinic Receptor Mutation in a Mildly Dysmorphic Girl with Duane Retraction Syndrome | 2013 | 2013 | Abu-Amero KK, Kondkar AA, Hellani AM, Oystreck DT, Khan AO, Bosley TM |
| 9 | Journal Articles (subsidised) | Ophthalmologic Observations in a Patient with Partial Mosaic Trisomy 8 | 2013 | 2013 | Abu-Amero KK, Kondkar AA, Salih MA, Al-Hussain H, Al Shammari M, Zeidan G, Oystreck DT, Hellani AM, Kentab AY, Bosley TM |
| 10 | Journal Articles (subsidised) | Partial Duplication of Chromosome 19 associated with Syndromic Duane Retraction Syndrome | 2013 | 2013 | Abu-Amero KK, Kondkar AA, Al Otaibi A, Alorainy IA, Khan AO, Hellani AM, Oystreck DT, Bosley TM |
| 11 | Journal Articles (subsidised) | Prevalance of and risk factors for retinopathy of prematurity in a cohort of preterm infants treated exclusively with non-invasive ventilation in the first week after birth | 2013 | 2013 | Van der Merwe SK, Freeman N, Bekker A, Smit DP |
| 12 | Journal Articles (subsidised) | Prevalence of and risk factors for retinopathy of prematurity in a cohort of preterm infants treated exclusively with non-invasive ventilation in the first week after birth | 2013 | 2013 | Van der Merwe SK, Freeman N, Bekker A, Smith J |
| 13 | Journal Articles (subsidised) | Shigella Keratitis in an HIV-exposed infant | 2013 | 2013 | Freeman N, Newman H |
| 14 | Journal Articles (subsidised) | Variable Ptosis and Botulinum Toxin Type A Injection with Positive Ice Test Mimicking Ocular Myasthenia Gravis | 2013 | 2013 | Alaraj AM, Oystreck DT, Bosley TM |

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| | | | | | |
|----|-----------------------------------|--|------|------|---|
| 15 | Journal Articles (subsidised) | Viral ocular manifestations: a broad overview | 2013 | 2013 | Newman H, Gooding C |
| 16 | Journal Articles (subsidised) | Xq26.3 Microdeletion in a Male with Wildervanck Syndrome | 2013 | 2013 | Abu-Amero KK, Kondkar AA, Alorainy IA, Khan AO, Al-Enazy LA, Oystreck DT, Bosley TM |
| 17 | Journal Articles (NON-subsidised) | Astute and safe use of topical ocular corticosteroids in general practice: Practical guidelines | 2013 | 2013 | Janse van Rensburg E, Meyer D |
| 18 | Journal Articles (NON-subsidised) | Basic ophthalmology for the health practitioner: the red eye | 2013 | 2013 | Mohamed N, Smit DP |
| 19 | Journal Articles (NON-subsidised) | Intraocular pressure-lowering effect of oral paracetamol and its in vitro corneal penetration properties | 2013 | 2013 | Mohamed N, Meyer D |
| 20 | Journal Articles (NON-subsidised) | Management of chemical ocular injuries – what every GP should know | 2013 | 2013 | Janse van Rensburg E, Meyer D |
| 21 | Chapters in Books | Glaucoma following cataract surgery | 2013 | 2013 | Fenerty c, Freeman N, Grigg J |

Teaching and Training

- Three MMed students are supernumerary students – one from the SA Defence Force and two from the Northern Cape Province. These students are under contract to return to their respective employers to serve as specialists. Their contribution to clinical service delivery is invaluable to the Division
- Currently there are two registered PhD students in the Division. Both are international students. A third PhD student successfully submitted his protocol in 2013
- The increased number of MBChB students needing exposure to clinical ophthalmology in their student intern years, proposes new challenges. We will not be able to maintain standards unless new clinical teaching platforms are sourced. These are limited because of the paucity of specialised ophthalmic care centres with an academic brief in the Metropole

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Special achievements and other highlights

1. Dr Debbie Laaks, a registrar in the Division, received the prestigious Neville Welsch Medal for the best candidate in the Fellowship in Ophthalmology examination of the College of Ophthalmology of the Colleges of Medicine of South Africa for 2013. This is the second year in running that this medal has been won by a Stellenbosch graduate. She also won the first prize for her poster presentation at the Glaucoma Society of SA's national annual congress. This prize fully sponsors her to an international congress. Dr Michael Djan won the second prize at the same congress.
2. Dr Caroline Gooding authored the winning poster at the Annual Academic Day of the Faculty of Medicine and Health Sciences of Stellenbosch University in the Surgical Sciences category.
3. Dr William Mapham won a R1 million research grant from SAB to enable him to pursue the development of a cellphone app to be used in ophthalmology with the emphasis on assisting eye care in rural- and underserved areas.
4. The Western Cape branch of the Ophthalmological Society of South Africa annually awards prizes for the best case presentations at their quarterly meetings. In 2013, Drs William Mapham and Ernst Janse van Rensburg won the first and second prizes respectively.
5. Dr Julia Janse van Rensburg won the first prize for her oral paper at the Glaucoma Society of SA's annual national congress. This entitles her to attend a fully sponsored international congress abroad.

ORTHOPAEDIC SURGERY

HEAD OF DEPARTMENT: Dr Jacques du Toit

Summary of activities:

❖ Service Delivery:

- Current Activities: The Department of Orthopaedics deliver tertiary and secondary care to approximately 50%

of the Western Cape population. We have a massive trauma load that has increased by 22% with the addition of Khayelitsha to our drainage area. We see and treat about 900 to 1 200 new emergency cases and operate about 600 to 800 emergency cases per month. Our average daily emergency cases awaiting theatre average 40 to 90 cases per day.

The Department comprises of the following subspecialties for treatment of elective orthopaedics and complex trauma:

- Tumor and Sepsis Unit
- Spinal Unit
- Shoulder and Elbow Unit
- Sports Medicine and Arthroplasty Units
- Foot and Ankle Unit
- Hand Unit and Paediatric Orthopaedics
- Research Unit

High quality elective orthopaedic care is rendered although this is suboptimal due to restricted bed availability and theatre time.

● New Incentives:

- Outreach: Khayelitsha: Newly established weekly Orthopaedic Outpatients and Theatre List
- Departmental Restructuring: Initiation of project to restructure Department to improve efficiency, for example one trauma firm with more efficient quality control and peer review. Project to be completed 15 July 2014
- Establishing an orthopaedic digital database for registrar logbooks and database for patient treatment and operative procedures, as well as controlling the use of the appropriate orthopaedic hardware as prescribed on tender. The database also allows us to control expenditure
- Restructured Morbidity and Mortality Meetings: Evidence-based and

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accurate reflection of trends and interventions with regards to our Morbidity and Mortality

- Orthopaedic Treatment Protocols: We initiated a project to establish evidence-based Tygerberg Hospital treatment protocols for the Casualty Department, orthopaedic registrars and interns. Date of completion 15 July 2014

❖ Personnel:

● Current Activities:

Our Department consists of:

- 9 Orthopaedic Specialists (Including the Head of Department)
- Three sessional specialists
- 17 Orthopaedic registrars
- 1 Supernumerary Registrar-Libya
- 2 Registrars that are financed by Il Military Hospital

● New Incentives:

- One Medical Officer Post
- One new Sessional Specialist: Dr Markus Michel, an internationally renowned hip and knee reconstructive orthopaedic surgeon
- Extensive personal development programmes to improve teaching and examination skills of our specialists and our orthopaedic registrars
- Restructuring of the departmental performance assessment - SPMS
- Trauma "fellowship" with "Newly Qualified" Orthopaedic Specialists from the Netherlands attending a 6/12 "Trauma Fellowship" at our institution

❖ Administration

● New Incentives:

- Departmental restructuring with official portfolio allocation and regular review of output
- Accurate data capturing through our own data capturing software (Orthware)

❖ Academic Activities

● Current Activities

- Teaching, training and examining the MBChB III/V/VI pregraduate students
- Extensive Postgraduate registrar programme

● New Incentives

- MBChB Curriculum: Initiation of restructuring the entire MBChB Curriculum. This exciting programme has the outcome objectives to render our students an up-to-date and outcome-based curriculum. This will entail new outcomes, lectures, notes and examination techniques
- Undergraduate examination: Initiation of programme to implement evidence-based and scientifically sound examination techniques
- Postgraduate Trauma Programme: The development of an official trauma orientated teaching programme to enhance knowledge of Orthopaedic Trauma
- Orthopaedic Specialists: We have numerous courses at our facility to train already qualified orthopaedic specialists in their chosen subspecialties.

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Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|--------|
| Head | 1 | 1 |
| Consultants | 8 | 8 |
| Registrars | 15 | 15 |
| Medical Officer | 1 | 1 |
| Posts (sessional – how many hours worked per week) | | |
| Dr R Smith | 1 | 1 |
| Dr AA van Zyl | 2 | 2 |
| DR AM Heyns | 4 | 4 |
| Dr RJ du Plessis | 6 | 6 |
| GJ Toulouras (Podiatrist) | 20 | 20 |

Output:

- Astronomical service delivery in trauma orthopaedics
- High Quality elective orthopaedics
- High Standard of Academic and Research output
- High quality administrative output
- Defining the Department of Orthopaedics as a properly functioning Business Unit

Comment on output:

The Department has maintained high quality of service delivery, exceptional academic programmes (near 100% postgraduate pass rate and a very high MBChB pass rate) and a vastly improved research output despite of being severely overloaded with emergency orthopaedics. We have initiated extensive restructuring programmes in 2013:

- MBChB III Curriculum
- Administrative Portfolio Development
- Departmental Restructuring
- Database Development and Improved Data capturing
- Personnel managerial, administrative and leadership development
- Initiating outreach programmes
- Launch of Orthopaedic Research Unit

The Department of Orthopaedics could easily have capsized due to the trauma burden and restricted availability of infrastructure to render elective orthopaedic care, but due to the commitment of the personnel, the

Department is actually improving output on all its spheres of responsibility.

Factors that will influence output in the future are:

- Availability of infrastructure to effectively manage our workload
- Increase of personnel, both at Tygerberg Hospital and as outreach initiatives

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

- Extensive upgrading of the Advanced Orthopaedic Training Centre
- Supply of a large amount of research software by the Faculty of Health Sciences to enhance research output

Community outreach programmes/ community services and interaction.

- ❖ Community Outreach in Africa: Treatment of clubfeet with the Ponseti Method Outreach Project

The Clubfoot Clinic at Tygerberg Hospital is one of the more advanced units in South Africa with regards to rendering evidence-based clubfoot care with the Ponseti Method. There is very little doubt in the international arena that the Ponseti Method is the "Gold Standard" for clubfoot care.

In Partnership with STEPS Charity (South African Clubfoot treatment NGO), we have launched governmental clubfoot programmes and trained personnel to treat clubfeet in the following countries:

- Botswana
- Namibia
- Seychelles in April 2014

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Partnerships

- STEPS Charity and Lady Michaelis Paediatric Orthopaedic Surgery Department-NGO that aid African Countries to initiate active clubfoot treatment programmes

Achievements with regard to research activities and research outputs:

During 2013 our Department increased research output significantly due to the following reasons:

- Initiation of a structured research programme
- Appointment of a sessional Research Advisor

➤ International Peer Reviewed Publications:

- Nelleke G. Langerak, Jacques du Toit, Marlette Burger, Mark F. Cotton, Priscilla E. Springer and Barbara Laughton: Spastic Diplegia in children with HIV Encephalopathy: first description of gait and physical status, Developmental Medicine and Child Neurology :2013

➤ Publications in local Journals

- Restoration of Teardrop Angle (TDA) in distal radius fractures treated with volar locking plates. Pienaar G; Anley C; Ikram A. SA Orthop J. 12(3): 32-34
- Percutaneous core needle biopsies: The yield in spinal tuberculosis. Watt JP. Davis JH. SAMJ 2014; 104(1): 29-32.
- Synovial Haemangioma as a Cause for Atraumatic Hemarthrosis of the Knee - A Case Report. SAOJ Vol 12 Nr 4: p48-49 E Joubert
- SA Orthopaedic Journal, Spring 2013: Volume 12: Dr A Ikram
- Multicentre study comparing outcome of pinning and locking plates for Treating distal radius fractures

➤ Presentation of research at Academic Year day (University of Stellenbosch) -2013

- 2013 – The outcome of Taylor Spatial Frame in the treatment of relapsed and residual clubfeet: Dr A Botha
- Submuscular Bridge Plating of length-unstable paediatric femoral shaft fractures in children between 6 and 13. – Dr R Salkinder
- Clavicle nail vs. plate – Dr PR King
- Distal radius nail vs. plate – Dr M van der Kaag
- Fragment specific fixation – Dr M Thiart
- Poster on tear drop angle – Dr G Pienaar
- Poster on fragment specific fixations – Dr M Thiart
- Poster on instability of CMC joint – Dr M van der Kaag
- Restoration of Teardrop Angle (TDA) in distal radius fractures treated with volar locking plates. – Pienaar G

➤ Presentation of Research at National Congresses

- South African Orthopaedic Association Congress, Sun City 2013: Presentation - Use of an intramedullary nail instead of plate and screw for stabilisation of unstable ankle fractures: An analytical study and historical control group: Dr D Badenhorst
- 2013 – The outcome of relapsed and recurrent clubfeet treated with the Taylor Spatial Frame – SAOA Congress: Dr A Botha
- 2013 – Costotransversectomy in thoracic spinal tuberculosis – SA Spine Congress and SAOA Congress: Dr A Botha
- SASS 2013 Port Elizabeth – The surgical management of TB of the paediatric spine: Dr Watt
- The yield of needle core biopsies in TB of the spine – SAOA Congress 2013 – Dr James Watt
- The surgical management of TB of the paediatric spine – SAOA Congress 2013 – Dr James Watt

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- Complications of volar locked plating for distal radius fractures in an academic institution – SASSH Congress 2013 – Dr James Watt
 - Sub muscular Bridge Plating of length-unstable paediatric femoral shaft fractures in children between 6 and 13. – SAOA Congress 2013: Dr R Salkinder
 - "Fragment Specific Fixation Of Intra-Articular Distal Radius: The Role of Arthroscopy to Confirm Reduction" at the 43rd Annual Congress of the SA Society for Surgery of the Hand held in September 2012. This paper won the Best Paper Presented by a Registrar Prize: Dr M Thiar
 - Clavicle nail vs. plate – Dr PR King: Annual Hand Congress (SASSH) Sept. 2013
 - VLP vs. nailing of distal radius – Dr M van der Kaag: Annual Hand Congress (SASSH) Sept. 2013
 - Complication of distal radius fractures – Dr J Watt: Annual Hand Congress (SASSH) Sept. 2013
 - CMC tight rope suspension arthroplasty – Dr M Wells: Annual Hand Congress (SASSH) Sept. 2013
 - Fractures fixation with fragment specific fixation – Dr M Thiar: Annual Hand Congress (SASSH) Sept. 2013
 - Supra-condylar distal humerus fracture fixation prone vs. supine: Dr A Rawoot
 - Which distal radius fractures can be fixed with fragment specific fixation:
 - Dr M Thiar
 - Scope assistant reduction of distal radial fracture 2 years follow-up study: Dr V Socishe
 - Intra-medullary nail of distal radius: Dr M van der Kaag
 - Poster on median nerve palsy in supra-condylar distal humerus fracture:
 - Dr A Rawoot
 - 2013 SASSH Congress: "The efficacy of Taylor spatial frame in the management of humeral non-unions and traumatic ununited, unplatable fractures as a salvage tool." Dr K Strauss
 - 2013 SAOA Congress: "The efficacy of Taylor spatial frame in the management of humeral non-unions and traumatic ununited, unplatable fracture as a salvage tool." Dr K Strauss
- **Presentation of Research at International Congresses**
- **Scotland Edinburgh Trauma Symposium 2013**
 - Presentation - Use of an intramedullary nail instead of plate and screw for stabilisation of unstable ankle fractures: An analytical study and historical control group: Dr D Badenhorst
 - **Edinburgh International Trauma Symposium – August 2013, Edinburgh, Scotland**
 - 'Locked intramedullary fixation vs. Anatomically contoured locked plating of clavicle shaft fractures – a randomised controlled trial': Dr PR King
 - **American Orthopedic Society for Sports Medicine Annual Meeting – July**
 - 2013 Chicago, USA 'Locked intramedullary fixation vs. anatomically contoured locked plating of clavicle shaft fractures – a randomised controlled trial': Dr PR King
 - **Presentations at European Hand Society Meeting May 2013 : Dr A Ikram**
 - - CMC tight rope suspension arthroplasty
 - - Poster dislocation CMC thumb stabilisation
 - - Suspension arthroplasty in osteoarthritis – workshop
 - **Paper presented at International Hand meeting ASSH, American Society for the Surgery of Hands meeting 2013**
 - Fracture specific fixation for distal radius

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- Fracture assisted reduction with a scope for a distal radius fracture: Dr M Thiart and Dr A Ikram

➤ Prizes or Accolades: National and International Congresses

- "Fragment Specific Fixation Of Intra-Articular Distal Radius: The Role of Arthroscopy to Confirm Reduction" at the 43rd Annual Congress of the SA Society for Surgery of the Hand held in September 2012. This paper won the prize for Best Paper Presented by a Registrar: Dr M Thiart
- Registrars' Congress Feb 2014: Best Presentation: Dr A Botha
- Distal radius intra-medullary nailing presented at Hand Congress and won best registrar prize: Dr M van der Kaag
- Ian Healy Honorary Lecture-Second World Orthopaedics: Glasgow Infirmary Hospital, Scotland-Dr Jacques du Toit (October 2013)
- Best academic paper presentation at SASSH 2013 - Dr Martin Wells, Dr Ajmal Ikram, Dr Yusuf Elghawail, Dr Cameron Anley

Teaching and Training (undergraduate-, postgraduate- and elective students)

● Current Activities

- Teaching, training and examining the MBChB III/V/VI undergraduate students
- Extensive Postgraduate registrar programme

● New Incentives

- MBChB Curriculum: Initiation of restructuring the entire MBChB Curriculum. This exciting programme has the outcome objectives to render our students an up to date and outcome based curriculum. This will entail new outcomes, lectures, notes and examination techniques
- Undergraduate examination: Initiation of programme to implement evidence

based and scientifically sound examination techniques

- Postgraduate Trauma Programme: The development of an official trauma orientated teaching programme to enhance knowledge of Orthopaedic Trauma

PAEDIATRIC SURGERY

HEAD OF DEPARTMENT: Prof SW Moore

Summary of activities:

Paediatric Surgery currently functions within 18 beds in ward G4, but more than 50% of its patients lie within the beds of the Paediatric service outside of this ward.

