



Western Cape  
Government

Health



**ANNUAL REPORT**  
2012

Tygerberg Hospital

**Tygerberg Hospital**  
**Annual Report**  
**2012**

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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

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

## **Message from Dr Beth Engelbrecht Deputy Director General: Secondary, Tertiary and Emergency Care (DOH)**

Tygerberg has been confirmed as one of the ten Central Hospitals in the country according to the recently published Regulations in terms of the National Health Act, Act 61 of 2003. This implies the hospital “must provide tertiary hospital services and central referral services and may provide national referral services; must provide training of health care providers; must conduct research; receives patients referred to it from more than one province; must be attached to a medical school as the main teaching platform; and must have a maximum of 1200 beds.”



These requirements have been captured in the healthcare 2030 planning process for the Western Cape. The commitment, furthermore, of rebuilding the hospital as a modern hospital creates a new opportunity to reposition Tygerberg as a leading tertiary and academic institution. To reposition it as relevant to the health services of the Western Cape, in the country, in Africa as a whole as well as internationally. Opportunities such as this come once in a lifetime. I am confident that the hospital and its higher education partners will harness the positive energy of planning and innovating in the design of a new hospital over the next few years. The Department is committed to this.

Dr Erasmus and his team in the past year steered the hospital towards excellent achievements. It opened 74 additional beds to cater for the referrals from Khayelitsha district Hospital (KDH) that opened in phases as from January 2012. Joint planning of services, outreach and support and system strengthening formed the agenda of support to KDH. TBH furthermore strengthened the capabilities of the geographic service area (Metro East) through outreach and support in ENT, ophthalmology and urology services.

The hospital saw over 56 000 patients in its emergency centre, over 347 000 outpatients, admitted over 68 000 patients, did more than 3 000 caesarean sections, in its 1 384 beds and its budget of just over R2 billion rand. Apart from dealing with these volumes the hospital focused on quality improvement with morbidity and mortality meetings in all its disciplines, 80% of patient complaints resolved in 25 working days and a hospital patient satisfaction rate of 90%. The hospital was assessed for its readiness towards certification according to the National Core Standards and the team is working hard to make some changes towards being fully compliant on the vital measures.

The Tygerberg Central Hospital does us proud and it is an honour to be associated with this team. Thank you to the management team, all the staff, for our university partners and the health facility board.

## **Message from Dr Dimitri Erasmus**

**Chief Executive Officer:**

**Tygerberg Hospital**

This annual report reflects the activities and achievements of the year 2012.

The key achievement has been the successful commissioning of additional services to accommodate the referrals from the newly commissioned Khayelitsha Hospital. An additional operating theatre and an additional 74 beds were commissioned, taking the hospital to a bed capacity of 1384 beds. Service volumes were quite significant with over 68 000 admissions and 347 000 outpatient headcounts.



Tygerberg Hospital played a significant role in system strengthening and outreach and support in the Metro east geographic service area.

The total expenditure for the 2012/13 financial year amounted to R1 924 700.

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 partnership with the Faculty of Health Sciences of Stellenbosch University. Despite the challenges of ageing infrastructure and increased service delivery pressures, Tygerberg Hospital continues to provide quality services – this is testimony to the dedication of the staff.

I wish to thank all the staff for their hard work and commitment which has culminated in the many achievements and activities as reflected in this annual report.

# FINANCE

**Head of Department**  
**Director: Mr Toufiek Salie**



## Summary

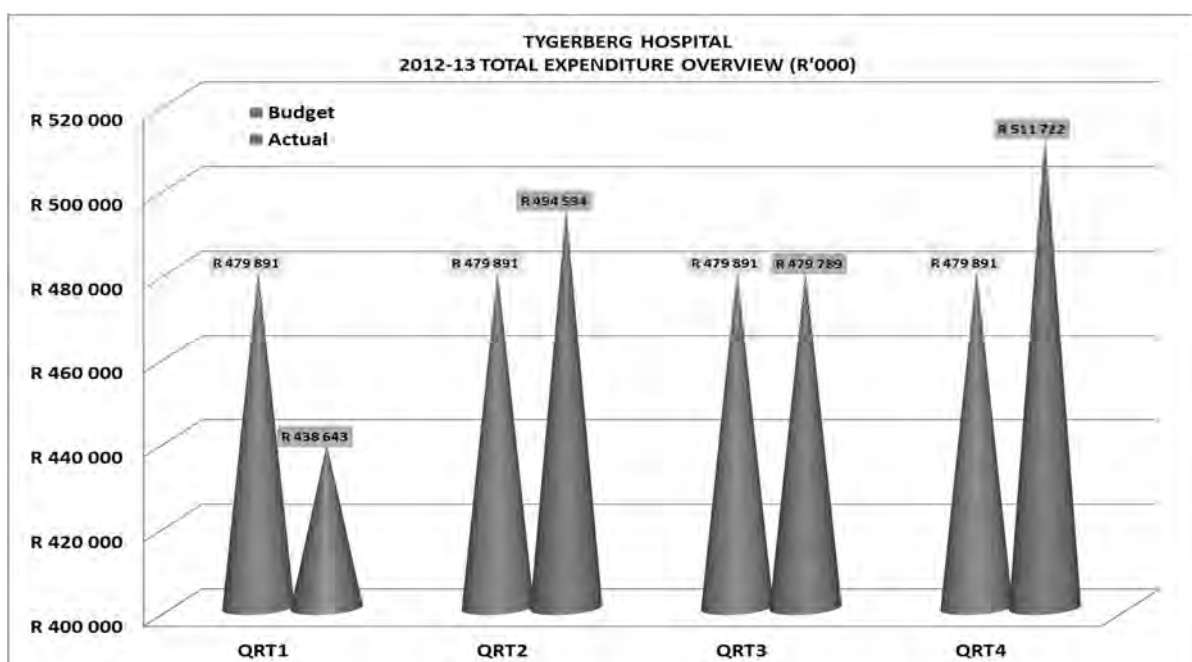
Tygerberg Hospital is the single biggest Health facility in the Western Cape. Its funding is secured from the National Tertiary Services Grant (specialized tertiary services), Health Professional Development and Training Grant (professional training) and a portion from the Provincial Equitable Share. A smaller allocation is secured from the Modernization of Tertiary Services Grant.

## An overview of the Hospital's Annual Financial Results: 2012/2013.

	BUDGET	ACTUAL	VARIANCE	%
<b>Expenditure</b>	<b>R1 919,5m</b>	<b>R1 924,7m</b>	<b>(R5,1m)</b>	<b>-0.3%</b>
<b>Revenue</b>	<b>R94,5m</b>	<b>R142,0m</b>	<b>R47,5m</b>	<b>50.2%</b>

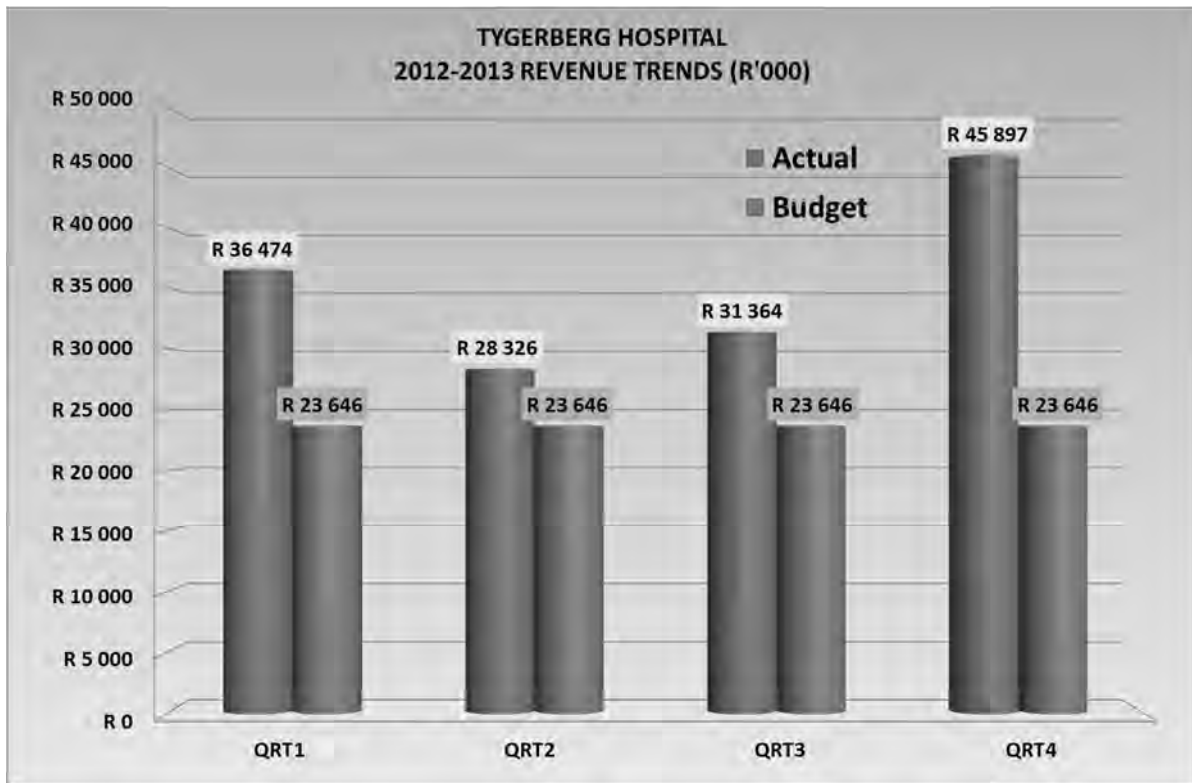
The results achieved to provide ever demanding patient care (specialist and generalist care), professional training and medical research with the limited financial resources. The actual expenditure exceeded the budget by **R5.1m** which is less than a full percentage point. The reason for this is there was funding available within the programme. However, 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 will constitute future challenges.

The graphic display of the quarterly spent, indicates the escalations in the second and fourth quarters, contributed by remuneration improvements, capital equipment deliveries and forward settlement of identified accounts.



# FINANCE

The main revenue inflows emanates from the Road Accident Fund, Medical Aid Schemes, state departments and individual patients. The graphic trends of revenue inflows was significantly above the quarterly targets and escalated majorly in the last quarter due to the cash inflows from the RAF, resulting in a total overrecovery of **R47.5m (50.2%)** against the target for 2012/2013. This was the best ever achievement TBH realised and also the highest achiever in the whole Department of Health.



In explanation of the expenditure results:

## Staffing and Personnel Expenditure:

PERSONNEL EXPENDITURE	BUDGET	ACTUAL	VARIANCE	%
Persal staff	R1 296.8 m	R1 289.0m	R7.8 m	0.60%
Joint staff	R49.5m	R50.4m	(R0.9)m	-1.88%
Agency staff	R25.0m	R19.1m	R5.9m	23.51%
<b>TOTAL</b>	<b>R1 371.3m</b>	<b>R1 358.5m</b>	<b>R12.8m</b>	<b>0.92%</b>

Hospital staff stabilized at **4 456** as at year end March 2013. Nursing posts makes up **44%** and doctors **13%** of staff. The APL was managed at a **96, 1%** filled post rate.

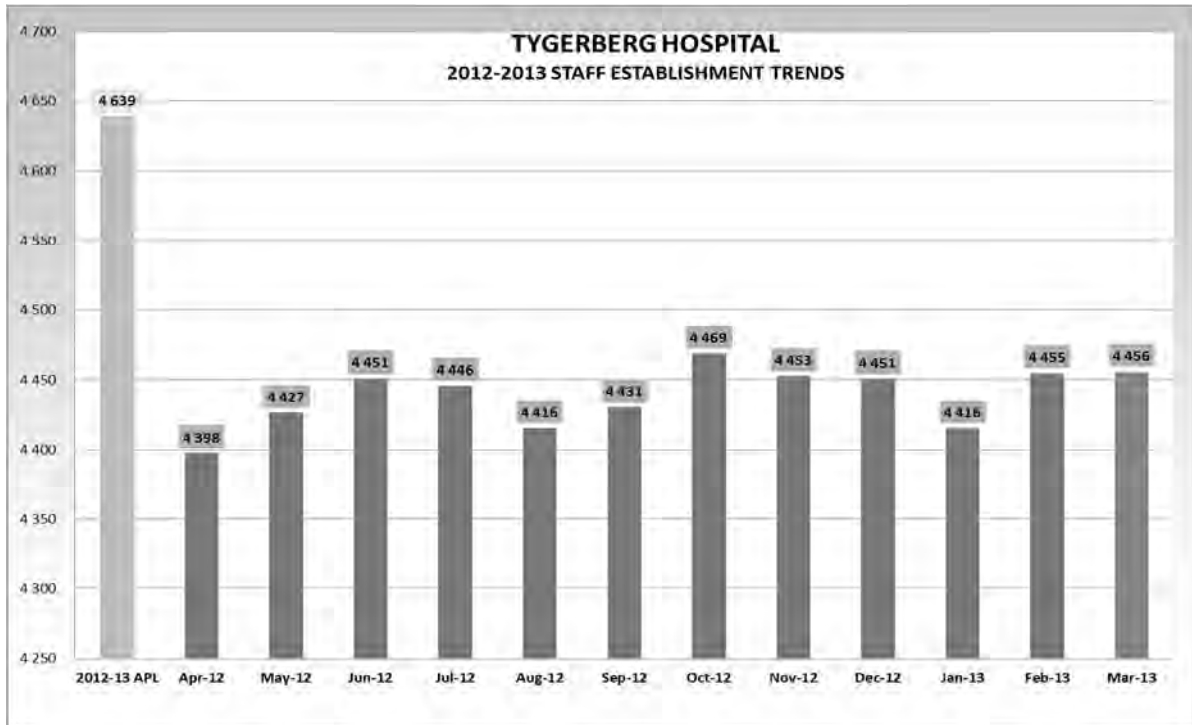
The general salary adjustments had a welcome effect on all staff.

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

The new Multilateral Joint Agreement with the Universities and Technicons is in place.



# FINANCE



## Goods and Services (excludes agency cost):

	BUDGET	ACTUAL	VARIANCE	%
Goods and Services	R519,8m	R532,9m	(R13,1m)	(2,5%)

## Major expenditure comparative spending trends:

Category	Actual 2011/2012	Actual 2012/2013	% >
<b>Clinical Consumables</b>			
Laboratory Services	R 66.0m	R 77.7m	17.7
Blood & Blood Products	R 50.9m	R 52.3m	2.8
Pharmaceuticals	R 63.1m	R 71.7m	13.6
Medical/Surgical Consumables	R151.9m	R167.1m	10.0
<b>Other</b>			
Support Services	R 21.0m	R 28.4m	35.2
Steam, Gas, Energy and Utilities	R 45.6m	R 48.7m	6.8
Engineering & Service Maintenance	R 44.6m	R 39.3m	-11.9
Catering	R 13.1m	R 17.6m	34.4

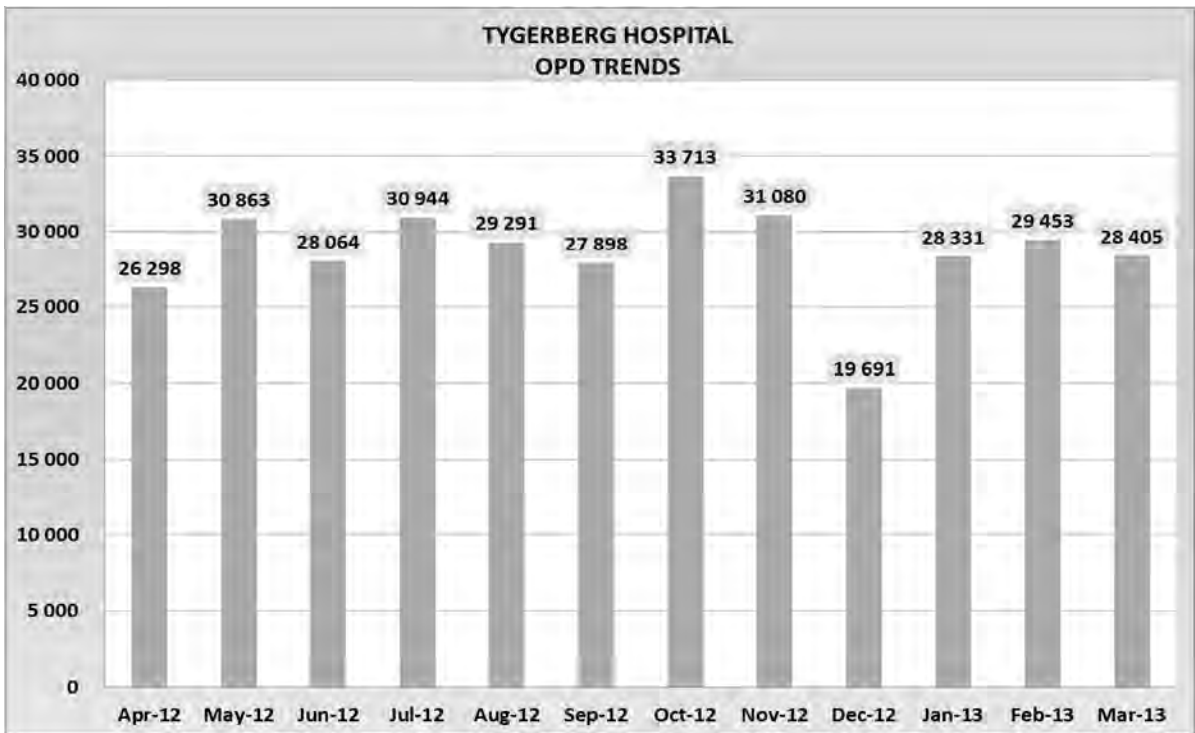
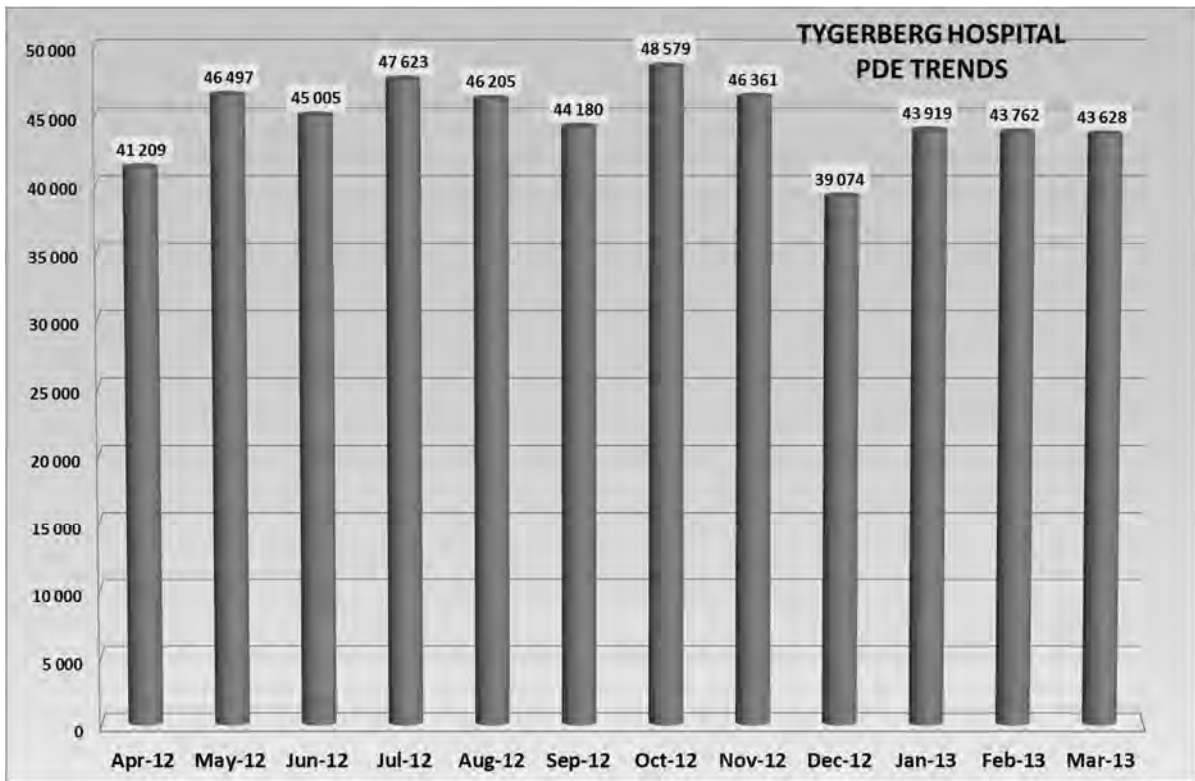
## Patient activities increases experienced in relationship to the previous financial year.

Patient Activity	2011/2012	2012/2013	% >
PDE's	499 486	536 042	7,3
Admission	61 740	67 573	9,4
Patient Days	375 622	408 368	8,7
OPD Headcount	315 264	328 263	4,1

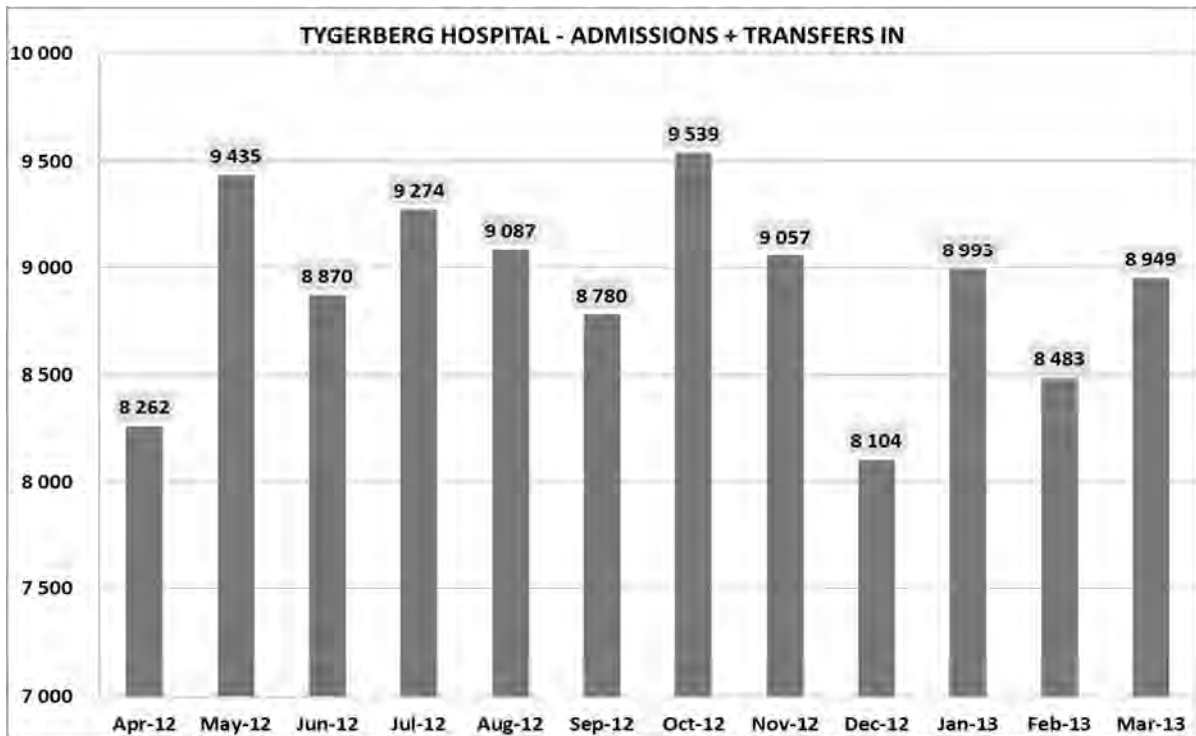
The successful opening of the new **74** pediatrics and neonatal beds plus theatre list due to the referrals shift to Tygerberg Hospital with the commissioning of the Khayelitsha Hospital. The resultant growth in patient activities was well managed within the proportionate augmentation of the budget.

# FINANCE

Cost per PDE concluded at R3 606.86.



# FINANCE



## Capital Equipment:

Additional to the Capital Equipment Funding in the budget, Tygerberg Hospital benefited from outside Donation funding as well as from the Hospital Facility Board and Children's Hospital Trust.

## Own Capital Funds **R28.1m**

The main items prioritized for capital equipment:

- Medical And Allied Equipment – R23.5m
- Computer Hardware – R2.5m new and refresh of old IT hardware
- Domestic Equipment And Furniture – R2.1m

## Modernization of Tertiary

### Services Grant **R16, 5m**

The total MTS Grant of R37, 5m continued to be used primarily for the Modernization of the Radiological Imaging Technology across the Tertiary Institutions. The R16, 5m benefited by Tygerberg Hospital was i.r.o:

- Acquisition of a CT Scanner (R6.3m)
- Maintenance of the Nuclear Hermes System (R0.47m)
- PET CT Scan accessories (R1m) and
- The continued role out of the Open text ECM system (R6.6m).

## Donation Funding **R2.8m**

Some of the major items received: Arthroscopic Camera Stack, Echocardiography machine, NJM machine, Bedside monitors and Neopuff & 7C – Paps.

## Smaller Equipment Items **R3.6m**

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

Year on 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.

## DIRECTORATE FINANCE:

Salient features during the year:

The seamless incorporation of Patient Administration and Hospital Fees into the Finance Directorate and the shifting out of Cleaning Services to Support Services. 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

# FINANCE

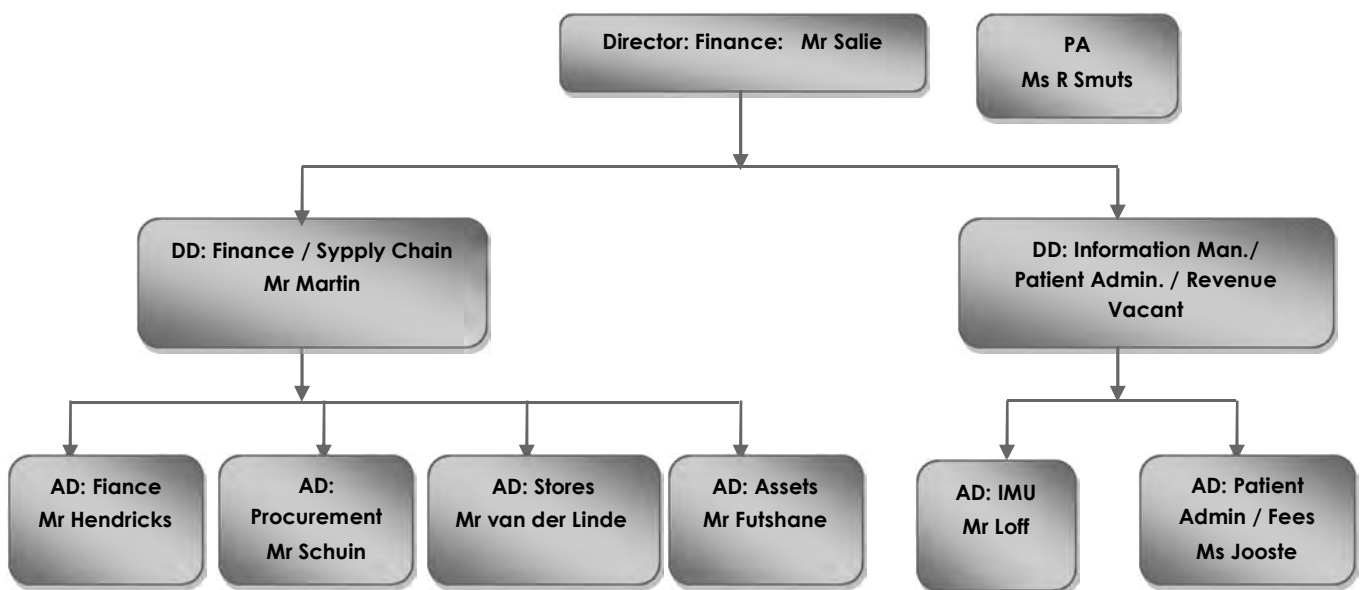
**Matters Affecting the Audit Report** were clean audits for Tygerberg Hospital. Minimal audit queries are recorded against **Other Important Matters** with payments over 30 days the most noticeable.

This audit findings by the Auditor-General is the most excellent ever achieved by Tygerberg Hospital. 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. As acknowledgement we received from CPUT a certificate of recognition and appreciation.

## 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.

The Finance department is increasingly being challenged to avoid a buildup of workload causing backlog of payments and to ensure that suppliers are paid within the 30 day prescribed period.

These challenges were well contained due to staff dedication to maintain an effective work standard. The workforce of 29 staff only experienced two vacancies during the year.

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

The target set to reduce staff debt by 40% was exceeded.

There were only 153 cases remained by 31/03/2013, a clearance rate of 45%

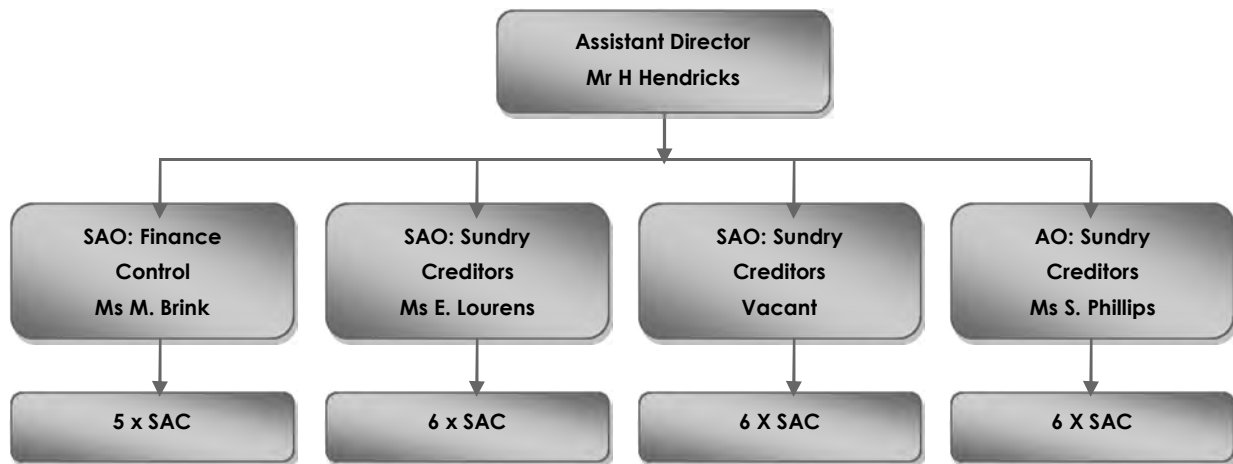
# FINANCE

## The Asset & Liability Account Section

- We have experienced an increase of 44.6% in the remaining balance of our asset and liability accounts to the value of R1, 85m at the end of the financial year. 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. Year-end Accruals of R55, 1m increased by 28% compared to the previous financial years of R43, 2m. A monthly accrual meeting is in place to follow up on outstanding payments.

## STRUCTURE OF FINANCE UNIT



## STOCK HOLDING 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.

The challenge to achieve the objective is to overcome Treasury rules and regulations which delay the procurement processes to place orders, impacting on consumables availability.

The ten stockholding stores namely, Provisioning, Surgical, Bandages, Disposable, Technical and Clinical Engineering, Stationary, Engineering, CSSD and Theatre Stores plus the two kitchen stores handled purchase orders to the value of R65m. The non-stockholding warehouses placed purchase orders valued at R489m. The stock holding level moved from R14,905m at the beginning of the financial year to R26, 633m as at 31 March 2013 to ensure a higher

volume of consumables available. In addition R17,814m commitments were recorded at year end.