- Paediatric Surgery admitted 1 002 patients to ward G4 in 2013 (Clinicom)
- 226 urgent Paediatric inpatient referrals in Paediatric wards were consulted
- 96 neonates were operated within and associated with the neonatal section
- In addition to the in house referrals, there were 1 045 outpatients (Clinicom) seen in the 2 specialised clinics (general Paediatric surgical clinic and ano-rectal clinic)
- These figures exclude daily emergency referrals from G ground Paediatric admissions

Surgical procedures

- The available theatre time (very limited) could handle 706 elective procedures (theatre lists)
- There were 136 emergency operations performed (excluding vascular access frequently called for within the intensive care and other units)
- There is also a day theatre list (1 half day/week, 254 cases) and the first hour of the abscess list is reserved for children, where the staff assist the intern

SURGICAL SCIENCE

Resources:

| Posts (full-time) | Number | Filled |
|---|--------|--------|
| CONSULTANT | 3 | 3 |
| REGISTRAR | 2 | 2 |
| MEDICAL OFFICER | 1 | 1 |
| Posts (sessional – how many hours per week) | | |
| CONSULTANT | 0 | 0 |

Output:

Source:

Buitepasiënt besoeke / Outpatient visits: 1 275
 Spesialisklinieke / Speciality Clinics: G Ground referrals 551
 Opnames / Admissions: 1 284
 Teater prosedures / Theatre procedures:
 Day surgery 254
 Main theatre 842 [706 elective + 136 emergency]
 Other procedures 260
 Total: 1 354* (subject to verification)

Comment on output:

Output is limited due to very limited resources
 Caseload is increasing with the Khayelitsha shift, with little extra resources

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

- i. Development of Seminar room in Ward G4 for meetings and teaching purposes
- ii. Re-siting of Divisional office to Ward G4

Community outreach programmes / community service and interaction.

- o Attempts to initiate an outreach training theatre list at Eerste River Hospital was cancelled due to lack of anaesthetic staff
- o Improved liaison and service to clinics

- o Teaching initiative with Ethiopia's Addis Ababa University university is further explored
- o Contact with University of Zimbabwe established – Prof. Moore invited as external examiner
- o Contact with University of Namibia – Prof. Moore external visits
- o Advisory service to the Africa Paediatric Oncology Initiative

Partnerships

National

Private sector: Blaauwberg Hospital— Public private partnership explored

International

Achievements wrt research activities and research outputs

Number of publications from the department/division

Textbooks and contributions to textbooks.

Publications in:

- A. Peer reviewed journals 5 published in 2013
- B. Revision of student handbook "Student guide to Paediatric surgery"
- C. Revision and translation of Afrikaans version "studente notas in Pediatriese chirurgie"

TOTAL: 7 published in 2013

Teaching and Training (under-, postgraduate and elective students).

Teaching and training

The teaching commitment involves both undergraduate- and postgraduate teaching programmes.

Undergraduate teaching Paediatric surgical staff are involved in teaching second year-, third year-, fourth year and fifth year MBChB students and student Interns, are involved in tests and examinations in General Surgery, as well as the Paediatric Surgery component of undergraduate middle surgical rotation.

SURGICAL SCIENCE

Postgraduate teaching involves both training of General surgeons in Paediatric Surgery and specialist training.

Training of General surgical registrars

General surgery trainees also receive tutorials at intermediate and final modules, as well as practical training on rotation.

Specialist training in Paediatric Surgery

The University of Stellenbosch is an accredited Paediatric- and Paediatric Surgical training centre, actively engaged in goal directed research.

One of the highlights of 2011 was the further development of the new MMed programme at the University of Stellenbosch as a HPCSA approved four-year Masters programme to allow specialisation in Paediatric Surgery. In 2011 we had four enrolled postgraduate students, who followed a systematic teaching and training course. In 2013 we had only two students registered.

As a result,

- Regular meetings occur between units to discuss policy and individual patients
- These include weekly meetings with Radiology, Paediatric Oncology, General Surgery, as well as Neonatology – Paediatric Gastro-enterology, Endocrinology, Fetal Medicine, Anatomical Pathology and Clinical Genetics.
- A regular Tuesday afternoon teaching programme has been established, which includes a mortality and morbidity review, a journal club and systematic teaching by Prof. Heinz Rode, who is funded out of DOE for this purpose.
- A regular postgraduate teaching round has been commenced.
- Presentations and participation at other forums is fairly regular.
- Foetal assessment joint meetings is introduced.

Special achievements and other highlights

Professor SW Moore retired on 31 December 2013.

PLASTIC AND RECONSTRUCTIVE SURGERY HEAD OF DEPARTMENT: Prof Frank Graewe

Summary of activities:

Besides our normal teaching and training activities and delivery of an elective and emergency plastic surgery service for the draining area of Tygerberg Hospital, we hosted a Smile week in November 2013, which is sponsored by the Smile Foundation South Africa. We operated on children with congenital craniofacial and cleft lip and palate deformities.

We organised the national registrar symposium, which took place at the Stellenbosch University Business School in July 2013.

Resources:

| Posts (full-time) | Number | Filled |
|---|--------|--------|
| Consultants | 2 | 2 |
| Registrars | 4 | 4 |
| Supernumerary registrar | 0 | 0 |
| DoE funded sessions | 5 | 5 |
| Posts (sessional – how many hours per week) | | |
| Consultant | 10 | 10 |

Output

Source:

Outpatient visits: 4694
Speciality Clinics: 141
 Cleft lip and palate and craniofacial
Admissions: 1300
Theatre procedures: 387
 elective cases (cases under local anaesthesia and cases on other lists excluded)

SURGICAL SCIENCE

Part 2

Faculty on Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

We got new microsurgery instruments sponsored by Smile foundation South Africa. With the support of Smile foundation South Africa we could establish an extra children's list on every second Friday. This helps us to reduce waiting time and to manage our surgical workload.

Community outreach programmes / community service and interaction.

Partnerships

National:

Smile foundation South Africa

Achievements with regard to research activities and research outputs:

Number of publications from the department/division 1

Textbooks and contributions to textbooks.

Teaching and Training (undergraduate-, postgraduate- and elective students).

Continuous postgraduate training in Plastic Surgery. Undergraduate training comprises elective medical students from Stellenbosch University and abroad.

We offer our specialised microsurgery course for beginners or advanced micro surgeons on a regular basis.

UROLOGY

HEAD OF DEPARTMENT: Prof CF Heyns

Summary of activities:

The Department of Urology manages an enormous service load, apart from the obligations with regard to undergraduate and postgraduate training, research and publications. There is still a chronic shortage of

theatre time relative to the huge number of outpatients, beds (especially in the intensive care unit), modern equipment and infrastructure, as well as nursing staff, especially in the outpatient clinics.

The dedication and loyalty of the senior nursing staff remains one of the biggest assets of the Department. The enthusiasm and dedication of the consultants, clinical assistants and medical officers is a source of inspiration for all, regardless of the huge service load and many frustrations.

Resources:

| Posts (full-time) | Number | Filled |
|-----------------------------------|--------|--------|
| Professor | 1 | 1 |
| Specialists | 3 | 3 |
| Clinical assistants | 6 | 6 |
| Medical officers | 2 | 2 |
| Supernumerary clinical assistants | 2 | 1 |
| Number of beds | 31 | |

Outputs:

| OUTPATIENTS | 2011 | 2012 | 2013 |
|---------------------------|--------------|--------------|--------------|
| C6A West | 5404 | 5406 | 5700 |
| C6A East | 5605 | 5791 | 6174 |
| Total | 11009 | 11197 | 11874 |
| SPECIALIST CLINICS | | | |
| Oncology | 1697 | 1782 | 1870 |
| Andrology | 567 | 546 | 566 |
| Structures | 484 | 472 | 388 |
| Urodynamics | 329 | 268 | 273 |
| Prostate biopsies | 296 | 298 | 314 |
| Total | 3373 | 3366 | 3411 |
| ADMISSIONS | | | |
| Ward D6 (Urology) | 1271 | 1308 | 1307 |
| Ward D4 (Private ward) | 48 | 38 | 37 |
| Ward G4 (Paediatrics) | 6 | 157 | 139 |
| Total | 1325 | 1503 | 1483 |

SURGICAL SCIENCE

| THEATRE PROCEDURES | | | |
|------------------------|-------------|-------------|-------------|
| Main theatre | 730 | 741 | 768 |
| Cystoscopy theatre | 2466 | 2604 | 2782 |
| Day theatre | 230 | 209 | 199 |
| Shock wave lithotripsy | 58 | 26 | 44 |
| Total | 3484 | 3580 | 3793 |
| Typist reports | | 1698 | 1859 |

Comments on outputs:

Over the past three years (as for the previous ten years) there was a continuing progressive increase in the number of outpatients because there are not sufficient services at primary and secondary level, and all Urology cases are simply referred to Tygerberg, regardless of whether the problem is indeed on tertiary level. This is confirmed by the fact that the number of patients seen at the Urology specialist clinics did not increase much. The number of theatre cases also increased progressively, mainly because of bigger numbers in the cystoscopy theatres, which are overbooked.

The kidney transplant programme is still functioning well, and living family transplants have significantly increased since Prof André van der Merwe started doing laparoscopic retroperitoneal donor nephrectomies. The surgical procedures for dialysis (AV fistulas and peritoneal dialysis catheters) are also managed by Urology, which places a huge load on our theatre time.

Part 2

Faculty Medicine and Health Sciences Infrastructure development – upgrading, new equipment

There is still a great and urgent need for equipment and technology which is accepted in most of the centres worldwide as basic standard for training and service delivery, but is not yet available in Tygerberg, for example laser equipment for the treatment of kidney stones, focal therapy for kidney and prostate cancer (brachytherapy

and cryotherapy), to name just a few examples. Existing equipment which is broken, is replaced now and then, for example a new C-arm for screening and a flexible cystoscope were purchased, but there is still a great need for modern equipment.

Community service and outreach programmes

Members of the Department of Urology take care of the vasectomy service, which is coordinated by the Family Planning Unit at Tygerberg Hospital and the Association for Voluntary Sterilisation of South Africa (AVSSA). This service carries out the majority of vasectomies that are done in the Western Cape (as well as nationally).

Partnerships

International:

The collaboration with Prof Gernot Bonkat of Basel in Switzerland with regard to microcalorimetry as technique for the diagnosis of tuberculosis is continued. Dr Pedro Fernandez visited the unit in Basel to gather more information about the microcalorimetry technique. Prof Bonkat published various articles, with Prof André van der Merwe as co-author.

Research activities and outputs:

| | |
|---|----|
| Number of publications: | 15 |
| Congress presentations – International: | 10 |
| Congress presentations – National: | 5 |

Education and training

Drs Jacques Basson and Kenny du Toit passed the final examination of the College of Urologists of South Africa.

Exceptional achievements

Dr André van der Merwe was promoted *ad hominem* to associate professor in Urology. Prof CF Heyns, as President of the Société Internationale d'Urologie (SIU), attended the congress of the SIU in Vancouver, Canada. Prof Heyns is also President of the South African Urological Association for the term 2012-14.

UNIT FOR INFECTION PREVENTION AND CONTROL

HEAD OF DEPARTMENT

Dr WAJ Meintjes

Summary of activities

The Division of Community Health within the Department of Interdisciplinary Health, Faculty of Health Sciences, Stellenbosch University (SU), established the UIPC in 2004, and in 2006 it became an academic unit which was sited in Tygerberg Hospital.

The UIPC is the first academic unit of its kind in Africa. The unit is headed up by Dr WAJ Meintjes, a specialist in Occupational Medicine, who has worked with the UIPC (while under the leadership of Prof. S. Mehtar) for many years. Prof. Mehtar retired at the end of 2012, but continues to be involved in the unit on a consultative basis.

The clinical team includes four IPC Clinical Programme Coordinators (CPCs), two of whom have the Postgraduate Diploma in IPC and two have completed the Fundamentals in IPC short course.

The UIPC provides eight university-registered and accredited training courses in IPC and related subjects. Apart from South Africa, the UIPC has extended its teaching and research programmes to Namibia, Botswana, Swaziland, Zimbabwe, Rwanda and Egypt.

The UIPC is leading and participating in several research programmes which are mainly related to TB-IPC and interventions suitable to low and middle income countries; with emphasis on integrated health and community systems strengthening. The programmes were managed by Dr Frederick Marais, who has left the unit in the beginning of 2013 to assist in strengthening interventions at a provincial level. Research and development in collaboration with the SURMEPI programme,



led by Dr Angela Dramowski, is ongoing and involves training interventions at community level.

Clinical service is provided by the IPC team and is based on outcome of surveillance (in association with the Department of Microbiology) carried out at TBH. At provincial, national and international level, the UIPC advises on IPC-related matters.

The UIPC focuses on, and advocates, integrated research, training and clinical service provision for healthcare facilities (HCFs) and communities in IPC, including TB and blood-borne viruses.

Resources

| | |
|--|---|
| Professor (30% FTE) | 1 |
| Medical Specialist | 1 |
| Senior Medical Officer | 1 |
| IPC Nurses (clinical programme coordinators) | 4 |
| Senior Admin Clerk | 1 |
| Administrative officer | 2 |
| Training coordinator | 1 |
| Intern | 1 |
| Training administrator | 1 |

UNIT FOR INFECTION PREVENTION AND CONTROL

Output

Source:

Clinical service provision:

The UIPC is essentially a clinical support unit, providing a comprehensive IPC service across wards and medical specialities. The role of the UIPC is wide-reaching, including interpretation of the daily pathogen report, frequent ward rounds with individual patient follow-up when indicated, consultation for and direction in the clinical management of patients, antibiotic stewardship, outbreak management and guidance in the management of new emerging infections, IPC risk assessments and identification of areas for IPC strengthening, instigation of IPC audits, surveillance and operational research and interpretation of the data, policy and clinical guideline development, direct liaison with the Department of Microbiology, NHLS, Pharmacy, Heads of medical specialities at TBH, and with Department of Health: Western Cape, and leading and serving on multiple IPC-related committees at local, provincial, national and international level, and in-service- and academic training. The scopes, roles and responsibilities of the medical and nursing specialists in IPC are in line with both the National Infection Prevention and Control Policy and Strategy (DoH 2007) and the National Core Standards (DoH 2011). Since 2011, the IPC has also expanded into the community structures as part of the WCG and SU visions.

The UIPC data management formulates the *daily pathogen report* based on electronic data from the microbiology and immunology laboratory (NHLS). This report assists the UIPC clinical team in guiding and supervising the appropriate clinical management of individual patients, in monitoring outbreaks of infections in various wards and in determining if control measures are effective in reducing Hospital Acquired Infections (HAIs). The UIPC contributes to a major reduction in HAIs at TBH, resulting in considerable cost savings.

In collaboration with the Central Data Warehouse (NHLS), the reporting system (for compilation of the daily pathogen report) is continually improving and increases in accuracy. This, too, reflects a reduction in HAIs.

The UIPC presented and participated in several IPC-related events at TBH during 2013, including:

- The Global Hand Hygiene Day as recommended by the World Health Organisation (WHO), which emphasised the role of hand hygiene in the prevention of HAI
- The provincial IPC Day, an annual event since 2008, is a platform to discuss hot topics in IPC and is very well attended

Comment on output

Although this is the largest unit for IPC in the province, it is still small in comparison with the burden of infection-related morbidity and mortality in the province and the unit experiences a shortage of staff. Despite the limited resources, the UIPC has performed exceptionally well in ensuring a high output and impact.

Part 2

Faculty on Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

The UIPC acquired additional equipment for newly appointed staff. The student room was also expanded, with the provision of workstations for students who spend their time within the unit.

Community outreach programmes / community service and interaction

The unit is involved in the SURMEPI programme of the faculty, providing training in rural areas on matters related to IPC. This is also associated with pre- and post assessments to evaluate the impact of the training.

UNIT FOR INFECTION PREVENTION AND CONTROL

Partnerships

National:

Ongoing work with the Department of Health: Western Cape Government, the National Department of Health and the Western Cape Provincial IPC Committee. Ongoing work with the HSRC.

International:

The UIPC is the headquarters of the Infection Control Africa Network (ICAN), which has members from multiple African countries. Prof. Shaheen Mehtar is the founder and Chair of ICAN. The expansion of education and training, as well as joint projects are ongoing. Visits to several SADC countries (including Swaziland, Namibia and Botswana) for IPC training and audits.

A Memorandum of Understanding was signed between the UIPC and the University of Nijmegen in the Netherlands as a natural progression of an existing relationship. This allows for collaborative research and training initiatives, as well as staff exchanges between the two institutions.

Private sector:

Funding was provided for one IPC training coordinator from the Mediclinic group up to April 2014.

The Unit is also involved in training programmes for the Melomed group.

Service on council and committees:

WHO Task Leader: task group on Decontamination and sterilisation
WHO core group member on Patient Safety Global Alliance
WHO Chair of subcommittee; Safety Injection Global Network
MRC Grants Committee
National Advisory Committee on Immunisation
National Advisory Committee on IPC
Provincial IPC-OHS Committee
Provincial antibiotic stewardship committee
Working Party on Waste Management

WHO/ SIGN- Chair of meeting on Injection Safety

WHO/SIGN- Chair of Best Practices in Phlebotomy

TBH Infection Control Committee

Centre for Infectious Diseases- SUN

Chair: Infection Control Africa Network

Committee member: TB/HIV Care

Organisation, Cape Town

Committee member: TADSA, Cape Town

Achievements with regard to research activities and research outputs

The UIPC remains actively involved in education-related-, as well as operational (clinical) research. A number of publications originated from the unit. The Unit is also involved in research at the postgraduate level and currently has four students enrolled for the MSc (IPC) programme.

Presentations:

The UIPC presented several papers at local, national and international conferences.

Teaching and Training (under-, postgraduate and elective students)

The UIPC delivers a large range of IPC-related training courses at local, national and international level. The courses include Formal academic programmes:

- MSc (Infection Prevention and Control)
 - Postgraduate Diploma in Infection Control
- Sort courses:
- Fundamentals of Infection Prevention and Control
 - IPC for healthcare managers
 - Introduction to IPC for healthcare workers
 - Basic Decontamination and Sterilisation
 - Intermediate Decontamination and Sterilisation
 - Advanced Decontamination and Sterilisation
 - Train-the-Training in IPC
 - TB-IPC for Laboratory Workers
 - IPC for Link-nurses and the link-nurse programme
 - IPC for general assistants and domestic staff

UNIT FOR INFECTION PREVENTION AND CONTROL

The UIPC staff continued with the supervision of six Masters of Nursing degree students from the University of Stellenbosch. The unit also had its

first intake of (four) students for the MSc (IPC) degree programme.

HUMAN NUTRITION

HEAD OF DEPARTMENT

Prof. Reneé Blaauw

Summary of activities

The Division of Human Nutrition consists of three components, namely Service Delivery, Training and Research:

Service delivery

Dietetics at Tygerberg Hospital consists of two blocks and other divisions in order to cover all aspects of nutritional care and to render a comprehensive nutrition service to all areas in the hospital. They are:

Block 1

Burns, Cardiology, Surgery, Surgical and Respiratory Intensive Care Unit (ICU), Diabetes Mellitus and Endocrinology, Internal Medicine, Orthopaedics, Dermatology, Gynaecology, Ophthalmology, Neurosurgery, Enteral Nutrition and Eating Disorders

Block 2

Nephrology, Internal Medicine, Oncology, Paediatrics (all aspects), Enteral Nutrition, and Psychiatry

Total Parenteral Nutrition team

The Adult Total Parenteral Nutrition (TPN) team consists of a nutrition support sister, three dietitians and a medical practitioner, who assists with the TPN prescriptions. A pharmacist provides support for the TPN orders. The Paediatric TPN team consists of one paediatrician and a dietitian, who are assisted by a pharmacist.

Food Services

Food Services handle the menu planning for normal and special diets, quantity and quality control and the monitoring of the meal-ordering-and-diet system (MODS). Food is also provided to one private ward.



Clinics

There is a general on-call service to all clinics in the hospital, for both adult and paediatric patients.

Specialised clinics

The specialised clinics are the Eating Disorders, Nephrology, Diabetic, Abdominal Surgery and Oncology clinics. Consultations on cystic fibrosis and biliary atresia are also done for Paediatric Outpatients.

Health and Lifestyle Clinic (H&L):

Tuesday: Overweight
Thursday: Diabetes Mellitus

HIV Clinic:

Adult and Paediatric

Tube feed Room:

This is a highly specialised area where all tube feeds and supplemental drinks are hygienically prepared and distributed. Staff members consist of six specially trained food service workers. Our division is fully responsible for the administrative and management of the ordering system MODS 2 (the ordering system for tube feeds).

HUMAN NUTRITION

Training

Dietetics comprises three fields of speciality: clinical nutrition, food service management and community nutrition. Undergraduate training is provided in all three fields.

Research

The focus areas for research at the Division of Human Nutrition include: maternal and young

child nutrition linked to community food security, infectious diseases (including HIV, AIDS and TB) and specialised nutrition support (including ICU nutrition and other specialised fields). Food safety and a human rights-based approach are linked to the focus areas as relevant.

Resources:

| Posts (Full-time) | Number | Filled |
|---|--------------|--------|
| Academic posts: | | |
| Professor | 2 | 1 |
| Associate Professor | 1 | 1 |
| Senior Lecturer | 3 | 3 |
| Lecturer | 4 | 4 |
| Junior Lecturer | 1 | 1 |
| Administrative | 3 | 3 |
| Researcher | 1 | 1 |
| NICUS Posts* | | |
| Manager | 1 | 1 |
| Dietitian | 1 | 2 |
| Posts (sessional – how many hours worked per week) | | |
| Part-time posts (5/8) | 4 | 4 |
| Locum posts* | 0 | 0 |
| Full-time equivalents | 0 | 0 |
| NICUS posts* | | |
| Dietitian (3/8) | 1 | 1 |
| Posts in Tygerberg Academic Hospital: Dietetic and other | | |
| Assistant Director | 1 | 1 |
| Chief Dietitian | 4 (ODI = 5) | 4 |
| Production Dietitian | | |
| Grade I | 9 (ODI = 15) | 9 |
| Grade II | | |
| Community-service Dietitian | 1 | 1 |
| Contract posts | 1 | 1 |
| Chief Professional Nurse | 1 | 1 |
| Typist | 1 | 1 |
| Food Service Supervisor | 1 | 0 |
| Food Service Aid | 5 | 5 |

*Private funds

HUMAN NUTRITION

Outout:

| | |
|---|---------|
| Inpatients | |
| Once-off visits | 4 897 |
| Patients seen > 1 once | 12 383 |
| Total visits | 43 004 |
| Informal consultations | 1 856 |
| Tube feeds | 15 662 |
| Supplementary drinks | 13 353 |
| Outpatients | |
| H&L clinic- Diabetes (new) | 56 |
| H&L clinic- Diabetes (follow-ups) | 25 |
| H&L clinic- Weight loss (new) | 81 |
| H&L clinic- Weight loss (follow-ups) | 46 |
| H&L clinic- individual | 24 |
| On-call (adults) | 1 747 |
| On-call (paediatric) | 640 |
| HIV clinic (adults) | 249 |
| HIV clinic (paediatric) | 47 |
| Food Services | |
| Special diets | 140 088 |
| Full diets | 295 950 |
| TPN | |
| New referrals | 196 |
| Total TPN patients | 282 |
| TPN nursing consultations | 6 058 |
| Total ward rounds | 508 |
| Nutrition Support: feeds | |
| New referrals | 100 |
| Patient consultations | 1 923 |
| PEG ¹ patients (new) | 211 |
| PEG ¹ patients (follow-up) | 1 005 |
| Nutrition Information Centre (NICUS) | |
| <i>Advisory service</i> | |
| Correspondence | 2 200 |
| Television | 5 |
| <i>Educational</i> | |
| Radio talks | 43 |
| Lay publications | 35 |
| Talks | 5 |
| Talks to the public | 17 |
| Stikland outreach | |
| Individual consultations | 16 |
| Group activities | 148 |
| Community nutrition | |
| Individual consultations | 1 297 |
| Group activities | 3 046 |

¹Percutaneous endoscopic gastrostomy

HUMAN NUTRITION

Comment on output:

The above statistics include the service provided by the fourth-year dietetic students (contact with patients).

Part 2

Faculty of Medicine and Health Sciences Infrastructure development – upgrading, new equipment, etc. (highlights)

The newly equipped food laboratory are being utilised to facilitate students' practical experience in food preparation and experimentation. Volunteer workers who offered a cooking course to women living in a poor community, rented the facility.

Community outreach programmes/ community services and interaction.

The Community Nutrition Security Project (CNSP)

Data analysis continued for the CNSP baseline study. During 2013, five master students conducted their research within the overarching CNSP project (in addition to the three graduates of 2012): one student obtained the Master of Nutrition during 2013, one student obtained the Master in Clinical Epidemiology and there are two confirmed Master of Nutrition graduates for 2014.

Additionally, three PhD (Nutritional Sciences) students are continuing their research within the bigger project.

Stikland Hospital

Final-year dietetics students support the Stikland Hospital Day Centre with health promotion activities and consultations to patients.

The Road to Health Booklet (RtHB) Study

The first phase of the RtHB study was launched in 2012 in order to investigate the implementation of the new RtHB in healthcare facilities in the Cape Town

Metropole and Cape Winelands district of the Western Cape. Data was collected in 2012 and the results reported to the Department of Health. For 2013, phase 2 was successfully conducted in the Eden and Great Karoo districts and planning for phase 3 is underway.

Collaboration with School Health Service

Fourth-year dietetic students collaborate with a School Health team for a period of one week. The students rotate in groups of 3 to 4 students 8 times a year to provide a service with the School Health Service team for the Metro West district, consisting of a professional nurse and an enrolled nurse.

The School Health Service team do routine screening of Grade 1 learners in order to assess early indications of health problems. Eyes and hearing are tested and a physical examination is performed. Weights and heights are measured by the dietetic students. The data is entered into the WHO AnthroPlus software programme, analysed and presented to the School Health Service team.

The School Health Service team provides feedback to the schools about the nutritional profile of the children. The students also do health education and promotion at the primary schools. They are also afforded an opportunity to do advocacy about the dietetics course and profession to high school learners.

Social Learning for Sustainable Food Systems (SLSFS): NRF-supported research program continued. Under this program, three PhD students in Nutritional Sciences and one PhD student in Sociology continued their studies in 2013. Three Master's students completed their studies in Sustainable Development for graduation in March 2014.

HUMAN NUTRITION

Partnerships

National:

Lecturers provide input in various areas:

- Input regarding the National Tender Document (RT9/12)
- Input in the National Food Service Policy
- Facilitation of finalisation of the Roadmap for the National Nutrition Strategy
- Collaboration with the Institute for Land and Agrarian Studies (PLAAS) at the University of Western Cape on a joint project with the Southern Africa Food Lab, under the auspices of the SU Food Security Initiative

Private:

- Collaboration with the industry through our Glycaemic Index (GI) Laboratory. GI testing is performed on foods upon request from the industry
- Board Membership of Foodbank South Africa
NICUS consultations to industry:
- Food book for the Shoreline Trust
- Pamphlets for Shoprite
- Recipe analysis for Numi Foods
- Food Security Situation of the City of Cape Town
- Consulting Dietitian in sport nutrition: Dis-Chem
- Consultant, sports and energy drink development: SirJuice

International:

Collaboration between Stellenbosch University, the University of Oslo (Norway), Oslo and Akershus University College of Applied Sciences (Norway), Makerere University (Uganda) and Kyambogo University (Uganda) in the Norwegian Programme for Master's Development, the NOMA Project, to develop and deliver cooperative regional Master's Module in "Nutrition, Human Rights and Governance" for two cohorts of students from all three countries: 2011/12 and 2012/2013.

Collaboration between Stellenbosch University and the Vrije University (VU),

Amsterdam, with six Master in Public Health Students completing their research projects in South Africa during 2013. Partnerships were established for further collaboration in 2014.

Achievements with regard to research activities and research outputs:

Number of publications from the department/division

- Journal articles (subsidised) : 26
- Journal articles (non-subsidised) : 3

Invited reviewer of the following scientific journals:

- Public Health Nutrition journal
- Bio Medical Central (Public Health)
- Development Southern Africa journal
- Nurse Educator
- Current Nutrition and Food Science journal
- University of Mauritius Journal
- South African Family Practitioner
- South African Journal of Clinical Nutrition
- South African Family Practice Journal
- Public Health Nutrition
- South African Journal of Sports Medicine
- International Journal of Sport Nutrition and Exercise Metabolism
- South African Journal for Research in Sport, Physical Education and Recreation
- PLOS ONE
- African Journal of Psychiatry
- The International Journal of Applied and Basic Nutritional Sciences (NUTRITION)
- Food Security: The Science, Sociology and Economics of Food Production and Access to Food
- British Journal of Nutrition
- South African Journal of Education

Teaching and Training (undergraduate-, postgraduate- and elective students)

Undergraduate

- Fourth-year Dietetic students : 27
- Third-year Dietetic students : 21
- Second-year Dietetic students : 27
- First-year Dietetic students : 39

HUMAN NUTRITION

Elective students

- Belgium : 7
- Norway : 1

Postgraduate

- Master of Nutrition (Research) : 8
- Master of Nutrition (Structured) : 60
- PhD (Nutritional Sciences) : 8

Master's degrees completed

- Carstens M. The association between glycaemic control and lifestyle habits in adults with type 2 diabetes mellitus attending selected private healthcare practices in Thabazimbi, Limpopo Province. MNutrition, 2013. 123 pp. Study leader: Blaauw R. Co-study leader: Fouche IF
- Goosen C. Factors influencing feeding practices of primary caregivers of infants (0 – 5,9 months) in Avian Park and Zwelethemba, Western Cape, South Africa. MNutrition, 2013. 256 pp. Study leader: McLachlan M. Co-study leader: Schübl C
- Hoosen F. The nutritional profile of high performance junior soccer players in Western Cape, South Africa. MNutrition, 2013. 123 pp. Study leader: Claassen A. Co-study leader: Potgieter S
- Kluys M. An evaluation of knowledge and current trends of omega-3 (n-3) supplementation in parents of children at public primary schools in the City of Cape Town. MNutrition, 2013. 127 pp. Study leader: Marais D. Co-study leader: Smuts CM
- Main CA. To determine the relationship between dietary intake, body composition and incidence of upper respiratory tract infections in triathletes during training and competition for the Ironman®. MNutrition, 2013. 204 pp. Study leader: Potgieter S. Co-study leader: Smith C
- Nel J. Factors contributing to the adequate vitamin a status and poor anthropometric status of 24 to 59 month old children from an impoverished Northern Cape community. MNutrition, 2013. 98 pp. Study

leader: Van Stuijvenberg ME. Co-study leader: Du Plessis IM, Schoeman SE

- Veldsman I. The impact of intravenous fluid and electrolyte administration on total fluid, electrolyte and energy intake in critically ill adult patients. MNutrition, 2013. 179 pp. Study leader: Blaauw R. Co-study leader: Richards GA
- Wolberg C. The influence of vitamin D₃ supplementation on the components of the metabolic syndrome. MNutrition, 2013. 114 pp. Study leader: Herselman MG. Co-study leader: Hough FS

PhD degrees completed

- Masibo PK. Effects of initial nutritional status on the responses to a school feeding programme among school children aged 6 to 13 years in the millennium villages project, Siaya, Kenya. PhD, 2013. 315 pp. Promoter: Labadarios D. Co-promoters: Herselman MG, Etyyang G, Deckelbaum RJ.
- Potgieter S. The effect of caffeine supplementation on olympic-distance triathletes and triathlon performance in the Western Cape, South Africa. PhD 2013. 317 pp. Promoter: Smith C. Co-promoters: Wright HH, Warnich I.
- Venter I. Development and evaluation of a food frequency questionnaire to assess daily total flavonoid intake using a rooibos intervention study model. PhD, 2013. 513 pp. Promoter: Marnewick JL. Co-promoter: Herselman MG.