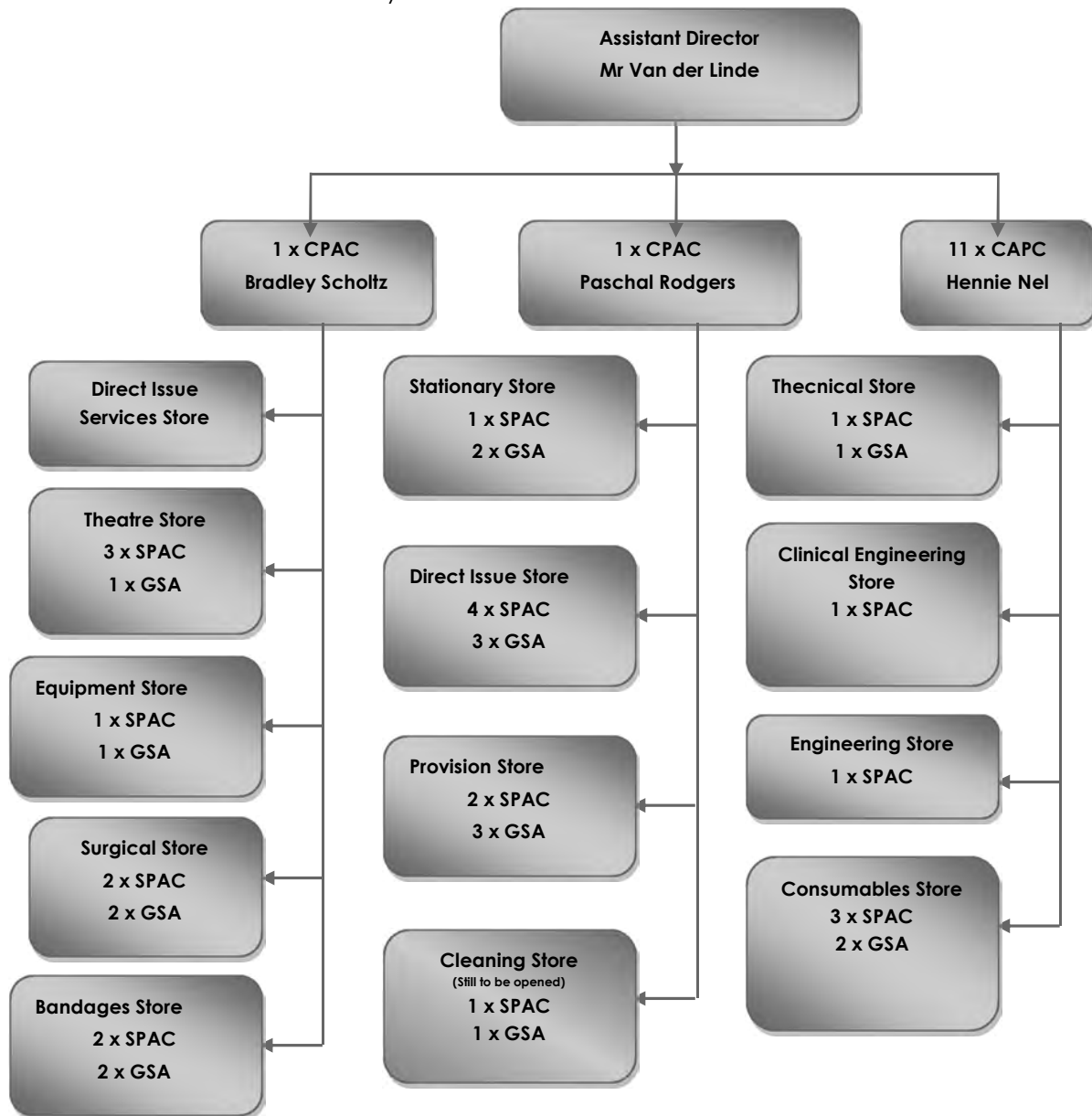
The 44 staff complement is the most stable workforce as a 100% filled rate throughout the year was maintained. 4 Student interns were trained in the Stores processes.

Urgent measures implemented were to borrow from other hospitals, encourage wards to exchange items, contact suppliers for early or partial delivery. In some cases staff took GG transport to collect goods from supplier's warehouses. These measures ensured no critical items were out of stock. Orders are now placed to ensure a 3 months stock holding. Additional space was secured in the Protea Court to accommodate higher stock volumes. For the past few years, no audit queries were reported by the Auditor-General for Stores.

# FINANCE

Two successful stock-takes were performed, mid-year and at year end, with minimal stock variations as well as perpetual stock-take in the different stores conducted by the four

managers. A monthly commitment meeting is established to report back on outstanding orders.



## 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 months backlog of orders processing. To overcome this contract staff were appointed, reorganization of the unit and the application of lean

management. The three procurement sections deal with:

- Equipment Contracts (Formal and limited) & Purchases
- Quotation of consumables and services
- Services Contracts (Formal and Limited) & 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 R25.124 million plus a further

# FINANCE

R4 million to accommodate the opening of the additional 74 beds and other urgent needs. We also spent R3.6 million on minor equipment.

A total of 10 bids (above R500 000) to the value of R12,597 million were awarded during 2012/2013 financial year.

For equipment items between R100 000 – R500 000 a total of 37 "Mini-Bids" were invited and ordered to a value of R7,482 million and 12 limited bids were invited at a value of R2.865 million.

*Large capital equipment that was purchased in 2012/2013 financial years were:*  
 1x High Quality Endobrochial Ultrasound Unit @ R1.766 million  
 1x Floorstand Light for ENT @ R0.848 million

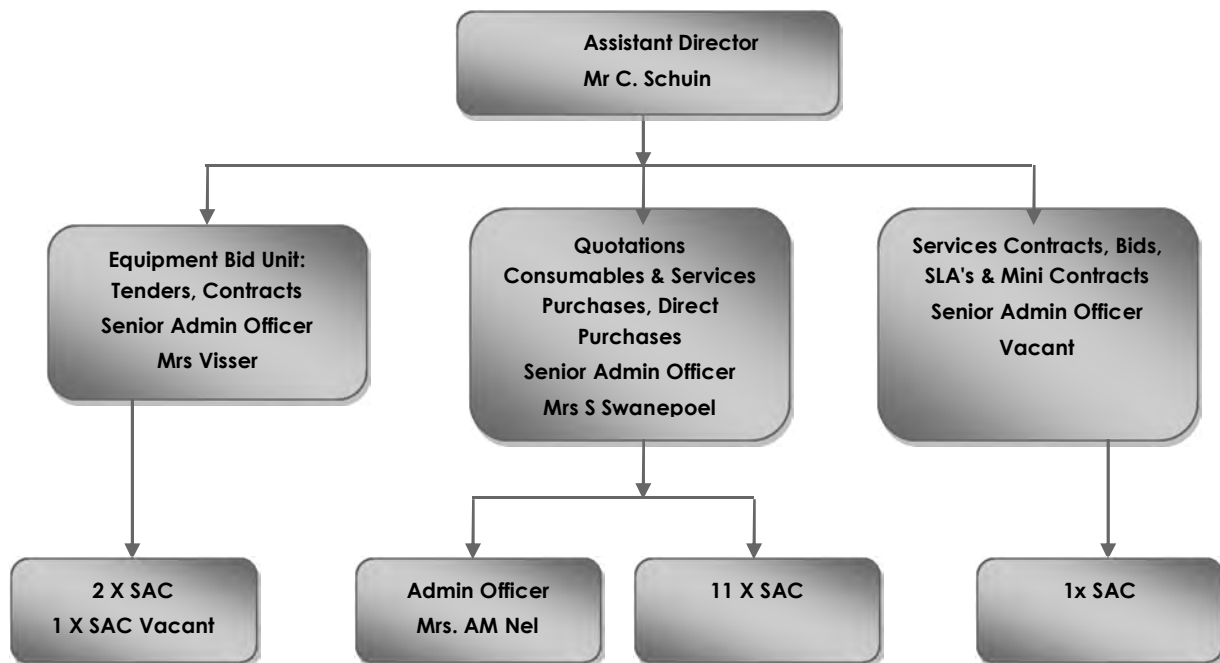
### MTS Grant Funds Purchases:

1x Large Bore Multi-Detector ROW Computer Tomographic (CT) Scanner = R6.3 million

### GOODS AND SERVICES PURCHASES

A total of 27 545 orders were placed in 2012-2013.

## SCM: PROCUREMENT STRUCTURE



### ASSET MANAGEMENT

For the major part of the financial year, the Asset Unit lacked the necessary capacity at Assistant Director and Administrative Officer level. These two positions were only filled during May 2012 and March 2012 respectively. The total staff number is 11.

Towards the end of 2012 the Unit moved offices from the first floor to the lower ground, which could accommodate all staff members as a unit.

The Assets Operational Plan concluded, the main challenges remains :

- 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 R19 094m

Sold obsolete assets to the value of R128 588.

An R7.1m (nett) bulk write off of assets which could not be verified for at least 3 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.

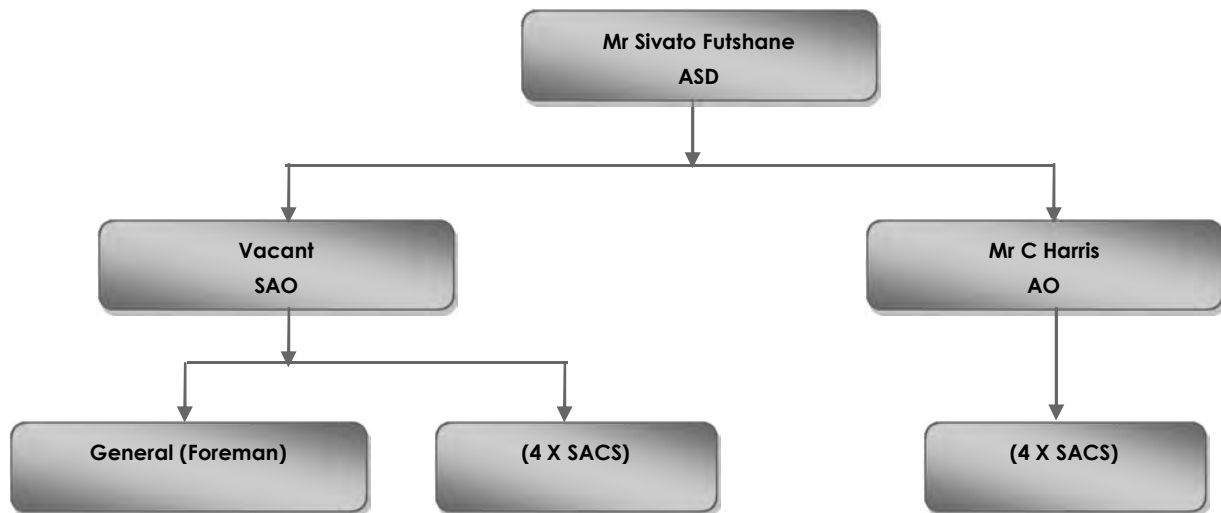
**Assets Value:**

Major assets:	R395, 379m	Quantity -	9 410
Minor assets:	<u>R 67,508m</u>	Quantity -	<u>58 664</u>
	R462, 887m	Total -	68 074

Asset Inventory list – 34% was rolled out to the location managers.

**For the financial year 2012/2013, Asset Management received a clean audit; no asset audit queries were recorded by the Auditor-General, a recognition well deserved for the huge efforts put in to manage the assets.**

## 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. Its primary function 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, summarize 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.

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

- i. Computer – 120
- ii. Printers – 97
- iii. Laptops – 5
- iv. Projectors – 2
- v. High Volume Scanners – 10
- vi. ECM Server – 1
- vii. PACS Wall mounts – 10

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



# FINANCE

The Data Avenue received a much needed upgrade and was formally inaugurated on 11 June 2012. Data Avenue can be regarded as the one-stop-shop for Information and Communication Technologies. The various components provide support to end users and management in order to perform daily duties and to actively participate in critical decisions respectively.

The new offices have been the catalyst for stronger relationships with other role players namely IT infrastructure, System controllers, Desktop Support and System Developers.

It goes without saying that the new offices

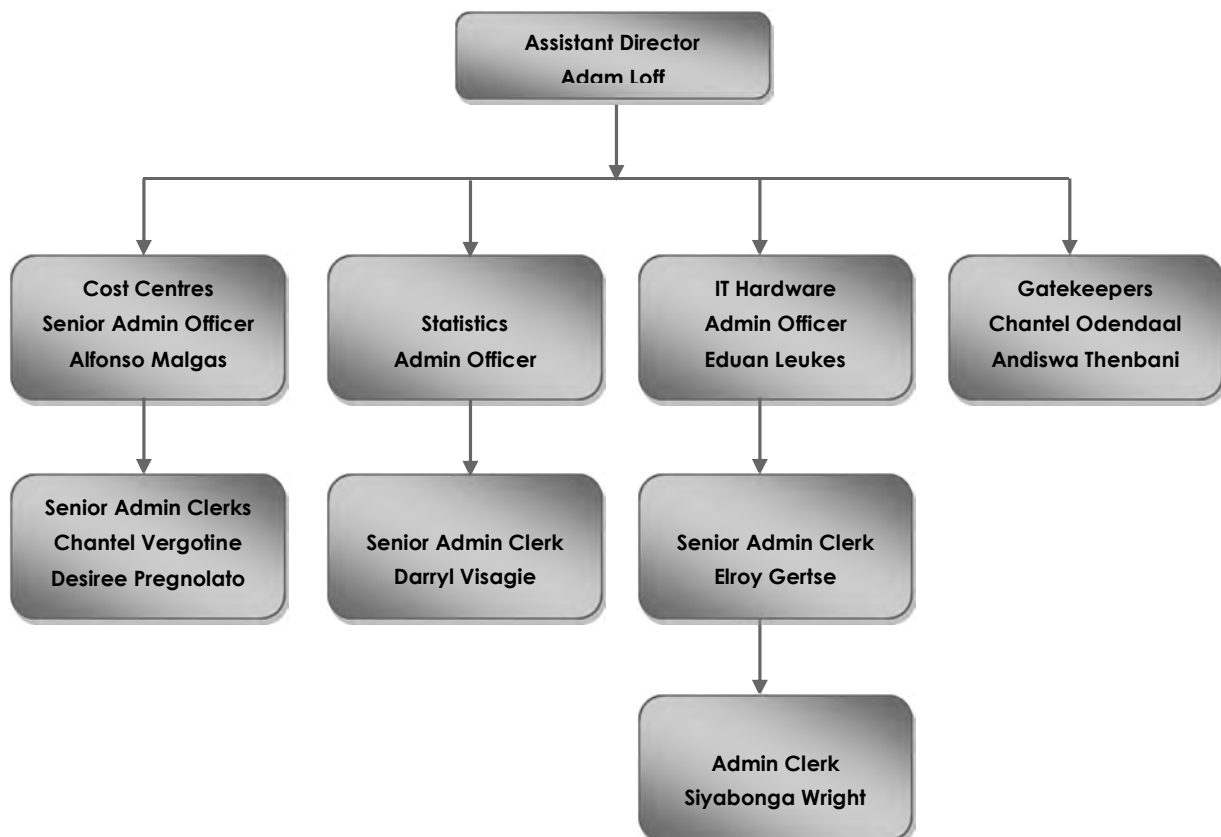
promote a good and harmonious working environment. The return on this investment will be seen for years to come.

The Unit's staff complement comprises of 9 members who is the best asset of the Unit and who are young, dynamic and dedicated in providing a service to Tygerberg Hospital and beyond.

The Director Finance and the IMU received delegations from other provinces to share best practices with Tygerberg Hospital in respect of Cost Centre Management, NHLS internal control systems and Asset Management.

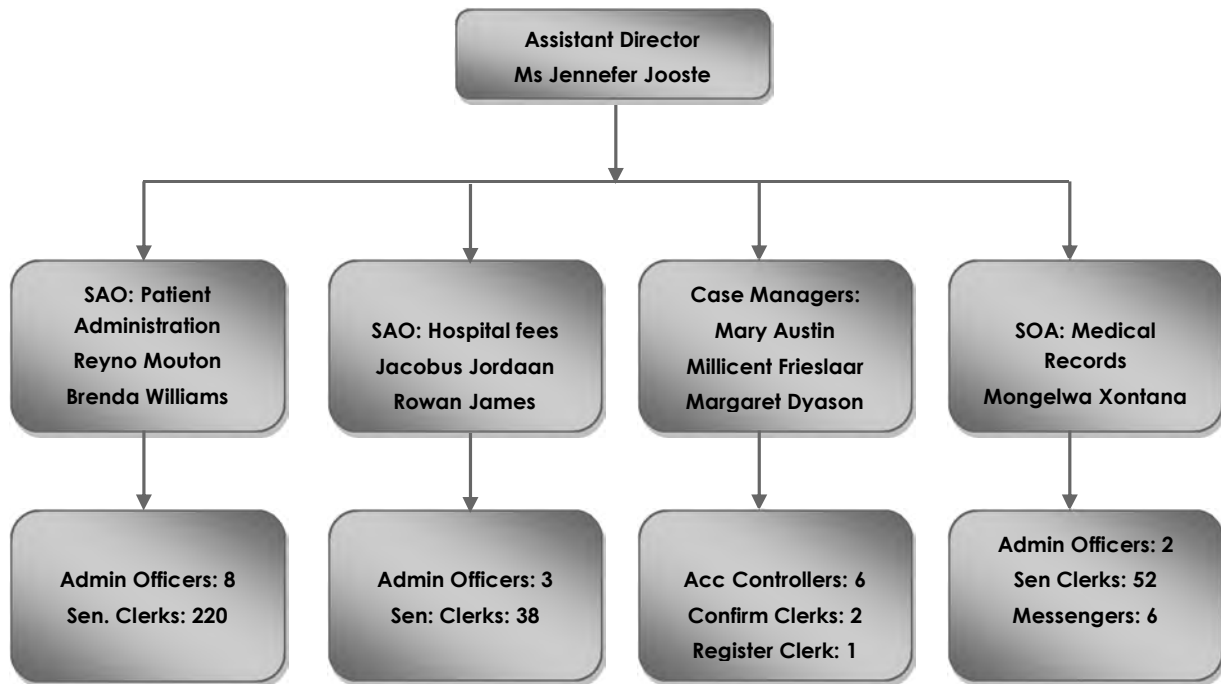


## Staffing Establishment of the Information Management Unit



# FINANCE

## Structure of Patient Administration, Hospital Fees and Medical Records



### Summary of activities

Hospital Fees, Medical Records and Patient Administration, were transferred from Administration: Support Services to Finance at the beginning of the financial year. The 3 components focusses on the following:

Appointments, registration/admission and discharge of in- and outpatients on the Health Information System,

Issuing, return and safekeeping of patient folders,

Liaising with Medical Schemes with regards to updated clinical information of externally funded patients and ensure UPFS accounts of patients are correct,

Vigorous follow-up of outstanding accounts and ensure that BAS and the Accounts Receivable systems are in-sync.

Patient centredness becomes a focal point in the patient flow to enhance processes to better efficiency and effectiveness.

### Staff Training

Training	Number of Staff
Computer related	45
BAS/AR	84
Client Related Services	74

**39 staff members completed 30 years of services, was well recognised with a function, bonus and a certificate.**

### Hospital Fees

#### Output:

- Income generation and collection
- Outstanding balance
- Write off – bad debt
- EDI Challenges and Successes
- Reconciliation BAS / AR
- Fees Complaints (Patient Advisory Services)
- Utilizations of Interns

# FINANCE

**Comment on output:**

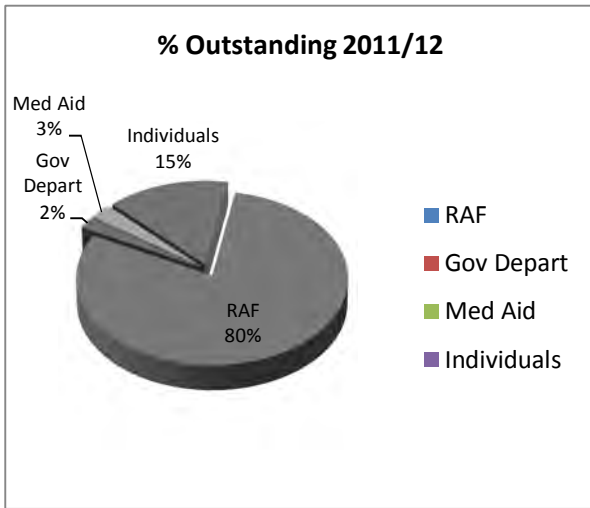
**Tygerberg Hospital has done exceptionally well in collecting R42.4M (50.9%) in excess of the target of R82.9M.**

**The revenue budget is divided into the following categories:**

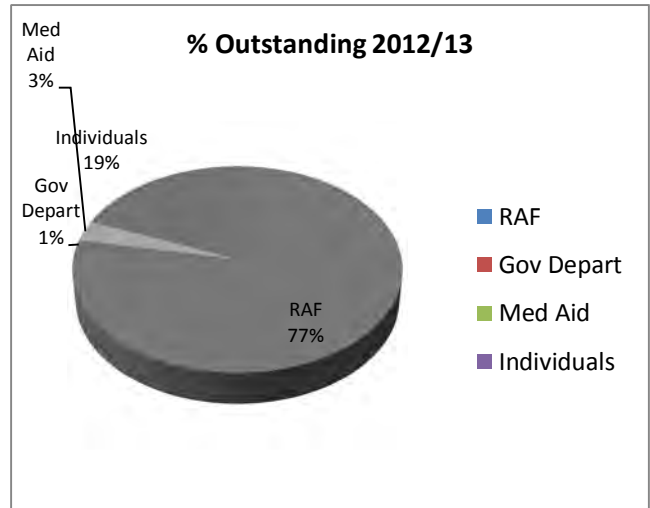
	Income	Target	Difference	%
<b>RAF</b>	R 61,078 m	R 23,216 m	R 37,862 m	62.0
<b>Gov Department</b>	R 6,190 m	R 4,000 m	R 2,190 m	35.4
<b>Medical Aid</b>	R 41,013 m	R 41,356 m	R - 343 m	-0.8
<b>Individual</b>	R 17,143 m	R 14,405 m	R 2,738 m	16.0

**OUTSTANDING BALANCE:**

**31 MARCH 2012 : R204,804 m**



**31 MARCH 2013 : R212,989 m**



Road Accident Fund remains the biggest outstanding balance, representing **76.6%** of the total patient fee debtors.

A special task team vigorously follow up unsuccessful RAF claims exceeding 60 days as well as the individually patient accounts. This ensures optimal revenue collections and simultaneous reduction of the outstanding balances.

**Write off of outstanding debt**

A total of **R 60,420m** debt was approved for write off in terms of financial delegations to give financial relief to financially constraint debtors. On the other hand where debtors do not react to final demands, telephonic calls and SMS messages, these bad debts are written off but handed over to the department's debt collector. It should also be mentioned that RAF payments are proportioned and balances are waived.

# FINANCE

## Electronic Data Interface (EDI)

Tygerberg Hospital is the front-runner in the total cases submitted through EDI to the Medical Schemes.

**The successful EDI claims increased over the years:**

Year	In-patients	Out-patients	All cases	Total gross	Average number of days to close	Average cases per month	Average value per month
2012	1 744	12 975	14 719	R44,577 m	15	1 226	R3 715 m
2011	1 725	12 093	13 818	R33,380 m	24	1 115	R3 525 m
2010	1 648	8 467	10 115	R31,080 m	31	1 055	R3 268 m
2009	1 516	7 890	9 406	R29,564 m	31.92	941	R2 956 m
2008	1 480	8 492	9 972	R32,071 m	29.38	831	R2 673 m

- **Reconciliation : BAS / HIS**

The reconciliation between the Basic Accounting System and Health Information System was successful for the Financial Year. This is an Audit requirement and the Central hospitals are audited on the BAS/HIS recon annually. Thus, as from 1<sup>st</sup> April 2012 to March 2013 the total patient fees received on BAS was reconciled with the total patient fees allocated in HIS – these are done accumulatively and will ensure a smoother reconciliation by year end.

Credit balances on the system are closely monitored and refunds effected where overpayment is identified.

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

Debtor complaints received from the PALS Office have to be finalised within 25 days. Many of these complaints are due to dissatisfaction with services, or attitude of staff. Every effort is made to ensure that cases are replied to before the due dates. A register was implemented to monitor complaints received and to ensure that it receive the necessary attention.

**44 Complaints** received and finalized for the year.

- **Utilizations of Interns**

A total of 6 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. The hospitals are monitored on their ID performances and TBH has a debtor ID success rate of 64% at the end of March 2013. The target set for the hospital is 80%

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.

Interns were used as Queue Marshalls at registration and main admissions as prescribed in the National Core Standards.

## MEDICAL RECOR

**A vital service to patient care to ensure all patients' information is secured in medical folders, stored and issued for appointments of patient visits.**

# FINANCE

**Output:**

- Destruction of inactive folders

**Comment on output:**

**Destruction of inactive deceased folders**

A great achievement by the hospital during 2012 was to receive 3 destruction certificates by National Archives. The norm is at least 1 per annum.

**PATIENT ADMINISTRATION**

**Output:**

- Ensure ICD10 codes are captured on the Clinicom system of all patients.
- Capturing of ID nr on the Clinicom system
- Admissions and discharges of all OPD's and inpatients
- Reduce waiting times of patients at service areas
- Raising of accounts and collection of patient fees

**Comment on output:**

- **The capturing of ICD10 codes** on all invoices have improved to 96% - OPD and Inpatients varied month to month but eventually reached 100% before submission to Medical Schemes. ICD10 codes that are identified by the case managers, remains a challenge for the clinicians to identify the correct ICD10 codes of all patients.

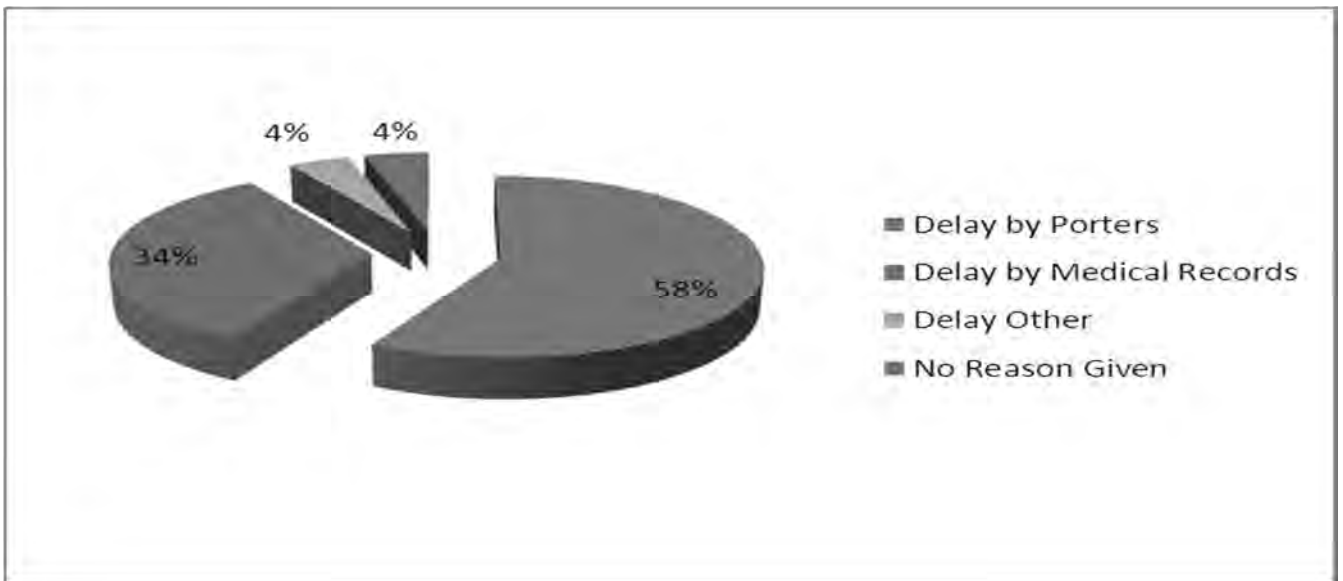
Month	Inpatient	OPD	ID No	Cell No
April	92 %	92%	63%	60%
May	97%	94%	80%	61%
June	93%	94%	62%	(not available)
July	92%	96%	62%	65%
August	90%	95%	63%	65%
September	92 %	94,9%	63%	64%
October	94 %	96,4%	63%	66%
November	96%	95,5%	62%	67%
December	92%	92%	62%	67%
January	93%	94%	61%	68%
February	90%	96%	64%	66%
March	91%	96%	63%	68%

- The capturing of ID no's showed some improvement.
- Admissions and discharges of all OPD's and inpatients

# FINANCE

- **Waiting Times**

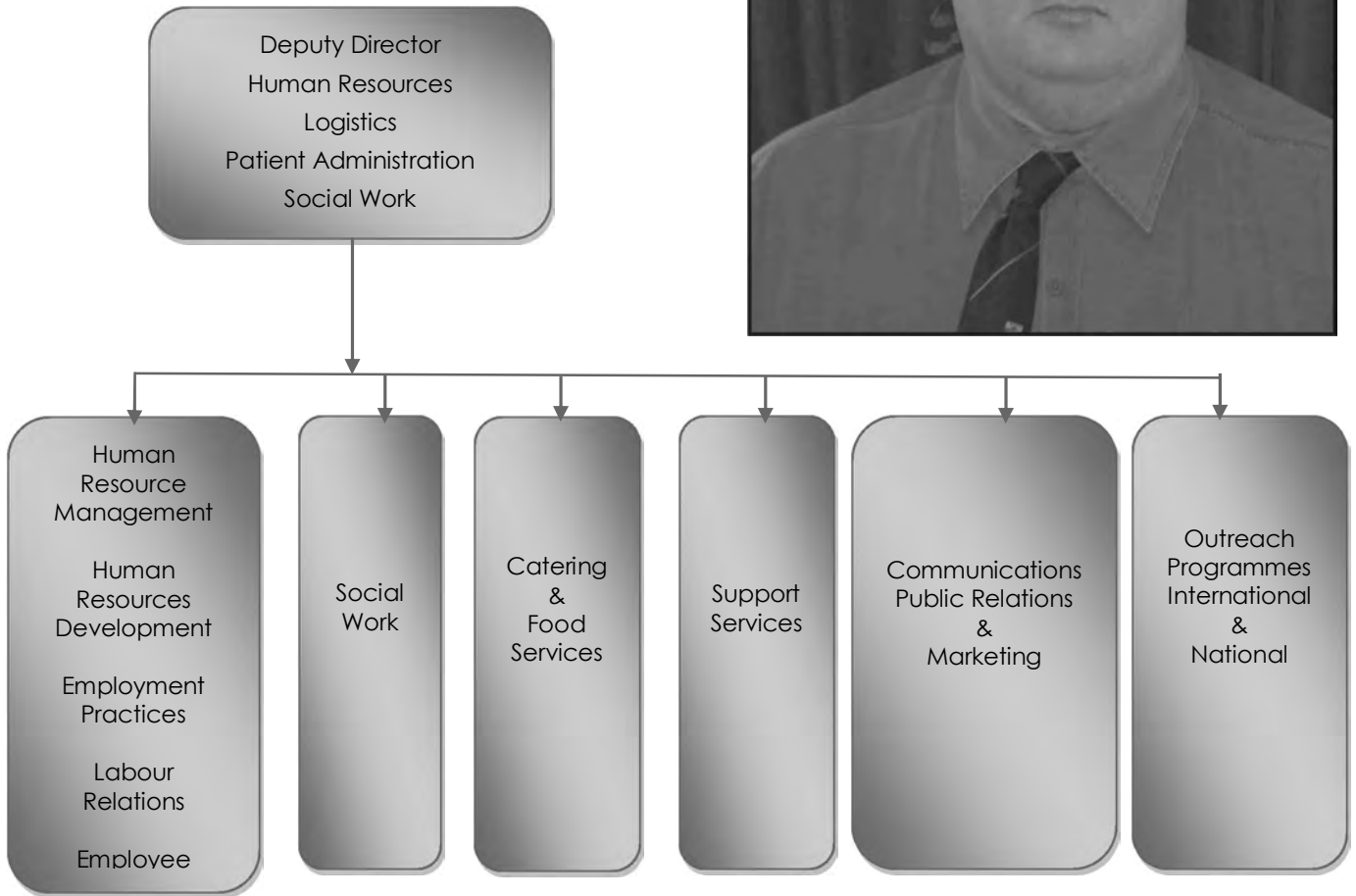
Herewith waiting times statistics of the Emergency Services component. The average percentage of folders taken longer than 40 minutes for 2012 was 39%



# ADMINISTRATION

## Deputy Director Mr P.J. Wolfaardt

The following diagram reflects the areas forming part of the sub-directorate:



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

### HUMAN RESOURCES MANAGEMENT

#### Assistant Director: Mr E.C. Steyn

The establishment of Human Resource Management was suitably filled during the year.

Rank	Filled	Vacant	Total
Assistant Director	1	0	1
Chief Admin. Officer	5	0	5
Admin. Officer	4	2	6
Senior Admin. Clerk	22	5	27
<b>Total</b>	<b>32</b>	<b>7</b>	<b>39</b>

Vacant posts are in the process of being filled.

## ADMINISTRATION

Staffing is a problem in the department due to a high turnover rate.

The personnel turnover since 1 April 2012 to 31 December 2012 statistics of Tygerberg Hospital are listed below:

<b>Nature</b>	<b>Administration</b>	<b>Professionals</b>	<b>Technical</b>	<b>Nursing</b>	<b>General</b>
Resignations	8	40	7	52	8
Dismissals	1	0	0	0	3
Ill Health	0	0	0	4	5
Retirement 65	0	5	0	2	4
Early Retirement	6	1	0	8	9
Deceased	0	0	1	4	7
Transfers out	5	4	0	27	4
Contract expiry	36	78	15	29	34
<b>Totals</b>	<b>56</b>	<b>128</b>	<b>23</b>	<b>126</b>	<b>74</b>

Transfers in / Appointments	40	92	27	146	67
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The post position of Tygerberg Hospital is follows:

<b>Institution</b>	<b>Filled</b>	<b>Vacant</b>	<b>Session</b>	<b>Total</b>
Tygerberg Hospital	4422	205	23	4 650

The establishment has increased from 4449(2010) and 4508(2012).