Special achievements and other highlights

Service to committees

- Member of the organising committee for the Clinical Supervision Course
- Quality Assurance Committee
- South African Society for Parenteral and Enteral Nutrition (SASPEN) President and Council
- Critical Care Congress Organising and Scientific Committee
- Co-Regional Editor for the International Journal of Applied and Basic Nutritional Sciences (NUTRITION)

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- Editorial Assistant for the South African Journal of Clinical Nutrition
- Member of the National Working group to review the South African Paediatric-based Dietary Guidelines
- Member of the Provincial Technical Working Group: Infant and Child Nutrition. (This is an advisory subcommittee to the Department of Health Provincial Co-ordinating committee for Child Health)
- Member of the Advisory group on Health Promoting Schools to the Vice-Dean Community Interaction, Faculty of Medicine and Health Sciences, Stellenbosch University
- Member of the Health Promoting Schools Forum (network between universities/government departments/NGOs and CBOs)
- Breastfeeding consultant for the lay publication: "Baba en Kleuter "/ "Baby and Toddler"
- Member of the Advisory Committee for Maties Community Service
- Member of the IMBEWU-GESOG Committee to recruit students from disadvantaged backgrounds
- Inter-professional Education working group of the Faculty of Medicine and Health Sciences
- Allied Health Professions Graduate Attribute committee of the Faculty of Medicine and Health Sciences
- Bishop Lavis facility committee
- Bishop Lavis Rehabilitation Centre committee
- Member of working group: Hospital Dietitians (PGWC)
- Member of Core Committee for Allied Health Professions at Tygerberg Hospital
- Member of Breastfeeding Committee of Tygerberg Hospital
- Member of Provincial Food Service Management Menus Task Team
- Member of Provincial Ration Scales Task Team
- Member of Provincial Economical Meals Task Team
- Member of Provincial ARV Task Team
- Member of Provincial NTP policy Task Team
- Infant and young child feeding working group, Nutrition Subdirector, Department of Health, Provincial Government of the Western Cape
- Member of the Health Research Ethics Committee (Stellenbosch University), two members (vice-chair)
- Chair Wellness Committee of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Executive committee of the South African Sports Medicine Association (SASMA)
- Executive committee of the Association for Dietetics South Africa- Sport Nutrition Working Group (ADSA-SNWG)
- International Society for the Advancement of Kinanthropometry (ISAK) member and accreditation as level 1 and level 2 anthropometrist
- American College of Sports Medicine Professional member

International presentations

- Dhansay MA, Blaauw R, Downs J, Koornhof HE, Kuzwayo PNM, Mbhenyane X, Moeng TL, Vorster HH. EIGHTEENTH ICN (SOUTH AFRICA, 2005) profit invested in a sustainable university dietetics and nutrition grant programme – a success story. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain
- Blaauw R, Koornhof HE, Marais ML, Du Plessis LM, Daniels L. From urban platform to rural communities. Service-Learning across the globe: From local to transnational. Stias, Stellenbosch University, 20 to 22 November 2013.
- Blaauw R, Marais M, HE Koornhof, du Plessis LM, Visser J. Utilizing the Service-Learning Paradigm to Redesign Students' Research Experience. Service-Learning across the globe: From local to transnational. Stias, Stellenbosch University, 20 to 22 November 2013.

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- Marais ML, Blaauw R, Visser J, Koornhof HE, Iversen PO, Eide WB, Andreassen BA, Oshaug A, Rukundo P, Kikafunda JK, Rukooko AB, Kaaya A. Linking nutrition, human rights and governance: a teaching initiative collaboratively developed for master students from three different countries. Service-Learning across the globe: From local to transnational. Stias, Stellenbosch University, 20 to 22 November 2013.

National presentations

- Potgieter S. The effect of caffeine supplementation on Olympic distance triathlon performance. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, August 2013
- Potgieter S. The effect of caffeine supplementation on Olympic distance triathlon performance. Department of Physiological Sciences, Faculty of Science, Stellenbosch University, October 2013
- Potgieter S. Protein for optimal adaptation and recovery. Fifteenth Biennial Congress of the South African Sports Medicine Association (SASMA). Wild Coast Sun, South Africa, 24 to 27 October 2013
- Visser J. Peri-operative nutrition – worth the bother? ASSA (Association of Surgeons of South Africa) Congress, 13 to 16 March 2013, East London International Convention Centre, East London, South Africa
- Visser J. Targets – one size fits all? Eleventh Congress of the World Federation of Societies of Intensive and Critical Care Medicine, 28 August – 1 September 2013, Durban International Convention Centre, Durban, South Africa
- Stevenson C, Blaauw R, Fredericks E, Visser J, Roux S. Randomised clinical trial: Effect of *Lactobacillus plantarum* 299v on symptoms of irritable bowel syndrome. SAGES Congress, 16 to 18 August 2013, Drakensberg, South Africa

International poster presentations

- Blaauw R, Du Plessis LM, Koornhof HEK, Marais ML, Nel DG, Visser J, Visser ME. Growth monitoring and promotion practices in primary health care facilities in the Western Cape Province, South Africa. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain
- Viljoen E, Visser J, Koen N, Musekiwa A. A systematic review of the effect and safety of ginger in the treatment of pregnancy-associated nausea and vomiting. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain
- Nel M, Marais ML, Potgieter S. The adaptation of an appropriate screening tool for the early detection of malnutrition in individuals with intellectual disability (ID) in a psychiatric hospital in North West Province (South Africa). International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition 15 to 20 September 2013. Granada, Spain
- Rukundo PM, Kikafunda JK, Rukooko AB, Kaaya A, Marais ML, Blaauw R, Eide WB, Andreassen BA, Iversen PO, Oshaug A. Linking nutrition, human rights and governance for nutrition policy: collaborative capacity development in Uganda, South Africa and Norway. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition 15 to 20 September 2013. Granada, Spain
- Bredenhann E, Marais ML, Kassier S. A reliable method of evaluating nutritional intake of male mineworkers residing in mine accommodation on a platinum mine (South Africa). International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain

HUMAN NUTRITION

- Du Plessis LM, Herselman MH, McLachlan MH, Nel JH. Infant and Young Child Feeding practices in vulnerable communities in the Breede Valley, Western Cape Province, South Africa. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain
- Dhansay MA, Schoeman SE, Nel J, Le Roux M, Van Stuijvenberg ME. When research study and nutrition program implementation timelines clash – a case report on vitamin a supplementation from South Africa. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain
- Van Stuijvenberg M, Schoeman S, Nel J, Dhansay M. Implications of frequent liver consumption among pregnant women from a low socio-economic south african community. International Union of Nutrition Sciences, 20th International congress of Nutrition, Joining Cultures through Nutrition, 15 to 20 September 2013. Granada, Spain

Published Abstracts

- Blaauw R, Du Plessis LM, Koornhof HE, Marais ML, Nel DG, Visser J, Visser ME. Growth monitoring and promotion practices in primary health care facilities in the Western Cape Province, South Africa. *Ann Nutr Metab* 2013; 63(suppl1): 1436-1437.
- Du Plessis LM, Herselman MH, McLachlan MH, Nel JH. Infant and Young Child Feeding practices in vulnerable communities in the Breede Valley, Western Cape Province, South Africa. *Ann Nutr Metab* 2013; 63(suppl1) 631
- Nel M, Marais ML, Potgieter S. The adaptation of an appropriate screening tool for the early detection of malnutrition in individuals with intellectual disability (ID) in a psychiatric hospital in North West Province (South Africa). *Ann Nutr Metab* 2013; 63(suppl1)

- Viljoen E, Visser J, Koen N, Musekiwa A. A systematic review of the effect and safety of ginger in the treatment of pregnancy-associated nausea and vomiting. *Ann Nutr Metab* 2013; 63(suppl1): 691
- Stevenson C, Blaauw R, Fredericks E, Visser J, Roux S. Randomised clinical trial: Effect of *Lactobacillus plantarum* 299v on symptoms of irritable bowel syndrome. *S Afr Med J* 2013; 103(8): 571-572

Journal Articles (subsidised)

- Cloete I, Daniels L, Jordaan J, Derbyshire C, Volmink L, Schübl C. Knowledge and perceptions of nursing staff on the new Road to Health Booklet growth charts in primary healthcare clinics in the Tygerberg subdistrict of the Cape Town metropole district. *South African Journal of Clinical Nutrition* 2013; 26(3):141-146
- Davies HR, Visser J, Tomlinson M, Rotherham-borus MJ, Gissane C, Harwood. An investigation into utilising gestational body mass index as a screening tool for adverse birth outcomes and maternal morbidities in a group of pregnant women in Khayelitsha. *South African Journal of Clinical Nutrition* 2013;26(3):116-122
- Drimie S, Faber M, Vearey J, Nunez L. Dietary diversity of formal and informal residents in Johannesburg, South Africa. *BMC Public Health* 2013;13(911):doi: 10.1186/1471-2458-13-911
- Du Plessis LM, Kruger HS, Sweet L. Complementary feeding: a critical window of opportunity from six months onwards. *South African Journal of Clinical Nutrition* 2013;26(3):S129-S140
- Du Plessis LM, Pereira C. Commitment and capacity for the support of breastfeeding in South Africa: a paediatric food-based dietary guideline. *South African Journal of Clinical Nutrition* 2013;26(3):S120-S128
- Esau N, Koen N, Herselman MG. Adaptation of the RenalSmart web-based application for the dietary management of patients with diabetic nephropathy. *South African*

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- Journal of Clinical Nutrition 2013;26(3):132-140
- Grobler L, Siegfried N, Visser ME, Mahlangu S, Volmink J. Nutritional interventions for reducing morbidity and mortality in people with HIV. *Cochrane Database of Systematic Reviews* 2013; 2 : 0
 - Gründlingh H, Herselman MG, Iversen PO. An assessment of the implementation of the National Therapeutic Programme for pregnant women within the City of Cape Town district. *South African Medical Journal* 2013;103(8): 549-551
 - Innes S, Sculte-kemna E, Cotton MF, Zöllner EW, Haubrich R, Klinker H, Sun X, Jain S, Edson C, Van Niekerk M, Innes ER, Rabie H, Brown S. Biceps skin-fold thickness may detect and predict early lipodystrophy in HIV-infected children. *Paediatric Infectious Disease Journal* 2013;32(6): e254-e262
 - Kirsten AP, Marais D, Schübl C. The influence of socio-demographic factors on the nutritional status of children in the Stellenbosch area, Western Cape. *South African Journal of Clinical Nutrition* 2013;26(3): 24-131
 - Labuschagne IL, Van Niekerk E, Lombard MJ. Acidified infant formula explained. *South African Family Practice* 2013;55(3):354-356
 - Lombard MJ, Laubschagne I. Introducing solid foods. *South African Family Practice* 2013;55(1):56-58
 - Lombard L, Du Plessis, Visser J. Body composition of rheumatoid arthritis patients in the City of Cape Town, South Africa. *Clinical Rheumatology* 2013; Epub ahead of print:1-10
 - Lombard MJ, Steyn N, Burger H-M, Charlton K, Senekal M. A food photograph series for identifying portion sizes of culturally specific dishes in rural areas with high incidence of oesophageal cancer. *Nutrients* 2013;5:3118-3130
 - Lombard MJ, Steyn N, Burger H-M, Charlton K, Senekal M, Gelderblom W. A proposed method to determine fumonisin exposure from maize consumption in a rural South African population using a culturally appropriate FFQ. *Public Health Nutrition* 2013;17(1):131-138
 - Mavengahama S, McLachlan M, De Clercq W. The role of wild vegetable species in household food security in maize-based subsistence cropping systems. *Food Security* 2013;DOI 10.1007/s12571-013-0243-2:1-10
 - McLachlan M, Drimie S. Food security in South Africa-first steps toward a transdisciplinary approach. *Food Security* 2013; 0241(4):1-10
 - McLachlan M, Landman AP. Nutrition-sensitive agriculture – a South African perspective. *Food Security* 2013;5:857-871
 - Mugambi MN, Musekwa A, Lombard MJ, Young T, Blaauw R. Association between funding source, methodological quality and research outcomes in randomized controlled trials of synbiotics, probiotics and prebiotics added to infant formula: A Systematic Review. *BMC Medical Research Methodology* 2013;13: 0
 - Nel J, Van Stuijvenberg ME, Schoeman SE, Dhansay MA, Lombard C, Du Plessis LM. Liver intake in 24-59-month-old children from an impoverished South African community provides enough vitamin A to meet requirements. *Public Health Nutrition* 2013; doi:10.1017/S1368980013003212:1-8
 - Owens CJW, Labuschagne I, Lombard MJ. Prescribing infant formula. *South African Family Practice* 2013;55(2):123-131
 - Potgieter S. Sport nutrition: A review of the latest guidelines for exercise and sport nutrition from the American College of Sport Nutrition, the International Olympic Committee and the International Society for Sports Nutrition. *South African Journal of Clinical Nutrition* 2013;1(26):6-16
 - Roos J, Ruthven GA, Lombard MJ, McLachlan M. Food availability and accessibility in the local food distribution system of a low-income, urban community in Worcester, in the Western Cape Province. *South African Journal of Clinical Nutrition* 2013;26(4):194-200

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- Schoonees A, Nel ED, Lombard MJ, Musekiwa A, Volmink JA. Ready-to-use therapeutic food for home-based treatment of severe acute malnutrition in children from six months to five years of age. *Cochrane Database of Systematic Reviews* 2013;6:0
- Visser J, McLachlan M, Fergusson P, Volmink JA, Garner P. Supplementary feeding for food insecure, vulnerable and malnourished populations – an overview of systematic reviews (Protocol). *Cochrane Database of Systematic Reviews* 2013;6: 0.
- Waddel S, McLachlan M, Dentoni D. Learning and transformative networks to address wicked problems: A GOLDEN Invitation. *International Food and Agribusiness Management Review* 2013;16(A):23-31

Journal Articles (Non-subsidised)

- Lombard L, Du Plessis LM, Visser J. Nutrition: essential management component in RA. *South African Rheumatology Journal* 2013;1:18-22
- Labuschagne I. Nutrition and ADHD: The role of elimination diets. *Pedmed* 2013; 2
- Labuschagne I. Constipation in children. *Pedmed* 2013; 4

Research Reports

- Conference report, 20th International Congress of Nutrition (IUNS) 15 to 20 September 2013 Granada Spain – R Blaauw
- Conference report, 20th International Congress of Nutrition (IUNS) 15 to 20 September 2013 Granada Spain – J Visser
- Conference report, 15th Biennial Congress Wild Coast Sun 24 to 27 October 2013 Durban South Africa – S Potgieter

Editorials (non-subsidised)

- Battersby J, McLachlan M. Urban food insecurity: A neglected public health challenge (Editorial). *South African Medical Journal* 2013;103(10):716-717
- Du Plessis LM. Infant and young child feeding in South Africa: stop the crying, beloved country (Editorial). *South African Journal of Clinical Nutrition* 2013;26(1):4-5
- Visser J, Herselman MG. Anaemia in South Africa: the past, the present and the future (Editorial). *South African Journal of Clinical Nutrition* 2013; 6(4):166-167

OCCUPATIONAL THERAPY

HEAD OF DEPARTMENT

Mr E Williams

Summary of activities:

The past year can be described as a 'wave of change' for the Department of Occupational Therapy (OT), characterised by various infrastructural and human resource changes. Despite all these exciting and challenging developments, the Department continued to deliver a comprehensive occupational therapy service to both children and adults of all ages, who experienced disruption in their daily activities of self-care, education, socialisation and work, due to ill health, disease or disability. As part of the World Health Organisation (WHO) Millennium Development Goals, various national- and provincial strategic drivers in health care, the Department continued to participate in various service improvement initiatives within the Metro District region, as well as within Tygerberg Hospital, aimed at improving health and wellness of the persons served by:

- Initiating and convening a multi-disciplinary Grade R learner school readiness programme, aimed at facilitating the entry of learners into mainstream school
- Participating in monthly Early Intervention Clinics with the goal of identifying and assessing patients between the ages of 1 to 3 years who are at "high risk" for developmental delays, e.g. premature babies
- Establishing a Congenital Hands Clinic in collaboration with the Hands Department to prevent secondary and lifelong complications associated with congenital hand conditions
- Leading a weekly Basic and Advanced Paediatric Seating Clinic to provide seating devices for all in and out patients referred within the catchment area, as well providing training to caregivers.



- Delivery of a comprehensive OT service to all 13 inpatient paediatric wards within Tygerberg Hospital, consisting of ward-based early screening and development stimulation programmes (individual- and caregiver-based) and provision of assistive devices, such as splinting, buggies, posture chairs and wheelchairs
- Establishment of a Life skills Groups for adolescents focussing on issues such as sexual and reproductive health, through the Department of Child and Adolescent Psychiatry at Tygerberg Hospital
- Delivery of monthly Fibromyalgia Support Groups for patients and caregivers living in communities and who have difficulty in adjusting and coping with the illness
- Delivery of interdisciplinary Socio-Emotional Groups for burn survivors to address the myriad of socio-emotional difficulties associated with the traumatic injuries
- Establishment of a weekly Lymphedema Outpatient Clinic
- Delivery of weekly outpatient Hands and Pressure Garments Clinics
- Establishment of an 8 week Work Skills Programme facilitating sustainable work placement and return to work strategies for patients referred to the Work Assessment Unit
- Initiation of the Metro Hand Work Group by Occupational Therapists from Tygerberg Hospital to streamline treatment guidelines

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across the different levels of care within the District Health System

- Continuation of the Paediatric and Work Assessment Interest Groups to address service delivery issues guidelines across the different levels of care within the District Health System

Despite the efforts of the Department of Occupational Therapy to deliver excellent services to the persons serve, we have to acknowledge the various challenges affecting service delivery. These are, but are not limited to:

- Patients are referred to Occupational Therapy too late, especially for mobility assistive devices
- There are still too few Occupational Therapists for the amount of patients in Tygerberg Hospital, especially in the areas of Paediatrics, Neurology, Neurosurgery and Psychiatry services
- The rapid turnover of entry level therapists has made it very difficult to provide consistent services
- Appropriate clinical courses are expensive and at times not approved
- Referral to other levels of services within the District Health system remains a challenge. This results in too large an outpatient load seen by the therapists at Tygerberg Hospital, which makes seeing inpatients earlier very difficult. Evidence indicates that early Occupational Therapy intervention is best to prevent or reduce long term negative impact of most health problems where Occupational Therapy is indicated, e.g. low weight births
- Consumable resources for child and adult psychiatric group activities are very limited

Resources:

- **A new Head of Department was appointed in October 2013.**

| Posts (Full-time) | Number | Filled |
|--|--------|--------|
| Head of Department | 1 | 1 |
| Occupational Therapy Supervisor | 4 | 4 |
| Occupational Therapy Clinicians | 8 | 8 |
| Occupational Therapy Community Service | 0 | 0 |
| Occupational Therapy Technicians | 5 | 5 |

Output:

- Surgery (Amputation, Burns, Hands, Orthopaedics, Plastics, Internal Medicine, Pressure Garments, Rheumatology, Lymphoedema) 7 181
- Neurology and Neurosurgery1 714
- Paediatrics.....3 154
- Psychiatry:
 - Adult1 675
 - Child and Adolescent Unit1 491
- Work Assessment 1 722
- Total:16 937**
- Total in 2012.....13 706

Comment on output:

Although there has been an increase in the numbers of patients seen in the Department of Occupational Therapy in 2013 (16 937) in comparison to 2012 (13 706), it must be noted that the overall statistics reflected in 2012 (13 706), did not include the November and December 2012 data, due to the unavailability of statistics from the data management system, Clinicom. When examining areas such as Paediatrics, data shows a significant increase (2 072 in 2012) in headcount numbers since the appointment of the inpatient OT in March, as well as the appointment of the locum OT end of April 2013. In addition, the outpatient seating and splinting clinic managed to see a total of 574

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patients for the year 2013, which shows a 10% increase in comparison to 2012. When looking closely at the Surgery Workgroup, it must also be noted that despite challenges of the renovations and the suspension of the Lymphedema Clinic, the area statistics increased from 6 563 in 2012 to 7 181 in 2013, indicating a 20% increase in the overall headcounts. This can be attributed to the appointment of two locum OT's for the period ending December 2013. Due to the absence of an HOD from April 2013 to October 2013, many of the Chief OT's assumed additional managerial responsibilities, impacting on their ability to deliver efficient clinical services. This can be reflected in the area of Neurology and Neurosurgery, where the overall statistics show a minimal increase from 1 697 in 2012 to 1 714 in 2013.

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

- During the period of June to October 2013, the Department underwent various structural renovations resulting in an improved environment of care for the persons served
- Areas that were upgraded included the Hands and Pressure Garment areas; an outpatient treatment wing that enables therapists to provide functional treatment in a safe, confidential and patient friendly environment
- As part of the renovations, the OT Department also received a newly built “transitional living” treatment area that enables therapists to engage patients in simulated tasks of bathing, toileting and dressing, thus teaching them self-care skills needed to reintegrate to their homes and communities post discharge
- In addition, the Child and Adult Psychiatry inpatient serve areas also underwent improvement, resulting in the relocation of the respective wards

- A Bosch Foam Curver (valued at R5 500,00) was acquired to assist in fabrication and modification customised seating supports for patients using mobility assistive devices
- The following equipment was received from the 2012/2013 Equipment List:
 - Hands Mobile Treatment trolley for the outpatient clinic;
 - Burns Mobile Trolley for the inpatient wards;
- A standardised Valpar work sample was approved, but not yet received

Community outreach programmes/ community services and interaction.

The Marketing committee of the OT Department was responsible for marketing the OT profession to patients and caregivers and the services offered at Tygerberg Hospital, using key health calendar days to promote the Millennium Development Goals. The following is a breakdown of the events for 2013:

• Open Day – 12 September 2013

- The following information were shared and/or demonstrated to visitors to the OT exhibition:
- The role of the OT at Tygerberg Hospital
 - Advocating OT intervention and health promoting messages covering lifestyle and compliance
 - Pamphlets covering all areas of OT (Paediatrics, Psychiatry, Neurology and Neurosurgery, Surgery and Work Assessment) were given to visitors depending on the needs
 - Various splints, self-care and mobility assistive devices were on display
 - Referral procedures were explained
 - Bought and donated gifts were distributed to remind people of OT services at Tygerberg Hospital
 - Advice required and functional problems experienced by individuals visiting the stall were addressed by referring them to the OT services in their communities or

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providing them with information or appointment dates

- **Mental Health Day – 10 October 2013**

Theme: "Depression in Older Adults". The purpose was to reduce the stigma and create awareness and understanding. A talk was done and booklets with information on depression distributed.

- **Occupational Therapy Week – 20-26 October 2013**

Participants visiting the hospital completed a quiz and prizes were given to the winners.

- **International HIV and AIDS Day – 1 December 2013**

Theme: "Getting to Zero". A booklet with ABC (Abstain, Be faithful, Condomise) was distributed to encourage safe sex practice. A quiz was developed to test knowledge, and in this way accurate information was shared with participants on HIV and AIDs. The Booklet also focuses on the Link between HIV and TB (Tuberculosis).

- **International Day for People with Disabilities – 3 December 2013**

Theme: "Breaking Barriers, Open Doors For An Inclusive Society And Development For All". Public and private employers, recruiters, supervisors and colleagues of people with disabilities were made aware and encouraged to alter the way they responded to people with disability in the workplace. Pamphlets were designed and distributed electronically and delivered to nearby businesses. People with disabilities were themselves encouraged to apply for jobs with the emphasis that "there are possibilities in the world of work for people with disabilities".

Partnerships

National:

- The collaboration between the National Department of Human Settlements (HS) and the OT Department continued in 2013. People with disability in the GSA of TBH were issued mobility assistive devices when approached by DHS as part of their service delivery approach to housing and disability
- Various therapists in the OT Department are active members of Occupational Therapy Association of South Africa (OTASA)

Private:

- An agreement is in place for the Work Assessment Unit to use the driving simulator at USABENZA (Work Assessment Unit in Occupational Therapy Department at the University of Stellenbosch) to assess clients who attend the Work Assessment Unit at Tygerberg Hospital
- Partnerships with a number of placement and learnership agencies, such as McDonalds, Woolworths and Jive Cooldrinks, has been strengthened and this created strong referral pathways to assist work assessments clients back into the workforce (placement statistics have increased from 6,4% in 2011 to 8,9% in 2012 and 7,1% in 2013)
- Collaboration with CE MOBILITY and SHONAQUIP as part of their corporate social responsibility, for product training and for collaborative efforts to assist with patients who require complex seating

Achievements with regard to research activities and research outputs:

- Joint research study by Stellenbosch fourth-year Occupational Therapy Students and Hands therapist, L. Melton: The Stiff Hand
- "Treating a patient with a Burns injury" – Anjanet Liebenberg (Burns OT) – ongoing

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Teaching and Training (undergraduate-, postgraduate- and elective students)

- A presentation to preliminary students and their parents are done quarterly to introduce them to the role of the Occupational Therapist and the Occupational Therapy services offered at Tygerberg Hospital
- In addition, Grade 12 learners have been accommodated for job shadowing in the Department
- Continuous supervision of third- and fourth-year Occupational Therapy students in all areas of Occupational Therapy (Neurology/Neurosurgery, Adult and Child Psychiatry, Surgery and Work Assessment)
- Supervision of elective students from various universities in South Africa, America and Belgium

- Nurses Training on the Role of Occupational Therapy within Hands and Orthopaedics: 6/5/13
- Some staff has attended courses in line with their development plan and for HPCSA requirements
- One Chief OT completed her Masters at Stellenbosch University, while one commenced her Masters in OT at UWC

Special achievements and other highlights

The Occupational Therapy Department continues to play an active role in advancing the MDG's in the public sector and Health Care 2030, through involvement in:

- Metro Paediatrics Interest Group
- Metro Hand Interest Group
- Work Practise Interest Group

PHYSIOTHERAPY

HEAD OF DEPARTMENT

Ms Anne-Marie Swart

Summary of activities:

The job purpose of a physiotherapist is to provide a holistic clinical service consisting of curative, preventative, rehabilitative and health-promotive procedures in the fields of respiratory, neurology and orthopaedic therapy.

Clinical services provided by TBH Physiotherapy Department:

- Inpatient service to all wards of TBH (wards D4, J1 and J3 have locum services)
- Limited afterhours and weekend duties
- Outpatient service to clients residing in the catchment area of TBH
- Outpatient consultation in complex cases referred from other clinics
- Outpatient monitoring of certain elective procedures for example shoulder replacements
- Specialist outpatient clinics: Hands clinic, CF (Craniofacial) assessments

Education: The TBH Physiotherapy Department is involved in education and training of staff, students and the public through various programmes.

Resources:

| Posts (Full-time) | Number | Filled |
|--|-----------|-----------|
| Assistant Director | 1 | 1 |
| Chief Physiotherapists | 4 and 5/8 | 4 and 5/8 |
| Physiotherapists Grade 1 and 2 | 13 | 13 |
| Community Service Physiotherapist | 1 | 1 |
| Sessional locum physiotherapy services | | |



Output:

January to December 2013 statistics totalled **48 904** patient attendances (Inpatients and OPD) by TBH physiotherapy staff and students – and an additional **3 036** attendances from weekend duty. GRAND TOTAL = **51 940**

Comment on output:

- The total attendances for 2013 (**51 940**) remained constant when compared to the totals for 2012 (**50 638**).
- The Physiotherapy Department has managed to continue delivering a physiotherapy service to in- and outpatients despite a limited staff capacity – considering the recommended staffing levels in the ODI report
- The additional beds opened in TBH after the KDH shift caused an increased workload that could not be absorbed. A locum physiotherapist was appointed.
- There is a continued increase in the complexity of cases referred.
- High turnover of patients and quick discharges due to a high demand for beds caused an increased demand on physiotherapy services.

PHYSIOTHERAPY

Part 2

Infrastructure development – upgrading, new equipment, etc. (highlights)

- Work commenced on improving the air conditioning system on the west side of the department
- Network points were installed for additional computers (ECM roll-out)
- Capital equipment approved for purchase:
 - 1 x electric treatment plinth
 - 1 x electric tilting table

Achievements with regard to research activities and research outputs:

Participation in research activities:

- One physiotherapist assisted an orthopaedic surgeon with measurements for his research project
- One physiotherapist conducted clinical research as part of M.Sc. Physiotherapy studies

Teaching and Training (undergraduate-, postgraduate- and elective students)

Staff

- All physiotherapists attended at least one WCG course or had special leave to attend a private course or seminar
- Kinetic Handling lectures and demonstrations were given to TBH staff

Students

- The Department accommodates undergraduate and postgraduate students from UWC and SU Physiotherapy Departments. Students from other SA universities are accommodated on elective placements.

| Student Placements 2013 | | Number of final clinical exams accommodated |
|-------------------------|--------------------|---|
| University | Number of Students | |
| SU II | 60 | 20 |
| SU III | 39 | 13 |
| SU IV | 75 | 41 |
| SU OMT MSc | 6 | |
| UWC II | 179 | 8 |
| UWC III | 20 | 10 |
| UWC IV | 35 | 15 |
| Elective placements | 2 | |

- The Department co-ordinated a visit by the UCT Physiotherapy students to the TBH Burns Unit
- Training was provided to MB CHB final-year students regarding Orthopaedic Physiotherapy Practice as part of their Orthopaedic Clinical Rotation at TBH

Public

- Participation in TBH initiatives: TBH Open Day and Rheumatology Open Day
- Two Open Days for scholars interested in studying Physiotherapy were held

Special achievements and other highlights

- Representation on committees/portfolios outside Physiotherapy Department:
 - Occupational Health and Safety Committee – involvement with OH&S Risk Assessments and Ergonomics Subcommittee
 - Transformation Committee – representative served as Vice-chairperson
- One Chief Physiotherapist assisted UWC Physiotherapy Department as external examiner during their final clinical exams
- ASD served on a working group for the National Disability and Rehabilitation Task Team

SPEECH THERAPY & AUDIOLOGY

HEAD OF DEPARTMENT

Ms H. Elliott

Summary of Activities:

Assessment and management of adults and children with communication, swallowing and hearing difficulties.

Services are provided to both in- and outpatients.

Areas of Service Delivery include:

Adult and paediatric dysphagia;

Neurologically-based communication disorders;

Paediatric developmental speech and communication disorders (0-6 years);

Autistic Spectrum Disorder;

Cleft Lip and Palate;

Head and Neck Oncology;

Fluency disorders;

Voice pathologies;

Adult and paediatric diagnostic hearing assessments (including neonatal hearing screening);



Adult and paediatric hearing aid fitting and rehabilitation;

Cochlear implant assessments and management;

Parent and patient support groups

Wards covered:

A1, A5, A4, A8, A9, C1D, D2, D3, D4, D5, D8, D9, G1, G2, G3, G4, G5, G7, G8, G9, G10, J2, J3, J7, H1/2X

Resources:

| Posts (Full-time) | Number | Filled |
|--|--------|------------------------------------|
| Speech Therapy and Audiology Clinic | | |
| Assistant Director | 1 | 1 |
| Speech Therapists: | | |
| Senior Speech-Language Therapist | 3 | 3 |
| Chief Speech-Language Therapist | 1 | 1 |
| Audiologists: | | |
| Senior Audiologist | 3 | 2, one vacant from 1/07-31/12/2013 |
| Chief Audiologist | 1 | 1 |
| Cochlear Implant Unit: | | |
| Chief Audiologist | 3 | 3 |
| Chief Audiologist 5/8 | 1 | 1 |
| Posts (sessional) | | |
| Senior Audiologist (30 hours) | 1 | 1 |

SPEECH THERAPY & AUDIOLOGY

Output:

Outpatient visits: (Jan-Dec 2013)

Audiology: 9008

Speech therapy: 2827

Inpatient treatments: (Jan-Dec 2013)

Audiology: 958

Speech therapy: 1687

Total: (Jan-Dec 2013)

Audiology: 9966

Speech therapy: 4514

Assistive devices issued:

600 state-issued hearing aids

10 state-funded cochlear implants

100 state-issued Provox's

Comment on output:

- Due to the lack of posts at other levels of care, our department services a large number of outpatients from within our catchment area. Therefore, outpatient statistics far exceed inpatient contacts. Post creation at other levels of care is necessary to address this imbalance. Lack of awareness of the professions of Speech Therapy and Audiology remains a challenge in this regard
- The Neonatal Hearing Screening program has contributed to an increase in paediatric outpatients requiring re-screening or diagnostic assessments

Part 2

Faculty of Health Sciences

Infrastructure development – upgrading, new equipment, etc. (highlights)

- The newly acquired screening Automated Auditory Brainstem Response (AABR) testing unit allowed us to adjust our Neonatal Hearing Screening Protocol and improve the efficacy and efficiency of testing for infants screened before discharge

Community outreach programmes/community services and interaction.