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

A Statistical overview of the 2010 - 2012 cycle FOR PERIOD 01 January 2010 until 31 December 2012 for Tygerberg Hospital is as follows:

<b>Total cases</b>	<b>1192</b>
--------------------	-------------

### **Declined by Soma**

Short period incapacity	519
Long period incapacity	8
Ill health retirement	9
<b>Total</b>	<b>536</b>

### **Approved by Soma**

Short period incapacity	480
Long period incapacity	87
Ill health retirement	20
<b>Total</b>	<b>587</b>



# ADMINISTRATION

## Outstanding Cases

Short period incapacity	27
Long period incapacity	2
Ill health retirement	1
<b>Total</b>	<b>30</b>

## Deviations

Short period incapacity	30
Long period incapacity	3
Ill health retirement	3
<b>Total</b>	<b>36</b>

## Cases per year

<b>2010</b>	169
<b>2011</b>	490
<b>2012</b>	533

## Grievances

Short period incapacity	9
Long period incapacity	0
Ill Health	0
<b>Total</b>	<b>9</b>

**HRM: EMPLOYMENT PRACTICES**  
**Assistant Director: V Meyer [Acting]**

## Approved Staff Complement

<b>Rank</b>	<b>Filled</b>	<b>Vacant</b>	<b>Total</b>	<b>Comments</b>
Assistant Director	0	1	1	The ASD and 3 Clerk posts are in the process of being filled.
Senior Administrative Officer	3	0	3	
Administrative Officer	1	0	1	
Administrative Clerk	3	3	6	
<b>Total</b>	<b>7</b>	<b>4</b>	<b>11</b>	

## Recruitment and Selection

Statistics for the period 1 January 2012 - 31 December 2012:

Total interview meetings	164
Total appointments made	585

# ADMINISTRATION

## Establishment Control

The Approved Post List (APL) as at 31 December 2012 was as follows:

SubGroup	Cost per post (R'000)	2012/2013 Approved number of Posts	SubGroup	Cost per post (R'000)	2012/2013 Approved number of Posts
Management SL 09-10	349	16	Clinical Tech SL 03-6	152	5
Management SL 11-12	566	5	Clinical Tech SL G1-3	306	21
Management SMS	1,012	2	Clinical Tech Man	421	15
Medical Clinical Head	1497	24.63	Med Tech SL 07-8	342	11.63
Medical Clinical Manager	1053	1	Medical Tech SL 09-10	820	5
Medical Interns	1,497	84	Medical Tech Manager	422	1
Medical Non-Clin Man	947	6	Orth & Pros SL06-8	141	3
Medical Officer Comm Serv	560	0	Orth & Pros SL09-10	401	0
Medical Officer Grade 1-3	780	95	Specialist Scientist G1-3	551	11
Medical Specialist Gr 1 - 3	1,067	91.13	Admin SL 01-6	177	505
Med Sub-Specialist Gr 1 – 3	1,218	34.63	Admin SL 07-8	255	64
Pharmacology SL 11-12	1,010	1	Registry SL 07	237	1
Registrar	733	224	Secretaries SL 01-7	170	3
Registrar Snr	963	16	StoresAdmin SL 02-6	149	0
Nurses: Prof Gen	262	381	Stores Admin SL 07	210	3
Nurses: Prof Gen Comm Serv	179	31	System Controller SL08-10	177	0
Nurses: Prof Spec	374	401	Artisans SL05-10	234	20
Nurses: Staff	179	409	Eng Tech Management	543	5
Nursing Assistants	146	806	Indust/Eng Tech Production	325	18
Allied Health Comm Serv	199	13	Handymen SL 03-4	138	21
Clinical Psych Intern	364	5	ASO's SL 01-7	169	0
Clinical Psychologist SL 09-12	651	4	Domestic SL 01-6	116	480
Dieticians SL 06-8	312	15	Domestic SL 07-8	229	1
OT Man / Co-ordinator	395	6	Domestic SL 09-10	307	1
OT Assistants	191	5	Drivers SL 02-6	128	12
Occ & Ther G1-3	279	8	Food Service SL 01-6	116	120
Optometrist SL 06-8	252	1	Food Service SL 07-8	236	7
Pharmacy Assistants	181	15	Food Service SL 09	338	1
Pharmacy Comm Serve	287	2	General workers SL 01-6	120	55
Pharmacy G1-3	480	23	Grounds SL 01-2	85	4
Pharmacy Intern	219	4	Messengers SL 01-4	109	21
Physiotherapists Assistants	192	0	Operators SL 02-7	150	82
Physiotherapists G1-3	269	13	Porters SL 01-4	112	129
Physiotherapists Manager	389	5.63	Porters SL 05	189	0

## ADMINISTRATION

Radiographers G1-3	317	99.25	Security SL 03-6	144	27
Radiographers Manager	389	7	Security SL 07-8	239	1
Social Workers Assistant	164	0	Tele Exchange SL 03-6	162	17
Social workers G1-4	309	19	Telephone Exchange SL 07	246	1
Social workers Manager	424	4	Tradesmen SL 01-3	103	31
Speech Therapy G1-3	297	9	Typists SL 03-6	42	45
Speech Therapy SL 06-8	390	3.63			
			<b>Grand Total</b>		<b>4637.53</b>

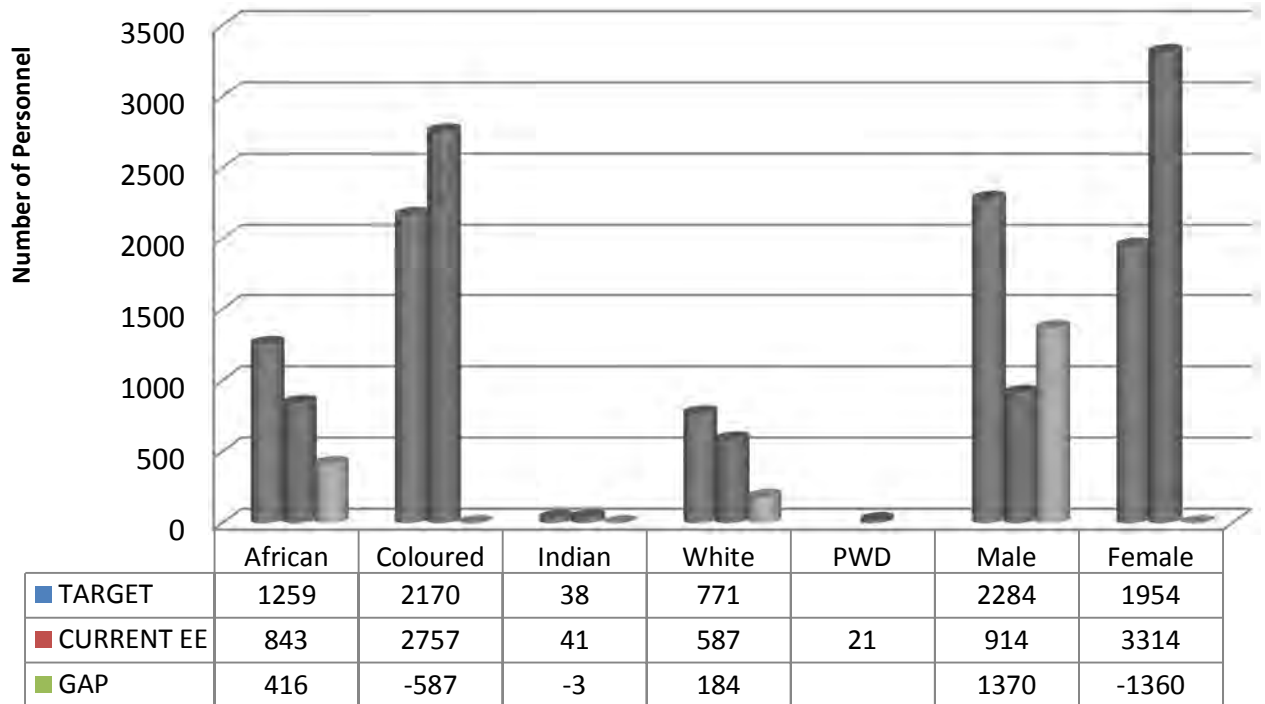


# ADMINISTRATION

**Table 1: PERMANENT PERSONNEL: Race / Gender / Disability**

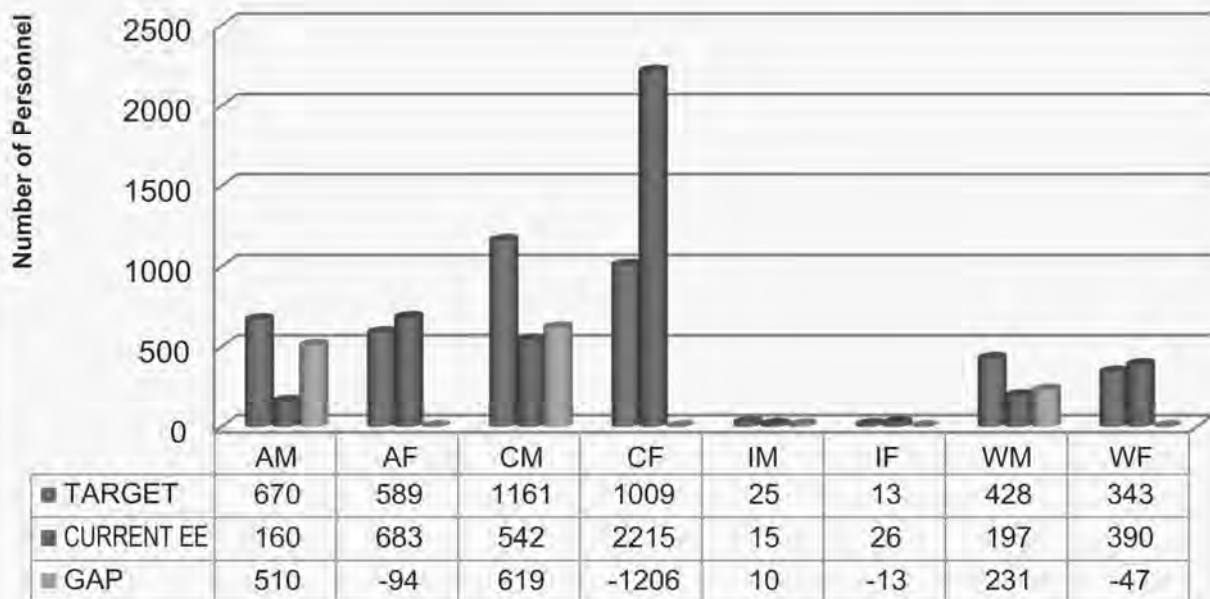
CATEGORIES		TARGET	CURRENT EE	GAP
Race	African	1259	843	416
	Coloured	2170	2757	-587
	Indian	38	41	-3
	White	771	587	184
Disability	PWD		21	
Gender	Male	2284	914	1370
	Female	1954	3314	-1360

**Table 1: Permanent Personnel: Race / Gender / Disability**



# ADMINISTRATION

**Table 1: Permanent Personnel: Race and Gender**



## Staff Performance Management System

The results for the 2011/2012 reporting cycle on 1 April 2012 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	4	74	377	19.63
Levels 3-5	6	336	1644	20.44
Levels 6-8	1	263	1140	23.07
Levels 9-10	2	114	612	18.63
Levels 11-12	3	61	609	10.02
<b>Total</b>	<b>16</b>	<b>848</b>	<b>4382</b>	<b>19.35</b>

### 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
Medical	3	54	595	9.08
Nursing	0	405	1893	21.39
Administration	11	332	1625	20.43
Social Science	2	57	269	21.19
<b>Total</b>	<b>16</b>	<b>848</b>	<b>4382</b>	<b>19.35</b>

# ADMINISTRATION

## 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	5	112	542	20.66
Coloured Female	5	511	2211	23.11
White Male	3	35	299	11.71
White Female		77	478	16.11
African Male	2	21	160	13.13
African Female		82	612	13.40
Asian Male	1	2	28	7.14
Asian Female		8	52	15.38
Persons with Disabilities	0	0	0	0.00
<b>Total</b>	<b>16</b>	<b>848</b>	<b>4382</b>	<b>19.35</b>

## LABOUR RELATIONS

Mr R Japhta

### INFORMAL DISCIPLINARY ACTION

	Male				Female				Total
	A	C	I	W	A	C	I	W	
Disciplinary Action									
Correctional Counselling	2	0	0	0	5	11	0	0	18
Verbal Warning	4	10	0	1	11	21	0	2	49
Written Warning	8	15	0	1	9	34	0	2	69
Final Written Warning	5	9	0	1	6	25	0	1	47
<b>TOTAL</b>	<b>19</b>	<b>34</b>	<b>0</b>	<b>3</b>	<b>31</b>	<b>91</b>	<b>0</b>	<b>5</b>	<b>183</b>

### FORMAL DISCIPLINARY HEARINGS FINALISED

Outcomes of Disciplinary Hearings	Number
Final Written Warning	2
Suspension without salary	1
Demotion	0
Dismissals	2
Not guilty	2
Cases withdrawn	1
Cases dismissed	0
Hearings pending	9
<b>TOTAL</b>	<b>17</b>
Formal Hearings Pending	3

# ADMINISTRATION

## TYPES OF MISCONDUCT ADDRESSED AT DISCIPLINARY HEARINGS

TYPE OF MISCONDUCT	NO	DEPARTMENT
Absent from work without reason or permission	11	Porter Services, Nursing, Food Services
Falsification of Medical Record	1	Support Services
Unauthorised removal of state property	1	Nursing
<b>TOTAL</b>	<b>14</b>	

## GRIEVANCES LODGED

Type of Grievance	Number
SPMS grievances received	17
SPMS grievances resolved	8
SPMS grievances finalised/pending	9
Pilir grievances received	7
Pilir grievances resolved	5
Pilir grievances finalised/pending	2
Other grievances received (not related to SPMS PILIR or OSD)	37
Other grievances resolved (not related to SPMS PILIR or OSD)	14
<b>Total received</b>	<b>61</b>
<b>Total resolved</b>	<b>27</b>
<b>Total finalised</b>	<b>11</b>
<b>Total pending</b>	<b>23</b>

Collective grievances received	4
Collective grievances finalised	4

## PENDING GRIEVANCES

Collective grievances received	4
Collective grievances finalised	4

## Disputes

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

## Training

Number of employees trained	1613
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# ADMINISTRATION

## Precautionary suspensions

Number of employees suspended	0
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	2011	2012
Corrective counselling	2	18
Verbal warnings	11	49
Written warnings	46	69
Final written warnings	50	47

## Formal Discipline

Formal Discipline	2011	2012
Final written warnings	3	3
Suspension without remuneration	4	2
Demotion	0	0
Dismissals	13	2
Not guilty	1	3
Cases withdrawn	4	1
Cases dismissed	0	1
Grievances	2011	2012
SPMS	23	17
OSD	34	0
Other grievances	43	37
PILIR	7	7

Disputes	2011	2012
Disputes declared	7	3
Disputes dismissed	0	0
Disputes withdrawn	1	0
Disputes deadlocked	0	0
Agreements reached	0	1
Disputes finalised	6	1
Disputes pending	0	1

Training	2011	2012
Number of employees trained	1057	1613
Establishment	4508	4650

# ADMINISTRATION

## Courses presented and attended

2011	2012	
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	
Sexual Harassment	Disciplinary Skills	
PERSAL	Conciliation and Arbitration	
PILIR	Fraud Prevention	
	Know Your Rights	
	Investigation and Report Writing	
	Disciplinary Procedures for employees	
	Disciplinary Procedures for Supervisors	
	Report Writing	
<b>Precautionary Suspensions</b>	<b>2011</b>	<b>2012</b>
Employees suspended	3	0

## Achievements

In 2011 training was provided to 1057 employees. In 2012 1613 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.

Formal Disciplinary hearings have drastically decreased in 2012 as supervisors are advised to make use of progressive disciplinary process for less serious transgressions.

Financial savings for the Institution as no employee was Precautionary Suspended in 2012 as compared to the previous year.

Labour Relations advises supervisors to make use of EAP and ICAS as a method to try to solve employee social problems. This highly contributes in the alleviation of absenteeism in the workplace.

Strategies

- More supervisors/managers need to be trained on how to conduct informal

- disciplinary meetings on a monthly basis especially in the Nursing department.
- Labour Relations will conduct training for all employees about Code of Conduct on monthly basis.
- All supervisor/ managers should attend compulsory Labour Relations Training.

## HUMAN RESOURCES DEVELOPMENT

Ms J Johnson

### Overview on Human Resource Development 2012

#### 1. Learnerships

##### 1.1 Diagnostic Radiography

Ten (10) learners are currently on the programme. Seven (7) learners are busy in their final year and three (3) in their first year.

**Funding:** Health and Welfare Seta

#### 1.2 Pharmacy

##### 1.2.1 Basic Pharmacist Assistants

# ADMINISTRATION

Five (5) employed (18.1) and two (2) unemployed (18.2) learners are busy with this course.

**Funding:** Khet'impilo training and EPWP

## **1.2.2 Post Basic Pharmacist Assistants**

Four (4) unemployed (18.2) learners are busy with this course.

**Funding:** Expanded Public Works Programme (EPWP)

## **2. Bursaries**

### **2012/13**

Twenty-one (21) employees received part-time bursary with an estimated budget of **R222 386.50**. These beneficiaries are from the following categories: Nursing, Administration support and Professionals. These bursaries are funded by the Directorate: HRD.

### **2013/14**

Twenty-five (25) Administration support and Professional bursary applications was approved. A total of fifteen (15) Nursing bursaries were approved. These bursaries are funded by the Directorate: HRD

## **3. Adult Further Education and training (Grade12)**

Ten (10) learners wrote exams during May / June 2012. Thirty four (34) staff members enrolled for classes in order to write exams in May / June 2013

## **4. Internship**

### **4.1 Expanded Public Works Programme**

Three (3) Data Capture Interns are on an internship at the institution.

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

Three (3) Human Resources Management students were offered an opportunity to do experiential training for a period of three (3) months between April – June 2012. These students got exposure in Personnel and Employment Practices, Labour Relations and HRD.

Six (6) Financial Management and Office Management students were offered an opportunity to do experiential training for six (6) months. They were all placed in the Finance Department.

## **Further Education and Training College (FET)**

Thirty (30) 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.

## **4.3 Premier's Advancement Youth programme**

Fifteen (15) interns are placed for a year in Patient Admin and Social Work Department.

## **4.4 Generic Interns**

Forty-three (43) 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.

Fifteen (15) of the interns received permanent employment within Health (8 at Tygerberg Hospital) and a further twelve (13) resigned, further studies or contracts expired.

## **5. Training**

### **Skills fund and Provincial Training Institute**

Despite changes in the Procurement processes, 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.

Total training interventions: 3252

Total employees trained: 1780

Percentage trained: 41%

## **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.

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
11th Asian and Oceania Congress of Child Neurology 2012					1			
12th International Child Neurology Congress					2			
15th International Congress on Infectious Diseases					1			
15th SASMN Biennial Congress	1				1			
15th WFSA World Congress Of Anaesthesiologist					3			
19th International Aids Conference					1			
1st African Conference on Emergency Medicine					1			
2012 European Respiratory Society Congress					1			
2012 MDS International Congress					1			
2012 Temporal Bone Course					2			
20th World Congress of the International Association of Child Psychiatry and Allied Professions					1			
25th Annual Labour Law Conference					1			
25th ECNP Congress					1			
28th Annual South African Labour Law Reports Seminar					1			
2nd Namibian Medical Society Paediatric Congress					1			
34th International Association of Cancer Registries					1			
35th National Congress of the SDA Society of Obstetrics & Gynaecology					1			
3rd Child Priorities Conference					2			
3rd SA TB Conference 2012					1			
43rd Union World Conference on Lung Health					2			
44th Congress of World Society of Paediatric Oncology					2			
4th IMPAKT Breast Cancer Conference					1			
4th International Workshop on HIV Paediatrics					1			
6th World Congress Paediatric Cardiology & Cardiac Surgery					1			
80 Hour Lactation Management For Professional Staff					2			
8th Congress of Toxicology in Developing Countries					1			
8th Divers Alert Network Day					1			
9th Continued Nutrition Education					2			
9th ECHM Consensus Conference					1			
Accident Emergency Service					1			
ADA Course					1			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Addiction Care					1			
Adolescent HIV Conference					3			
Adult HIV/AIDS					1			
Advanced Cardiac Life Support					7			
Advanced Course in Gynaecology Ultrasound					1			
Advanced Gynaecological Endoscopy Training					1			
Advanced Life Support					1			1
Advanced Neonatal Life Support					51			
Advanced Paediatric Life Support					9			
Advanced Paediatric Life Support Instructor Course					1			
Advanced Trauma Life Support					3			
Advise Consent Test Support					5			2
Afrikaans for Beginners	3		4					3
Alcohol Induced Psychotic Disorder					2			
American Society for Radiation Oncology Teaching Course					4			
Anatomy and dissection of the upper limb workshop					1			
Annual Congress of the European Association of Nuclear Medicine					1			
Annual European Congress Of Rheumatology					1			
Annual Novo Nordisk Haemostasis Symposium					2			
Anxiety Exposed in Kids					3			
Assessor Programme	1							
Association for Research in Vision and Ophthalmology Congress 2012					1			
Audit Skill	2	1			13			
Baby Friendly Hospital Initiative Assessments					1			
Bana Pele Congress					1			
BAS Cash Receipts	2							
BAS Journals	2							
BAS Orientation in Finance	3							
BAS Reports	1							
BAS Sundry Payments								1
Basic Assessment and Support in Intensive Care					2			
Basic Course on Management of HIV + TB at Primary Health Care Level					1			
Basic CPR					1			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Basic Life Support					53			
Basic Seating Course					2			
Basic Surgical Skills					3			
Batho Pele	18	2	28				2	
Best Care					4			1
Better Birth Initiative Workshop					4			
Beyond Words					1			
Bioethics: The use of methylphenidate in "healthy" students					1			
Brachytherapy					1			
Brain Ageing & Dementia in Developing Countries					1			
Breastfeeding Friendly Workplace					12			3
Brother 1st Line Support Dealer Training	2							1
Cadaver based Spinal Anatomical Approaches Course					1			
Cases & Causes of Hearing Loss					3			
Cashier	4							
Central Sterile Supply departments				1	1			
Cervical Workshop					1			
Child Rights and Law for Health Professionals					1			
Chronic Diseases of Lifestyle Symposium					3			
Clinical Supervision					7			
Clinical and Training Outreach					1			
Clinical Gait Analysis Course					1			
Clinical Science Workshop					1			
Clinical Workshop: Assessments 2012					6			
Clinicom	2							
CMT Medical Conference						1		
Compensation for Occupational Injuries and Diseases	7							4
Computed Tomography/Magnetic Resonance Imaging Seminar					33			
Conflict Management	7	1	2		14		1	12
Continuous Nutrition Education (CNE)					5			
Controversies in Infection Control and the ICU					6			
COPICON Congress					1			
Counselling Workshop					1			
Course in Intensive Care					1			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Creating a Respectful Workplace	25		8	1	7		2	12
Creative Arts in Psychosocial Support Intensive					1			
Critical Care Africa Congress					2			
Critical Care Refresher Course					3			
Customer Care	21	1	39	2	15		3	39
Customer Care	21	1	39	2	15		3	39
Data Capturer Training	4							
Demand Management					1			1
Departmental Strategic Planning Session					1			
Dermatitis					1			
Dessa Congress/Diabetic Course					2			1
Detection and Diagnosis of Early Breast Cancer					2			
Diabetes Course								1
Dietician's Workshop					1			
Disciplinary Codes and Procedures					2		2	
Diversity Management	9		5	6	12		6	5
Dr2Dr Workshop					1			
Driving Assessment and Intervention Planning					1			
Dysphagia Diet: Principals & Practices					1			
Dysrhythmia Interpretation					3			
Ear Institute					1			
Echocardiography Course					1			
EDHI Workshop					1			
Effective Ward Management Skills					1			
Electronic records training	1							
Embolization Workshop					1			
ENT Congress					1			
Essential End User Testing of Radiopharmaceuticals and Design					1			
ESTRO Quality and Risk Management					2			
ESTRO Training Course on RM&PS					1			
Ethics					2			
Ethics workshop: Ethical Principles in Rehabilitation					1			
Ethics: ethnic stigma - genetic research in Africa					1			
Ethics: race in research					1			
Etiquette and Ethics in the Public Service	5						1	2

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Euler Ultrasound Course 2012					1			
European Congress of Radiology 2012					1			
European League Against Rheumatism Congress					1			
European Society for Therapy And Radiation Oncology Conference					3			
Evaluator Training Workshop					1			
Evidence Based Health Care					1			
Exercise during pregnancy workshop					1			
Experts in Cervical Cancer and Leadership					3			
Falls Prevention: Physiotherapy Management and the role of technology					2			
Familiarization with the uPA-PAL Cancer Market Assay Technique					1			
Ferring Pharmaceutical Sponsorship					2			
Finance for Non-Financial Managers					2			
First Aid	10	1	28		13		7	8
First Clinical Attachment Course					1			
Fisio Training Workshop					1			
Follow-up short course in Undergraduate Teaching					1			
Food Based Dietary Guideline training					1			
Fresenius Kabi Advanced Nutrition					2			
Gender Mainstreaming					5			1
Going Global: Lower Quarter					1			
Grievance Procedure					2		3	
Group Dynamics	4		11	4	5		4	3
HACCP Food Safety			2				3	
Haemophilia nurse training								1
Hand hygiene and Personal Protective Equipment			32				4	
Head Injuries					1			
Health Care Implementation Workshop	1		2		2			
Health Care Risk Waste Management Regulations					1			
Health Leadership					2			
Haemophilia					1			1
Heart Congress					2			
Health systems strengthening					1			
High Resolution Computed Tomography course					2			
HIV Conference					3			



# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
HIV/AIDS Pharmaceutical Management					3			
HIV/AIDS/ART Clinical Management					1			
HR Connect training Session					1			1
ICC Nephrology					2			
Imaging 4 TAVI Course					4			
I-MED Training Course					1			
Implantable Cardio venter - Defibrillators					2			
Implementation Of Preferential Procurement Regulations	2							1
Improvement Advisor Professional Development Program					1			
Infant Feeding Counselling for Counsellors					2			
Infant feeding in the context of HIV								1
Infection Control Africa Network Annual Conference					2			
Infection Prevention and Control Link Nurse					54			
Injury on Duty	2							1
Inter acoustics Product Launch					1			
Intermediate Seating Workshop: Wheelchair & Buggies					2			
Intermediate Wheelchair Seating					1			
Internal Records Management/Registry Training	34		4	1				1
International Child Neurology Congress					3			
International Conference on Emergency Medicine 2012					1			
International ICF Consensus Conference For Hearing Loss					1			
International Instructional Trauma Course					1			
International Vaccinology					1			
Intervention of PIP Injuries								1
Introduction to Junior Management	8		2	2	12		1	3
Introduction to Labour Law					1		1	
Introduction to Office Management	18		2	2			2	6
Introduction to Records Management and Registry	6				1			
Introduction to the Compilation of Annual Financial Statements	3							
IOWA Head & Neck Course					1			
Job Descriptions					2			
Junior Management Development Programme Block 1	1				7		1	

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Junior Management Development Programme Block 2	1				4			
Juta's Writing Skills Workshop					1			
Know Your Rights	20		12	1	2		3	5
Labour Market Analysis	1				1			
Laparoscopic Procedures					2			
Leadership					1			
Leadership Innovation & Change Management						1		
Lenovo Customer Academy Programme	2				1			1
Leprosy Module 2012								1
Lift Maintenance Training	1		43	2	3		7	5
Longitudinal Monitoring of Complicated Osteomyelitis					1			
Low Tech & High Tech Simulation					1			
Lumbar Spine					1			
Lumbar Spine Techniques					1			
Management of Diabetes and Diabetic Foot Congress 2012								1
Management of Extensor Tendon Injuries					1			1
Management of HIV & TB at Primary Health Care Level					1			
Managing Absenteeism in the Workplace	4	1	2		9		3	9
Managing Absenteeism			1		1		1	
Managing Disability					2			
Managing Incapacity and Poor Work Performance			2		17			5
Managing Leave					2		1	3
Managing Paediatric Feeding Disorders					2			
Monomeric Studies					1			
Measuring & Management of TB-MDR,XDR,TB in patients					2			
Mechanical Ventilation					4			
Medical Applications of Biotechnology Congress					2			
Medical records Theory	3							
Meeting Skills & Report Writing	14				1			2
Meeting the World Association of Trainees in Obstetrics and Gynaecology					1			
Mental Health Summit 2012					1			
Medtronic Rapid Exchange Forum 2012					3			
Micro Surgery Course					1			
Microsoft Outlook	30	5			51		3	23

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Midwifery managers and educators forum					1			
Ministerial Complaints Project	1							
Moorsfield International Glaucoma Symposium					1			
Mossback Hospital and ATOS Clinic Heidelberg					1			
MS Access 2007 Level 1	5							1
MS Access 2007 Level 2	5							1
MS Access 2007 Level 3	5							1
MS Adobe Photoshop 2007 Level 1	2				3			1
MS Adobe Photoshop 2007 Level 2	2				3			1
MS Excel 2007 Level 1	19	1	8		17		1	2
MS Excel 2007 Level 2	19	1	8		17		1	2
MS Excel 2007 Level 3	18	1	8		17		1	2
MS PowerPoint 2007 Level 1	3	1	3		5			
MS PowerPoint 2007 Level 2	3	1	2		5			
Ms Word 2007 Level 1	37	5	14	1	22		4	4
Ms Word 2007 Level 2	35	5	13	1	22		4	4
Ms Word 2007 Level 3	35	5	13	1	22		4	4
Musculoskeletal Workshop					1			
Myths about milk feeding/weaning					2			
NASA Congress					2			
National Child Health Conference					1			
National Expanded Programme on Immunization of Disease Surveillance Workshop					1			
National Skills Development Strategy III Workshop					1			
Neonatal Cardio Pulmonary Resuscitation					11			
Neonatal Intensive Care					1			
Neonatal meningitis and bedside imaging					1			
Neonatal Seminar					8			4
Neurosurgery Seminar					1			
NMCS System Workshop					1			
NNASA 5th National Conference					1			
Nursing Council Hearing					14			6
Nursing Induction	5			2	16		1	11
Nursing Speciality Forum					3			
Observe Technical and Clinical Methods related to Gait Analysis					1			
Obstetric training					2			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Occupational Health and Safety	1	1	2		9		6	3
Oncology Summer Seminar					3			
Organ donation, Vit D, nephrology					2			
Overview of Persal & Reports								1
PACS & RIS 2012					2			
Paediatric Anaesthesia Congress of South Africa					3			
Paediatric Cardiology Training					1			
Paediatric HIV/AIDS					1			
Paediatric Oncology					2			
Paediatric Rheumatology					4			
Paediatric Surgery Advanced Course					1			
Pain Care Management					1			
Pain Management Programme					3			
Pain SA Congress					1			
Pan African Burns Society Congress					2			
Parenteral Nutrition Training Workshop					1			
Patient Admin Training	55							6
Patient Admin(Procedures and Policies)	6							2
Paediatric Cardiology					1			
Paediatric Haematology/Oncology Workshop								2
Performance Management Policy, Reviews, Measures and Appraisals	3			1	3			10
Persal Establishment	2							
Persal Introduction	11							
Persal Leave Administration and Service Termination	1							
Persal Personnel Admin	6							
Persal Salary Admin	3							1
Personal Leadership					1			
Policy Training	6							
PONTAK/PREDAC 2012					1			
Post Graduate Diabetes Course					1			
Postgraduate Child Nursing Evaluation					3			
Postnatal Adjustment Baby Gym & Postnatal Exercises					2			
Practical Hands on Workshop (Lumber Spine)					1			
Pre Conference Contouring Workshop					1			
Preceptorship Training Programme					3			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
Presentation Skills	4				6		2	2
Prevention of Mother to Child Transmission Hast Toolkit					1			
Principals of Pain					1			
Priorities in perinatal Care in Southern Africa					1			
Problem Solving & Analysis Training	5				6			1
Problem Solving & Decision Making	5	1	4	1	10		1	3
Professional Conduct Code					8			1
Progressive Discipline for Supervisors/Managers	4	1			23		2	14
Project Management	9			1	7		2	3
Promoting Patient Safety & Quality Care in ICU					1			
PRONTAK/ PREDAC Course					1			
Provincial Midwifery Managers and educators forum					1			
PTB, Bronchoscopy, CDH					2			
Public Sector Trainers Forum					1			
Public Service Induction Level 1 - 5	33	3	45	4			4	60
Public Service Induction Level 6-12					48			5
Public Service Induction Network					1			
Pulsa Plus					2			
Radiology FRCR 2B Course					1			
Radiology Refresher Course for GP's 2012					5			
Rational Emotive & Cognitive Behavioural Theory & Techniques					1			
Refresher Course Part II					4			
Regional Training Course on Hospital Radio - Pharmacy					1			
Respiratory conditions					3			
RSSA Leuven head and neck cancer imaging					9			
RSSA Leuven Lung Imaging Course					7			
RSSA/SAS Paediatric Imaging Congress					17			
SA Congress of Nephrology					1			
SA Glaucoma Society Congress					2			
SA Heart Association 2012					3			
SA HIV Clinicians Society Conference 2012					7			
SA Paediatric Association 2012 Congress					2			
SA Renal Conference					1			
SA Spine Society Congress					2			
SAAPMB 2012 Congress					3			

# ADMINISTRATION

Training Interventions	Clerks	Craft and Related Workers	Elementary Workers	Plant and Machine Operators	Professionals	Senior Officials and Managers	Service Workers	Technicians
SAGES/ SASSES Congress					1			1
SASH Course					4			
SASNM Congress					10			
SASPEN Congress 2012					1			
SASSH Refresher Course					1			
Scientific Writing skills					1			
Scope Workshop					1			
Seating Workshop: Wheelchair and Buggies					1			
SEMDSA Congress					2			
Sensory Defensiveness: A Comprehensive Treatment Approach					1			
Sexual Harassment	3		1					9
Short Course in Undergraduate Clinical Supervision					4			
Shoulder Rehabilitation					10			
Skeletal Trauma Symposium					1			
Skills Development Facilitator Training	1							
Society for Endocrinology, Metabolism and Diabetes of South Africa					3			
Society for Industrial and Organizational Psychology Conference					3			
South Africa Sociological Association Congress 2012					28			
South African Congress of Nephrology					1			
South African Orthopaedic Association Congress					8			
South African Society of Obstetricians & Gynaecologists					9			
South African Sugar Association					1			
South African Triage Scale Training					4			2
Spine week/Euro spine 2012					1			
Staff Performance Management System	2	1	3		57		11	15
Standard Charts of Accounts Training	29				1			6
Standard Precautions and Communicable Disease in HCE			43				9	
Stoma and Wound Workshop					5			6
Strategic Human Resource Management					1			
Strategic Leadership, Management and Planning					15			
Strategic Sourcing Training						1		
SUNECHO Course					5			
Supply Chain Management	1							

## ADMINISTRATION

Surgical Skills Course					3			
Talk Tools: Placement Therapy for Speech Clarity & Feeding Skills					1			
TB					2			
Teaching Course on Oncology					1			
Teaching/Review Training program					1			
Team Building	1		8				1	1
Technical Review Summit /Baseline Training For Cancer					1			
Tec Med demonstration					1			
The Ageing Brain					8			
The Management of: De Quervains, Dupuytren's, CTS, CRPS & Tenosynovitis					2			
Theatre Congress					4			
Time Management	39	1	2		23			24
TOE Course					1			
Tomosynthesis Hands-on Workshop					2			
Toy making workshop					1			
Transact Triathlon Conference					1			
Trans oesophageal Echocardiography course					1			
Trauma Case Controversies Conference					1			
Trauma Symposium					5			
Triage Trainer of Trainers Course					2			
Undergraduate Clinical Supervision					2			
Uniform Patient Fee Schedule	29							2
VAC Dressing					9			8
Vancouver Referencing System					1			
Vascular Workshop					1			
Waste Management and Environmental Cleaning			50				3	
What's Hot in IPC					3			
Wheelchair Service Delivery: Basic(Professional) Course					2			
Winter School					2			
Woman Empowerment					2		1	14
Woman in Management					4			1
Women in Business Conference	1				1			
World Federation of Haemophilia World Congress 2012					1			
Xhosa for Beginners	8	3	1		4		1	13
<b>Total</b>	<b>747</b>	<b>43</b>	<b>457</b>	<b>35</b>	<b>1413</b>	<b>3</b>	<b>120</b>	<b>434</b>
<b>Grand Total</b>								<b>3252</b>

### Staff Wellness Programme (EAP)

The hospital continues to look after its staff by means of utilizing the services procured by Head Office from ICAS, an independent counseling and advisory. Prevalent and common cases that were dealt with include relationship issues, legal issues, child and

family care, stress, mental illness / psychiatric and money management. The relationship between the internal EAP and ICAS continues to be a viable option.