The Cochlear Implant Unit provides ongoing support and training to Cochlear implant satellite clinics in East London, Port Elizabeth and Windhoek.

Our department provided training to stroke support groups in an attempt to facilitate communication-based support groups in the absence of Speech Therapists in these areas. We spoke to OT's at Elsie's River and Michael Mapongwana Day Hospital in Khayelitsha regarding the stroke groups. We also trained seven Speech Therapists (public and privately employed) in the facilitation of groups for adult stroke patients.

We initiated a paediatric forum with Speech Therapists at Red Cross and Khayelitsha District Hospitals, which met once a quarter in 2013, to extend our expertise and to help them cope with their caseload. It culminated in a Screening Day at Red Cross Hospital where therapists from the different hospitals met to try and tackle the excessive waiting list of the Red Cross Hospital Speech Therapy Department.

Partnerships

Achievements w.r.t research activities and research outputs:

- One staff member is busy with her Masters Degree in Audiology, one is busy with her Masters Degree in Speech-Language Therapy and another is busy with her Masters Degree in Public Health
- Our department was involved in a research project looking at HIV and Hearing Loss in Children, in collaboration with San Diego University, Division of Speech, Language and Hearing Therapy, US, and Kid-Cru Unit, US. This resulted in three poster presentations at WSPID Congress in November 2013.

SPEECH THERAPY & AUDIOLOGY

• PRESENTATIONS

- Derrick Wagenfeld and Lida Müller. Challenges influencing paediatric cochlear implant outcomes in emerging populations. Australian Hearing Hub, Sydney, Australia, 17 – 19 April 2013
- Lida Müller. Cochlear Implantation in Auditory Neuropathy Spectrum Disorder: Our Experience. SACIG Academic Meeting, Johannesburg, 4 May 2013
- Jenny Perold. Communication challenges and solutions. Hear2Day Constantiaberg Chapter, Cape Town, 12 June 2013
- Pieter Naudé, JW Loock, AMU Müller. The aetiology of hearing loss in the paediatric cochlear implant programme, Tygerberg Hospital. Poster presentation at the Academic Year Day of the Faculty of Health Sciences, Stellenbosch University, 14 and 15 August 2013
- Lida Müller. Demystifying Cochlear Implants. Tygerberg Hospital, Faculty of Health Sciences, Stellenbosch University, 28 August 2013
- Jenny Perold. Music and cochlear implants. Hear2Day Constantiaberg Chapter, Cape Town, 4 September 2013
- Derrick Wagenfeld and Lida Müller. Challenges influencing paediatric cochlear implant outcomes in emerging populations. ENT/SAHNOS/SASLHA/SAAA Congress, Bloemfontein, 28 September 2013
- Pieter Naudé, JW Loock, AMU Müller. The aetiology of hearing loss in the paediatric cochlear implant programme, Tygerberg Hospital. ENT/SAHNOS/SASLHA/SAAA Congress, Bloemfontein, 29 September 2013

Teaching and Training (undergraduate, postgraduate and elective students)

- All staff members were involved in weekly clinical supervision of Speech therapy and Audiology undergraduate students from the University of Stellenbosch (US) and the University of Cape Town (UCT). This included UCT Clinical Audiology blocks in Electrophysiological procedures and Paediatric test procedures, US Clinical speech therapy blocks in early intervention, paediatric speech and language disorders, adult voice and dysfluency
- Our department provides ongoing Clinical Audiology lectures to fifth-year US medical students on ENT rotation
- Certain staff members are involved in teaching to undergraduate UCT and US students in the fields of Speech Therapy and Audiology
- All staff members were involved in formal and informal in-service training to TBH staff
- Course presented: Listening and Spoken Language: South Africa (LSLSA) Short Course registered in the Department Speech Language and Hearing Therapy, University Stellenbosch. Barbara Kellett (affiliated to Cochlear Implant team) was a co-presenter. The course also involved individual and group mentoring for 10 months for the registered students.

Special achievements and other highlights

TBH Speech Therapist J. de Grass was sent to SANRA as part of TBH's multidisciplinary stroke team (along with PT and OT) to represent our hospital and broaden her expertise in this area. It has led to her starting her Masters Degree in this area in 2013 at Stellenbosch University

VOLUNTARY AID SERVICE

CHAIRPERSON

Mrs F MacClune

Committee members

| | |
|---------------|---|
| Mrs G Scott | Vice – Chairperson |
| Mrs L Layman | |
| Mrs R Rogers | |
| Mrs P Oliver | |
| Mrs M Rhooode | |
| Mrs M Arendse | |
| Mrs H Rudman | |
| Mrs M Parker | Accountant |
| Mrs M de Jage | Head of Social Work Unit (officially) |
| Ms Z Vallie | Occupational Therapist (per invitation) |

Personnel

The organiser, cashier/stock controller, manager of the catering service, six kitchen personnel, one shop assistant at the pharmacy and one shop assistant at kiosk exit 1 are all compensated by Voluntary Aid Service.

General

After 40 years the Voluntary Aid Service at Tygerberg Hospital still renders a service to patients and personnel. The volunteers display love and devotion in their work all over the hospital. The qualified and dedicated administrative staff ensures effective service despite a shortage of volunteers.

Services

A total of 77 members at different working points rendered 6 325 hours of service in total. During the school holidays 23 junior volunteers worked 350 hours. The following areas were served:

- Ward visits and wards duty
- Children's Wards
- Hairdressing service: Hair care for 800 patients
- Shop trolley to wards, clinics and pharmacy
- Gene Louw Building, Radiotherapy Department: catering service and hair wash for patients



- Christmas project: 680 gifts were handed out in the children's wards, including patients in the Gene Louw Building, psychiatric wards and the Burns Unit
- Gift shop/Tuck shop
- Catering service on ground floor, theatres and pharmacy; free refreshments are provided to six-yearsixth year medical students during examinations
- Uniform shop for nursing and other personnel in the Peninsula and rural districts
- Weekend service: Gift- and tuck-shoptuck shop
- Assistance at CSSD and the Milk Kitchen

Need alleviation

Applications for financial assistance for needy patients are received on a regular basis. In cooperation with the Social Work Unit, financial assistance and food parcels are given to patients. In addition a number of patients are assisted with transport money.

| | |
|---|-------------|
| Total amount paid out for Need Alleviation: | |
| Petty cash | R42 000.00 |
| Food parcel | R110 000.00 |
| | R152 000.00 |

VOLUNTARY AID SERVICE

Special projects

| Some of the donations made to the hospital: | |
|---|--------------------|
| Transport money and sandwiches, Occupational Therapy Department | R3 600.00 |
| Prize for best Occupational Therapy student | R500.00 |
| Five chairs for office – Head, Occupational Therapy Department | R1 245.00 |
| Toiletries and underwear, Wards D-Lower ground and D-Ground | R1 326.69 |
| Track Suits and Slippers, Psychiatry patients | R1 638.61 |
| Transit Lounge Transport | R1 988.00 |
| Transit Lounge Tea and Sandwiches | R1 987.33 |
| Diabetic Patients' Sandwiches | R263.00 |
| CEO Office Plants | R6 787.00 |
| Christmas Project | R1 579.07 |
| Tea and sandwiches, sixth year medical students | R1 240.00 |
| Curtains, Ward J2 | R24 000.00 |
| Blinds, Ward D5 | R20 400.00 |
| 2 x Microwave Ovens, CSSD | R999.00 |
| 8 x Chairs Upholstry, Mrs R Basson's office | R7 982.00 |
| Refreshments, Event, Ms Majiet | R519.90 |
| Breast Cancer Awareness, Sr September, Refreshments | R1 500.00 |
| Ms Majiet, HIV Lecture, Refreshments | R640.00 |
| Hairdressing service equipment, laundry of towels, etc. | R1 892.37 |
| Donation, Strategic Planning, March 2013, Hospital Facility Board | R12 000.00 |
| Repairs and re-upholstery of chair, Waiting Room, Ward F1 | R3 520.00 |
| Total amount paid out for Hospital Projects | R95 607.97 |
| Total amount spent on Need Alleviation | R152 000.00 |
| Total amount spend | R247 607.97 |

STATISTICS

Inpatient Statistics 2013

| Ward | Actual Beds | Useable Beds | % Occ (a) | % Occ (u) | Cum. Admis | Total Admis | Ward Int Trans In | Cum. Disch | Total Disch | Deaths | Day Patients | Ward Int Trans Out | Inpatient Days | Patient Days | Avg Los |
|---------------------------------|-------------|--------------|-----------|-----------|------------|-------------|-------------------|------------|-------------|--------|--------------|--------------------|----------------|--------------|---------|
| A1 Burns | 22 | 22 | 81,2 | 81,2 | 30 | 29 | 1 | 35 | 29 | 3 | 0 | 3 | 554 | 554 | 15,8 |
| A1 Surgical ICU | 12 | 12 | 101,1 | 101,1 | 78 | 6 | 72 | 79 | 0 | 4 | 0 | 75 | 376 | 376 | 4,8 |
| A10 Metab | 14 | 14 | 39,1 | 39,1 | 30 | 25 | 5 | 34 | 28 | 0 | 1 | 5 | 169 | 170 | 5,0 |
| A2 Thoracic Surg High Care | 10 | 10 | 110,0 | 110,0 | 52 | 15 | 37 | 60 | 49 | 0 | 0 | 11 | 341 | 341 | 5,7 |
| A2 Thoracic Surg ICU | 14 | 14 | 44,2 | 44,2 | 29 | 1 | 28 | 34 | 2 | 0 | 0 | 32 | 192 | 192 | 5,6 |
| A3H Orthopaedics | 31 | 31 | 84,2 | 84,2 | 157 | 147 | 10 | 157 | 149 | 0 | 1 | 7 | 809 | 810 | 5,2 |
| A3W Orthopaedics | 31 | 31 | 80,6 | 80,6 | 78 | 69 | 9 | 82 | 69 | 1 | 0 | 12 | 775 | 775 | 9,5 |
| A4E Neuro Surg + Thoracic Surg | 31 | 31 | 51,2 | 51,2 | 35 | 14 | 21 | 44 | 37 | 0 | 0 | 7 | 492 | 492 | 11,2 |
| A4W Neuro Surg High Care | 18 | 18 | 125,1 | 125,1 | 87 | 53 | 34 | 86 | 66 | 2 | 0 | 18 | 698 | 698 | 8,1 |
| A4W Neuro Surg ICU | 12 | 12 | 11,0 | 11,0 | 12 | 2 | 10 | 11 | 0 | 1 | 0 | 10 | 41 | 41 | 3,7 |
| A5E Respiratory ICU | 7 | 7 | 80,2 | 80,2 | 38 | 15 | 23 | 41 | 1 | 11 | 0 | 29 | 174 | 174 | 4,2 |
| A5W Internal Meds High Care | 13 | 13 | 94,5 | 94,5 | 71 | 5 | 66 | 75 | 22 | 5 | 0 | 48 | 381 | 381 | 5,1 |
| A6 Cardiology High Care | 16 | 16 | 74,7 | 74,7 | 106 | 49 | 57 | 109 | 78 | 0 | 3 | 28 | 369 | 371 | 3,4 |
| A6 Cardiology ICU | 8 | 8 | 68,3 | 68,3 | 79 | 56 | 23 | 79 | 21 | 4 | 1 | 53 | 169 | 170 | 2,1 |
| A7 Renal High Care | 6 | 6 | 97,3 | 97,3 | 34 | 30 | 4 | 37 | 34 | 2 | 0 | 1 | 181 | 181 | 4,9 |
| A7 Renal ICU | 4 | 4 | 3,2 | 3,2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 4 | 4 | 4,0 |
| A8 Internal Medicine | 28 | 28 | 83,3 | 83,3 | 107 | 0 | 107 | 113 | 88 | 13 | 0 | 12 | 723 | 723 | 6,4 |
| A8W Dermatology + Neurology | 27 | 27 | 67,1 | 67,1 | 57 | 41 | 16 | 64 | 51 | 0 | 2 | 11 | 561 | 562 | 8,8 |
| A9 Neonatal ICU | 8 | 8 | 143,5 | 143,5 | 45 | 26 | 19 | 45 | 2 | 10 | 0 | 33 | 356 | 356 | 7,9 |
| A9 Paediatric High Care | 4 | 4 | 66,9 | 66,9 | 13 | 1 | 12 | 16 | 2 | 1 | 0 | 13 | 83 | 83 | 5,2 |
| A9 Paediatric ICU | 10 | 10 | 86,5 | 86,5 | 69 | 24 | 45 | 63 | 1 | 8 | 0 | 54 | 268 | 268 | 4,3 |
| A9 Paediatric Trachea | 6 | 6 | 64,0 | 64,0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 119 | 0,0 |
| B5E Day Surgery | 15 | 15 | 13,3 | 13,3 | 127 | 125 | 2 | 127 | 1 | 0 | 124 | 2 | 0 | 62 | 0,5 |
| C1A Triage (Wardattenders Only) | 0 | 0 | 0,0 | 0,0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,0 |
| C1D Resus | 4 | 4 | 114,5 | 114,5 | 94 | 66 | 28 | 96 | 2 | 15 | 0 | 79 | 142 | 142 | 1,5 |
| C1D Trauma + Surgery | 23 | 23 | 193,1 | 193,1 | 598 | 587 | 11 | 609 | 328 | 10 | 33 | 238 | 1 360 | 1 377 | 2,3 |
| C2A East | 12 | 12 | 65,3 | 65,3 | 50 | 15 | 35 | 49 | 21 | 0 | 0 | 28 | 243 | 243 | 5,0 |
| C2A Labour Ward | 19 | 19 | 141,4 | 141,4 | 886 | 692 | 194 | 886 | 54 | 33 | 10 | 789 | 828 | 833 | 0,9 |
| C2A Labour Ward High Care | 4 | 4 | 71,4 | 71,4 | 50 | 10 | 40 | 47 | 1 | 2 | 1 | 43 | 88 | 89 | 1,9 |
| D Ground - Psychiatry | 14 | 14 | 63,1 | 63,1 | 20 | 4 | 16 | 21 | 20 | 0 | 0 | 1 | 274 | 274 | 13,0 |
| D1 Vascular Surgery | 22 | 22 | 99,0 | 99,0 | 77 | 23 | 54 | 78 | 50 | 1 | 0 | 27 | 675 | 675 | 8,7 |
| D10 Internal Medicine | 30 | 30 | 84,4 | 84,4 | 94 | 2 | 92 | 100 | 86 | 7 | 0 | 7 | 785 | 785 | 7,9 |
| D2 Abdominal Surgery | 31 | 31 | 74,6 | 74,6 | 116 | 37 | 79 | 122 | 81 | 5 | 7 | 29 | 713 | 717 | 5,9 |
| D3 Plastic/Reconstructive Surg | 25 | 25 | 54,2 | 54,2 | 99 | 87 | 12 | 97 | 90 | 0 | 0 | 7 | 420 | 420 | 4,3 |
| D4 Private + Cardiology | 29 | 29 | 50,7 | 50,7 | 93 | 66 | 27 | 95 | 74 | 1 | 4 | 16 | 454 | 456 | 4,8 |
| D5 Abdom +Head/Neck and Breast | 31 | 31 | 72,2 | 72,2 | 100 | 19 | 81 | 115 | 84 | 3 | 0 | 28 | 694 | 694 | 6,0 |
| D6 Urology | 32 | 32 | 60,5 | 60,5 | 88 | 51 | 37 | 101 | 96 | 0 | 0 | 5 | 600 | 600 | 5,9 |
| D7 Ophthalmology | 32 | 32 | 55,2 | 55,2 | 168 | 159 | 9 | 176 | 156 | 0 | 11 | 9 | 542 | 548 | 3,1 |

STATISTICS

Inpatient Statistics 2013

| | | | | | | | | | | | | | | |
|--------------------------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|------------|------------|--------------|---------------|---------------|------------|
| D8 Internal Medicine | 28 | 74,9 | 74,9 | 91 | 59 | 32 | 91 | 68 | 7 | 10 | 6 | 645 | 650 | 7,1 |
| D9 Internal Medicine | 29 | 84,8 | 84,8 | 119 | 3 | 116 | 127 | 107 | 14 | 0 | 6 | 762 | 762 | 6,0 |
| DLG Psychiatry (GLG) | 12 | 94,4 | 94,4 | 23 | 21 | 2 | 23 | 10 | 0 | 0 | 13 | 351 | 351 | 15,3 |
| F1 Medical Emergency | 20 | 193,1 | 193,1 | 871 | 847 | 24 | 850 | 336 | 34 | 49 | 431 | 1 173 | 1 198 | 1,4 |
| F1 Medical Emergency High Care | 6 | 45,2 | 45,2 | 84 | 67 | 17 | 88 | 12 | 30 | 0 | 46 | 84 | 84 | 1,0 |
| F2M Obstetrics Antenatal | 34 | 70,9 | 70,9 | 292 | 122 | 170 | 293 | 135 | 0 | 5 | 153 | 745 | 748 | 2,6 |
| F4 Orthopaedics | 32 | 68,1 | 68,1 | 71 | 58 | 13 | 77 | 66 | 1 | 1 | 9 | 675 | 676 | 8,8 |
| FGR Gynaecology | 24 | 70,2 | 70,2 | 122 | 102 | 20 | 122 | 98 | 3 | 2 | 19 | 521 | 522 | 4,3 |
| G Lower Ground - Psychiatry | 16 | 82,7 | 82,7 | 10 | 9 | 1 | 14 | 14 | 0 | 0 | 0 | 410 | 410 | 29,3 |
| G1 Neonatal Medicine | 30 | 94,1 | 94,1 | 88 | 31 | 57 | 90 | 63 | 1 | 1 | 25 | 875 | 876 | 9,7 |
| G10 Paediatric Medicine | 30 | 41,3 | 41,3 | 86 | 9 | 77 | 89 | 75 | 0 | 0 | 14 | 384 | 384 | 4,3 |
| G2 Neonatal Medicine | 27 | 105,5 | 105,5 | 186 | 186 | 0 | 188 | 45 | 3 | 0 | 140 | 883 | 883 | 4,7 |
| G3 Paediatric Oncology | 18 | 64,0 | 64,0 | 59 | 53 | 6 | 59 | 43 | 0 | 12 | 4 | 351 | 357 | 6,1 |
| G4 Paediatric Surgery | 27 | 63,7 | 63,7 | 139 | 103 | 36 | 130 | 108 | 0 | 8 | 14 | 529 | 533 | 4,1 |
| G5 Ear, Nose & Throat | 19 | 49,2 | 49,2 | 66 | 55 | 11 | 75 | 61 | 3 | 0 | 11 | 290 | 290 | 3,9 |
| G6LM Paediatric Orthopaedics | 25 | 73,3 | 73,3 | 69 | 63 | 6 | 75 | 72 | 0 | 0 | 3 | 568 | 568 | 7,6 |
| G7 Paed Infectious Diseases | 23 | 78,4 | 78,4 | 37 | 20 | 17 | 47 | 38 | 0 | 4 | 5 | 557 | 559 | 11,9 |
| G8 Neonatology / KMC | 30 | 91,3 | 91,3 | 70 | 1 | 69 | 68 | 64 | 0 | 0 | 4 | 849 | 849 | 12,5 |
| G9 Paed Internal Medicine | 30 | 56,6 | 56,6 | 115 | 75 | 40 | 128 | 100 | 3 | 10 | 15 | 521 | 526 | 4,1 |
| GG Paediatric Emergency | 24 | 54,4 | 54,4 | 372 | 371 | 1 | 367 | 196 | 0 | 54 | 117 | 378 | 405 | 1,1 |
| H1X Radiation Oncology | 21 | 86,3 | 86,3 | 52 | 33 | 19 | 52 | 45 | 2 | 1 | 4 | 561 | 562 | 10,8 |
| H2X Radiation Oncology | 26 | 72,5 | 72,5 | 63 | 52 | 11 | 73 | 65 | 4 | 2 | 2 | 583 | 584 | 8,0 |
| J1 Medical / Surgical | 28 | 91,9 | 91,9 | 101 | 2 | 99 | 109 | 85 | 12 | 0 | 12 | 798 | 798 | 7,3 |
| J2M Obstetrics Post Natal | 27 | 77,7 | 77,7 | 304 | 60 | 244 | 306 | 261 | 0 | 2 | 43 | 649 | 650 | 2,1 |
| J3 Neonatology | 25 | 108,3 | 108,3 | 69 | 0 | 69 | 72 | 61 | 0 | 0 | 11 | 839 | 839 | 11,7 |
| J4 Gynaecology | 33 | 53,5 | 53,5 | 177 | 107 | 70 | 197 | 177 | 1 | 3 | 16 | 546 | 548 | 2,8 |
| J5B Obst Post Neonatal | 0 | 0,0 | 0,0 | 8 | 7 | 1 | 8 | 8 | 0 | 0 | 0 | 23 | 23 | 2,9 |
| J5M Obstetrics Post Natal | 23 | 58,0 | 58,0 | 350 | 27 | 323 | 343 | 315 | 0 | 21 | 7 | 403 | 414 | 1,2 |
| J6 Orthopaedics | 29 | 70,6 | 70,6 | 63 | 52 | 11 | 67 | 59 | 1 | 0 | 7 | 635 | 635 | 9,5 |
| J7 Trauma Surgery | 31 | 90,1 | 90,1 | 125 | 76 | 49 | 126 | 103 | 3 | 0 | 20 | 866 | 866 | 6,9 |
| R1 West (PACU) | 2 | 66,1 | 66,1 | 10 | 0 | 10 | 10 | 0 | 0 | 0 | 10 | 41 | 41 | 4,1 |
| X(Close) - A9M | 0 | 0,0 | 0,0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0,0 |
| X(Close)-A9 Paed/Neonat ICU | 0 | 0,0 | 0,0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 0,0 |
| X(Close)J3B Neo Meds01/04/06 | 0 | 0,0 | 0,0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0,0 |
| Report Total: | 1 384 | 77,9 | 77,9 | 8 161 | 5 222 | 2 939 | 8 349 | 4 763 | 264 | 383 | 2 939 | 33 210 | 33 402 | N/A |

STATISTICS

NATIONAL THEATRE 2013

| Theatre | Under 30 min | 30 - 60 min | Over 60 min | Total |
|---|--------------|-------------|-------------|-------|
| TBH C6AT UROLOGY/CYSTOSCOPY | 1321 | 486 | 200 | 1747 |
| TBH B1AB ABDOMINAL/NEURO/RECONSTRUCTIVE | 499 | 227 | 848 | 1478 |
| TBH B3QR PAEDS SURGERY/ORTHO | 15 | 73 | 490 | 527 |
| TBH B3UV TRAUMA/ORTHO | 109 | 279 | 579 | 873 |
| TBH C1AT BURNS ADULTS | 91 | 224 | 306 | 620 |
| TBH C2AT OBSTETRICS | 79 | 1127 | 1109 | 2237 |
| TBH C4B THEATRE | 148 | 944 | 935 | 1687 |
| TBH C5BT DAY CASE SURGERY | 553 | 721 | 696 | 1880 |
| TBH C8DT CARDIOLOGY CATHETER LAB | 585 | 633 | 369 | 1390 |
| TBH B1CD EMERGENCY/SURGERY | 405 | 880 | 2403 | 3534 |
| TBH CGW KOEBERG THEATRE | 257 | 656 | 1776 | 2140 |
| TBH B1EF CARDIO THORACIC | 107 | 322 | 1218 | 1613 |
| TBH B1GH ADOMINAL/PAEDS/VAS/MAMM | 38 | 205 | 1171 | 1360 |
| TBH B1J ENT | 30 | 162 | 642 | 697 |
| TBH B1IJ SHARED ENT+UROLOGY | 25 | 235 | 824 | 1030 |
| TBH B3ST GYNAECOLOGY | 19 | 141 | 722 | 797 |
| TBH B3WX ORTHOPAEDICS | 30 | 254 | 940 | 1140 |
| TBH B3YZ OPHTHALMOLOGY | 184 | 636 | 854 | 1545 |
| | 4495 | 8205 | 16082 | 26295 |

Outpatient Statistics Attendance Rates 2013

| Specialty | Attended Not Treated | Attended | Not Recorded | Walk-ins |
|---------------------------|----------------------|----------------|--------------|----------------|
| Gynaecology | 321 | 19 854 | 4 | 13 904 |
| Maternity | 377 | 47 031 | 2 | 20 765 |
| Medicine | 1 827 | 142 765 | 15 | 32 192 |
| Non Specialist as per DoH | 381 | 60 121 | 32 | 99 101 |
| Orthopaedics | 800 | 27 258 | 1 | 5 031 |
| Paediatrics | 158 | 22 781 | 1 | 15 401 |
| Psychiatry | 48 | 4 684 | 4 | 1 922 |
| Surgery | 1 682 | 80 568 | 17 | 36 771 |
| Grand Total | 5 594 | 405 062 | 76 | 225 087 |

Service Groups Visits 2013

| 2013 | Head Count | | Visit Count | |
|----------------------|-------------|-------------|--------------|-------------|
| | FOL | NEW | FOL | NEW |
| Service Group | | | | |
| Clinical Psychology | 205 | 80 | 274 | 109 |
| Human Nut/Dietetics | 34 | 47 | 570 | 270 |
| Occupational Therapy | 1315 | 571 | 3094 | 1342 |
| Physiotherapy | 446 | 117 | 8355 | 1506 |
| Podiatry | 137 | 35 | 138 | 35 |
| Radiotherapy | 2380 | 239 | 3820 | 355 |
| Social Work | 1170 | 813 | 3378 | 2192 |
| Speech Thy/Audiology | 1028 | 432 | 1133 | 503 |
| Stomalthrapy RN | 292 | 35 | 830 | 144 |
| Grand Total | 7007 | 2369 | 21592 | 6456 |

STATISTICS

OUT PATIENT STATISTICS 2013

| Specialty | Clinic Name | New/Fol | Head Count | Attendances | |
|-------------------------------------|----------------------|---------------------|---------------|---------------|-------|
| Specialty Group: Gynaecology | | | 29 803 | 33 597 | |
| Gynaecological Endocrinology | C3BW Gyn Endocrine | FOL | 570 | 576 | |
| | | NEW | 186 | 187 | |
| Gynaecological Oncology | C3BW Gyn Carcinoma | FOL | 1 884 | 1 998 | |
| | | NEW | 307 | 520 | |
| | C3BW Gyn Colposcopy | FOL | 1 737 | 1 779 | |
| | | NEW | 1 428 | 1 466 | |
| | Use for WA-stats | FOL | 2 | 2 | |
| | Gynaecology | C2A Family Planning | FOL | 1 049 | 1 398 |
| NEW | | | 4 720 | 6 403 | |
| C2AW Gyn Emergency | | FOL | 1 086 | 1 211 | |
| | | NEW | 2 272 | 2 498 | |
| C3BW Gyn Cytology | | FOL | 134 | 134 | |
| | | NEW | 112 | 117 | |
| C3BW Gyn Evaluation | | FOL | 1 093 | 1 230 | |
| | | NEW | 216 | 244 | |
| C3BW Gyn Follow/Up | | FOL | 5 366 | 5 760 | |
| | | NEW | 357 | 391 | |
| C3BW Gyn New | | FOL | 886 | 965 | |
| | | NEW | 2 714 | 2 854 | |
| C3BW Gyn TOP | | FOL | 693 | 759 | |
| | | NEW | 1 032 | 1 086 | |
| C3BW Gyn Urology | | FOL | 1 195 | 1 244 | |
| | | NEW | 313 | 323 | |
| Use for WA-stats | | FOL | 36 | 36 | |
| | | NEW | 27 | 27 | |
| Reproductive Medicine | | E3 Reprodu Androlo | FOL | 81 | 82 |
| | | | NEW | 307 | 307 |
| Specialty Group: Maternity | | | 46 150 | 61 115 | |
| Obstetrics | C2AO Obst Fetal Eval | FOL | 2 734 | 5 971 | |
| | | NEW | 229 | 376 | |
| | C2AW Obst Emergency | FOL | 4 101 | 4 520 | |
| | | NEW | 5 026 | 5 376 | |
| | C2BO Obst Sonar | FOL | 3 947 | 9 610 | |
| | | NEW | 411 | 877 | |
| | C3BO Obst Diabetics | FOL | 1 339 | 1 448 | |

STATISTICS

| | | | | |
|----------------------------------|----------------------|-----|----------------|----------------|
| | | NEW | 17 | 18 |
| | C3BO Obst High Risks | FOL | 23 281 | 27 296 |
| | | NEW | 3 218 | 3 605 |
| | C3BO Obst New Antena | FOL | 19 | 29 |
| | | NEW | 23 | 35 |
| | C3BO Obst Postpartum | FOL | 724 | 764 |
| | | NEW | 35 | 39 |
| | C3BO Obst Spec Care | FOL | 1 013 | 1 116 |
| | | NEW | 32 | 34 |
| | Use for WA-stats | NEW | 1 | 1 |
| Specialty Group: Medicine | | | 178 506 | 215 253 |
| Cardiology | A6 Cardio Exam Room | FOL | 270 | 390 |
| | | NEW | 728 | 863 |
| | A6W CardioStress ECG | FOL | 373 | 784 |
| | | NEW | 204 | 261 |
| | C8 Tread Research | FOL | 1 288 | 1 328 |
| | | NEW | 14 | 18 |
| | C8BO Cardio ECG | FOL | 1 292 | 5 831 |
| | | NEW | 716 | 3 529 |
| | C8BW Cardio Echogram | FOL | 659 | 2 111 |
| | | NEW | 264 | 1 018 |
| | C8BW Cardio Pacemake | FOL | 1 008 | 1 040 |
| | | NEW | 19 | 20 |
| | C8BW Cardiology | FOL | 4 701 | 6 057 |
| | | NEW | 422 | 485 |
| C8BW Lipid-Medicine | FOL | 450 | 491 | |
| | NEW | 22 | 22 | |
| | Use for WA-stats | FOL | 17 | 17 |
| Clinical Haematology | XHG Bone Marrow | FOL | 246 | 262 |
| | | NEW | 25 | 29 |
| Community Medicine | Use for WA-stats | FOL | 3 | 3 |
| Dermatology | C8CW Derma General | FOL | 10 568 | 11 047 |
| | | NEW | 3 713 | 4 002 |
| | C8CW PUVA | FOL | 575 | 584 |
| Emergency Medicine | F1 Med Emergency | FOL | 1 291 | 1 513 |
| | | NEW | 4 322 | 4 953 |
| | Use for WA-stats | FOL | 1 | 1 |
| Endocrinology | C7CW Endocrine | FOL | 1 784 | 1 856 |
| | | NEW | 531 | 556 |
| | C7CW Spec Diabetics | FOL | 2 238 | 2 355 |