# ADMINISTRATION

## Utilisation rates

Over the three quarters of 2012 (April – December) 134 cases were dealt with. The period between April – December 2011 that a total of 136 cases were handled, indicating a decrease in the utilization of services. This can be due to the fact that the contract of ICAS as service provider was on a monthly basis. It is recommended that ICAS services be again emphasized 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 2012. Organized per gender, this 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 greater than 5 year's employment is the bulk users of the services. Two team building sessions took place.

A further breakdown of the utilization rate per site as depicted in the table below illustrates that nurses had the highest number of cases and this bears a correlation with previous findings. Certain areas at nursing were identified to be high risk in terms of most hazards to staff health and wellness.

## Site Utilisation 2012

Site	Q 1 cases	Q 2 cases	Q 3 cases	Total
Clinical Nurses	22	17	17	<b>56</b>
Administrative	12	14	9	<b>35</b>
Support services	8	9	7	<b>24</b>
Clinical-other	5	8	6	<b>19</b>
<b>Total</b>	<b>47</b>	<b>48</b>	<b>39</b>	<b>134</b>

## 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 of 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.



# ADMINISTRATION

## Special visitors

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

Milan Murray	19 January
Gerry Rantseli- Elsdon	10 April
MEC Botha	19 April & 19 November
Stormers	24 July
Kia Johnson	10 August
SA Navy Band	16 August

## Special Events

Open Day	12 April
Opening of Western Cape Academic PET/CT Centre	19 April
Mandela Day	18 July
Women's Day	16 August
Spring Concert	27 September
Staff Wellness Day	9 & 11 October
Paediatric Oncology Workshop	19 October
Long Service Awards	24 October
Hartman Lecture Annual Awards	25 October
Nurse's Pledge Ceremony	26 October
Opening Of Haematology Unit	19 November
CEO Ball	30 November
Smile Week	19-23 November
Annual Children's Christmas Party	6 December

## Support Services

Mr AJM Harmse

## In House Security Service:

### Financial Constraints

- CCTV Cameras have been installed.
- Although vacant post have been filled, the current staff allocated to each shift is not sufficient to enable the security department to function to its full capacity.
- This circumstances place a tremendous strain on the department, especially in the maintaining of security enforcement against intrusion for any unlawful and unauthorized entries.

## Service Delivery

- Currently, the establishment is as follows:  
Supervisor x 1 Chief Security Officer:  
Senior Security Office x 8  
Security Officer x 15

## Supervision: Personnel Management

### Positive

- Staff nominated and received training on related issues on their work objectives
- Some of the courses, which were successfully completed, were, Training in Human Resource Management, Basic supervision, Investigating Officers, Health and safety Officers as well as in the SPMS.
- A request for further training was forward to the HRD Department, such as to be trained in computer literacy, Labour relations as well as other training to become well equipped.
- This training empowered the staff with reference to their work skills which would enable them to execute their duties more effective and correctly.

### Negative

- Other related functions, such as, water leakage, electrical problems, run-away patients, open doors and escorting of public from wards due to late visit.

## General Constraints

- Staff shortage; which causes delay in the performing of security functions.

## Contract Security

### Resources

### Contract Manager

#### Shift x 1: Day Shift:

Supervisor: Grade	:	A	x1
Supervisor: Grade	:	B	x1
Controller: Grade	:	C	x1
Security Guards	:	65	

# ADMINISTRATION

## Shift x2: Night Shift:

Supervisor: Grade	:	A	x1
Supervisor: Grade	:	B	x1
Controller: Grade	:	C	x1
Security Guards	:		49

## Shift x3: Relieve :

Supervisor: Grade	:	A	x1
Supervisor: Grade	:	B	x1
Controller: Grade	:	C	x1
Security Guards	:		60

## Mobility

- Vehicle x 4
- Motor Bikes x 3
- Bicycle x 2

## Service Delivery

- The in-house security is responsible for the internal security functions, while the private security attend to the perimeter security.
- Several changes at supervisory and guard levels were made to produce and uplift service delivery.
- Weekly meetings between the general manager, hospital admin officer and staff are held to address problematic issues and attitude towards service delivery
- Also extra staff was allocated to allocated points to improve service delivery.
- Armed response vehicles were deployed to enhance adequate response and visibility.

## Findings

Although there is still room for improvement the following have been found:

- A great improvement on service delivery has been found since the weekly meetings and changes both on ground and supervisory level were made.
- Motorbike and an extra vehicle are in place and an improved patrol visibility has been found.
- Vehicle and motorbike patrol is very effective.
- A more professional attitude on ground level.

- Points are constantly manned and visited by supervisors and armed response.
- Even though there is still room for improvement, access control has been enhanced.
- All allocated points to be manned with staff have been addressed.
- New supervisory shifts have been implemented to ensure that every staff member become acquainted with all supervisors.
- Since the beginning of this year an improvement of the control of private taxis has been found.
- An improvement on the apprehension of suspect and arrested by SAPS has been found.
- There has been a reduction in vehicle theft and vandalism on the floors.
- It has been found that the service delivery on weekends and during night shift has improved.

## Patient Transport

### Personnel Management (Positive & Negative)

- A geographic and practical introduction training program was provided in this specific field before the officer was deployed in the work field.
- Other information session that were presented, before commencing in this field, were, Absenteeism, Basic Service Condition, Disaster Plan, SPMS, Labour Relations, Code of Conduct, Discipline Procedures, the Batho Pele Principles, Admin duties to execute the duties more effectively.

## Pneumatic Tube Distribution

- Cost of repairs to the system has reduced as after hour call out have been curtailed.

## Service Delivery

The Current Establishment:

- Operators x 6
- Component lacks a post of supervisor to ensure the required level of efficiency

# ADMINISTRATION

## Personnel Management (Positive & Negative)

- All staff were nominated and received training on issues relating to the departments objectives. The newly appointed staff also received geographic and practical induction- training program before being deployed in the work field. Other information session that were presented, were uniform code, absenteeism, basic Service Condition, Disaster Plan, SPMS, Labour Relations, Code of Conduct, Discipline Procedures, the Batho Pele Principles, admin duties to execute their duties more effectively.
- Vacant post in the department have been advertised and filled within the expected time.
- Due to the age of the system mechanical parts are not at all times available, and it does happen occasionally that some tubes slips past their destination, which then causes a variety of problems for the operator. However, this problem is addressed by the technician on a daily basis.

## Monitoring Measures

- Overtime and leave, sick leave forms are submitted on a weekly basis.

## 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 have been put in place where record keeping of specimens received and dispatch is recorded to enable the operator to identify the time and laboratories the specimen have been sent to.

## Mortuary

### Service Delivery

The establishment is as follows:

- Senior Admin Clerk           x 1
- Senior Porter                   x 1

- Delays in the receipt and dispatch of necessary documentation to be completed by the Medical Staff has a negative effect on service delivery

## Support Services (Continued)

Ms CB Johnson

## EXTERNAL CLEANING SERVICES

### Service Delivery

The removal of medical waste and refuse from the campus has been outsourced to a private contractor.

### Resources

Supervisor (Principle General Foreman)	X1
Senior General Foreman	X1
General Workers	X9

### Personnel Management

- Staff received continuous training on issues related to their work objectives which resulted in the empowerment of staff.

### 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.
- To date, the promulgation of the Draft Health Care Risk Waste Management Regulation, 2011 as depicted in the Health Care Waste Management Act of 2007 has not been implemented by the Department of Environmental Affairs and Planning. When implementation takes place, we the generator of waste, need to be registered within 180 days of promulgation.
- A waste plan for the hospital was developed

## GARDENING SERVICES

### Financial Achievement

A new tractor was purchased which facilitates in the productivity of service delivery.

# ADMINISTRATION

## General

Continuous problems with the escalation of moles on the premises which has been addressed, however there is still a considerable amount of alternatives that need to be viewed.

## 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.

To ensure compliance with the Health and Safety Standards, one hundred tamper resistant bait stations were purchased and placed at strategic points to eradicate rodent and mice activities within the institution

## PORTER SERVICES

### Service Delivery

The Smile Foundation scheduled 30 operations for children with cleft palates.

The organisations' mission is to give back a smile to our children.

To have been part of such a huge event was a great privilege.

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 Porter and Porters received continuous training to improve service delivery.

### Monitoring Measures

Programme to monitor absenteeism in the workplace was continued and has been beneficial in reducing absenteeism.

Due to this system, patterned absenteeism could be identified and even misuse of sick leave was dealt with in accordance with the disciplinary policy.

Quarterly stock-taking of equipment was initiated and broken or condemned stock could be identified.

### Financial Achievement

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

## LINEN MANAGEMENT

Mr J Trytsman

### Resources

Assistant Director	1
Senior Linen Supervisor	4
Laundry Aid III	1
Laundry Aid II	1

### Service Delivery

Approximately 300 000 pieces of linen processed per month.

### Complaints Recorded

No official complaints received from the public.

### Annual Audit

#### Basic Linen Count

Count	Value
205 785	R16 532 873.67

#### Linen Loss

Count	Value
24 192	R1 806 724.10

# ADMINISTRATION

## National Audit Report Feedback

Score	Extreme measures	Vital	Essential	Development
100%	Not available	100%	100%	100%

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 exchange that was upgraded to a 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, one of which is used for Doctors' Enquiries.
- 6 of the 8 consoles are used for the handling of general calls/enquiries on a full time basis during 07h30 & 16h00.
- These 6 consoles manages approximately 4000 of the 12000 incoming calls per day.
- The outgoing calls amount to approximately 4000 of which the Telephone Exchange handles approximately 3000.
- This total includes approximately 2000 cellphone and trunk calls.
- The average cost of cellphone calls per month is R40 000.00
- The average cost of Telkom calls per month is R210 000.00

#### RADIO ROOM:

- The two Operators in the Radio room handles approximately 3000 calls for

transmission during the following working hours: 07h30 to 16h00.

- The Operator that mans the console at Doctors' Enquiries handles approximately 1000 calls per day.

#### SMS MESSAGE SYSTEM:

- Tygerberg Hospitals' Radio room also uses a SMS message system to contact doctors that have no beepers or beepers that are faulty.
- The SMS message system is used to send SMS messages to the personnel that have no beepers.
- Approximately  $\pm$ 1000 SMS's are sent per day.

### ACCOMMODATION

Mr EC Steyn & Ms CB Johnson

Doctors' Quarters	Rooms
Single Rooms	38
One Bedroom Flats	36
Two Bedroom Flats	05

#### 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.
- 95 permanent tenants reside at Protea Court, the majority from the nursing department.
- The 1<sup>st</sup> floor in Tower 3 was allocated to CANSA (Cancer Association of South Africa) to assist in the recuperation of patients
- Two floors in Tower 3 (40 beds) are allocated to the Emergency Services Department.
- A total of 31 tenants moved in and 63 moved out of Protea Court in 2012.
- A further floor has been identified to accommodate a patient overnight facility.
- The night crèche is also accommodated in the Protea Court.

# ADMINISTRATION

## Single Rooms/beds

(including suitcase rooms) 192

Double Rooms = 127 Total of 254 beds

One Bedroom Flats 06

Two Bedroom Flats = 2 Total of 04 beds

Single Room with sitting room 01

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

## REPROGRAPHICS

Mr W Adonis

### OVERVIEW

- The core function of the department is to ensure an efficient high volume production unit for printing and photocopying.
- Two Riso machines do all high volume printing of forms ranging from 1000 – 20000+ for the stores, wards and clinics.
- Photocopies of manuals, memorandums, notices and forms are done on two high volume Minolta Bizhub models; 920 and 1050.
- Copying of patient folders is handled with the required confidentiality.
- The department provide also other finishing as requested e.g. sort and stapling, gluing, punching, cutting and laminating.
- The ID section handles the taking of personnel identity cards for new appointees, changes in rank and surnames. Lost and damage cards is replaced at a cost.
- The department does printing for NHLS who are charged for printing via the Finance Department.

### RESOURCES

Chief Clerk	1
Principal Operators	4
Typist	1

### OUTPUTS

ID Photo's taken	1 150
Photo copies	3 769 923
Copies printed	4 344 028
Laminating	4 170

## SERVICE DELIVERY

The department is at times under pressure to handle high volumes of work when one or two officials are absent, due to leave or illness. The staff of 4 operators and 1 supervisor apply their knowledge and experience of the department and equipment to cover all production points during these times.

The upgrading of 2 x Riso Machines on 13 March 2012 contributed to an increase in production and a service contract for these machines include masters and ink, response time for repairs and servicing is good.

## 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 a capacity of 30 vehicles.
- 22 existing vehicles were replaced with various new vehicles.

### RESOURCES

Chief Clerk	1
Senior Clerk	1
Drivers	7
General Assistants	1

### SERVICE DELIVERY

- The requests for transport to various destinations regularly places pressure on the component due to insufficient drivers available, reasons being illnesses, various leave types,
- Another hampering event is when vehicles are booked at the Government Garages for mandatory services as well as when any breakages occur on said vehicles
- The staff utilises their knowledge and experience of the various transport destinations and the shortest, yet safest possible routes to ensure excellent service delivery.

# ADMINISTRATION

## REGISTRY/ARCHIVES /MAILROOM Mr HTM Mbidlana

### Registry

The Registry Department handles all incoming mail to Tygerberg Hospital.

Outgoing mail for the period 20120204 – 20120203 was at 57 343 items (letters and parcels) and expenditure of same amounted to R169 586-90

### Resources

Administration Officer 1  
Senior Registry Clerk 1

- The telegram machine at Tygerberg Post Office (situated on the hospital grounds) has been out of order for a lengthy period which resulted in telegrams being faxed to Johannesburg.
- Incoming faxes are much more 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 hospitals..

### 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, Laundry, Forensic Services, Disa Court, Sarleh Dollie, Forensic Mortuary,

Ravensmead Day Hospital, Emergency Medical Services

### Training

2 staff members are recipients of bursaries for 2013 for Archives & Records Management.

### General

Space capacity is almost at maximum use and new solutions need to be reached in terms of funding and space capacity to facilitate adequate record keeping.

## FOOD SERVICES Ms NM Bekwa

### Summary of activities

- Meal provision to all patients as applicable to the Food Services Policy.
- Costing of meals and recipes as indicated in the policies.
- A total of 1 350 521 meals for the year were served
- Maintain a high level of hygiene,
- Human capital development as well as management including managing performance.
- Adhering to all Food services guidelines

### Resources

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

### Infrastructure development

- A new dishwasher was installed
- 30 Bain Marries were purchased
- 30 Lowerators were purchased
- Equipment was ordered and received

# ADMINISTRATION

- Food service unit was tiled and minor renovations done (sinks and stainless steel tables)

## **Achievements with regard to research activities and research outputs:**

- An improvement in the costing of meals for TBH and submission to the INP office on time every month.
- An improvement in the Pest control programme due to adherence to the drafted programme for the Unit.
- An improved work attendance due to personal interventions to ensure that a solution is reached

## **SPECIAL ACHIEVEMENTS AND OTHER HIGHLIGHTS**

- Meal cost per patient on average is currently R20.00, costing submitted on time to the INP office.
- An improvement in late coming as well as the general attendance
- Visibility of the managers on the floor during serving to ensure that all meals go out as expected in terms of quality and need.
- Hygiene samples as well as food samples are sent to NHLS on a weekly basis to ensure that the results come before a dish is used (prompt response from the laboratory as well)
- Installation of sanitizers and new hand washers to improve hygiene.
- Use of colour coded material to prevent cross contamination.
- Positive support and guidance from Labour Relations department
- Rotation of staff to different areas in the Unit in ORDER TO gain complete expose has proven to succeed.
- Vacant posts advertised and filled within time frames
- Monthly meetings with the Main Stores to ensure that we do not run out of stock from their suppliers aided to understand their vetting circumstances thereby ensuring that orders are placed timeously before vetting takes place.

- A daily personnel hygiene check sheet ensured that all jewellery that is not applicable in the FS POLICY is not worn and steps are taken to ensure adherence.
- Encouraging FS Supervisors regarding constant development of their subordinates assisted them to gain confidence
- Key control registers in place to ensure that allocated employees open the stores and fridges.
- Registers are checked daily by the production manager
- Improved response by Top Management on meal evaluation

## **DEPARTMENT OF SOCIAL WORK MRS MN DE JAGER**

### **Summary of activities:**

Our greatest challenge was to continue in rendering a comprehensive and holistic social work service with emphasis on treatment, support, outreach, prevention, training and empowerment of children and women.

Despite all the challenges e.g. Poverty, community and family violence and lack of resources we succeeded in meeting the criteria set out in the definition of health by the world health organization: health comprises of physical, psychological and social wellbeing. In our service delivery we focused on:

- Social work intervention to the patients and families constituted the following: individual counseling, group therapy and community outreach and development.
- Restoring the dignity of patients by providing practical assistance through our relief project in the form of food parcels, clothing, transport funds and toiletries sponsored by the TygerBear foundation.

### **Resources**

Social work manager	1
Social work supervisors	3
Social workers production:	18
Clerks:	2
Generic interns	4



# ADMINISTRATION

(1 left beginning of October)	
Pay interns (since April 2012)	4 ( 2 left beginning of august)

## Output:

The department of social work is responsible for the psycho-social wellbeing of in and out patients of tygerberg hospital as well as the children's hospital, the gene louw building for radiation oncology, the carel du toit centre for hearing impaired children, the tygerbear social work unit for traumatised children and their families as well as the internal eap. 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 23776 consultations with patients and families which increased to 32546 after the attendances that could not be captured on the clinicom system have been added. According to clinicom time spent on consultations with patients and families were 16184 hours which increased to 23357 when the hours spent on administration and activities that could not be captured on clinicom.

A large percentage of time goes into administration work generated by the discharge problems of patients, applications for social security services and the protection of vulnerable children.

Networking with other health disciplines and team work within the hospital is essential for the rendering of effective social work services. Weekly child abuse team meetings, regular meetings re diabetic patients, renal and oncology patients and attendance of ward rounds and case discussion groups are attended.

Special pilot project to deliver social work services to trauma patients over weekends.

The impact of poverty, unemployment and the challenging socio-economic environment has further impacted on social work services. 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

The department of social work also runs a staff support unit rendering crisis counseling services and group interventions to the staff of tygerberg hospital complex as well as development and awareness programs. A report on the work of the staff support unit can be found at the end of this report.

At the tygerbear social work unit for traumatized children an additional 408 new referrals were received from the community. Most of these referrals were from social work agencies, police, the sexual offences courts and day hospitals. More than 50% of referrals requested therapeutic services for sexually abused children.

## Group work programs included

- Parent guidance groups for kangaroo mothers
- Parent support and guidance groups for parents of paediatric oncology patients
- Support groups for laryngectomy patients
- Support groups with trauma patients

## Infrastructural development

The obtaining of computers for all staff members received attention.

The compulsory storage of records for at least 5 years is still problematic due to the lack of safe storage facilities within the department of social work and therefore presents a challenge that is being addressed.

The fact that social work offices are spread across the hospital makes quality control a challenge. The ineffective lift system also still impacts on service delivery.

## Community outreach programs

- The department of social work runs a 24 hour consultation service for professionals working with children.

# ADMINISTRATION

- An extensive relief program is providing for patients in need of transport, food, toiletries, blankets and clothes.
  - The food for thought program makes provision for parents who sit with their children and do not have access to meals at Protea court.
  - Volunteers are trained and utilized 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.
  - Health care professionals from the community attend the weekly child abuse team meeting on an ad hoc basis.
  - 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.
  - Regular liaison with saps and special courts for sexual offences
  - The already well-established TygerBear safety program was presented at the Tygerberg hospital school as well as the lthuba centre twice. A new program to accommodate teenagers has been developed by a special social work focus group.
  - A questionnaire for the assessment of teenagers' unique challenges was developed but still needs to be tested with teenagers.
  - Participation at Tygerberg hospital's open day. Very successful laughter yoga sessions were presented as well as a talk on drug addiction and a counseling service was rendered.
  - The hospital preparation program was presented for children.
  - A pamper morning for kangaroo mothers was presented at TygerBear.
  - Weekly parent guidance workshops were presented for mothers in wards g1, g2 and g8. An average of 60 mothers attended these workshops where topics such as child development, communication with a baby, parenting styles, stress and self-care were discussed. A lot of positive feedback and requests for more workshops have been received.
  - Participation in Nelson Mandela 67 minute voluntary service on 18 July 2012.
  - Developing of information pamphlets regarding the following topics:
    - Support for parents of patients with anorectal malformation.
    - Psycho-social support of patients with chronic and life-threatening illness.
    - Fetal alcohol syndrome.
    - Mental health awareness.
    - Bullying
    - Losing a baby/"om 'n baba te verloor"
    - Building your child's self esteem
  - "tree of life" event: acknowledging the work of social workers and intern counselors at TygerBear.
  - Children's party on 07/12/2012 sponsored by justice centre.
  - Survivors of trauma were invited to a survivor celebration at Parow centre on 1st of December 2012. The children and their families attended a movie, enjoyed a meal and received gifts.
  - "lost and found" service at the cape carnival and on new year's eve. This entailed a service of reuniting 48 lost children with their parents/families.
- Co-operation and partnerships**
- The department also networks with state departments such as justice, department of social development, Dept. of Home Affairs, labour, police, education, and the clothing industry fund, institutions
  - Liaison with hospice association
  - Membership of SACSSP
  - Membership of SASWIPP
  - Membership of the SA oncology social work forum
  - Membership of the western cape play therapy association
  - Membership of the kidney foundation
  - Liaison with SASSAs, Bellville, re pensions.
  - Liaison with department of education re community outreach projects in schools

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- Liaison with choc re needs of child oncology patients.
- Liaison with Cape Town refugee centre.
- Liaison with LOFOB, age in action and saps forensic social workers.
- Liaison with association for voluntary sterilization in SA.

## **Achievements with regard to research activities**

- Participation in a continuous study on home-based treatment of childhood neuro-tuberculosis
- The laryngectomy patient's view of social work support services in a hospital setting by H Steyn published in social work, 46 no. 1, 2010
- Grief counselling done with mothers experiencing still births and miscarriages: 480 mothers counselled.
- The profile of community referrals for play therapy.

## **Initiatives/achievements pertaining to the educational role**

### **Undergraduate**

- Social work iv, UCT, 2 students
- Social work iv, Huguenot college 2 students
- Social work iii, University of Stellenbosch 2 students
- Social work ii, UCT 1 student

### **Postgraduate**

- M. Diac. Play therapy, UNISA 1 student
- BA Psychology Hons, UWC 2 students
- Volunteer BA Psychology Hons 2 students
- B Educational Psychology 1 student

### **The following training was done:**

- Orientation programs for new social work and Psychology Hons students.
- Weekly group supervision with students focusing on different topics such as

- discipline, working with the angry child, working with adolescents, parent guidance, developing therapeutic stories
- The role of the social worker presented to nursing staff, speech therapy students and 4th year dietetics students.
- Stress management lecture for household personnel.
- Life skills management for nurses.
- The children's act: 7 lectures for medical students at child psychiatry.
- Trauma support for radiographers.
- Conflict management for nurses.
- Resiliency in nursing.
- Communication for nursing staff.
- Orientation programs for new medical interns.
- Laughter yoga session presented for 150 nurses on nurses' day.
- Sexual abuse of children: lecture presented at pinelands high school.
- Child abuse: the role of the nurse: lecture presented to nurses.
- The effect of trauma on children: lecture presented to occupational therapy master's students.
- The role of the social worker in nephrology presented to nurses.
- Lecture on positive thoughts and attitudes in the workplace presented to nurses.
- Family in health and disease: training given to MBCHB IV students.
- Lecture on trauma support given to nurses.
- The role of the social worker in rheumatology presented at rheumatology open day.
- Motivation and laughter yoga presentation to nurses at gynaecology.
- Motivation and laughter yoga presentation to nurses at Nurses day.
- Psycho-social support of the chronically ill child: the role of the social worker.
- New play therapy techniques.
- Grief counselling.
- Community development: starting up a new business.
- Emotional needs of burns patients.

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- Alzheimer's disease: professionalism in social work presented for nurses.
- Managing feelings and emotions and coping strategies presented at the fibromyalgia group

## Staff development

- The following staff development sessions were arranged and attended:
  - Diabetes medical compliance issues.
  - Introduction of play therapy techniques.
  - Sensory processing disorder.
  - Diabetes nutrition and insulin usage.
  - Orientation of student supervisors by Huguenot college.ms outlook training.
  - CPD policy: journal discussion.
  - Client satisfaction survey.
  - Resiliency in social work: journal discussion.
  - Language development.
  - Adolescent forensic work.
  - Diabetes medical compliance issues.
  - Developmental stages in childhood
  - Diabetes nutrition and insulin usage.
  - Drug addiction course (January - December) done by one social worker.
  - Information session by the Cape Town refugee centre.
  - Motivational interviewing: journal discussion
  - The new children's act: lectures for medical students at child psychiatry.
  - Presentation at child psychiatry meeting re places of safety for children.
  - Psychology service to children at schools.
  - Strategic leadership course at Kromme Rrhee was attended by 3 management team members.
  - Communicating with patients with hearing loss presented by Dept of speech therapy.
  - Excel and power point courses done by some of the staff.
  - Visit by league of friends of the blind and age in action.
  - Attendance of child trauma conference.
  - The role of the social worker in a hospital: journal discussion.
  - Six point story making: work group.
- Storytelling and the children's act: work group.
- The use of stories to educate teenagers about drug abuse: work group.
- Attendance of palliative care workshop.
- Mpi induction course attended by 2 social workers.
- Weekly group supervision sessions covering the following topics: parent guidance, communicating with teenagers.
- Attendance of rheumatology open day at Tygerberg hospital.
- Attendance of Paediatric Oncology workshop.
- Who should get the kidney?: lecture by Prof Sharon Kling attended.
- Phelopepa community outreach and adolescent work: feedback session.
- Feedback presentation on parent workshops for mothers in Tygerberg hospital.
- Educational support presented by b psych interns from UWC.
- Alzheimer's disease and dementia: journal discussion.
- The role of the social worker in trauma.
- Supervision course done by social work manager and 3 social work supervisors.
- Coma care – ward A4 Dept of Neuro surgery.
- Attendance of anxiety/panic attacks/ anger management group.
- Eating disorders.

## Supervision and consultation:

- Three social work supervisors take responsibility for the supervision and consultation service provided to support production social workers with risk assessments, safe discharge planning, intervention plans as well as the planning of group work and community work projects and preventative work.
- The supervision and training of all the students and volunteers mentioned at point 11 are also done by the supervisors.
- Social work supervisors also take responsibility for the after hour consultation service as well as the daily

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telephonic consultation service for professionals.

- Liaison with community resources, development of departmental policies and guidelines for service delivery and administration also forms part of the social work supervisor's job description.

**The Clinicom system does not provide for the data capturing of the work done by social work supervisors. The following gives a brief summary of the tasks performed by supervisors:**

- Formal supervision with social workers: 79 sessions
- Group supervision sessions: 6
- Informal consultation with social workers on a daily basis: 534 sessions
- Number of telephonic consultations from the public : 477
- Hours spent on management meetings, planning of services and quality assurance: 144 hours
- Attendance of departmental staff meetings: 10
- Case discussions: 42 hours
- Reviewing of outgoing reports: 1171
- Training of staff and students
- Team assessment of referrals for therapeutic intervention: 11 hours

## Conclusion

In view of the above information it is evident that the dedication of the social workers resulted in a significant improvement in the lives of the patients and families referred to the department of social work.



## Staff support unit

### Introduction

The staff support unit is a structure through which social services are rendered to employees and their immediate families. It is

also a tool for the early identification of problems and early intervention. Furthermore it is a management tool for the management of employees with problem behaviour.

## Utilization of services

Individual services were rendered to 285 employees and a further 237 employees were reached through group work, presentations and training. The total number of staff reached is 521 people. The utilization rate remains fairly constant from previous years. Many employees who were treated individually, were seen more than once. The number of individual contacts with employees was 688.

## Individual work

Individual services are summarised in table 1. The staff support unit is open to all employees and their families who need counselling services. A confidential short-term service is rendered and where necessary employees are referred to resources in the community for further assistance.

**Table 1: individual work: utilization**

	2012	2011
Cases treated	285	319
Attendances	688	798
Number of new cases opened	237	210
Follow up attendances	451	588
Interviews conducted	495	565
Correspondence	153	137
Consultations: management	71	88
Consultation: other	38	50
Telephonic counselling	25	43
Reports	49	39
Notes	322	389
Telephone calls	176	228

**Client characteristics** are summarised in the following tables.

# ADMINISTRATION

More females utilized the services, but this reflects the distribution of gender in the hospital.

**Table 2: gender**

Gender	N	%
Female	220	77
Male	65	23
<b>Total</b>	<b>285</b>	<b>100</b>

Age distribution is summarized in table 3.

**Table 3: age distribution**

Age	N	%
41 years to 50 years	11	39
	2	
31 years to 40 years	86	30
20 years to 30 years	39	14
51 years to 60 years	47	16
61 years to 65 years	1	
<b>Total</b>	<b>285</b>	<b>100</b>

The majority of users were Afrikaans speaking, as indicated in table 4.

**Table 4: language**

	N	%
Afrikaans	223	78
Xhosa	54	19
English	5	2
Other	3	1
<b>Total</b>	<b>285</b>	<b>100</b>

From table 5 it can be seen that almost half of employees who utilized the service, have been working in the hospital for longer than 10 years.

**Table 5: length of service**

	N	%
> 10 years	139	49
2.1 to 5 years	79	28
5.1 to 10 years	25	9
1.1 to 2 years		
< 1 year	30	11
Unknown	12	4
<b>Total</b>	<b>285</b>	<b>100</b>

The service is well utilized by nursing staff, general workers and administrative personnel. It can be promoted amongst the technical staff en professional workers.

**Table 6: staff category**

	N	%
General	109	38
Nursing	109	38
Administrative	57	20
Technical	8	3
Professional	2	1
<b>Total</b>	<b>285</b>	<b>100</b>

Formal referrals are done as part of the disciplinary process. More employees were referred by their supervisors informally than formally. This is an indication that supervisors offer help timeously.