STATISTICS

| | | | | |
|---------------------|----------------------|-----|--------|--------|
| | | NEW | 202 | 214 |
| | Use for WA-stats | FOL | 5 | 5 |
| Gastroenterology | C7BW Gastr Entrolo | FOL | 14 074 | 15 885 |
| | | NEW | 2 691 | 3 890 |
| | E4 Private Gastro | FOL | 9 | 11 |
| | | NEW | 2 | 8 |
| General Medicine | C8BO Gen Medicine | FOL | 6 510 | 7 622 |
| | | NEW | 2 022 | 2 290 |
| | Use for WA-stats | FOL | 4 048 | 4 048 |
| General Paediatrics | C3AW Ped Pharmacy | FOL | 134 | 141 |
| | | NEW | 16 | 16 |
| | Use for WA-stats | FOL | 4 | 4 |
| Geriatric Medicine | C8BO Geriatrics | FOL | 310 | 358 |
| | | NEW | 36 | 51 |
| | Use for WA-stats | FOL | 13 | 13 |
| Infectious Diseases | C8AO ARV Repeat Meds | FOL | 7 288 | 7 456 |
| | | NEW | 30 | 34 |
| | C8AO Infectious Dis | FOL | 8 642 | 9 213 |
| | | NEW | 857 | 953 |
| Neonatal Medicine | C3AW Ped Premature | FOL | 407 | 450 |
| | | NEW | 38 | 41 |
| | C3AW Prem High Risk | FOL | 2 635 | 2 859 |
| | | NEW | 330 | 353 |
| | Use for WA-stats | FOL | 13 | 13 |
| Nephrology | A7 Renal-Hemo Dialys | FOL | 7 948 | 8 157 |
| | | NEW | 55 | 58 |
| | A7 Renal-Organ Trspl | FOL | 1 860 | 2 009 |
| | | NEW | 11 | 13 |
| | A7 Renal-Peritoneal | FOL | 785 | 841 |
| | | NEW | 2 | 2 |
| | C7CO Nephrology (H1) | FOL | 2 347 | 2 503 |
| | | NEW | 350 | 372 |
| Use for WA-stats | FOL | 28 | 28 | |
| Neurology | A8 Neuro Laboratory | FOL | 21 | 28 |
| | | NEW | 20 | 170 |
| | C7C EEG-Lab (H1) | FOL | 188 | 210 |
| | | NEW | 539 | 557 |
| | C7CW Epileptic (H1) | NEW | 0 | 1 |
| | C7CW Neurology (H1) | FOL | 4 024 | 4 191 |
| NEW | | 749 | 785 | |
| | C8C EMG Laboratory | FOL | 171 | 176 |

STATISTICS

| | | | | |
|---------------------------|----------------------|-----|-------|--------|
| | | NEW | 155 | 162 |
| | Use for WA-stats | FOL | 38 | 38 |
| Nuclear Medicine | C10 Isotopes | FOL | 1 534 | 1 833 |
| | | NEW | 1 707 | 2 090 |
| | XHG PET-CT Centre | FOL | 377 | 415 |
| | | NEW | 502 | 595 |
| Occupational Health | C8AW Occupat Health | FOL | 785 | 811 |
| | | NEW | 439 | 443 |
| | C8AW Sickbay | FOL | 1 848 | 1 918 |
| | | NEW | 332 | 344 |
| Paed Allergy | C3AW Ped Allergy | FOL | 755 | 859 |
| | | NEW | 75 | 80 |
| Paed Cardiology | C3AW Ped Cardiology | FOL | 978 | 1 129 |
| | | NEW | 118 | 132 |
| | Use for WA-stats | FOL | 3 | 3 |
| Paed Clinical Haematology | C3AW Ped Haematology | FOL | 322 | 332 |
| | | NEW | 54 | 54 |
| | Use for WA-stats | FOL | 7 | 7 |
| Paed Clinical Immunology | C3AW Ped Immunology | FOL | 210 | 237 |
| | | NEW | 15 | 16 |
| Paed Dermatology | C8CW Dermatology Ped | FOL | 2 | 2 |
| | | NEW | 1 | 2 |
| Paed Emergency Medicine | C3AW NOBS Aftercare | FOL | 1 | 1 |
| | J1 Ped Emergenc24/7 | FOL | 2 560 | 2 804 |
| | | NEW | 9 991 | 10 806 |
| | Use for WA-stats | FOL | 29 | 29 |
| Paed Endocrinology | C3AW Ped Endo/Diabet | FOL | 1 444 | 1 537 |
| | | NEW | 100 | 105 |
| | Use for WA-stats | FOL | 3 | 3 |
| Paed Gastro-Enterology | C3AW Ped Gastro Ente | FOL | 811 | 879 |
| | | NEW | 80 | 88 |
| | Use for WA-stats | FOL | 25 | 25 |
| Paed Human Genetics | C3AW Ped Congenital | FOL | 691 | 764 |
| | | NEW | 57 | 67 |
| | Use for WA-stats | FOL | 1 | 1 |
| Paed Infectious diseases | C3AH Ped Congen Infe | FOL | 1 259 | 1 409 |
| | | NEW | 457 | 488 |
| | J8 Infectious Clinic | FOL | 1 616 | 1 699 |
| | | NEW | 136 | 149 |
| | Use for WA-stats | FOL | 34 | 34 |
| Paed Intensive Care | Use for WA-stats | FOL | 18 | 18 |

STATISTICS

| | | | | |
|---------------------------|----------------------|-----|-------|-------|
| Paed Medical Oncology | C3AW Ped Oncology | FOL | 368 | 385 |
| | | NEW | 10 | 11 |
| | G3 Ped Onco/Hema | FOL | 910 | 962 |
| | | NEW | 110 | 116 |
| | Use for WA-stats | FOL | 16 | 16 |
| Paed Nephrology | C3AW Ped Nephrology | FOL | 1 526 | 1 712 |
| | | NEW | 67 | 72 |
| | Use for WA-stats | FOL | 10 | 10 |
| Paed Neurology | C3AW Ped Neurology | FOL | 3 039 | 3 150 |
| | | NEW | 444 | 466 |
| | Use for WA-stats | FOL | 2 | 2 |
| Paed Respiratory Medicine | C3AW Ped Respiratory | FOL | 1 437 | 1 799 |
| | | NEW | 81 | 95 |
| | Use for WA-stats | FOL | 17 | 17 |
| Paed Rheumatology | C7C Paed Rheumatolog | FOL | 367 | 391 |
| | | NEW | 22 | 24 |
| | Use for WA-stats | FOL | 7 | 7 |
| Radiation Oncology | C5BO Pain Clin -XHG | FOL | 705 | 734 |
| | | NEW | 58 | 61 |
| | XHG Brochial RadioTh | FOL | 708 | 940 |
| | | NEW | 62 | 86 |
| | XHG Chemotherapy | FOL | 3 271 | 6 619 |
| | | NEW | 517 | 1 309 |
| | XHG Derma Radiothera | FOL | 164 | 177 |
| | | NEW | 28 | 33 |
| | XHG ENT Radiotherap | FOL | 1 467 | 1 825 |
| | | NEW | 171 | 253 |
| | XHG GIT Radiotherapy | FOL | 2 392 | 2 843 |
| | | NEW | 204 | 241 |
| | XHG Gamma Radioterap | FOL | 176 | 300 |
| | | NEW | 0 | 3 |
| | XHG Gynae/Urol RAT | FOL | 1 896 | 2 415 |
| | | NEW | 214 | 277 |
| | XHG Haematology | FOL | 6 492 | 7 515 |
| | | NEW | 318 | 375 |
| | XHG Head+Neck Radiot | FOL | 447 | 542 |
| | | NEW | 43 | 49 |
| | XHG Mammae RadioTher | FOL | 518 | 564 |
| | | NEW | 4 | 4 |
| | XHG Neurology RadThe | FOL | 216 | 244 |
| | | NEW | 38 | 41 |

STATISTICS

| | | | | |
|---|----------------------|-------------------|---------------|----------------|
| | XHG Radioth Planning | FOL | 1 730 | 2 573 |
| | | NEW | 184 | 262 |
| | XHG Sarcoma RadTerap | FOL | 106 | 142 |
| | | NEW | 35 | 40 |
| | XHG Thyroid Radiothe | FOL | 0 | 1 |
| | XHG Unbook Radiothpy | FOL | 2 077 | 3 023 |
| | | NEW | 401 | 591 |
| | XHG Urology RadTerap | FOL | 208 | 230 |
| | | NEW | 7 | 10 |
| | Respiratory Medicine | C7CO Allergy (H1) | FOL | 706 |
| NEW | | | 116 | 158 |
| C7CO Respiratory(H1) | | FOL | 1 170 | 2 107 |
| | | NEW | 276 | 367 |
| C7CW Lung Functions | | FOL | 920 | 1 837 |
| | | NEW | 426 | 764 |
| Use for WA-stats | FOL | 9 | 9 | |
| Rheumatology | C7C Rheumatology(H1) | FOL | 2 809 | 3 036 |
| | | NEW | 352 | 376 |
| | C7CO Lupus(H1 Recep) | FOL | 1 540 | 1 673 |
| | | NEW | 164 | 175 |
| Specialty Group: Non Specialist as per DoH | | | 39 263 | 132 983 |
| Diagnostic Radiology | A5W Bronchoscopy | FOL | 44 | 57 |
| | | NEW | 468 | 505 |
| | C1A Radiology Dept | FOL | 3 728 | 38 601 |
| | | NEW | 1 991 | 20 313 |
| | C4B Rad Sonar | FOL | 5 545 | 10 190 |
| | | NEW | 565 | 3 157 |
| | C4B X-ray Theatre | FOL | 140 | 2 762 |
| | | NEW | 79 | 1 892 |
| | C4BA Rad CT-Scan | FOL | 5 369 | 10 447 |
| | | NEW | 2 274 | 6 001 |
| | C6A Urol Xray | FOL | 398 | 844 |
| | | NEW | 57 | 135 |
| | C6BW Orth Xray | FOL | 3 861 | 8 194 |
| | | NEW | 796 | 1 620 |
| | C7B Rad Gastro ERCP | FOL | 12 | 45 |
| | | NEW | 17 | 36 |
| C8B Rad Cath Lab | FOL | 89 | 916 | |
| | NEW | 76 | 418 | |
| | H4 MRI | FOL | 2 341 | 3 220 |

STATISTICS

| | | | | |
|--------------------------------------|----------------------|-----|----------------|----------------|
| | | NEW | 270 | 829 |
| | H4 Radiology Inpat | FOL | 141 | 2 126 |
| | | NEW | 303 | 4 005 |
| | H4 Radiology OPD | FOL | 3 733 | 8 088 |
| | | NEW | 734 | 1 642 |
| | XBI Rad Diagnoses | FOL | 717 | 1 347 |
| | | NEW | 67 | 103 |
| Pharmacy-Repeats Scripts | CGB PharmRepeatMeds | FOL | 5 390 | 5 432 |
| | | NEW | 58 | 58 |
| Specialty Group: Orthopaedics | | | 30 328 | 35 594 |
| Orthopaedic Joint Replacement | C6BW Orth Joint/Hip | FOL | 945 | 1 333 |
| | | NEW | 110 | 135 |
| Orthopaedics | C6BO Orth General | FOL | 4 489 | 5 147 |
| | | NEW | 1 148 | 1 331 |
| | C6BO Orth Trauma | FOL | 10 082 | 12 380 |
| | | NEW | 2 512 | 3 121 |
| | C6BW Orth Professor | FOL | 761 | 871 |
| | | NEW | 152 | 166 |
| | E4 Private Ortho | FOL | 55 | 60 |
| | | NEW | 37 | 38 |
| Use for WA-stats | FOL | 10 | 10 | |
| Orthopaedics Hands | C6BW Orth Hand | FOL | 6 392 | 6 857 |
| | | NEW | 1 538 | 1 686 |
| | Use for WA-stats | FOL | 1 | 1 |
| Paed Orthopaedics | C6BW Orth Paeds | FOL | 1 817 | 2 143 |
| | | NEW | 279 | 315 |
| Specialty Group: Psychiatry | | | 6 096 | 6 979 |
| Child Psychiatry | FLG Psychi Ped F/Up | FOL | 1 929 | 1 987 |
| | | NEW | 65 | 69 |
| | FLG Psychi Ped New | FOL | 80 | 81 |
| | | NEW | 180 | 229 |
| General Psychiatry | JLG Psych Fol/Up | FOL | 2 630 | 2 830 |
| | | NEW | 31 | 36 |
| | JLG Psych New Adults | FOL | 623 | 721 |
| | | NEW | 557 | 1 025 |
| | Use for WA-stats | FOL | 1 | 1 |
| Specialty Group: Surgery | | | 111 277 | 120 775 |
| Anaesthetics | Use for WA-stats | FOL | 1 | 1 |

STATISTICS

| | | | | |
|------------------------------|------------------------|---------------------|--------|--------|
| Burns | C5BW Burns | FOL | 291 | 305 |
| | | NEW | 354 | 373 |
| | Use for WA-stats | FOL | 3 | 3 |
| Cardio Thoracic Surgery | C5BW Thoracic Surg | FOL | 1 156 | 1 292 |
| | | NEW | 642 | 697 |
| | Use for WA-stats | FOL | 51 | 51 |
| Ear Nose and Throat | C5AO Ear Nose+Throat | FOL | 7 111 | 7 735 |
| | | NEW | 3 541 | 4 052 |
| | C5AW Speech Therapy | NEW | 1 | 1 |
| | Use for WA-stats | FOL | 118 | 118 |
| General Surgery | B5E Day Surgery | FOL | 1 | 1 |
| | | NEW | 2 | 3 |
| | Use for WA-stats | FOL | 4 | 4 |
| General Surgery Abdominal | C5BW Abdominal | FOL | 3 624 | 3 869 |
| | | NEW | 2 327 | 2 512 |
| | Use for WA-stats | FOL | 24 | 24 |
| Head Neck and Breast Surgery | C5BO Head and Neck | FOL | 191 | 233 |
| | | NEW | 154 | 178 |
| | C5BO Mammae/Breast | FOL | 5 717 | 6 544 |
| | | NEW | 859 | 983 |
| | C5BO Melanoma | FOL | 50 | 62 |
| | | NEW | 23 | 27 |
| | C5BO Thyroid | FOL | 657 | 693 |
| | | NEW | 151 | 164 |
| | Use for WA-stats | FOL | 23 | 23 |
| | Maxillo-Facial Surgery | C5BW Harelip+palate | FOL | 243 |
| NEW | | | 31 | 33 |
| Use for WA-stats | | FOL | 3 | 3 |
| Neurosurgery | C5BW Neuro Surgery | FOL | 4 520 | 4 729 |
| | | NEW | 1 504 | 1 593 |
| | Use for WA-stats | FOL | 5 | 5 |
| Ophthalmology | C7AO Opht General | FOL | 20 037 | 20 767 |
| | | NEW | 1 079 | 1 141 |
| | C7AO Opht Refraction | FOL | 1 324 | 1 346 |
| | | NEW | 14 | 14 |
| | C7AO Opht Unbooked | FOL | 854 | 928 |
| | | NEW | 3 900 | 4 319 |
| Use for WA-stats | FOL | 564 | 564 | |
| Paed Ear Nose and Throat | C5AW Pedo Audiology | FOL | 1 332 | 1 496 |
| | | NEW | 838 | 942 |
| Paed Neurosurgery | Use for WA-stats | FOL | 1 | 1 |

STATISTICS

| | | | | |
|--------------------------------|----------------------|-------------------|--------|----------------|
| Paed Ophthalmology | Use for WA-stats | FOL | 26 | 26 |
| Paed Surgery | C5BW Ped Surgery | FOL | 1 046 | 1 110 |
| | | NEW | 1 043 | 1 123 |
| | Use for WA-stats | FOL | 81 | 81 |
| Paed Surgical Oncology | Use for WA-stats | FOL | 9 | 9 |
| Paed Urology | Use for WA-stats | FOL | 1 | 1 |
| Plastic Reconstructive Surgery | C5BW Reconstruc Surg | FOL | 4 086 | 4 264 |
| | | NEW | 1 570 | 1 729 |
| | Use for WA-stats | FOL | 26 | 26 |
| Thoracic Surgery | Use for WA-stats | FOL | 5 | 5 |
| Trauma | C1AW Trauma General | FOL | 3 605 | 4 081 |
| | | NEW | 14 709 | 16 224 |
| | C1D Resuscitation | FOL | 1 | 4 |
| | | NEW | 7 | 7 |
| | C1DO Surg Emergency | FOL | 370 | 491 |
| | | NEW | 1 465 | 1 693 |
| | Use for WA-stats | FOL | 9 | 9 |
| | Urology | C6AO Urol General | FOL | 4 628 |
| NEW | | | 1 807 | 1 972 |
| C6AO Urol Theatre | | FOL | 1 409 | 1 622 |
| | | NEW | 186 | 205 |
| C6AW Urol General | | FOL | 2 811 | 3 054 |
| | | NEW | 1 140 | 1 204 |
| C6AW Urol Oncology | | FOL | 2 217 | 2 393 |
| | | NEW | 133 | 145 |
| C6AW Urol Theatre | | FOL | 1 270 | 1 459 |
| | | NEW | 160 | 179 |
| Use for WA-stats | | FOL | 5 | 5 |
| Vascular Surgery | C5BW Vascular | FOL | 2 350 | 2 530 |
| | | NEW | 1 289 | 1 340 |
| | E4 Private Vascular | FOL | 26 | 27 |
| | | NEW | 22 | 22 |
| | Use for WA-stats | FOL | 440 | 440 |
| | Total | | | 441 423 |

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