**Table 7: referrals to staff support unit**

Referred by	N	%
Self-referred	157	55
Supervisor informal	69	24
Supervisor formal	54	19
Family members	2	1
Other	3	1
<b>Total</b>	<b>285</b>	<b>100</b>

The problems presented are described in table. The most commonly presenting problems were family problems, employment related- and emotional problems.

**Table 8: problems presented**

Problem	N	%
Family problems	92	25
Employment related	76	20
Emotional problems	65	17
Problem behaviour: children	33	9
Alcohol problems	27	7
Drug abuse	20	5
Marital problems	17	5
Financial problems	14	5
Child care	8	2

## ADMINISTRATION

Housing	7	2
Child maintenance	4	1
Other	11	3
<b>Total</b>	<b>374</b>	<b>100</b>

Employees are referred to resources in the community for help, where necessary. Most referrals were to welfare organizations in the community and icas.

**Table 9: referrals to resources in the community**

Referred to	N	%
Welfare organizations	22	24
ICAS	20	22
Rehabilitation clinics	13	14
Medical services	10	11
Legal services	7	8
Tygerbear unit for traumatized children	6	7
Psychiatry TBH	5	6
Psychologist in private practice	3	3
Financial services	3	3
Psychiatrist in private practice	2	2
<b>Total</b>	<b>91</b>	<b>100</b>

### Group work and presentations

A large number of employees were reached through group work and presentations. The topics that were addressed are displayed in table 10.

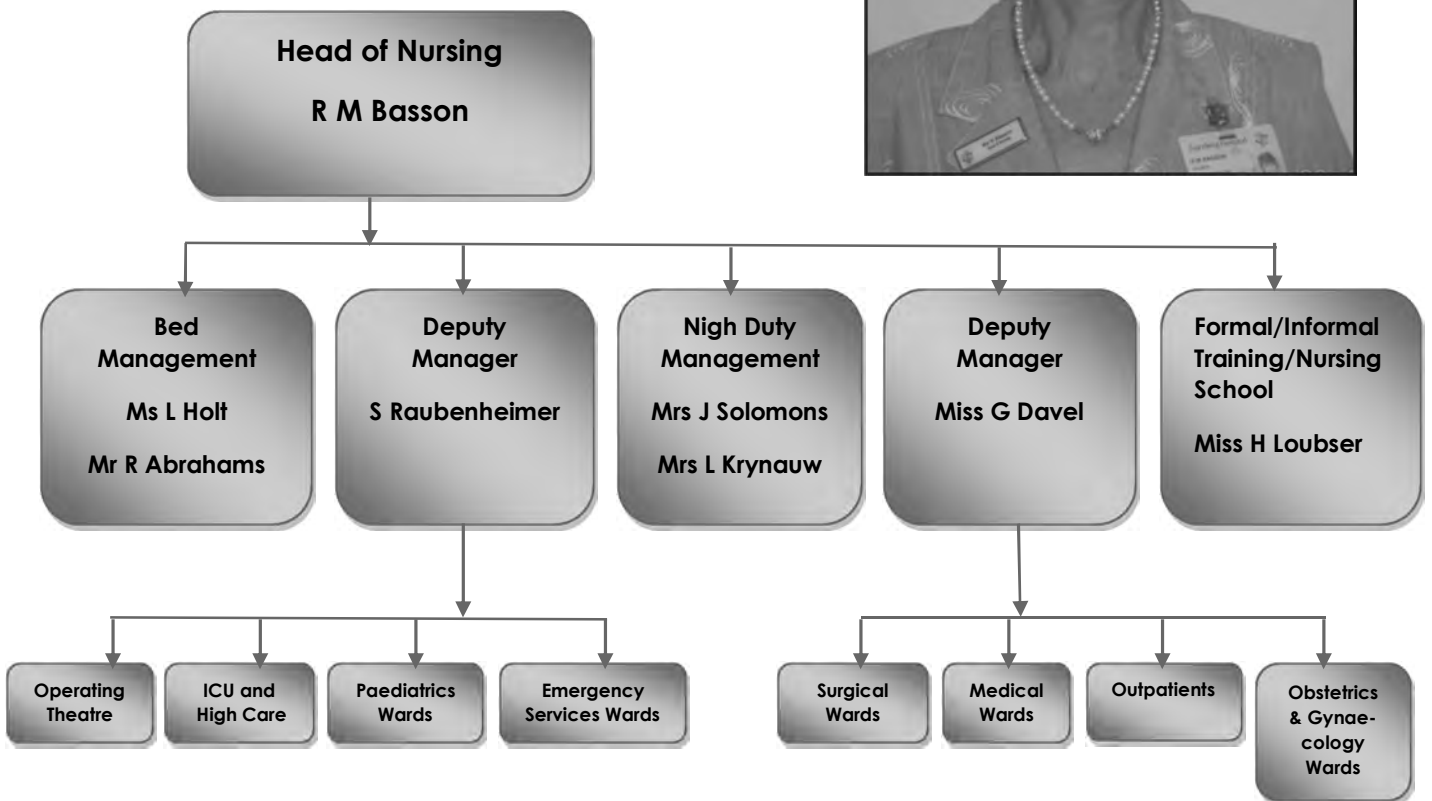
**Table 10: group work and presentations**

Topic	N
Trauma support	82
Attitudes in the workplace	32
Orientation on staff support unit	15
Life management	12
Communication	14
Stress management	44
Resilience	21
Conflict management	17
<b>Total</b>	<b>237</b>

### Conclusion

From the above report it is evident that the staff support unit renders a comprehensive service to the employees of the hospital, which includes individual work, group work and work at the community level of the hospital.

# NURSING



## SUMMARY

The Nursing Services faced many challenges with specific reference to maintaining the speciality services with speciality training nurses and to staff additional, new services opened during 2012.

Quality of services were improved with nurse driven implementation of Best Care Initiatives and roll out actions within the Intensive Care Units focusing on Infection Prevention and Control practices at clinical level, auditing and accreditation of services and upskilling of new staff.

Nursing staff adapted extremely well to the increased patient numbers and higher workload in the emergency areas, by rotating staff within the emergency areas as needed.



# NURSING

## THE NURSING SERVICES CONSIST OF CLINICAL AND NON-CLINICAL MODULES

### Clinical :

ICU  
Surgery  
Paediatrics  
Theatre  
Medicine/Psychiatry/Oncology  
Trauma and Emergency Services  
Private Wards  
Obstetrics and Gynaecology  
Outpatients Services

### Non-clinical :

Nursing School  
CSSD  
Support Services (Housekeeping)  
Nursing Informatics  
Crèche

## NURSING AND SUPPORT RESOURCES

Posts (1 January 2011)	Filled
Nursing Services Manager	1
Deputy Managers Nursing	2
Assistant Managers Nursing	11
Bed Managers	2
Professional Nurses	865
Staff Nurses	405
Nursing Assistants	743
Operators (CSSD)	65
Senior Housekeepers	40
Housekeepers	21
Household Aids	337

### Resignations(2012) :

Professional Nurses	32
Staff Nurses	16
Nursing Assistants	20

### Appointments (2012) :

Professional Nurses	92
Staff Nurses	74
Nursing Assistants	96

## ACHIEVEMENTS

### The Nursing Services achieved, amongst other, the following :

- Teambuilding and awarding nurses for clinical excellence.
- Implementation and roll-out of Best Care Always Initiatives.
- The recruitment and appointment of Nursing staff to open additional services due to change in the drainage areas.
- Clinical training of nurses placed by different nursing education institutions within clinical services

## CENTRAL STERILE SUPPLY DEPARTMENT: CSSD

### HEAD OF MODULE:

Mr. M R Schuller (CSSD Manager)

### Summary

The CSSD department delivers a service to Tygerberg theatres, wards and clinics

### RESOURCES:

CSSD Manager:	01
Administration Clerk:	01
Principal Operators:	07
Senior Housekeeper:	01
Operators:	48
General Stores Assistants:	05
Linen Stores Assistants:	05
Housekeeping Aids:	06

### NUMBER OF MACHINES:

Sterilizers: x 10  
Steris washer disinfectors: 1 x Single chamber,  
2 x Multi washer disinfectors  
Ethylene Oxide Sterivac machines x 3

# NURSING

## OUTPUTS

6417 were trays processed through steam sterilization on average per month. 90 new instrument trays were purchased to help with the increase in theatre usage in 2012.

EO sterilization machine: 6060 items processed through CSSD Gas Unit i.e. disinfection and ethylene oxide sterilization average per month.

## HIGHLIGHTS OF THE YEAR

- The purchasing, installation and commissioning of 1 x 5 XL and 1 x 8XL EO Sterilizers for the EO unit
- Reducing the number of items processed in EO unit

## TRAINING AND DEVELOPMENT:

### IPC Intermediate Sterilization Course:

- 2 x Operators send to the IPC Intermediate course
- 3M training in regards to the ethylene oxide machines in March 2012

- The CSSD Supervisors all completed the Introduction to Junior Management in this year.
- The Administration clerk completed a course in Office Management in May 2012
- 5 x Operators completed the Diversity course in 2012

## SPECIAL PROGRAMS:

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

- Decontamination Area: Maintenance Register for Washer Disinfectors where all repairs on washer disinfectors are recorded
- Sterilization Area: New validation system integration of Sterilizer's Content Sheet with the printouts filed together to help in tracking and tracing of equipment processed
- Chemical Attest validation: Staff re trained in interpretation of results and recording thereof to make sure that all equipment processed is validated and sterility guaranteed.

## EMERGENCY AND ORTHOPAEDICS

**Head of Module:** Ms. Sophia Kleinsmith

### Services:

Area	Beds	Service
Ward F1	27	Medical emergencies
Ward C1A	20 trolleys	Trauma
Ward C1D East/ West	19	Surgical emergencies 19 Beds / 10 chairs / 3 cots
Ward J7	31	Trauma ward
Ward: Resus	6 trolleys	Surgical Emergency
Ward: Day Surgery	15	Day ward
Ward J6	29	Orthopaedics
Ward F4	32	Orthopaedics
Ward A3E	31	Orthopaedics
Ward A3W	31	Orthopaedics
	Total: 215 (beds only) 26 (trolleys)	

# NURSING

## Resources

Assistant Manager: Nursing	: 1
Operational Managers	: 10
Professional Nurses	: 79
Staff Nurses	: 49
Nursing Assistants	: 116
Housekeepers	: 9
Household Aids	: 35

## Number of Beds:

**Orthopaedics: 129** (x6 beds in ward J1 included)

**Emergency: 84+15** beds in Day Surgery

## 6. Average Bed Occupancy:

### Emergency Services

F1	:123%
C1D	:162%
C1AW	: 168%
J7	: 81%
C1DR	: 117%
B5E	: 21%

### Orthopaedic Services

A3E	: 88%
A3W	: 88%
F4	: 81%
J6	: 86%

## Highlights of the Year

- The commissioning of 28 beds in ward J1 in April 2012.
- Hartman Memorial Award Ceremony: x3 Nurses received awards of clinical excellence.
- Installation of security gates in ward F1, Resus and back of ward J7 for all security patients for protection.

## Academic

- X2 Professional Nurses completed Post Basic Diploma in Trauma and Emergency.

- X1 Staff Nurse completed R683 course.
- X2 Assistant Nurses completed R2175 course.

## Special Events

- Various wards within the module hosted teambuilding throughout the year.
- Memorial service hosted for RAN Siyothula of Ward J7
- Nursing School staff reached out to Ward F1 staff.
- Staff team building function at Devonvale Country Club.

## INTENSIVE CARE

**Head of Module: Mrs R. Walsh**

## Services:

- A1 West Surgical ICU
- A1 East Burn Unit
- A2 Cardiac Thoracic Surgery
- A4 Neuro Surgery Adults & Paediatrics, Thoracic Surgery
- A5 High Care – Medical & Surgical
- A5 Unit – Respiratory Unit
- Broncho Theatre
- A6 High Care Cardiology
- A6 Unit Cardiology
- A7 Peritoneal dialysis and Haemodialysis, kidney transplant unit, Transplants and peritoneal outpatients.
- Total Parental Nutrition Care

## Resources:

Assistant Manager Nursing	: 1
Registered Professional Nurses	: 164
Registered Staff Nurses	: 65
Registered Nursing Assistants	: 81

**Number of Beds:** 172

**Average bed occupancy:** 100%

## Highlights of the year:

- Ward A5 and A5 Unit were visited by the Minister of Health (Mr. Theuns Botha) to

# NURSING

acknowledge staff for quality patient care rendered in June 2012.

- Open day was held by A7 Nephrology department on World Kidney Day March 2012. This function was attended by members of the public.
- Good progress with Best Care Initiatives - VAP (Ventilated Associated Pneumonia) in A5 Medical Unit and CLABSI (Central Line Associated Bloodstream Infection) in A1 West Surgical Unit.
- Best Care Always bundles rolled out to other Units in the ICU eg. The VAP (Ventilated Associated Pneumonia) bundle in A4 Neuro Surgical Unit May 2012 and The CLABSI (Central Line Associated Bloodstream Infection) in A5 Medical Unit July 2012.

## Academic:

- 8 Professional Nurses successfully completed the Diploma in Critical care during 2012.
- 1 Staff Nurse successfully completed the bridging course to Professional Nurses.
- 3 Nursing Assistants successfully completed the bridging course to Staff Nurses.
- 3 Nurses were awarded Clinical Excellence Awards at the Hartman Memorial Lecture in October 2012.
- The Burns Unit held a successful seminar in October 2012 regarding treatment of the burns patient.
- Conferences attended by Nursing Staff: Neuro Surgical conference in October 2012 and the Nephrology conference in September 2012.

## Special Donations:

- A7 Renal Unit was upgraded; patient ablution areas painted and four television sets were sponsored by Tongaat Hullels (Pty) Ltd in August 2012.
- A5 Unit was painted in December 2012 and the paint and labour were sponsored by Legimiy investments.
- In October 2012 the Burns Unit received 2 television sets sponsored by Sanlam.

## Special Events:

- Staff Celebration functions were successfully held on International Nurses Day 2012 and Women's Day 2012.
- Staff of A5 Unit and A5 Ward were treated with a Christmas lunch on 6 December 2012 by the Minister of Health (Mr. Theuns Botha) for quality patient care rendered to patients.
- A successful team building effort was held on 7 December 2012 in the form of a Nurses Ball for the ICU staff.

## INTERNAL MEDICINE

**HEAD OF MODULE : Miss S D Henry**

## Services :

- The Internal Medicine Module consists of Internal Medicine, Psychiatry and Oncology wards.
- The module includes 4 Medical Wards, 1 Metabolic Unit, 1 Dermatology and Neurology Ward.
- Psychiatry – 3 Inpatient Wards and 2 Outpatients Departments namely Child Psychiatry and Adult Psychiatry.
- Oncology – 2 Inpatient Wards and 5 Outpatient Departments.

## Number of beds :

Internal Medicine	:	152 beds
Psychiatry	:	41 beds
Oncology	:	47 beds

## Resources :

Registered Professional Nurses:	71
Registered Staff Nurses	: 41
Registered Assistant Nurses	: 87
Module Clerks	: 3
Housekeeping Supervisors	: 11
Household Aids	: 53

## Highlights of the year

- D8 was upgraded and a new Haematology Unit opened on 19 November 2012.

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- The Hartman Award Ceremony took place on 25 October 2012. The nurses awarded for Clinical Excellence were the following RN S Skippers, SN M Davids, NA F Munyai
- Staff development took place amongst all categories of staff.
- 1 Registered Nurse completed her studies in Advanced Psychiatry at Stellenbosch University.
- 1 Registered Nurses completed her studies in Midwifery.
- 2 Staff Nurses did the Bridging Course and qualified as Registered Nurses in October 2012.
- 1 Assistant Nurse qualified as a Staff Nurse in October 2012.
- A Christmas party was held for the Child Psychiatry patients in December 2012.

## NURSING SCHOOL

### HEAD OF NURSING SCHOOL

Ms H Loubser

#### PERSONNEL:

Head of Nursing School: Miss. H. Loubser

Lecturers: 5

Clerks 2

Intern 1

As from 1 April 2012 the Tygerberg Hospital Nursing School delinked from the hospital. As per provisional agreement the nursing school continue to deliver present support services to nurse management until the new clinical unit is established.

The following services were maintained:

#### Oversee matters regarding:

Nurses placed for clinical training in Tygerberg Hospital coming from other institutions other than the Tygerberg Hospital Nursing School.

#### NURSE AUXILIARY (R2176 course)

##### Sarepta old Age Home:

Incidental clinical placement of 10 pupil nurse auxiliary nurses were accommodated in Tygerberg Academic Hospital.

##### Healthnicon:

Incidental clinical placement of 20 pupil nurse auxiliary nurses were accommodated in Tygerberg Academic Hospital.

#### STAFF NURSE TO PROFESSIONAL NURSE (R683 course)

Western Cape Rehabilitation Centre Nursing School

From 1/1/2012 till 30/6/2012, eight first years and 7 second years were accommodated in the hospital. From 1/7/2012 to 21/12/2012 eight second years were accommodated.

Healthnicon

The maximum of 20 learners were accommodated at an intermittent placement at Tygerberg Hospital.

Tygerberg Hospital Nursing School

The nursing school was accredited to commence training according to R683 in 2013.

#### FOUR YEAR TRAINING FOR PROFESSIONAL NURSE (R425)

During 2012 undergraduate student nurses from Western Cape College and University of Western Cape were accommodated in the hospital.

5.1 Post graduate nursing students

5.2 Diploma in Nursing Administration:

Three post basic professional nurse students were accommodated for clinical management during August 2012.

#### Critical Care Nursing

Eight professional nurses were supported to continue training at Western Cape College of Nursing and one at Stellenbosch University for Honours in Nursing

#### Diploma in Midwifery (R254)

# NURSING

Three students in the diploma in midwifery were accommodated to study at Western Cape College of Nursing.

## **Diploma in Advanced Midwifery and Neonatology**

Six students in the diploma in midwifery were accommodated to study at the University of Stellenbosch. Thirteen students from the University of Stellenbosch who are not from Tygerberg Hospital were accommodated on the rotation lists.

## **Diploma in advanced psychiatry**

One student was sent to study advanced diploma in psychiatry at the University of Stellenbosch..

## **Diploma in Oncology Nursing**

One student was supported to study at the Cape Peninsula University of Technology and was accommodated in the oncology department.

## **Diploma in Palliative care**

Five students were accommodated for one day per student to shadow oncology nursing and stomacare.

## **Diploma in Operating Room Nursing**

Three students for the diploma in operating room nursing were supported to study at the Western Cape College of Nursing.

## **Diploma in Medical and Surgical Nursing - Trauma /Emergency**

Two students from the hospital were supported to study at the Western Cape College of Nursing. Ten students not from Tygerberg Hospital were accommodated to do clinical practice in Tygerberg Hospital

## **Diploma in Child Care nursing**

Two students from Tygerberg Hospital were allowed to study at the University of Cape Town.

## **Diploma in Nurse Education**

Four students were supported for Nurse education training.

## **Diploma in Ophthalmology**

Two officers were supported from Tygerberg Hospital for continuous education at the University of Cape Town

## **Diploma in Orthopaedics**

The hospital was accredited as a clinical facility for the Western Cape College of Nursing and five officers commenced their training in the second semester of 2012. Eight extra students were accommodated from other hospitals to do their practicals at Tygerberg Hospital.

## **Diploma in Nephrology**

One officer from Tygerberg Hospital was accommodated with study by assignment to do her training at the University of Cape Town and to do practicals at Tygerberg Hospital

## **NON-NURSING STUDENTS**

MTh students

Twelve students were accommodated for practicals to support family members of patients.

## **RADIOGRAPHY STUDENTS**

Radiography (44) students from CAPE PENINSULA UNIVERSITY OF TECHNOLOGY were accommodated for observation for 4 days.

## **MBCHB III**

Hospital orientation lecture was presented to 2nd year medical students from University of Stellenbosch by one of the lecturers.

## **B. Occupational Therapy**

A lecturer assisted with orientation lectures to the 35 B Occupational students from University of Stellenbosch to familiarise the students with the hospital ward routine and nursing practise.

## **Emergency services officers.**

The assigned lecturer co-ordinated the Emergency services students. Of the EMS college and B-Tech students of CPUT

# NURSING

## IN SERVICE TRAINING

Monthly generic in service training was done. The attendance reflected 275 nurses attended.

Clinical skills updating took place for nurse auxiliaries(76), Staff nurses(63) and Professional nurses(22)

## INDUCTION

During 2012, 339 officers were accommodated in induction programmes

## FUNCTIONS

Hartman Memorial award function was arranged on 25 October 2012

## COMMUNITY SERVICE PRACTITIONERS

In January 2012, 21 Community service nurse practitioners commenced their community service.. The officers were rotated to expose them to different disciplines. Six Community service nurse practitioners commenced on 1 August 2012.

## OBSTETRICS AND GYNAECOLOGY

HEAD OF MODULE Mrs. J R Sapto

### Services:

WARD	NUMBER OF BEDS	SERVICE
C2A WEST	19	Labour ward
C2A EAST	25	Specialized Antenatal, Postnatal, Special care
F2	34	Antenatal
J2	28	Post Caesarean section mothers and babies and Antenatal
J5	23	Postpartum Normal deliveries mothers and babies
J4	33	Gynaecology
Fground	25	Gynaecology and Oncology

### Clinics

- Breastfeeding Clinic
- Outpatients : High Risk Clinic, Teenage Clinic, Special Care, New Bookings, Diabetic clinic, Fetal Evaluation and Sonar
- Family Planning Clinic

### Resources:

<b>Assistant Manager Nursing</b>	:	1
Professional Nurses	:	99
Enrolled Nurses	:	45
Nursing Assistants	:	90

**Number of beds:** 187

**Average bed occupancy:** 81%

### Highlights of the year

- The commissioning of 16 additional beds in the Obstetrics department
- The launch of the Baby tagging system contributed to the improved baby safety in the institution

- Successful Mother and Child seminar were hosted by Midwives in the Department and were well attended by Midwives from both Public and Private sector
- Two Midwives participated in the MBFHI evaluations in institutions in the Province
- Successful celebrations on the Health Calendar during the year
- The appointment of the PMTCT Professional Nurse resulted to the improved compliance to the PMTCT protocol with 70%

### Academic:

- Four Professional Nurses successfully completed the Diploma in Advanced Midwifery and one of the candidates passed the examinations with cum laude
- Two Nursing Assistants successfully completed the bridging course to Staff Nurse.

# NURSING

- The Hartman Memorial Award Ceremony: Four Nurses were awarded for clinical excellence.
- One Nursing Assistant was nominated for the Provincial Cecelia Makiwane Award and represented the institution at this prestigious event.

## Special donations:

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

## Special events:

- The Department hosted two successful teambuilding events.
- The department hosted a successful program on International Nurses Day and International Midwifery day during May 2012
- The staff reached out to a congregation in Kraaifontien and presented groceries for needy families on Mandela Day

## OUTPATIENTS DEPARTMENT

### HEAD OF MODULE:

**Mrs. Mara Majiedt (Assistant Nurse Manager)**

## Output

The Outpatient department serviced a total of 26 5407 patients during 2012

## Staffing

Unit Managers	: 19
Professional Nurses	: 16
Enrolled Nurses	: 29
Nursing Assistants	: 36
Orthotic Aid	: 3
Housekeepers	: 2
Housekeeping Assistants:	34

## Services Available

The department consists of 23 service points. Stoma clinic is the only service offered on an in and outpatient basis and is the only nurse driven service. The clinics have undergone restructuring with some points offering a combined service. The services offered are as follows:

**3th floor** Gynaecology clinic (including oncology and infertility services) Services offered: Theatre: Termination of pregnancy –

1416 applications, Minor surgical procedures – hysteroscopy evacuations, Pre- & post TOP counseling.

**4th floor** X rays - Basic to the more advanced diagnostic investigative procedures. Sonars, CT scans, as well as MRI scans.

**5th floor** Breast clinic, Thyroid clinic, Abdominal oncology. From September 2012 the pain clinic was also incorporated into the services offered, Ear Nose & Throat. Collateral surgery - Neurosurgery, Abdominal surgery, Vascular surgery, Burns, Paediatric surgery, Ano-rectal repair /dilation clinic, Plastic surgery & maxilla facial, cleft palate and hair lip repair, Trauma surgery. Stoma care clinic.

**6th floor** Urology clinics east & west: Prostate abnormalities, circumcision, oncology, erectile dysfunction, Eshwell theatre, **Orthopedic clinic East:** General and trauma orthopedics.

Specialized clinics West: Hand surgery, Knee and knee replacement, Hip and hip replacement, Shoulder clinic, Back pathology, Chiropody and club foot clinic.

**7th floor:** Ophthalmology clinic, Specialized clinics: Diabetic, Epileptic, Neurology, Respiratory, Rheumatology, Lupus, Nephrology, Allergy. Gastroenterology and hepatology unit, Gastroscopies, Colonoscopies, Endoscopic stenting, Manometric investigations, Percutaneous gastrostomies.

**8th floor** Internal Medicine: Cardiology including ECG and Echo services, Dermatology, Infectious Diseases clinic. Staff health, including Occupational health diseases clinic.

**9th floor** Hematology – bone marrow biopsies

**10th floor** Nuclear medicine – various scans, thyroid bone, sentinel node scans, PET scan bookings, bone scans, milk scans, Reno grams

## Summary of activities

- Radiology - introduction of agency and overtime nursing staff in radiology has



# NURSING

resulted in a decrease in waiting time for MRI and CT scan.

- Stoma clinic had an open day on 10/11/12.
- Breast (mamma) clinic received donations from the Pink Lady Apples organization. These donations go towards paying for the transport of breast oncology patients to and from the hospital. The Pink drive started in June 2011. The service is taken to the community in a large pink truck equipped with a mammogram machine. This initiative is to boost the attention given to woman's health
- A Registered nurse, enrolled nurse and enrolled nursing assistant received the Hartman awards for clinical excellence in October 2012.
- Gastroenterology and hepatology unit received two endoscopic washing machines. Construction is still in progress. Colonoscopy with light source and processor also received. Nursing staff also attended the annual Sages congress in Durban.
- Rheumatology clinic: Room 701 was upgraded into an ultra-sound room with donations by Abbot pharmaceutical company. The nursing staff was actively involved in public awareness open days – Osteoarthritis day, 26/07/2017, International Rheumatology day, 12/10/2012, and World Kidney Day 8/3/12.
- Two nursing unit managers were on study leave. One staff nurse was doing the bridging course.

## Outreach

- Gynaecology oncology clinic monthly at Paarl and Worcester hospital
- Colposcopy clinic twice a month at Eersterivier and Helderberg Hospitals.
- Medical and nursing staff held surveillance clinics in Vredendal, Garies Nababeep and Upington. This also served to limit the referrals to the hospital.

- Dermatology staff visited Worcester hospital the last Wednesday of the month in February and November 2012.

## Paediatrics and Neonatology

Head of Module: Ms AF Jacobs

### Services:

Paediatrics :

General

Neonatal High Care

Neonatal Intensive Care

Paediatric Intensive Care

Paediatric High Care

Oncology

Neurology

Urology

Nephrology

Gastroenterology

Surgical

Infectious Diseases

Orthopaedics

Kangaroo mother care

### 4. Number of beds:

- General	131
- Neonatology	114
- ICU: Nicu	8
- NHC	4
- PICU	10
- PHC	4
- Surgical	27
- Orthopaedics	25

**Average bed occupancy:** 75 –110%

### Highlights of the year:

#### Hartman Awards for Nursing Excellence

Professional Nurse	Ms LJ Cloete
Enrolled Nurse	Ms EF Abrahams
Nursing Assistant	Ms EG Plaatjies.
Elsa Reiner Trophy	Mrs M Cloete

# NURSING

An additional Neonatal ward was opened in April 2012 –J3

Paediatric High Care 4 beds were opened in A9

## Christmas Party:

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

Coke Cola sponsored the cold drinks and also provided a jumping castle

## SURGICAL

HEAD OF MODULE: Mr R. De Bruyn

### Services:

Area	Beds	Service
Ward D1	22	<ul style="list-style-type: none"> <li>Vascular surgery – 15 beds</li> <li>Abdominal surgery – 7 beds</li> </ul>
Ward D2	31	<ul style="list-style-type: none"> <li>Abdominal surgery – 16 beds</li> <li>Head neck and breast – 8 beds</li> <li>Vascular surgery - 7 beds</li> </ul>
Ward D3	24	<ul style="list-style-type: none"> <li>Plastic Surgery</li> </ul>
Ward D4	28	<ul style="list-style-type: none"> <li>Private</li> </ul>
Ward D5	31	<ul style="list-style-type: none"> <li>Head Neck and Breast surgery</li> </ul>
Ward D6	31	<ul style="list-style-type: none"> <li>Urology</li> </ul>
Ward D7	31	<ul style="list-style-type: none"> <li>Ophthalmology surgery (Speciality)</li> </ul>
Ward G5	19	<ul style="list-style-type: none"> <li>Ear Nose and Throat surgery (2 Paediatric beds)</li> </ul>
Ward J1	28	<ul style="list-style-type: none"> <li>Medical / Surgical /Orthopaedics</li> </ul>
<b>Total:</b>	<b>246</b>	

Number of beds: 246

Average bed occupancy:

D 1 = 88%

D 2 = 78%

D 3 = 54%

D 4 = 71%

D 5 = 78%

D 6 = 71%

D 7 = 69%

G 5 = 68%

J 1 = 81%

### Resources:

Assistant Manager Nursing	:	1
Operational Managers	:	9
Professional nurses	:	48
Staff Nurses	:	43

Nursing Assistant : 101

Housekeepers : 9

Household Aids : 34

### Highlights of the year:

- Hartman Clinical Excellence Awards**

The following officials received awards:

- Professional Nurses Award: RPN A. Oliver
  - Staff Nurse: REN G. Heins
  - Nursing Assistant: RAN G. Davids
- Ward D2: Certificate rewarded to second runner up for the best performance regarding IPC practices in 2012.

# NURSING

- **Smile Week**

The Smile Week outreach programme to children with cleft lips and palates was held on 18 -23 November 2012.

Operations done were 29.

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

1. **Academic:**

- Professional nurse x1 completed post basic diploma in ophthalmology.
- Staff nurse x1 completed R683 course.
- Auxiliary nurses x3 completed R2175 course.

## THEATRE/OPERATING ROOMS

Head of Module : Mr. R E 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 90 cases per day in the general theatres and 25 cases per day in the emergency theatres.

- 

### Resources

- Assistant Nurse Manager x 1
- Professional Nurses x 78
- Staff Nurses x 26
- Nursing Assistants x 66
- Admin Clerks x 5
- General Assistants x 45
- Housekeepers x 4

### Output

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

### Comment on Output

- 28 610 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 4 Sterilisers in Theatre are still in progress.

### Highlights of the year

Hartman Awards handed to:

- Ms S.Henderson Professional Nurse
- Ms Z.Saal Staff Nurse
- Ms A.Gordon Nursing Assistant
- Strategic Planning sessions were held in the Module
- Testing the readiness for a Nuclear Decontamination Theatre was held on 5 November 2012 with Escom Power Station.

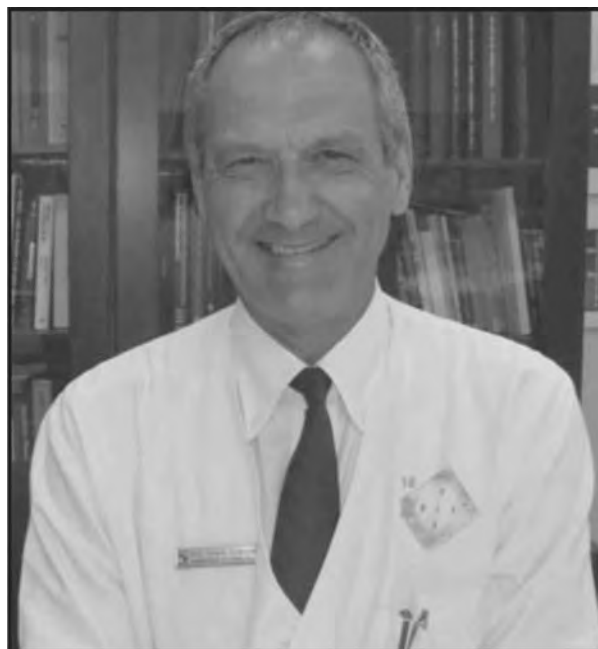
### Conclusion

- 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
60	60	60
2 Supernumeries (Reg)	2	2
Posts (sessional – how many hours worked per week)		
1	16	1

**Output:**

Performed approximately 26 000 anesthetic procedures during the year.

**Comment on output:**

- Progressive increase in number of cases managed.
- Significant increase in risk profile of patients.
- Increasing load on obstetric anesthesia service.
- Progressive displacement of elective cases with either emergency or semi-emergent cases.
- Mortality less than internationally published figures.

**Part 2**

**Faculty of Health Sciences**

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

- Post Operative High Care Unit became operational.
- Pain Clinic moved from X block to Tygerberg Hospital
- Opened additional operating room during day will serve as additional emergency room after hours.

# ANESTHESIOLOGY & CRITICAL CARE

**Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

- Active involvement in Metro East activities at secondary level.
- Airway workshops
- Active teaching of obstetric anaesthesia to practitioners in metro East
- Training program for recovery room nursing staff

## **Partnerships**

### **National:**

Department of Anaesthesia, University of KZN

Department of Bioengineering, University of Stellenbosch

SMILE

### **Private**

SASA

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

Number of publications from the department/division 4

Text books and contributions to text books

## **Teaching and Training (under, postgraduate and elective students)**

MB ChB students

M Med(Anes) students

Critical Care (Subspeciality)

Housemen

Critical Care Nursing program

## **Special achievements and other highlights not covered by this template**

Dr. G le Roux won the Jack Abelsohn prize for best performance in the clinical section of the FCA part II

## Head of Department Prof Paul van Helden

### Summary of activities

#### The Division of Anatomy and Histology

#### Teaching

1st semester:

MBChB II

MMed

Speech Therapy III

2nd semester:

Dentistry

Occupational Therapy II

Physiotherapy II

Speech therapy III (Clinical Neurology)

Teaching hours per week = 5 Test/exams set up, administered, marked, marks processed = 6 per semester.

#### Clinical work:

Genetic counseling

Active in Mfuleni clinic where patients are treated on a weekly basis for TB (2 days per week)

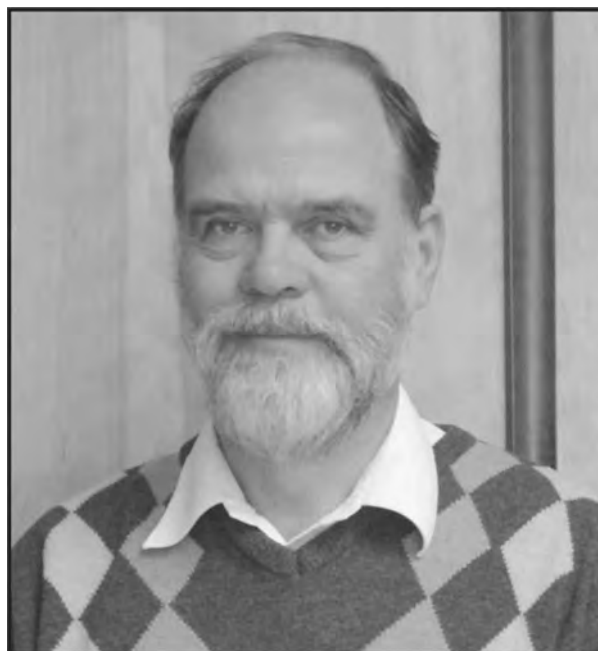
#### Division of Molecular Biology and Human Genetics:

Clinical services

- One Respiratory OPD clinic per week
- One bronchoscopy theatre session per week
- Seven weeks per year on Medical ICU call duty, including ward round, consultation service (ward referrals), after hours on-call and weekend ward rounds.

#### Direct patient and community benefit

- CV diseases: Direct DNA based testing is available for HCM, LQTS and PFHBI. Information is also made available to PACE for patient and family based advice and counselling. Information for the lay person is also made available for their website.
- The treatment outcome of patients with XDR-TB often leads to a situation of treatment failure followed by death. In



- An attempt to improve treatment outcome we have embarked on collaboration with MSF to determine the resistance profile of patients who are therapeutically destitute. This information is used to tailor treatment options and to motivate for the compassionate use of anti-TB drugs which are still in phase 2 and 3 trials.
- We are supporting NHLS with genotyping and assistance with diagnosis of problematic cases of TB and drug resistant TB. We have been asked to assist in determining the underlying reason for the low specificity of the culture-based test for ethionamide. We are supporting the NHLS in the training of BSc Honours students (Mr D Hart) and well as PhD student (Mr M Barnard).
- We are working with NHLS to evaluate the new "sensititre" plate method for drug susceptibility testing and MIC determination of both first and second-line anti-TB drugs.
- We are collaborating with the NHLS to evaluate the performance of the Xpert MTB/RIF test in KwaZulu Natal with the

vision to control the observed increase in MDR-TB cases in one district municipality.

- A policy brief was released in August 2011 documenting the strong association between mutations in the inhA promoter and resistance to isoniazid and ethionamide. In this brief we have made recommendations that this information should be included in the diagnostic report. In addition we have proposed guideline for clinicians on how to treat patients according to routine MTBDRplus genotyping results.
- We have written a document for National Department of Agriculture (at their request), explaining the situation with diagnosis of unusual Mycobacteria in animal disease. This work has been continued and expanded and will appear as an explanatory document in the peer reviewed literature this year (2010).
- We do specialised diagnostics for critical animal species for the National Zoological Gardens (NZG) and SANParks and advise them accordingly.
- The organisation FIND, supported by the Gates Fdn, regularly asks one of our staff members (SU) Ms A Jordaan, to travel to African countries to provide diagnostic training on their new commercial molecular diagnostic assays.
- The Clinical Genetic and Genetic Counselling service provides for care and prevention of birth defects and genetic disorders to the Tygerberg Hospital drainage area (Cape Town Metro East, and the Winelands and Overberg and West Coast districts of the Western Cape).

### 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 II: 6 lectures in immunology

### 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) – this is a growing service. 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)
- Rural health districts (did not happen in 2012 due to lack of district contact people – this is being rectified)

# BIOMEDICAL SCIENCES

## 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

Reproductive Physiology 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

### 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:

#### 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



# BIOMEDICAL SCIENCES

## Clinical Genetics and Genetic counselling

CLINIC	FREQUENCY	PATIENTS SEEN
<b>PRENATAL / PERINATAL GENETICS</b>		
TBH Assessment of stillbirths	Daily	795
TBH Prenatal Fetal Anomaly Counselling	1/week (and ward call)	883 total (762 first visit)
TBH Prenatal Down Syndrome counseling	1/week (and ward call)	
TBH TOP Counselling		60
<b>SUBTOTAL</b>		<b>1738</b>
<b>PAEDIATRIC GENETIC SERVICE</b>		
TBH Paediatric Genetic	1/week (and ward call)	575 total (327 first visit)
TBH Haemophilia	1/ month	8
TBH Cleft Palate (Interdisciplinary Clinic with Plastic surgery)	2/month	98 (50 new)
Paediatric Outreach: Paarl and Worcester Hosp	4/year	36
Paediatric Outreach: LSEN schools	Regular	130
<b>SUBTOTAL</b>		<b>849</b>
<b>ADULT GENETIC SERVICE</b>		
TBH Cancer Genetic service (Interdisciplinary Clinic with Mamma team and Radiation Oncology)	1/month (and ward call)	81 Breast cancer 8 Colon cancer
TBH Neurogenetic Clinic (Interdisciplinary Clinic with Neurology)	1 in 3 months	12 families
<b>SUBTOTAL</b>		<b>101</b>
<b>TOTAL PATIENTS SEEN</b>		<b>2688</b>

### Comment on output:

#### Division of Molecular Biology and Human Genetics

We performed Quantiferon tests for Tygerberg Hospital whenever requested, i.e. for Pediatric Oncology. This is a specialized test for TB infection that is not available through the state sector.

#### 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 in-patient 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 ~45min, and follow-up

cases ~30min). 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

##### 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/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

## **Division of Medical Physiology**

The following infrastructural upgrades and laboratory equipment were procured during the course of the year: Data projector installed in seminar room, Storage Cabinet: Acids / Alkalis and flammables, microplate reader, Ultra low temperature (-80°C) chest freezer, Non-invasive Blood Pressure system for Laboratory animals, High Pressure Liquid Chromatographer, PowerLab for the study of Aortic ring contractions, oxygraph, High throughput Western blotting system.

**Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

## **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 stake holders and has actively encouraged the participation of others in these events. These activities have been undertaken with "outreach" funding from the CMCB or with the Community Liaison Office/Research Translation Office of the MRC, with Ms Benita Mayosi.
- A highlight of 2012 has been that Prof Corfield was judged the most worthy recipient of the 2011/2012 NSTF-BHP Billiton Award in the category "To an Individual or a Team for an outstanding contribution to SETI through Science Communication for Public Awareness over the last 5 years – sponsored by the South African Agency for Science and Technology Advancement (SAASTA)". The award was made to Prof Corfield for producing a package of innovative SETI-based public engagement activities which she shares with other scientists and science communicators through training workshops and printed/electronic/DVD resources. This award requires that the winner presents a series of lectures to high school learners (particularly), Prof Corfield presented the first of these in August 2012 to learner visiting iThemba Labs, Western Cape. The title of her presentation was "A different scientist's journey; enjoying the ride" which traced her interest and education in science from primary school to doctorate and her 47 year career in varied natural

## BIOMEDICAL SCIENCES

science disciplines, including the last 26 years of research in CMCB investigating the molecular genetics of heart disease.

- Prof Corfield continued to promote the use of the Murder Mystery genre to engage the general public in the science underpinning DNA forensics and in the ethical issues that this technology raises. She has written three more “who-dun-it” scenarios which have been used in public engagement activities, at Scifest Africa 2012 and the CT Science Centre, also train science graduates in public engagement skills.
- During 2012, Prof Corfield was involved in other activities that furthered public awareness of various aspects of science. One of these is the continued rollout of the DNA Project, an organisation which seeks to raise awareness of the importance of DNA forensic evidence through many activities. During 2012, Prof Corfield has presented, DN: CSI, which she has helped develop with other trainers working with the DNA Project, to the South African Police (SAPS), security companies, school learners of all ages and the general public. Again in 2012, in response to the need to raise awareness of the range of health-related careers available to school learners, Prof Corfield presented a talk entitled “Careers in Health Care” to Stellenbosch University's bridging programme.

### **The activities in which Prof Corfield and members of CMCB/MRC were involved in 2012 are detailed below:**

- February 13 DNA:CSI workshop Pinelands High School
- February 16 DNA:CSI workshop Diep River SAPS
- March 10 and 11 Scifest Africa Sci-friend science communication training workshop run in conjunction with international science communicators

- March 14-20 Scifest Africa daily DNA Detective (7); DNA:CSI (7); Murder Mysteries (2) workshops
- May 21 “Careers in Health Sciences” presentation to bridging course learners at Stellenbosch University
- June 25 DNA:CSI workshop Group 4 Security Services (2)
- August 15 NSTF BHP Billiton presentation to high school learners visiting iThemba labs
- October 31 Murder Mystery staff training and presentation at CT Science Centre as part of their Public Understanding of Biotechnology programme
- December 5 Member of discussion panel at Teachers' Forum to discuss Body Worlds exhibition

### **Clinical Genetics and Genetic Counselling**

We work with the Down Syndrome Association – and are currently developing an informational video on Down syndrome. We work with the Foundation for Alcohol Related Research to highlight the problem of FAS.

### **Division of Medical Physiology**

Various members of staff acts 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 program of the Faculty of Health Sciences.

Prof Barbara Huisamen is also involved in the Women in Science career development Mentor program. Currently she and Dr S Bardiens-Kruger is lobbying for this programme to also be established on 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 pre- and post-graduate). He also maintains and staffs research clinics at various health care

facilities and contributes to health care in study participants.

## **Partnerships**

### **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 Medi-Clinic: Sarcoidosis project

### **International:**

Max Planck Institute for Infection Biology, Berlin, Germany- Prof Stefan Kaufmann, biomarker project

MRC, The Gambia- Dr Martin Ota, 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

Amhauer 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

## **Division of Anatomy and Histology**

### **National:**

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

There is a shortage of appropriately qualified Anatomists world-wide. The Division of Anatomy and Histology has a BSc Histology programme in place with 2-4 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 2-3 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 post graduate discipline which has necessitated the Division to develop post-graduate 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 post graduate programmes in Human Anatomy and has thus limited post graduate research capacity and a limited research publication record.

Human Anatomy, world-wide, is a highly specialized 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), 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.

# BIOMEDICAL SCIENCES

## **Clinical Genetics and Genetic Counselling**

### **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 Medical Physiology**

### **National:**

The Heart Research Laboratory, under the guidance of 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), Medical Biosciences (UWC) and Cape Peninsula University of Technology.

Prof Huisamen is involved in a collaborative study with Dr S Bardien-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 Physiology Research Group, headed by Prof Stefan du Plessis, actively collaborates with the research groups of Prof Gerhard van der Horst (Medical Biosciences, University of the Western Cape) and Dr Guillaume Aboua (Cape Peninsula University of Technology).

Dr John Lopes have 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 new research platform for TB diagnostics. 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 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 antituberculosis agents and regimens in collaboration with drug manufacturers and international partners.

### **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 is currently initiating a collaborative research network with Dr Nandu Goswami from the Medical University of Graz, Austria, which will measure the prevalence of cardiovascular disease in HIV-infected patients in urban and peri-urban areas around Cape Town

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 Alex Varghese (India), 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 program of the Center for Reproductive Research at Cleveland Clinic, Ohio, USA.

Prof Andreas Diacon has continued and expanded his research activities into novel antituberculosis agents and regimens in collaboration with drug manufacturers and international partners. The SU based part of the enterprise has now grown to 13 members performing tests on sputum samples collected at various research locations in Cape Town such as Delft, Mfuleni, Brooklyn Chest Hospital and Intercare Hospital. Prof Diacon is also still involved with clinical research at the Department of Medicine and is rendering clinical services.

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

#### **Division of Molecular Biology and Human Genetics**

- Using yeast two-hybrid analysis, we have identified several novel MyBPH interacting proteins and have subsequently verified these interactions using independent biochemical assays.

- We have optimized siRNA transfections to knockdown MYBPH and MYBPC, after which we plan to perform contractility assays to determine how MyBPC and MyBPH functions together to regulate cardiac contractility. To our knowledge, this is the first study that investigates the role of MyBPH in cardiac contractility.
- We have identified a number of novel putative KCNE1 and KCNE2-interacting proteins.
- We also showed that certain sequence variants in genes encoding KCNE1-interacting proteins were able to modify the QTc, as well as the number and type of cardiac events.
- Publication 11 (2013) evaluated the role that selected variants in serotonin transporter (*5-HTT*), dopamine receptor 2 (*DRD2*) and brain-derived neurotrophic factor (*BDNF*) genes play in PTSD symptom severity in an at-risk population. A significant interaction effect between *DRD2 Taq1A* and *BDNF Val66Met* variants on PTSD symptom severity was observed. This study provided evidence for an epistatic effect between *BDNF Val66Met* and *DRD2 Taq1A* polymorphisms on the severity of PTSD symptoms, where too little and too much dopamine affect increased PTSD symptom severity.
- Publication 2 investigated the impact of early developmental stress and voluntary exercise on telomere length in the ventral hippocampus (VH) and prefrontal cortex (PFC) of the rat. The increased telomere length in the VH of maternally separated non-exercised rats may be indicative of reduced cellular proliferation, which could, in turn, indicate hippocampal dysfunction. This effect on telomere length was not observed in exercised rats, indicating that voluntary exercise may buffer against the progressive changes in telomere length caused by alterations in maternal care early in life.

## BIOMEDICAL SCIENCES

- Dr Sven Parsons, a post-doc at the CMCB, is the consultant Vet to the MRC Primate Facility.
- The CMCB graduated 8 PhD and 7 MSc students in 2012.
- A number of students and post-docs were awarded fellowships (mostly Fogarty) to spend time overseas doing research. Monique Williams spend 6 months in Gilla Kaplan's Lab in New York.
- Prof van Helden every year writes opinion pieces for EMBO Reports (see non peer reviewed articles 1-3), a journal of the European Molecular Biology Organisation with impact factor approximately 7.
- Rob Warren was awarded two NIH funding grants, both focusing on drug resistant tuberculosis. Paul van Helden received an NIH supplement to improve pyrazinamide drug susceptibility testing.
- Continued external funding and invitations to serve the broader scientific community.
- A policy brief was produced by MRC in January 2012, which describes the association between *inhA* promoter mutations and resistance to isoniazid and ethionamide. It is recommended that this information is disseminated to attending clinicians to enable tailoring of the treatment regimen for the treatment of MDR-TB. The policy brief also includes a table on how treatment regimens can be tailored according to genetic drug-susceptibility data. Publication 6 demonstrated the possible role of *inhA* promoter mutations as a gateway to the emergence of XDR-TB in SA. These mutations are strongly associated with XDR-TB in the Cape Province as well as KwaZulu-Natal. This emphasises the importance of detecting these mutations as they may reflect TB patients at risk for XDR-TB.
- Publication 41 demonstrated that mutations in the *rrs* gene of *M. tuberculosis* confer cross-resistance to amikacin, kanamycin and capreomycin. This has important implications for the recommended treatment regimen which replaces kanamycin with capreomycin for the treatment of XDR-TB.
- Publication 43 demonstrated that the diagnostic utility of genetics-based drug susceptibility tests will depend on the proportion of patients whose bacilli are in the process of acquiring resistance in the study setting. These data have implications for the interpretation of molecular and microbiological diagnostic tests for patients with drug-susceptible and drug-resistant tuberculosis who fail to respond to treatment and for those with discordant results.
- Publication 13 (of 2013) shows that our genetic analysis of MDR-TB isolates from the Eastern Cape identified strong association between pre-XDR-TB and XDR-TB, and the "atypical Beijing genotype". This genotype was widespread in the province suggesting that pre-XDR-TB and XDR-TB reflects historic spread. Subsequent Third-line DST suggests the emergence of "totally drug resistant" cases. This is supported by extremely poor treatment outcomes of XDR-TB in that province. The strong association between the *inhA* promoter mutation and pre-XDR-TB and XDR-TB could be used as a marker to rapidly identify such cases, thereby prioritising second-line drug susceptibility testing.
- Publication 12 (of 2013) conducted a retrospective cohort analysis of 197 MDR tuberculosis patients treated at Brewelskloof, a rural tuberculosis hospital in Western Cape Province, South Africa, between 2007 and 2011. The median time from when the sample was taken to therapy initiation was reduced from 80 days for conventional DST to 55 days with the MTBDRplus. Significant operational delays persisted both in the laboratory and the clinical infrastructure for getting patients started on treatment.
- Publication 1 demonstrated that the GenoType MTBDRsl LPA is a rapid and reliable DST that can be easily

incorporated into the diagnostic algorithm. This assay significantly improved diagnostic yield ( $P < 0.001$ ) while simultaneously decreasing diagnostic delay for reporting second-line DST. The rapid dissemination of second-line DST results will guide initiation of appropriate treatment, thereby reducing transmission and improving treatment outcome.

- Publication 42 provides quantitative evidence that the addition of moxifloxacin to extensively drug-resistant tuberculosis (XDR-TB) regimens based on a clinical breakpoint of 2.0 mg/L has merit. The use of moxifloxacin in the treatment of multidrug-resistant tuberculosis may prevent the acquisition of additional mutations and development of XDR-TB.
- Publications 4 and 5 delineate TB biomarker antigens for diagnostic purposes.

## Peer-Reviewed Articles

### 2012

1. Barnard M, Gey van Pittius N, van Helden PD, Bosman M, Coetzee G, Warren RM. (2012) Diagnostic performance of Genotype® MTBDRplus Version 2 line probe assay is equivalent to the Xpert®MTB/RIF assay. *Journal of Clinical Microbiology*. 50(11):3712-3716.
2. Botha M, Grace L, Bugarith K, Russell VA, Kidd M, Seedat S, Hemmings SM. (2012) The impact of voluntary exercise on relative telomere length in a rat model of developmental stress. *BMC Res Notes*, 5:697.
3. Botha MH, Veenstra H, van der Merwe WK, Laeng RH, Nevin J, van Wijk L, Soeters R, Bird S, van Helden PD. (2012) Preliminary investigation of a new serum marker for ovarian cancer. *South Afr J Gynaecol Oncol*. 4(1):13-20.
4. Chegou NN, Black GF, Loxton AG, Stanley K, Essone PN, Klein MR, Parida SK, Kaufmann SH, Doherty TM, Friggen AH, Franken KL, Ottenhoff TH, Walzl G. (2012) Potential of novel Mycobacterium tuberculosis infection phase-dependent antigens in the diagnosis of TB disease in a high burden setting. *BMC Infect Dis*. 12(1):10.
5. Chegou NN, Essone PN, Loxton AG, Stanley K, Black GF, van der Spuy GD, van Helden PD, Franken KL, Parida SK, Klein MR, Kaufmann SHE, Ottenhoff TH, Walzl G. (2012) Potential of Host Markers Produced by Infection Phase-dependent Antigen-stimulated Cells for the Diagnosis of Tuberculosis in a Highly Endemic Area. *PLoS ONE*. 7(6):e38501.
6. Chihota V, Müller B, Mlambo C, Pillay M, Tait M, Streicher EM, Marais E, Van der Spuy G, Hanekom M, Coetzee G, Trollip A, Hayes C, Bosman M, Gey van Pittius NC, Victor TC, Van Helden PD, Warren RM. (2012) The population structure of multi-and extensively drug-resistant tuberculosis in South Africa. *J Clin Microbiol*. 50(3):995-1002.
7. Cohen T, van Helden PD, Wilson D, Colijn C, McLaughlin MM, Abubakar I, Warren RM. (2012) Mixed strain Mycobacterium tuberculosis infections: implications for tuberculosis treatment and control. *Clin Micro Rev*. 25(4):708-719.
8. De Beer JL, Kremer K, Ködmön C, Supply P, van Soolingen D, Global network for the molecular surveillance of tuberculosis 2009 (Consortium of authors include Warren, RM). (2012) First worldwide proficiency study on variable numbers of tandem repeats typing of Mycobacterium tuberculosis complex strains. *J Clin Microbiol*. 50(3):662-669.
9. Diacon AH, Maritz S, Venter A, Van Helden PD, Dawson R, Donald P. (2012) Time to liquid culture positivity as a substitute for colony counting on agar



- plates in early bactericidal activity studies of antituberculosis agents. *Clinical Microbiology and Infection*. 18(7):711-7.
10. Diacon AH, Dawson R, du Bois J, Narunsky K, Venter A, Donald PR, van Niekerk C, Erondou N, Ginsberg AM, Becker P, Spigelman MK. (2012) Phase II Dose-Ranging Trial of the Early Bactericidal Activity of PA-824. *Antimicrob Agents Chemother*. 56(6):3027-3031.
  11. Diacon AH, Dawson R, von Groote-Bidlingmaier F, Symons G, Venter A, Donald PR, van Niekerk C, Everitt D, Winter H, Becker P, Mendel CM, Spigelman MK. (2012) 14-day bactericidal activity of PA-824, bedaquiline, pyrazinamide, and moxifloxacin combinations: a randomised trial. *The Lancet*. 380:986-993.
  12. Donald PR, Maritz JS, Diacon AH. (2012) Pyrazinamide pharmacokinetics and efficacy in adults and children. *Tuberculosis* 92(1):1-8.
  13. Drewe JA, O'Riain MJ, Beamish E, Currie H, Parsons SD. (2012) Survey of infections transmissible between baboons and humans, Cape Town, South Africa. *Emerg Infect Dis* 18(2): 298-301.
  14. Gey van Pittius NC, van Helden PD, Warren RM. (2012) Characterization of *Mycobacterium orygis*. *Letter in Emerg Infect Dis*. 18(10):1708-1709.
  15. Hatherill M, Verver S, Mahomed H; Taskforce on Clinical Research Issues, Stop TB Partnership Working Group on TB Vaccines (Walzl, G). (2012) Consensus statement on diagnostic end points or infant tuberculosis vaccine trials. *Clin Infect Dis*. 54(4):493-501.
  16. Hesseling AC, Kim S, Madhi S, Nachman S, Schaaf HS, Violari A, Victor TC, McSherry G, Mitchell C, Cotton MF. (2012) High prevalence of drug resistance amongst HIV-exposed and -infected children in a tuberculosis prevention trial. *Int J Tuberc Lung Dis* 16(2): 192-195.
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  18. Katale BZ, Mbugi EV, Kendal S, Fyumagwa RD, Kibiki GS, Godfrey-Faussett P, Keyyu JD, van Helden P, Matee MI. (2012) Bovine tuberculosis at the human-livestock-wildlife interface: Is it a public health problem in Tanzania? A review. *Onderstepoort J. Veterinary Research* 79(2):1-8.
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  20. Le Roex N, Noyes H, Brass A, Bradley DG, Kemp SJ, Kay S, van Helden PD, Hoal EG. (2012) Novel SNP Discovery in African Buffalo, *Syncerus caffer*, Using High-Throughput Sequencing. *PLoS ONE*. 7(11):e48792.
  21. Loxton AG, Black GF, Stanley K, Walzl G. (2012) Heparin-Binding Hemagglutinin Induces IFN- $\gamma$ + IL-2+ IL-17+ Multifunctional CD4+ T Cells during Latent but Not Active Tuberculosis Disease. *Clin Vaccine Immunol*. 19(5):746-751.
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25. Mbugi EV, Kayunze KA, Katale BZ, Kendall S, Good L, Kibiki GS, Keyyu JD, Godfrey-Faussett P, van Helden PD, Matee MI. (2012) 'One Health' infectious diseases surveillance in Tanzania: Are we all on board the same flight? *Onderstepoort Journal of Veterinary Research.* 79(2):1-7.
26. McEvoy CRE, Cloete R, Muller B, Schurch AC, van Helden PD, Gagneux S, Warren RM, Gey van Pittius NC. (2012) Comparative analysis of Mycobacterium tuberculosis PE and PPE genes reveals high sequence variation and apparent absence of selective constraints. *Plos One* 7(4): e30593.
27. Miller M, Joubert J, Mathebelu N, De Klerk- Lorist L, Lyashchenko KP, Bengis R, van Helden PD, Hofmeyer M, Olea – Popelka F, Greenwald R, Esfandiara J, Buss P. (2012) Detection of antibodies to tuberculosis antigens in free –ranging lions (*Panthera Leo*) infected with Mycobacterium bovis in Kruger National Park, South Africa. *JZWM.* 43(2): 317–323.
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31. Parsons SD, Menezes AM, Cooper D, Walzl G, Warren RM, van Helden PD. (2012) Development of a diagnostic gene expression assay for tuberculosis and its use under field conditions in African buffaloes (*Syncerus caffer*). *Veterinary Immunology and Immunopathology.* 148(3-4):337– 342.
32. Parsons SD, Warren RM, Ottenhoff THM, Gey van Pittius NC, Van Helden PD. (2012) Detection of Mycobacterium tuberculosis infection in dogs in a high-risk setting. *Res Vet Sci.* 92(3): 414-419.
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- viral load set point in women. *J Infect Dis* 205(2): 194-203.
35. Robertson BD, Altmann D, Barry C, Bishai B, Cole S, Thomas Dick, Duncan K, Dye C, Ehrh S, Esmail H, Flynn J, Hafner R, Handley G, Hanekom W, van Helden PD, Kaplan G, Kaufmann SH, Kim P, Lienhardt C, Mizrahi V, Rubin E, Schnappinger D, Sherman D, Thole J, Vandal O, Walzl G, Warner D, Wilkinson R, Young D. (2012) Detection and treatment of subclinical tuberculosis. *Tuberculosis (Edinb)*. 92 (6):447-452.
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  38. Seddon JA, Jordaan AM, Victor TC, Schaaf HS. (2012) Discordant drug susceptibility for *Mycobacterium tuberculosis* within Families. *Pediatr Infect Dis J*. 31(7):783-785.
  39. Seddon JA, Visser DH, Bartens M, Jordaan AM, Victor TC, van Furth AM, Schoeman JF, Schaaf HS. (2012) Impact of drug resistance on clinical outcome in children with tuberculous meningitis. *Pediatr Infect Dis J*. 31(7):711-716.
  40. Seddon JA, Warren RM, Enerson D, and Beyers N (2012) Drug-resistant tuberculosis in children is caused by transmission and amplification of resistance within families. *EID*. 18(8):1342-5.
  41. Sirgel FA, Tait M, Warren RM, Streicher EM, Böttger EC, Van Helden PD, Gey Van Pittius NC, Coetzee G, Hoosain EY, Chabula-Nxiweni M, Hayes C, Victor TC, Trollip A. (2012) Mutations in the *rrs* A1401G Gene and Phenotypic Resistance to Amikacin and Capreomycin in *Mycobacterium tuberculosis*. *Microb Drug Resist*. 18(2): 193-197.
  42. Sirgel FA, Warren RM, Streicher EM, Victor TC, van Helden PD, Böttger EC. (2012) *gyrA* mutations and phenotypic susceptibility levels to ofloxacin and moxifloxacin in clinical isolates of *Mycobacterium tuberculosis*. *J Antimicrob Chemother*. 67(5): 1088-1093.
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  45. Van Rie A, Mellet K, John M-A, Scott L, Page-Shipp L, Dansey H, Victor TC, Warren RM. (2012) False positive Rifampicin resistance on Xpert®/MTB/RIF: case report and clinical implications. *Int J Tuberc Lung Dis* 16(2): 206-208.
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  47. Van Soelen N, Mandalakas AM, Kirchner HL, Walzl G, Grewal HM, Jacobsen M, Hesseling AC. (2012) Effect of *Ascaris Lumbricoides* specific IgE on tuberculin skin test responses in

children in a high-burden setting: a cross-sectional community-based study. *BMC Infect Dis.* 12(1):211.

48. Visser ME, Stead MC, Walzl G, Warren R, Schomaker M, Grewal HM, Swart EC, Maartens G. (2012) Baseline predictors of sputum culture conversion in pulmonary tuberculosis: importance of cavities, smoking, time to detection an w-beijing genotype. *PloS One* 7(1): e29588.
49. Wiedner SD, Burnum KE, Pederson LM, Anderson LN, Fortuin S, Chauvigné-Hines LM, Shukla AK, Ansong C, Panisko EA, Smith RD, Wright AT. Multiplexed Activity-based Protein Profiling of the Human Pathogen *Aspergillus fumigatus* Reveals Large Functional Changes upon Exposure to Human Serum. *J Biol Chem.* 287(40):33447-33459.
50. Weiner B, Gomez J, Victor TC, Warren RM, Sloutsky A, Plikatis BB, Posey JE, van Helden PD, Gey van Pittius NC, Koehrsen M, Sisk P, Stolte C, White J, Gagneux S, Birren B, Hung D, Murray M, Galagen J. (2012) Independent large scale duplications in multiple *M. tuberculosis* lineages overlapping the same genomic region. *PloS One* 7(2): e26038.
51. Wright GEB, Niehaus DJH, van der Merwe L, Koen L, Korkie LJ, Kinnear CJ, Drögemöller BI, Warnich L. (2012) Association of MB-COMT polymorphisms with schizophrenia-susceptibility and symptom severity in an African cohort. *Progress in Neuro-Psychopharmacology & Biological Psychiatry.* 39(1):163-9.
52. Zhu R, Kiser JJ, Seifart HI, Werely CJ, Mitchell CD, D'Argenio DZ, Fletcher CV. (2012) The Pharmacogenetics of NAT2 enzyme maturation in perinatally HIV exposed infants receiving isoniazid. *J Clin Pharmacol.* 52(4): 511-519.

Non peer-reviewed journal articles

- Van Helden PD. (2012) Simplicity. *EMBO reports* 13:172.
- Van Helden PD. (2012) The cost of research in developing countries. *EMBO reports* 13(5):395.
- Van Helden PD. (2012) Not too much and not too little. *EMBO Reports.* 13:942.

## Books

None for 2012

## Chapters in books

1. De Wit E, Moller M, Hoal EG. (2012) Genetic Perspectives of Tuberculosis in Southern Africa. In: *Genomics and Health in the Developing World*, D Kumar (Ed) Oxford University Press, New York.

Dissertations and theses completed (2012)

## PhD

1. Kleynhans L. The impact of the steroid hormones medroxyprogesterone acetate, cortisol and progesterone on protective immunity to tuberculosis. Promoter: G Walzl
2. Du Plessis N. The impact of *Nippostrongylus Brasiliensis* infection on host immune responses and susceptibility to *Mycobacterium tuberculosis* in a murine co-infection model. Promoter: G Walzl
3. Swart C. Characterization of the interaction between Acetylcholinesterases and Laminin: a template for discovering redundancy. Promoter:
4. Ngwane A. Elucidation of the mechanism of action of a furanone based compound (F1082). Promoter: I Wiid, Co-Promotor: PD van Helden
5. Bruiners N. Investigating the Human-M. tuberculosis interactome to identify the host targets of ESAT-6 and other mycobacterial antigens. Promoter: NC Gey van Pittius, Co-Promoter: RM Warren

6. Van der Merwe R. Development of a novel fluorescent-marker phage technology system for the early diagnosis of tuberculosis disease. Promoter: RM Warren
7. Werely CJ. Pharmacogenetics of Arylamine N-acetyltransferase genes in South African populations. Promoter: PD van Helden
8. Botha MM. Regulators of dormancy/viability of Mycobacterium tuberculosis inside the human macrophages. Promoter: I Wiid

## MSc

1. Black P. Identification of genes regulating the expression of the atpBEFHAGDC operon in response to rifampicin in multi-drug resistant Mycobacterium tuberculosis strains. Promoter: TC Victor
2. Dudhia Z. The effect of Cyclopiia maculata on lipogenesis and lipolysis in 3T3-L1 preadipocytes and adipocytes. Promoter:
3. Grobbelaar M. Adaptation of the Mycobacterium tuberculosis transcriptome in response to rifampicin. Promoter: TC Victor
4. Honing C. Identification of ligands interacting with the Wolframin protein (WFS1), a candidate in the pathophysiology of posttraumatic stress disorder (PTSD). Promoter: S Hemmings
5. Lucas L. Toll-like receptor genes and their pathway: role in susceptibility to pulmonary tuberculosis in a South African population. Promoter: E Hoal
6. Wagman C. Genetic studies on susceptibility to pulmonary tuberculosis mediated by MARCO, SP-D and CD14: molecules affecting uptake of Mycobacterium tuberculosis into macrophages. Promoter: E Hoal
7. Steyn N. Investigating the localisation of the ESX-3 secretion system in Mycobacterium smegmatis. Promoter: NC Gey van Pittius, Co-Promotor: RM Warren

## RESEARCH RECOGNITION OR AWARDS:

1. SARCHi Research Chairs: The NRF has provisionally allocated 3 new SARCHi's to the CMCB in 2012, evidence of the strength of the CMCB.
2. Dr. M. Williams was awarded a Columbia University-Southern African Fogarty AITRP Traineeship and a PHRI-AURUM-Global Infectious Diseases Research Fogarty Traineeship, July-Dec 2012
3. Mrs M. Klopper, received the L'Oréal-UNESCO Regional Bursary for Women in Science Fellowship Sub-Saharan Africa, 2012
4. Mrs M. Klopper, was awarded a SACEMA PhD bursary, 2012
5. Mr. M Salie and Miss M. Grobbelaar were awarded MRC PhD Bursaries, 2012
6. Dr E Streicher, Dr G. Louw, Mrs M de Vos, Miss M. Grobbelaar, Ms. P Black were awarded the Bill and Melinda Gates Global Health Travel grant (Keystone Symposium: E1, Drug Resistance and Persistence in Tuberculosis, Kampala, Uganda, May 2012)
7. Mrs M. de Vos, awarded a NRF scarce skills Doctoral Fellowship: Stellenbosch University Postgraduate Merit bursary, 2012
8. Mr M. Salie, DAAD-NRF Joint In-Country Doctoral Scholarship, 2012
9. Mr M. Salie, Miss J. du Plessis and Ms A Dippenaar were awarded Harry Crossley Funding, 2012
10. Mr M. Salie, EMBL Travel Grant and Registration Fee Waiver, 2012
11. Miss J. du Plessis, received a SU Postgraduate Merit Bursary, 2012
12. Miss J. du Plessis, was awarded the UMDNJ Global Infectious Diseases Scholarship, 2012

## BIOMEDICAL SCIENCES

13. Mr A. Viljoen and Mrs C. de Villiers were awarded DAAD-NRF Scholarships for PhD, 2012
14. Dr J. Blanckenberg, Ms A. Dippenaar were awarded NRF Innovation Postdoctoral Fellowships, 2012
15. Mr M. Salie, Ms A. Dippenaar were awarded International Office Overseas Conference Grants, 2012
16. Ms. M. Daya, received a full fee scholarship (17th Summer Institute in Statistical Genetics (SISG) for 3 modules: Bayesian Statistics for Genetics, MCMS for Genetics, Mixed Models in Quantitative Genetics), 2012
17. Mr N. McGregor, received the New Voices in Science finalist for presentation at the colloquium, 2012
18. Mr N. McGregor, received the Early Career Investigator Travel Award from the Lundbeck Foundation in collaboration with the International Society for Psychiatric Genetics for attending the XXth World Congress of Psychiatric Genetics , Germany, October 2012
19. Mr N. McGregor, received the Erasmus Mundus Doctoral Exchange Scholarship for a 6 month exchange at a European University or research institute
20. Mr. M. Salie, received the SU-FMHS Scientific Travel-Scientific Visit grant (Stanford University)
21. Miss S. Fortuin, received the MRC PhD Internship, 2012
22. Miss S. Fortuin, received the Pasteur Institute travel award (Proteomics and drug design Course, Tunisia), 2012
23. Miss S. Fortuin, was awarded Welcome trust travel award (6th Annual Directors meeting, Ghana), 2012
24. Ms. N. Le Roex, Finalist in the Popular Science Article category at the New Voices in Science colloquium, Stellenbosch University, December 2012.

25. Dr A Loxton, received the SU Scientific Travel Award (AIDS 2012 meeting, Washington, USA), 2012

26. Dr A Loxton, obtained the ERS International travel award Vienna, Austria, September 2012

### **The Division of Anatomy and Histology**

Publications in peer reviewed research papers: 7

Conference Presentations: 8 (6 national, 2 international)

Conference Posters: 12

Received PhD degree: 1

Peer reviewed manuscripts: 3 and 3 abstracts in conference proceedings

### **Clinical Genetics and Genetic Counselling**

1. Number of publications from the department/division (2)

Dandara C, Scott C, Urban M, Fieggen K, Arendse R, Beighton P. Confirmation of the recurrent ACVR1 617G>A mutation in South Africans with fibrodysplasia ossificans progressiva. *South African Medical Journal* 2012 8;102(7):631-3. PubMed PMID: 22748444.

2. Chersich MF, Urban M, Olivier L, Davies L, Chetty C, Viljoen D. Universal prevention is associated with lower prevalence of fetal alcohol spectrum disorder in Northern Cape, South Africa: a multicentre before-after study. *Alcohol and Alcoholism*, 2012; 47(1):67-74.

Text books and contributions to text books (1)

Urban M, Geerts L. Prenatal diagnostic services and prevention of birth defects in South Africa (2012). In: Kumar D, Ed, *Genomic variation and genetic disorders of developing countries*, Oxford University Press, New York, USA, p547-567.

### **Division of Medical Physiology**

Publications in peer reviewed research papers: 21

Chapters in books: 6

Conference Presentations: 16

Conference Posters: 14

PhD Graduates: 0

MSc Graduates: 1

Hons Graduates: 9

## **Teaching and Training (under, postgraduate and elective students)**

### **Division of Anatomy and Histology**

#### **Career development of graduates:**

MBChB Years 1-5

BChD Year 1 and 2

Allied Health 2nd year students (BSc Physiotherapy, Occupational Therapy, Dietetics students)

#### **Postgraduate teaching:**

BScHon (MedSci)

MMed students.

Retraining of specialists in latest surgical techniques in hip-replacement, pelvis-reconstruction, shoulder-repair, stabilization of vertebral column = 200 surgeons per year sponsored by the foremost suppliers of surgical equipment and implants.

Postgraduate research training:

1 PhD, 2 MSc, 3 Honours

Prof BJ Page is external examiner in anatomy at University of Namibia, Wits and Walter Sisulu University. Also Chief examiner for Anatomy for MFOS SA College of Dentistry.

Dr Sanet Kotze is external examiner at UP Faculty of Veterinary Science (Anatomy).

### **Division of Molecular Biology and Human Genetics**

#### **Practical training courses in during 2012:**

PCR techniques:

- Gershvin Arries (CCTR)
- Xavier Kayigire (CCTR)
- Bayanika Manunu (CCTR)

#### **Other Training courses**

Ms. Amour Venter also conducted initiation training for the laboratory personnel involved with clinical drug trials on the following protocols:

- TB Alliance protocol number NC-002-(M-Pa-Z); 06 March 2012
- Protocol TBTC Study 29X; 06 March 2012
- TB Alliance protocol number NC-003-(C-J-Pa-Z); 11 September 2012
- AstraZeneca protocol DMID 11-0006; 08 November 2012

#### **Oral/Conference Communication skills:**

Prof Corfield has developed and presents a workshop to facilitate the development of oral/conference communication skills. During 2012, she presented two separate workshops to lecturers/senior postgraduate students at University of Stellenbosch (this workshop has become a fixture on the Department of Research Development's calendar) and to postgraduate students in CMCB.

#### **NRF Ratings workshop:**

Prof Corfield has designed and developed and presents a workshop that helps unravel the NRF ratings systems from the perspective of the researcher. This has been presented to tertiary institutions across South Africa under the auspices of the NRF and at Stellenbosch University through the Department of Research Development. Thus, Prof Corfield was invited to travel on "road shows" with Dr Daisy Selematsela (NRF Executive Director, Knowledge Management) and Mrs Joyce Olivier (NRF Manager, Monitoring and Evaluation Manager Monitoring and Evaluation) to promote knowledge about the NRF ratings system and to conduct the workshop at the Cape Peninsula University of Technology, Universities of Limpopo, North West, Pretoria, Venda, Western Cape, Medunsa, Stellenbosch University [twice – second time on direct invitation from the University's research office].

#### **Other research capacity development activities**

1. Prof. Warren presented two lectures in the MBChB module on Infections and Clinical Immunology in 2012. Title: Molecular Epidemiology of Drug Resistant TB in South Africa.
2. Numerous radio, TV and newspaper interviews locally and abroad. Owing to extreme administrative burden, opportunistic interviews, no accurate records were kept.
3. Prof. van Helden was part of the organising committee for Bovine Tuberculosis Conference, Skukuza, Pretoria, South Africa September 2012.

## BIOMEDICAL SCIENCES

Training Course	Attendee/s
Performance Management Workshop, Feathers Lodge, Bellville (hosted by HOUR dept, FHS), 21 February 2012	Dr S. Hemmings
One Day Research Workshop, Tygerberg Campus, on 15 March 2012	Ms C van der Merwe
"The art of reviewing scientific papers" workshop, JS Gericke Library Auditorium, SU, 7 March 2012	Dr J. Blanckenberg
"A Short Course in Epidemiology and Research Methodology", SACEMA, SU, 7 Feb - April 2012	Dr J. Blanckenberg
Advanced TB Research course, 06-09 March 2012, at the UCT Lung Institute	Dr N. Chegou, Mr P. Essone Ndong
Proteomics & drugs design Course, Institute Pasteur, Tunis, 20-24 March 2012	Ms. S. Fortuin
'GCP for the Research Team' Course, Tygerberg Campus, Stellenbosch University, 26-27 January 2012	Drs A. Loxton, M. Kriel, N.Chegou, L. Kleynhans, N.du Plessis, Mrs L. Muller, Ms K.Stanley
SAMU/MSF DR-TB Workshop. Title: Drug resistant TB and genetic mutations	Dr. EM Streicher
Secretary course on 24 April 2012 held in Rondebosch	Ms L Vos
Performance Management Workshop on 17 April 2012 at Devon Valley, hosted by Stellenbosch University	Mrs L Muller, Dr D. Kriel
Basic isiXhosa course, Masazane 1, 14 Feb-19 April 2012, Tygerberg Campus	Mrs S. Mcanda, Prof. I. Wiid
Next Generation Sequencing and Bioinformatics Course on 17-19 April 2012 held at the University of the Western Cape.	Dr J. Blanckenberg
Grant Writing Course, STIAS, Stellenbosch, 18 April 2012	Dr N. Du Plessis
Mass Spectrometry and Proteomics Course during 18th-25th April 2012, at University of Southern Denmark, Odense, Denmark	Mr. KK Siame
HR: Building effective Relationships 11-12 of June hosted by human resources of Stellenbosch University at Lancerac Manor	Dr. K. Ronacher-Mansvelt
GCP course, Tygerberg Campus, Stellenbosch University, 14-15 June.	Dr. K. Ronacher-Mansvelt
Helping students to avoid plagiarism and use Harvard referencing correctly on 30 May 2012 at SU Language Centre	Ms G Durrheim
Hain Lifescience SA (Pty) Ltd Mini Symposium, Vineyard Hotel and Spa, Newlands, Cape town. 24 May 2012	Dr E Streicher
the Keystone Symposia on Drug Resistance and Persistence in Tuberculosis on 13-18 May 2012 held at Kampala, Uganda.	Ms PA Black
Introduction to Statistics & its applications in Biology, SACEMA Stellenbosch, 9-20 July 2012	Mrs C. de Villiers
Keystone Symposia on Drug Resistance and Persistence in Tuberculosis, Kampala, Uganda, 13-18 May 2012	Drs E. Streicher, G. Louw, A. Ngwane, Ms M. Grobbelaar, Mrs M. de Vos
Population Genetics workshop hosted by UCT, 4-8 June 2012	Dr. M. Moller, M. Daya & Dr. N. Roetz
Partek workshop Workshop (Next Generation Sequencing and Microarray Data Analysis), SANBI, UWC, 23-27 July 2012	Ms P. Black, Ms M. Grobbelaar, Mr. M Salie
Workshop in Windhoek, Various topics related to consortium studies, July 2012	Profs G. van der Spuy, G. Watzl, Dr M. Kriel, Ms. K. Stanley
New Voices in Science: Writing Workshop, Stellenbosch Univ, 4 September 2012	Mr. M Salie



## BIOMEDICAL SCIENCES

New Voices in Science: Science Communication Workshop, Stellenbosch Campus, 11 June 2012	Ms. N. le Roex
17th Summer Institute in Statistical Genetics (SISG), Seattle, USA, 9th-20th July	Ms. M. Daya
Mass spectrometry based Proteomics workshop, Tygerberg Campus, Stellenbosch University, 11 July 2012	Mr RD Pietersen, Ms. A. Dippenaar, L. Vos
New Voices in Science Workshop hosted by the University of Stellenbosch Post-graduate Office at STIAS, 11-12 June 2012	Mr N McGregor
Two-week course entitled, "Introduction to statistics and its applications in Biology (level II)" from 9-20 July 2012 at SACEMA, Stellenbosch	Dr. N. Chegou
Scientific Writing Skills Workshop, Tygerberg Campus, 16-17 May 2012	Ms. S. Malan-Muller
SASBMB/FASBMB Congress 2012 in the Drakensberg, from 29 Jan - 1 Feb 2012.	Mr P Essone Ndong
Advanced TB Diagnostic research course at UCT Lung Institute, 6-9 March 2012	Mr P Essone Ndong
Workshop hosted by the Dept Molecular and Cell Biology, University of Cape Town & the Centre for Proteomic and Genomic Research, 19-21 September 2012	Ms L. Vos, Ms M. McGrath
Seminar on the UniProt and Tuberculist databases, UCT, 1-2 November 2012	Ms M. McGrath
Web seminar on the PATRIC website presented by the PATRIC website organisation, 27-30 Nov 2012.	Ms L. Vos, M. McGrath
Workshop in scientific writing skills for theses, 22-23 August 2012	Ms M. McGrath, Mr. K. Hammond-Ayree
Workshop in scientific writing skills for academic articles, 28-29 August 2012	Ms M. McGrath, Mr. K. Hammond-Ayree
ARESA (Advanced Research Ethics Training in Southern Africa) seminar, Newlands, Cape Town, 30-31 August 2012	Dr. M. Moller, Mr. M. Salie, Prof E. Hoal
DAIDS Good Clinical Laboratory Practise Training Course, Johannesburg, 28-30 August 2012	K Stanley
Norvatis & Stellenbosch University Clinical Science workshop held at Tygerberg from 22-23 October 2012	Mr. K. Hammond-Ayree
EMBO Proteomics bioinformatics course: Computational Biology: from genomes to cells and systems, Girona, Spain, 14-20 October 2012	Ms A Dippenaar
Novartis Next Generation of Scientist in Basel, Switzerland from 01 June-31 August 2012	Dr A Ngwane
Novartis Next Generation of Scientist 2011 and 2012 reunion, KZN University, Durban, 28-30 November 2012	Dr A Ngwane
Workshop in scientific writing skills for academic articles. SU, 28-29 August 2012.	Dr M de Vos

# BIOMEDICAL SCIENCES

## **Clinical Genetics and Genetic Counselling**

### **Post-graduate:**

- Training of 2 registrars in clinical genetics is ongoing
- Training of 1 intern genetic counsellor is completed
- Training of 1 intern genetic counsellor is ongoing

### **Undergraduate:**

- 9 lectures to 2<sup>nd</sup> year medical students
- 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 well on the way to becoming clinical geneticists.

## **Division of Medical Physiology**

- Dr Shantal Windvogel attended the Masazane 1 Isixhosa Language Acquisition Course at Stellenbosch University (7/02/2011-6/04/2011).
- Dr Shantal Windvogel attended the CHEC assessment in Higher Education Course at Stellenbosch University (14/09/2011-5/10/2011).
- Amanda Genis: Participated in the "New voices in Sciences" workshop: Postgraduate and International Office, Stellenbosch University, June.

A number of students from the Division of Physiology, including Dumisile Lumkwana, Sidney Hanser, Enock Havyarimana and Veronique Jansen attended a short course on Epidemiology at the Faculty of Medicine and Health Sciences.

## **Research Interns (MRC):**

### **Mrs Cindy George**

NRF Sponsored Research Interns:

Mr Dirk Loubser was sponsored during his MSc 1st year

## **Career Development of Graduates:**

Undergraduate teaching of MBChB 1st, 2nd and 3rd year students, as well as BChD 1st and 2nd year students. Allied Health 2nd 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, SU, Prof Hans Strijdom – WITS, UCT, UKZN; Prof Barbara Huisamen – SU, UWC.

Prof Hans Strijdom and Stefan du Plessis acts 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 Barbara Huisamen hosted a masters student from Belgium, while Prof Du Plessis hosted a doctoral student from Nigeria. Both students had to complete laboratory research projects towards their respective degree programs.

Dr Johan Lopes have successfully set up a method for isolating and culturing rat heart cells, which is the only successful model thus far in Southern Africa, and is also not widely practiced internationally because of the difficulties around optimizing the conditions. This model can be used for the rapid screening of drug effects on heart cells.

## **Special achievements and other highlights not covered by this template**

### **The Division of Anatomy and Histology**

Prof BJ Page, Vusi April and Paul Pretorius received the SU Rector's award for Excellence in Service delivery.

## **Clinical Genetics and Genetic Counselling**

2012 was a fantastic year for the Clinical Unit. Some highlights:

- Michael Urban received the UK Clinical Genetics Society 'International Fellow' award in 2012. This provided funding to attend and address the UK Clinical Genetic Society Conference and then to spend a one week clinical attachment with a UK Clinical Genetics unit (his clinical attachment was based at the 'Centre for Life', Newcastle-upon-Tyne).
- In June 2012 Denis Viljoen (Honorary Professor in Clinical Genetics attached to our Clinical Unit) received the prestigious Henry Rosett in San Francisco. This is the premier award for fetal alcohol syndrome research worldwide.

## **Division of Medical Physiology**

- Several of our post-graduate students were placed among the top three best Oral Presentations at the 4039th PSSA conference (Johan Maartens – best Masters student; Roxy Graham and Ryan Janse van Rensburg – best Honours student presentations). During the same conference Dirk Loubser was placed third in the Johnny van der Walt Poster competition.
- Prof Stefan du Plessis received the Award for Excellence in Research from the Cleveland Clinic in Ohio, USA.
- Amanda Lochner received a Life Time Achievement award from the Cardiovascular Journal of Africa.
- Prof Amanda Lochner was invited to deliver 2 plenaries at the annual congress of the SA Heart Association.
- Prof Barbara Huisamen was an invited speaker at the African workshop for NCD's held in the Waterfront.
- Cindy George received a prize for the "best poster in the under 35 oral poster competition" at the die SEMDSA/NOFSA 2012 CONGRESS.
- Prof Stefan du Plessis were invited to give to plenary presentations at the Russian Association of Human

Reproduction conference in Gelendzhik, Russia.

- Prof Stefan du Plessis serve as a member of the FMHS Research C Committee.
- Prof Stefan du Plessis was elected as Member of Council of Stellenbosch University.

# CLINICAL PSYCHOLOGY

## Head of Department Dr Debbie Alexander



### Summary of Activities

The Clinical Psychology department at Tygerberg Hospital provides psychological services to in- and out-patients. Psychology services are provided through Adult Psychiatry (J-LG), Child and Family Psychiatry (F-LG) and Medical Psychology (A-LG). Staff from these units also render services at the community clinics. The Medical Psychology unit works in collaboration with Liaison Psychiatry and medical departments in the hospital. Clinical Psychology services provided include assessment, diagnosis and treatment as well as the 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**	
* the 4 <sup>th</sup> post removed by hospital management			
**one intern did not complete the internship			
<b>Posts (sessional – how many hours per week)</b>			

Output	Clinical Psychology Services – Statistics		
	Outpatients	Inpatients	Other
Patients	1752	433	
Consultations	2707.25	912.00	
Hours	3832.58	1713.46	
Other hours			7066.36
<b>Psychometric Evaluations</b>			
	Outpatients	Inpatients	
Patients	190	62	
Hours	1711.60	354.00	

# 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 -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 – 12 hrs 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.

The full complement of Intern Psychologists was reduced by one withdrawal during the course of 2012. One Child and Family Psychology post remained unfilled due to insufficient funding and because it was not used it was removed without consultation with the Psychology department. One Senior Clinical Psychologist had 3 months sabbatical leave.

## Infrastructure Development

Resources: Purchasing and updating test batteries for neuropsychological and psychometric assessment of adults and children remains an on-going process. Information Technology: The department received 7 new computers and printers. Human Resources: Professional development is on-going. 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 primary and advanced

level workshops on REBT (a therapeutic method) under the auspices of the Albert Ellis Institute of New York. One senior staff member also attended a teaching workshop hosted by US.

## Community Outreach Programmes/Community Service and Interaction

Clinical Psychology Interns were allocated to community clinics in the Bellville, Parow, Kleinveij; Kraaifontein, Delft and Elsie's 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. The facilitation of a debriefing group for members of the Genetics Department;
2. A talk on the psychological aspects of healthy and disordered eating behaviour to a group of women in the Health Sciences Faculty;
3. A presentation on "Depression and Medical Illness" at the Mental Health Update Day at Lentegeur Hospital;
4. A presentation on "The use of psychometric assessment in Psychology practice" to Masters students at the University of Cape Town;
5. Attendance at the: "People to people mental health professionals delegation" meeting in the faculty;
6. Liaison with local schools re: patient management plans at school and in the community;
7. The Provision of Psychology services to the IRB U20 Rugby World Championships held at US and UWC;
8. A presentation to National Coaches at the SASCOC National Coaches Conference re: the value and role of psychological literacy in the development of Youth and High Performance athletes;
9. Compilation of the Psychological Literacy component of the SARU Long Term Participant Development document;
10. Assistance with the mental preparation of Paralympic athletes for the Paralympic Games;

# CLINICAL PSYCHOLOGY

## **Partnerships**

University of the Western Cape – Teaching of Neuropsychology to the Clinical and Counseling Psychology Master's Students.

2 Military Hospital - Teaching of Neuropsychology to the Clinical Psychology Interns and Clinical Psychologists.

University of Cape Town/Groote Schuur Hospital – Communications were opened and experiences shared between Medical Psychology at GSH and TBH.

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

## **Achievements with regard to research activities and research outputs.**

1. External Examiner for Doctoral Thesis: Massey University, New Zealand
2. Supervision of Master's Thesis: North West University
3. Supervision of Doctoral Thesis: Stellenbosch University (Health Sciences Faculty)
4. MA (Psychology) Thesis: Collaboration with Stellenbosch University
5. Progressed with PhD degree research project: "Neurocognition and disordered thinking: its association, temporal stability and treatment outcomes in first episode psychosis".
6. Received Harry Crossley award for abovementioned PhD
7. Collaboration with Lentegeur Hospital on the research project: "Validity and clinical utility of the Montreal Cognitive Assessment (MoCA) as assessment of cognitive impairment in a South African population".
8. Two articles prepared for submission to international and national journals.

## **Teaching and training (under-, 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 & 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 and other highlights not covered by this template**

Services were provided to the following committees:

Internal:

University of Stellenbosch Medical and Health Sciences Faculty Board

University of Stellenbosch Health Research Ethics Committee

Post Graduate Committee (Department Psychiatry)

MBChB Psychiatry Department Training Committee

Psychotherapy Committee

Supervisors Committee

Psychiatry Department Management Committee

Psychiatry Department Lecturers Committee

External:

SASCOC Medical and Anti-doping Commission (Psychology representative)

Triathlon South Africa Executive Committee (Re-elected President)

Elected to the Executive Board of the International Triathlon Union

Member of the SARU concussion working group

Invited to present paper on Psychology in sport to SA National Coaching Conference hosted by SASCOC

## **Special Achievements:**

**External:**

Dr Alexander was awarded the CEO Magazine award for Most Influential Woman in Business and Government (Sport sector)

Dr Alexander was a Finalist in the SA Sport Awards – (Administrator category)

Dr Alexander was awarded Protea Colours – SA Team Management (Triathlon)

### **Division of Community Health: Occupational Health Clinic/ Minor Ailment Clinic 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). There are however several agreements with other organisation e.g. the National Health Laboratory Service (NHLS) which allows services (from the OH clinic) to also be rendered to their employees.

The service 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.

Services rendered by this clinic span the whole spectrum of Occupational Health including workplace hazard identification and risk assessment, risk based medical surveillance (e.g. blood lead levels in lead workers, pre-placement medical evaluation of workers exposed to ionizing radiation e.g. the radiographers), managing workers with occupational diseases as well as those with chronic injuries which are occupation related (e.g. sonographers with carpal tunnel syndrome). This include the evaluation of impaired function to establish appropriate work placement or adaptation of work activities. Inputs are also provided in other



specialist outpatient clinics, e.g. the Dermatology clinic.

All employees with needle stick injuries/splash injuries (during office hours) will be seen at the 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.

#### **Resources**

##### **Occupational Health Clinic and Minor Ailment Clinic**

**Principal Specialist in Occupational Medicine/Head of Clinical Unit:** Dr. SE Carstens, MB,ChB; MMed Comm Health; FCPHM (SA) Occ Med

**Specialist in Occupational Medicine:** Dr.WAJ Meintjes, MB,ChB (Pret), DOM (Stell); FCPHM(SA) Occ Med; MMed (Occ Med)

**Registrars in Occupational Medicine:** Dr. Z. Essop (SANDF); Dr. J. Ayuk (Cameroun)

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

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

# COMMUNITY HEALTH

**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 1958 patients were seen at the minor ailments clinic.

### Occupational Health clinic visits:

A total of 1921 persons were seen at the occupational health clinic. The consultations included pre-placement medical examinations, fitness for work evaluation and disability management and management of occupational diseases and injuries (e.g. needle-stick injuries and occupational tuberculosis)

During September 2012 the Occupational Health team successfully combined with the Unit for Infection Prevention and Control and Dermatology to contain a scabies epidemic in wards D1 and J1.

### 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.

## Part 2

### Faculty on Health Sciences

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

New diagnostic equipment was acquired, including dinamap, Hemocue HB monitor, a Multi-function copy-fax machine and a fax line was opened. Internet access was also installed.

#### Community outreach programmes/ community service and interaction.

Nil

### 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 wrt research activities and research outputs:

Number of publications from the department/division

Text books and contributions to text books.

1. **Meintjes WAJ.** Dive Medicine. In: Baker L, ed. A guide to the practice of travel medicine in the South African context.: SASTM Publications 2012:141-151
2. Woodbury GM, **Meintjes WAJ**, Lindholm C. How to read, understand and interpret quantitative research. In: Chronic wound care (5<sup>th</sup> Ed). Krasner DL, Rodeheaver GT, Sibbald RG and Woo KY. 2012:131-140

#### Presentations at international conferences

1. **Meintjes WAJ.** 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.
2. Mandic T and **Meintjes WAJ.** A survey of antimalarial medication use and its effects in recreational scuba divers. 38th Annual Scientific Meeting of the EUBS; 2012; Belgrade, Serbia.; 2012. p. 112.
3. Kharb M and **Meintjes WAJ.** A prospective evaluation of male fertility changes in saturation divers. 38th Annual Scientific Meeting of the EUBS; 2012: European Underwater and Baromedical Society; 2012. p. 64.
4. Karin Vela B and **Meintjes WAJ.** A cross-sectional study describing all divers seen at a private medical practice in Dubai, UAE. 38th Annual Scientific Meeting of the EUBS; 2012; Belgrade, Serbia; 2012. p. 111.



# COMMUNITY HEALTH

## Teaching and Training (under-, postgraduate and elective students).

1. There are two registrars in the MMed (Occupational Medicine) degree programme who are working in the clinic.
2. The BScMedScHons (Underwater Medicine) degree programme and the BScMedScHons (Hyperbaric Medicine) degree programme had a number of successful candidates graduating and their research projects were presented at an international conference.
3. Three University of Stellenbosch students, enrolled for a post basic course in nursing management were assisted with clinical guidance.
4. Sr Arendse (Occupational Health nurse) assisted the registrars with their research projects.
5. She also acted as a mentor to the occupational health nurse practitioner of Khayelitsha district hospital.
6. Sr Arendse was also involved in the orientation program of the hospital for CPUT and UWC nursing students.

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

1. Andrews BN. The validity of spirometry performed on South African navy divers and submariners from July 2010 to July 2012. 2012 [For the BScMedScHons (Underwater Medicine) degree]
2. Rai A. A descriptive analysis of the Divers Alert Network Southern Africa hotline calls received from 2009 to 2011. 2012 [For the BScMedScHons (Underwater Medicine) degree]
3. Poole-van Hoek S. A survey of diving and dive safety practices of divers in Zeeland, the Netherlands. 2012 [For the BScMedScHons (Underwater Medicine) degree]
4. Govender P. The performance of a Higher Education Institutional Health Research Ethics Committee in Gauteng, South Africa. 2012 [For the Postgraduate Diploma in Health Research Ethics]
5. 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 12 years – in process. [For the MSc (Baromedical Sciences) degree]
6. Van Wijk CH. A prospective cross-over study investigating specific aspects of neuropsychological performance in hyperbaric environments – in process. [For the MSc (Baromedical Sciences) degree]
7. Ayuk JN. Factors associated with transmission of tuberculosis among workers in Tygerberg Academic Hospital, Western Cape Province, South Africa. [For the FCPHM(SA) Occ Med qualification]
8. Ayuk JN. A cross-sectional study of percutaneous exposure incidents in Tygerberg Academic Hospital, South Africa. [For the FCPHM(SA) Occ Med qualification]
9. Essop Z. A case study of a patient with a neurological tumour: the role of occupational medicine in the management process. [For the FCPHM(SA) Occ Med qualification]
10. Essop Z. Post exposure prophylaxis use secondary to occupational exposure to blood and body fluids in undergraduate medical students over a period of 5 years [For the FCPHM(SA) Occ Med qualification]
11. Barrion IM. Risk factors for work-related noise-induced hearing loss in a cohort of mining and manufacturing industries – in process [For the M (Audiology) degree]

## Internal/external examining by staff members

Dr. Carstens served as internal examiner for a Masters in Medical Science: Rehabilitation student at Stellenbosch University – N Pefile

# COMMUNITY HEALTH

## **Special achievements and other highlights not covered by this template.**

- Dr. Carstens' term of office as Head of the Division of Community Health at Stellenbosch University, was extended for another 6 months, till June 2012
- Dr. Meintjes acted as a core examiner for the Colleges of Medicine of South Africa, for the FCPHM(SA) Occ Med candidates.
- Dr. Meintjes acted as chair of the Health Research Ethics Committee of Stellenbosch University
- Dr. Meintjes served as a member of the Stellenbosch University Senate Research Ethics Committee
- 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.

## Head of Department Prof. Shabbir Ahmed Wadee

### Summary of activities

From January 1 to 31 December 2012, 3 051 admissions were made to the Tygerberg Forensic Pathology Laboratory of the Forensic Pathology Services at the Tygerberg Academic Complex. Of these, 1 777 were deaths due to unnatural causes, 945 due to natural causes and 329 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 1 164 cases from the Tygerberg Forensic Pathology Services Facility or mortuary and 120 cases from referral centres (35 cases from Paarl, 10 cases from Stellenbosch, 17 cases from Worcester and 58 cases from George), comprising 1 284 cases in total. As a result, 19 583 blocks were processed from Tygerberg, 120 from Paarl, 107 from Stellenbosch, 181 from Worcester and 936 from George. A total of 18 711 Haematoxylin & Eosin (H&E) stains were performed from Tygerberg, 127 from Paarl, 107 from Stellenbosch, 181 from Worcester and 936 from George. A total of 123 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 and Dr. D. Zaharie. A total of 177 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 and other rotating registrars, and others were accommodated and trained at these meeting. 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 18 cases were macroscopically examined at the heart dissection meetings in consultation with Cardio-thoracic Surgeon, Prof. J. Rossouw. During the course of 2012, 171 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 124 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. 594 Telephonic consultations were handled by Medical Personnel in the Division and 25 crime or death investigation scenes were attended.

### 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

# FORENSIC MEDICINE

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

## Output

Outpatient visits:  
Speciality Clinics:  
Admissions:  
Theatre procedures:

## 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, and the Head of Clinical Unit, Dr Johan Dempers, and Senior Specialist, Dr Lene Burger and Specialist Dr M Tiemensma, in the maintenance of the Tygerberg Forensic Pathology Facility or mortuary.

## Community outreach programmes / community service and interaction. Please focus on initiatives in 2012, especially wrt MDG and projects in Africa.

Dr JJ Dempers undertook a Forensic Pathology Travelling Seminar to most cities around the country. The seminar was appreciated and well received.

Dr EH Burger gave a Death Notification Form completion talk to interns at Tygerberg Hospital. Similar talks were delivered in collaboration with the Medical Research Council at hospitals, public and private, in the Western Cape.

## Partnerships

International:

The Division is actively involved 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.

Achievements wrt research activities and research outputs:

Number of publications from the department/division  
Text books and contributions to text books.

Two articles were accepted and published in reputable journals nationally and internationally.

## Teaching and Training (under-, postgraduate and elective students).

### Undergraduate

During the year 2012, 126 MBChB IV and 70 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

# FORENSIC MEDICINE

undergraduate module involves tutoring small groups of approximately 10 to 12 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 are received pertinent training in Forensic Medicine.

One registrar from the Anatomical Pathology Division spent two months each as rotating registrars 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) at the College of Forensic Pathologist at the College of Medicine of South Africa.

The FPS Tygerberg Medico-legal Mortuary 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.

## **Special achievements**

Dr J Dempers –IAP National Travelling Forensic Seminar in 2012

Dr Lene Burger Death Notification Form Completion Training provincially in 2012 and now nationally working with the National Committee on Civil Registration and Vital Statistics involving Stats SA, the Department of Home Affairs and the Department of Health and Medical Research Council for a national programme.

Dr Lene Burger – WHO Family of International Classifications – Network meeting – Brazil in 2012.

## Head of Department Prof Richard Pitcher

### Summary of activities: Medical Physics

During 2012 Medical Physics ventured into new areas.

Acceptance testing was successfully completed by Medical Physics on the new PET/CT scanner, which was commissioned in March 2013. In addition, a quality assurance system was implemented on the new PET/CT Scanner, which has been running smoothly in the past months.

The Division played a leading role in the establishment of a system for the management of radiotherapy incidents. The system records incidents and near incidents, collects the information in a database, analyzes the incidents and proposes measures for preventing similar incidents in future.

In November 2012, a team comprising a Radiation Oncologist, a Radiographer and a Medical Physics representative attended an ESTRO Incident Management Course in Belgium and visited a number of institutions in Belgium and Holland.

As in the past, the Division of Medical Physics met its commitments to the Radiation Oncology, Nuclear Medicine and Diagnostic Radiology Divisions with regards to teaching and application of ionising radiation. The radiation monitoring service to radiation workers and licensing of x-ray units were successfully maintained. We supervised the safe use of LASER devices in the hospital. Courses in Radiation Physics and Medical Physics were presented to registrars, physics students and student radiographers.

On the international front our medical physicists participated in the health



programmes of the IAEA (International Atomic Energy Agency) on the African Continent. Staff members contributed to the activities of two IAEA projects, viz. "Information and Communication Technology on the Continent" and "Medical Physics in support of Cancer Management on the African Continent".

### Summary of activities:

#### Nuclear Medicine

Nuclear Medicine was not only actively involved in general Nuclear Medicine activities, but also saw the establishment of the Western Cape Academic PET/CT Centre, which scanned its first patient on 29 March 2012. The PET/CT scanner serves the Western Cape, including Groote Schuur and Red Cross Children's Hospitals. The acquisition of the PET/CT scanner was long overdue, as most of the other academic Nuclear Medicine departments in the country have had PET/CT scanners for many years. The availability of the PET/CT scanner on the premises of Tygerberg Hospital made it more accessible for patients, and referrals for PET/CT studies increased significantly, with more than 500 scans having been performed since it opened its doors. The PET/CT is currently the only scanner in South Africa

## MEDICAL IMAGING & CLINICAL ONCOLOGY

offering time-of-flight technology, as well as being ideal for radiotherapy planning.

Several staff members were involved in local, national and international activities, on service delivery, research, and teaching and training levels. Several international students received training in clinical Nuclear Medicine, radiopharmacy and as radiographers (technologists).

Increasing collaboration and interaction with a diverse group of international doctors and researchers is an indication of the division's increasing international profile

### **Radiation Oncology**

The Division offers a full spectrum of oncological services, including, Proton beam therapy and neutron therapy through association with iThemba LABS as well as ongoing training of registrars and practical oncology exposure to CPUT radiography students.

The long standing outpatient chemotherapy space shortage was successfully addressed by completion of phase one of the building renovation. Phase two will include a joint project between Western Cape Government, with upgrade of the teaching facility and cafeteria for staff.

The year under review saw the successful purchase of a large-bore planning CT scanner

### **Radiobiology**

Following the retirement of the Head in 2002, the Radiobiology Unit, faced some challenges, including (1) Adverse staffing policy and gradual bleeding of staff; (2) Complete loss of grant income; and (3) Absence of any new programmes and initiatives. Therefore, by the end of 2011 the staffing of the Unit remained inadequate and subcritical (only one scientist and one unskilled labourer as regular staff, and one consultant scientist). The appointment of Prof Akudugu as head of the Radiobiology Unit in February 2012 has markedly revised the Unit. The Unit was refurbished and fully equipped, and a number of postgraduate students were

recruited. The research output of the Unit was impressive. Prof Akudugu was appointed member of the Faculty Sub-Committee C (Research) and retained his NRF rating. A research and training collaboration was successfully initiated between the Unit and the Ghana Atomic Energy Commission.

### **Radiodiagnosis**

A cardinal development in clinical services was the roll-out of the Radiology Information System (RIS) within the TBH Radiology Department, which was completed in September 2012. The RIS facilitates Consultant validation of all special investigations, thus allowing more stringent monitoring of radiological requests and more coherent implementation of imaging protocols. RIS also allows detailed analysis of every component of the radiology workflow, facilitating appropriate resource allocation and enhancing service efficiencies, while allowing monitoring of individual clinical outputs.

March 2012 saw the commissioning of our Division's new digital mammography machine, together with the completion of structural changes to our Breast Imaging Unit. The latter included a breast sonography room, allowing a more comprehensive and patient-friendly breast imaging service at TBH. During the period under review, 183,938 radiological examinations were performed, representing a 4.9% increase in service delivery compared to 2011.

There was a 7.7% increase in after-hour service load, with 67,385 studies performed. After-hour examinations currently represent 36.6% of the total Divisional workload. Plain radiographs (32,249), mobile X-rays (17,776), CT scans (10,139) and interventional procedures (1,815) are the most common imaging studies performed in the after-hour setting.

The year under review saw the appointment of eleven Radiographer Unit Managers. This represents a very progressive Radiography management structure. It is envisaged that

## MEDICAL IMAGING & CLINICAL ONCOLOGY

the new organogram will contribute significantly to continuity, quality assurance and efficiency in radiographic services.

Extended MRI scanning was maintained between 16h00-19h00 Tuesdays-Thursdays. In addition, plans were finalised for further extension of elective MRI scanning on Saturdays and Sundays, from 2013.

The two new ultrasound machines acquired during 2011 were optimally utilised. The waiting times for outpatient ultrasound

examinations showed very gratifying improvement from 95 days in January 2012 to 30 days in January 2013.

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.

### Human Resources:

#### Medical Physics

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

#### Nuclear Medicine

Posts (Full time)	Number	Filled
Professor /Chief Specialist	1	1
Specialist	2	2
Registrar	3	3
Supernumerary Registrar	6	6
Radio pharmacist	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



## MEDICAL IMAGING & CLINICAL ONCOLOGY

Radiographers community service	3	3
Registered nurse	2	1
Staff nurse	1	1
<b>Posts (sessional)</b>		
Specialist	1	39 hours/week
Locum Radiographers	2	40 hours per week

### Radiation Oncology

Professor Branislav Jeremic was welcomed as the new Chief Specialist and Head of Division on 10 December 2012.

Posts (Full time)	Number	Filled
Professor and Chief Specialist	1	1
Clinical unit Head	1	1
Specialist	4	4
Registrar	5	5
Supernumerary Registrar	2	2
Medical Officers	6	6
Radiographers	22	21
<b>Posts (sessional)</b>		
Locum Consultant	1 (20 hours)	1 (20 hours)

### Radiobiology

Posts (Full time)	Number	Filled
Scientists	2	2
General Assistants	2	2
<b>Posts (sessional – how many hours worked per week)</b>		
Consultant	1	1

### Radiodiagnosis

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	4	4
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

## MEDICAL IMAGING & CLINICAL ONCOLOGY

Community Service Radiographer	4	4
Community Service Sonographer	1	1
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
<b>Posts (sessional – how many hours worked per week)</b>		
Specialist (DoE funding – 20 hours)	1	1

### Outputs:

#### Medical Physics and Dosimetry

Quality control procedures on radiotherapy units	<b>260</b>
Patient treatment plans checked	<b>2419</b>
Radionuclide administrations	<b>16</b>
Radiation monitors issued to TBH staff	<b>5200</b>
In vivo diode dosimetry system calibrations	<b>20</b>
Stability tests on dosimeters	<b>12</b>
Brachytherapy procedures checked	<b>512</b>

#### Nuclear Medicine

Stability tests on dosimeters	<b>310</b>
Quality Control Procedures	<b>1200</b>

#### Radiation Technology Laboratory

Alloy shielding filters	<b>28</b>
Plaster impressions	<b>2</b>
Bite blocks	<b>80</b>
Wax build-ups	<b>98</b>
Special devices	<b>11</b>
Body Foams	<b>5</b>

<b>Nuclear Medicine</b>	
Cardiac: GSPECT	1096
Cardiac: myocardial perfusion scintigraphy	1004
Cardiac: ventricular function	154
Cerebral perfusion and receptor imaging	95
Flow studies	202
Gallium scintigraphy	16
Gastro-intestinal and hepatobiliary studies	111
Haematological studies	14
Infection imaging	46
Lung scintigraphy: Perfusion	97

## MEDICAL IMAGING & CLINICAL ONCOLOGY

Lung Scintigraphy: Ventillation	116
Lymph Imaging	361
Miscellaneous Scintigraphy	33
PET/CT	660
Renal Scintigraphy	27
Renal: GFR Measurement	95
Renography	320
Renography: transplant	53
Skeletal scintigraphy	1511
Skeletal SPECT/CT	1214
Thyroid Clinic First visit	227
Thyroid Clinic Follow-up	417
Thyroid I-131 Therapy	162
Thyroid scintigraphy	262
Thyroid Uptake	259
Thyroid: Whole body iodine scintigraphy	28
Endocrine	89
Tomography	724
<b>Total</b>	<b>9393</b>

<b>Radiation Oncology</b>	
New patients per year:	2150
Outpatient visits:	12365
Speciality Clinics:	6
Admissions:	1377
Theatre procedures:	166
Planned patients:	2419
Simulated patients:	4353
Scanned patients:	574
Machine statistics (number of treatment fields):	67 508
Chemotherapy administrations:	7941
S-tube insertions (X-block theatre):	116
S-tube treatment procedures:	647

<b>Radiodiagnosis</b>			
<b>Examination</b>	<b>2011</b>	<b>2012</b>	<b>% Increase</b>
Chest X-ray:	60488	62546	3.4
General X-ray:	67057	69311	3.4
Ultrasound:	11773	11812	0.3
Computed Tomography (CT)	18144	20702	14.1
Magnetic Resonance Imaging (MRI)	2960	3208	8.4
Mammography	3159	3378	6.9
Fluoroscopy	3037	3144	3.5
Interventional Theatre	5675	6281	10.6
Cardiac Theatre	3005	3556	18.3
<b>Total</b>	<b>175298</b>	<b>183938</b>	<b>4.9</b>

# MEDICAL IMAGING & CLINICAL ONCOLOGY

## Comment on output

### Medical Physics

As Medical Physics is a service provider to Nuclear Medicine, Radiation Oncology and Diagnostic Radiology, the number of Medical Physics procedures is generally determined by the activities of the divisions mentioned above.

### Nuclear Medicine

During 2012 the number of patients increased by approximately 2%. In particular some complex studies such as cerebral perfusion imaging and lymphatic mapping studies increased significantly. The number of private patients (H2, H3, private) increased by 5%, generating invoices of more than R1.3 million, which is 58% more than in 2011. This increase is primarily because of the increase in the number of PET/CT scans performed on private and research patients.

PET-CT scanning continued at the private practice in Panorama during the first 3 months of 2012. In April 2012, the Western Cape Academic PET/CT Centre opened, with a Philips big bore time of flight scanner. This scanner serves the 3 academic hospitals in the Western Cape. Due to the PET/CT Centre on-site at Tygerberg Hospital, the number of PET studies increased by 42%. Since April 2013, 58% patients were referred from Tygerberg Hospital, and 22% from Groote Schuur and Red Cross Children's Hospitals. Research scans comprised 18% of the total number of scans.

The increase in MUGA scans for the evaluation of ventricular ejection fraction before and during chemotherapy continued during 2012. Renography increased by nearly 36%.

### Radiation Oncology

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. –Situation improve in later part of the year when

enlargement of chemotherapy room was completed and 3 out of 12 chemical substances applied for, were PRC approved

Outputs in terms of machines are restricted due to, poor functioning and increased down time of 26 year old LINAC, and remaining LINACs, not on a functioning level to do the work needed. Radiographer shortage; bed shortage and transport insufficiencies further leads to waiting lists.

### Radiodiagnosis

The increase in CT outputs (14.1%) may be attributed to referrals from the new Khayelitsha District Hospital, which was commissioned in 2012. Forty-nine percent of all CT scans are performed after-hours. Notwithstanding the significant increase in CT service load, waiting times for elective outpatient scans were stable at 10-15 working days throughout the review period. The increased output (10.6%) in interventional theatre results from the burgeoning collaboration between vascular surgery and radiology in offering an interventional vascular service.

Since 2009, the total number of radiological examinations performed has increased from 152,659 to 183,938, representing a 20,5 % increase in clinical outputs.

## Part 2

### Faculty of Medicine and Health Sciences

#### Infrastructure development

#### Infrastructure development: Medical Physics

Medical Physics played a significant role in procuring and commissioning of new radiation equipment. In this regard we may mention the successful specification and procurement of a Large Bore CT Scanner for the Radiation Oncology Division. We furthermore succeeded in procuring a sophisticated Octavius IMRT Phantom that would be used to verify dose distributions to patients receiving IMRT treatment.

# MEDICAL IMAGING & CLINICAL ONCOLOGY

## Infrastructure development

### Nuclear Medicine

2012 brought several important changes to Nuclear Medicine at Tygerberg Hospital. On 19 April 2012, the Western Cape Government, NTP Radioisotopes (Pty) Ltd and its parent company Necsa (South African Nuclear Energy Corporation) celebrated the official opening of the Positron Emission Tomography/Computed Tomography (PET/CT) Centre situated at Tygerberg Hospital. The R15.6-million PET/CT scanner was generously donated to the people of the Western Cape by NTP Radioisotopes. The contribution of the Western Cape Department of Health to this PET/CT project is estimated at R14.75-million (R11-million for infrastructure plus R3.75-million for equipment accessories). The PET/CT Centre was officially opened by Western Cape Health Minister, Theuns Botha. Since the scanning of the first patient on 29 March 2012, more than 500 patients have been scanned in 2012. Ms Shereen Bejai, a radiographer with extensive national and international general Nuclear Medicine and PET/CT experience, was appointed as manager of the PET/CT Centre.

In the Nuclear Medicine Division on 10th floor, a dedicated laminar flow unit for preparation and dispensing of radiopharmaceuticals was installed in mid-2012. This provides both clean air to ensure sterility of the radiopharmaceuticals and radiation protection to the staff working in the radiopharmacy.

One of the dual head gamma cameras was upgraded with the addition of a low dose CT system. This means that the Nuclear Medicine division now has two SPECT/CT systems, which allow better anatomic delineation of lesions seen on the Nuclear Medicine tomographic studies.

### Radiation Oncology

Phase 1 of structural upgrade completed: Chemo room double in capacity by structural renovations, two extra consultation rooms available.

Phase 2 of structural upgrade in process:

Include modernisation of library, lecture hall, offices and new cafeteria.

Purchase of Big Bore Planning CT: For installation early 2013

### Radiobiology

The Radiobiology Unit was awarded an amount of R1 138 000 for equipment. This was jointly funded by the Stellenbosch University's Advisory Committee on Laboratory Equipment and the Faculty of Medicine and Health Sciences. The Unit is now well equipped for state of the art radiobiological research and training.

### Radiodiagnosis

Department of Education (DoE) funding allowed the purchase of a stand-alone server for the Division's Medical Imaging Resource Centre (MIRC), facilitating the incorporation of the lifelong teaching files of Professor Richard Hewlett (neuroradiology, neuropathology) and Prof CJ Nortje (maxillo-facial surgery) into the Division's digital teaching archive.

The Radiology Information System (RIS) which was introduced during 2012 facilitates Consultant review of all registrar reports and thus represents a very valuable addition to the postgraduate teaching platform.

**Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

## Outreach

### Nuclear Medicine

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

# MEDICAL IMAGING & CLINICAL ONCOLOGY

scientists from Africa, but also directly from students themselves. In 2012 six physicians from Africa were enrolled for the MMed(NucMed) programme, while several other radiopharmacy and technology fellows were also trained. Two IAEA regional training courses for participants from Africa were hosted at Tygerberg during 2012. In both cases, Groote Schuur Hospital assisted with the practical training sessions.

## **Radiation Oncology**

International cooperation by the training of a supernumerary registrars from Uganda and Kenya.

The hostel in Protea Hof is running successfully in collaboration with CANSA. Patients can stay that comes from far and need daily treatment, but are not ill, as to be admitted in hospital. This facility houses 20 beds, provide food, and help with social support and transport.

## **Radiobiology**

Prof Akudugu visited two institutions in Ghana. This was a scientific visit jointly supported by a Stellenbosch University Africa Collaboration Grant and a Scientific Travel Grant from the Faculty of Medicine and Health Sciences. The purpose of the visit was to initiate and strengthen collaboration with researchers and academics at the Ghana Atomic Energy Commission (Accra, Ghana) and the Kwame Nkrumah University of Science and Technology (Kumasi, Ghana). The aims of the visit were to assist with setting up a radiobiology laboratory; give lectures and tutorials to scientists and technicians; identify areas of common research interests in radiobiology, and develop joint proposals for third stream research funding. The visit was very successful and productive, and it is hoped that future opportunities would arise to further the Stellenbosch University Africa collaborative effort.

## **Radiodiagnosis**

Our Division's inaugural Radiology Refresher Course was convened by Dr Georg Wagener in September 2012. The focus was

the plain X-ray features of adult fractures and our aim was to improve the confidence with which General Practitioners, Medical Officers, Registrars and Radiographers interpret trauma X-rays. Lectures were delivered by Drs Georg Wagener, Anne-Marie du Plessis, Stephanie Griffith-Richards, Tharbit Hartley and Razaan Davis. Drs Andrew van den Heever and Richard de Villiers were guest lecturers from the private sector. The course was fully subscribed, with 258 delegates, and reviews very complimentary. It is envisaged that the Refresher Course will become an annual event.

Prof Richard Pitcher was selected as the 2012 Jack Jacobsen Visiting Lecturer of the College of Radiologists of the Colleges of Medicine of South Africa and undertook a national tour to academic centres in November, presenting a lecture entitled "The chest X-ray in HIV-infected children".

Prof Jan Lotz served as the Editor-in-Chief, and Dr Razaan Davis as the Assistant Editor, of the South African Journal of Radiology.

Our Division hosted a 'Paediatric neuroradiology mini-symposium' on Wednesday 29 February 2012, with the guest speaker Professor Yutaka Sato, a neuroradiologist from the University of Iowa.

Prof Pitcher presented an invited paper entitled "The role of ultrasound in paediatric chest imaging" at the "Here be Lungs" Conference at the Lanzerac Hotel in March 2012.

Profs Jan Lotz and Richard Pitcher were invited Faculty at the Division of Urology's international interdisciplinary Paediatric Uro-radiology Workshop on 12 and 13 November 2012.

Prof Lotz was a member of the invited faculty of the Stellenbosch University GP Refresher Course convened at Spier Estate on 23 May 2012

# MEDICAL IMAGING & CLINICAL ONCOLOGY

Dr Christelle Ackermann was an invited speaker at the Division of Cardiology's Transcatheter Aortic Valve Implantation Congress on 2 March 2012.

Prof Richard Pitcher was the Congress Chair and an invited speaker at the 2<sup>nd</sup> African Imaging and Radiology Conference at the Johannesburg Convention Centre, 9-10 May 2012.

## Partnerships

### Medical Physics

#### National:

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

### Nuclear Medicine

#### National:

Several members of the division were involved in national activities. Profs Ellmann and Warwick served on the Council of the College of Nuclear Physicians (CNP) of the Colleges of Medicine of South Africa (CMSA), with Prof Warwick also serving on the Senate of the CMSA. They were also involved as examiners for the fellowship examinations of the CNP. Prof S Rubow served on a committee of the Medicines Control Council. Prof Warwick was elected as vice-president of the South African Society of Nuclear Medicine (SASNM), and Dr Nisaar Korowlay as the President of the Association of Nuclear Physicians, a subsidiary body of the South African Medical Association. Mrs Bejai serves as Secretary/Treasurer of the SASNM.

Prof Warwick was invited to serve a 5 year term as a member of the Directors Advisory Committee for iThemba LABS. The opening of the PET/CT centre has lead to a significant

increase in research collaboration with Prof D Stein of Psychiatry at UCT due to the initiation of several new functional brain imaging studies. In addition there are ongoing joint training activities with the Nuclear Medicine and Paediatric departments at UCT.

Profs Rubow and Ellmann were involved in training of Radiography students at CPU.

Profs Ellmann, Warwick and Rubow participate 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.

Members of the Division presented four papers and eight posters at the Biennial Meeting of the South African Society of Nuclear Medicine, in September 2012. Prof Ellmann won the prize for the best scientific presentation at the meeting.

Dr Emmanuel Modebe, one of the supernumerary registrars from Nigeria was awarded the H.S Ebrahim Memorial Medal, by the Joosub H.S Ebrahim Foundation in collaboration with Stellenbosch University, for his research work on the use of radiochromated red blood cells in the evaluation of occult gastrointestinal bleeding.

#### Private:

There is good interaction between NM and the private NM practices. The collaboration with the private PET consortium continued until the PET/CT Centre at Tygerberg was functional. From time to time the private practices made use of our facilities, while NM from time to time sent patients to a private facility when our gamma cameras were non-functional. The division's consultants, including the radiopharmacist, were consulted from time to time by private

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nuclear physicians for opinions on some of their difficult cases. Prof Warwick and other members of the Division attended regular meetings of a multidisciplinary group of doctors from the private and public sectors with a special interest in neuroendocrine tumours.

### **International:**

Both Profs Patrick Dupont of the Laboratory for Cognitive Neurology and Medical Imaging Center, Catholic University, Belgium and Jan Pruim of the Department of Nuclear Medicine and Molecular Imaging, University Medical Centre Groningen, Groningen, The Netherlands have been appointed as extraordinary professors in nuclear medicine for a three year period. There is continuous close collaboration with Prof Dupont, amongst others giving advice on several physics related aspects, and with postgraduate supervision. During 2012 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 Pruim visited the division last year, lecturing to the postgraduate students, and started activities which will lead to collaborative research programmes. Dr Liesbet Mesotten from Belgium visited the division for two weeks in May 2012 to assist with postgraduate teaching and training, through financial support from the Department of Higher Education and Training's clinical teaching grant.

Prof Ellmann was invited by the Director-General of the International Atomic Energy Agency to serve on the Standing Advisory Group on Nuclear Applications (SAGNA) of the IAEA for a three year period. The purpose of this group is to provide strategic advice 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 was also invited by the IAEA to serve 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 is also a member of a team from Africa developing an awareness brochure, which can be distributed by Nuclear Medicine physicians to their referring clinicians. This brochure contains information on the most frequently performed Nuclear Medicine investigations, for use by referring clinicians.

Prof Ellmann was the Course Director of the IAEA Regional Training Course for technologists on cardiology, nephrology and radiopharmacy. Prof Rubow was Course Director of the Regional (AFRA) Training Course on Radiolabelled Blood Products including Radiolabelled White Cells for Infection Imaging, offered in co-operation with the International Society of Radiolabeled Blood Elements (ISORBE).

The Division regularly consults directly with Prof John Buscombe, head of Nuclear Medicine at Addenbrooks Hospital, Cambridge University. He has extensive experience in the use of targeted radiotherapy using radiopharmaceuticals and provides valuable advice to assist the treatment of individual patients at Tygerberg Hospital.

The Division was fortunate to have been visited by a prominent Danish scientist Prof Albert Gjedde, from the Dept of Neuroscience & Pharmacology, University of Copenhagen. Prof Gjedde also gave a lecture on imaging dopaminergic function in the brain, and this interaction may lead to further valuable collaboration

### **Radiation Oncology**

#### **National**

Continued clinical program at iThemba LABS (formerly known as the National Accelerator



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Centre), Faure, with an MOU concluded between the parties.

### **Private Sector**

MOU signed with N1 city towards end of September to address challenge of waiting lists, IMRT and Stereotactic treatment to patients. Only 8 patients could benefit from this by the end of December 2012.

### **International**

Participation in international clinical trials:

Three large trials completed.

Partnership between Oncology unit, Pulmonology and Calypso research, based in Seattle, USA completed.

Successful candidate for fellowship at Columbia University: D43 educational grant: Columbia

South Africa collaboration for HIV related malignancies.

Together with UOFS do a week of training lectures at the University of Botswana Medical School

### **Radiobiology**

#### **International:**

Scientific visits to the Ghana Atomic Energy Commission and the Kwame Nkrumah University of Science and Technology (see Part 2: Point 9).

### **Radiodiagnosis**

#### **National:**

#### **College of Radiologists, Colleges of Medicine of South Africa:**

Prof Richard Pitcher served as the Secretary and Dr Christelle Ackermann as a Councillor on the Council of the College of Radiologists of the Colleges of Medicine of South Africa.

Prof Richard Pitcher and Dr Christelle Ackermann were Examiners for the FCRad(Diag) Part II Examination.

Prof Jan Lotz served as an Examiner for the FCRad(Diag) Part I Examination.

Dr Christelle Ackermann convened a pre-exam course for the FCRad(Diag) Part II Examination. Prof Jan Lotz and Drs Razaan Davis, Tharbit Hartley, Asif Bagadia, Stephanie Griffith-Richards and Anne-Marie du Plessis served as co-examiners.

### **Radiological Society of South Africa (RSSA)**

Prof Richard Pitcher was selected as a member of the RSSA delegation to the "ESR meets SA" session at the European Congress of Radiology which will be held in March 2013, where he will present an invited paper entitled: "Persistent chest radiographic abnormalities in HIV-infected South African children"

### **Cape Universities Brain Imaging Centre (CUBIC):**

Prof Pitcher served as Chairman and Dr Christelle Ackermann as a Board Member of CUBIC, the 3-Tesla Magnetic Resonance Imaging Centre for collaborative interdisciplinary research, which is based on the Tygerberg Campus.

### **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 Professorship Jan Lotz, from whose academic mentorship the Division continues to derive immense benefit.

### **International Visitors:**

- i. Professor Yutaka Sato: 29 February – 2 March 2012:  
Medical Director of Pediatric Radiology,  
University of Iowa Hospitals and Clinics,  
Iowa City, IA

The Division acknowledges with sincere gratitude the role of Prof Richard

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Hewlett in facilitating the outstanding Lecture Tour of Professor Sato.

- ii. Professor Mary Rutherford: 6 March 2012  
Perinatal Imaging Group  
Robert Steiner MR Unit  
Imperial College  
Hammersmith Hospital  
University of London
- iii. Dr Stefan Przyjebowski  
Interventional Radiologist  
Calgary, Alberta
- iv. Professor Avrom Pollock: 22 June 2012  
Associate Professor of Radiology,  
University of Pennsylvania School of  
Medicine
- v. Professor Harriet Paltiet: 8 August 2012  
Children's Hospital Boston  
Harvard Medical School
- vi. Dr Padma Rao  
Consultant Paediatric Radiologist,  
Royal Children's Hospital, Melbourne  
University of Melbourne
- vii. Dr David Legge

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.

### *Supernumerary Registrars:*

Dr Natasha Tjongarero (Namibia)  
Dr Archen Patel (India)  
Dr Joseph Kabongo (Zambia)

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

#### **Medical Physics**

Medical Physics staff members presented four papers at the Annual SAAPMB Conference, two papers at the SASNM Conference and one paper at the Faculty of Medicine and Health Sciences' Annual Academic Day.

Monique du Toit attended the SASNM 15th Biennial Congress in Parys in Free State from 21-24 September 2012 where she presented a paper entitled "A simple method of obtaining effective doses received from PET/CT". She also presented a paper entitled "Careful planning can reduce PET/CT Room shielding" at the Annual SAAPMB Conference in Port Elizabeth, 17-19 September 2012.

Anne-Mari Rossouw presented a paper entitled "Management of Radiotherapy Incidents: The Tygerberg Hospital Experience" at the Annual SAAPMB Conference in Port Elizabeth from 17-21 September 2012.

Mohlapholi Mohlapholi presented a paper entitled "Pitfalls associated with Treatment Planning System software upgrades" at the Annual SAAPMB Conference in Port Elizabeth from 17-21 September 2012. This paper was also presented at the 56th Annual Academic Day of the Faculty of Medicine and Health Sciences in August 2012.

Lelanie Nolan attended the SASNM 15th Biennial Congress in Parys in Free State. She was the co-author for papers presented by Monique du Toit and Prof A Ellmann.

Lelanie Nolan and Cheryl Johnson attended a training course on *International Medical Management of Radiation Injuries* in Goodwood, Cape Town, 21-24 August 2012.

#### **Nuclear Medicine**

Eight journal articles were published by members of the Nuclear Medicine team during the course of 2012.

Prof Warwick also contributed a book chapter on *Kinetic modelling in human brain in: Positron Emission Tomography*.

Dr Jen Holness completed her MMed dissertation.

Dr Nisaar Korowlay was involved in a coordinated research project of the International Atomic Energy Agency on *The*

use of SPECT/CT in complicated osteomyelitis. The finalisation of a publication is awaited.

Profs Ellmann and Rubow presented posters at the annual meeting of the European Association of Nuclear Medicine in Milan, Italy in October 2012.

Prof Warwick was invited to present a lecture on his work on Social Anxiety Disorder at the annual meeting of the European College of Neuropharmacology (ECNP) in Vienna in October 2012.

## **Radiobiology**

Five (5) papers were published in the following national and international peer-reviewed journals: International Journal of Radiation Biology, Nuclear Medicine and Biology, South African Medical Journal, and Toxicology Letters.

## **Radiation Oncology**

### **Published papers:**

Barnardt P, Eksteen S. A retrospective analysis of response and survival outcomes following neo-adjuvant chemotherapy in breast cancer patients, *The Specialist Forum Volume 12, Number 2 : 57-63.*

### **Annual Academic Day:**

Heunis M, Beg W The Protocol For Using Pet/Ct In Clinical Oncology At Tygerberg Academic Hospital.

Paris G, Controversies in the management of stage IIIA lung cancer- one size fits all

Summary of the talk given at the SA Pulmonology Society meeting, Sun City, August;

Barnardt P, Extraskelatal Ewing's Sarcoma (ESS)

Barnardt P, Dalmeyer, Hepatocellular carcinoma (HCC) and Sorafenib treatment at Tygerberg hospital;

Heunis M, Beg W The Protocol For Using Pet/Ct In Clinical Oncology At Tygerberg Academic Hospital.

## **Radiodiagnosis:**

The Division had 19 publications in accredited national and international peer-review journals and presented 20 papers at national or international congresses.

The Division has current research collaboration with the Cape Universities Brain Imaging Centre (CUBIC), the Medical Research Council (MRC) Medical Imaging Research Unit, the University of Cape Town, the Cape Peninsula University of Technology, the Red Cross War Memorial Children's Hospital, Kimberley Hospital, Worcester Provincial Hospital, and the Cape Gate Hospital. Within our Faculty of Medicine and Health Sciences, we are involved in projects with the Divisions of Clinical and Radiation Oncology, Nuclear Medicine, Paediatric Surgery, Paediatrics, Emergency Medicine, Forensic Medicine, Anatomy and Psychiatry. We welcome proposals for further innovative research partnerships.

*Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University*

Oral Presentations: Prof Richard Pitcher and Drs Christelle Ackermann, Jose Alves, Sibuhlongwane, Braham van der Merwe, Juruan de Witt, Adeeb Saban, Francois Roux and Steven Meyer.

## **Inaugural Congress of the South African Society of Paediatric Imaging (SASPI), Sandton Convention Centre, November 2012**

i. *Invited paper:* "An approach to the paediatric chest radiograph" Prof R.D. Pitcher

ii. *Oral Presentations:* Prof Richard Pitcher, Drs Christelle Ackermann, Jose Alves, Sibuhlongwane and Juruan de Witt.

iii. *Poster Presentations:* Drs Jacqueline du Toit, Fourie Bezuidenhout, Braham van der Merwe, Ben Barnard and Juruan de Witt.

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## Teaching and Training (under, postgraduate and elective students)

### Teaching and Training: Medical Physics

Radiation Physics courses were presented to M.Med. and M.Sc. students in Nuclear Medicine, M.Med. Radiation Oncology students, M.Med. Diagnostic Radiology students and to Diploma and B.Tech. Radiography students. Students, enrolled for the Honours B.Sc. (Medical Physics) course, received teaching in theoretical and practical aspects of Medical Physics.

AnneMarie Groenewald received an M.Sc.,Med.Sc. (Medical Physics) on a thesis entitled: "Radiation dose reduction in diagnostic neonatal X-ray imaging".

### Nuclear Medicine

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 from the Cape Peninsula University of Technology do their clinical training in the division. Some staff members are also involved in their theoretical teaching.

Postgraduate students comprise the students enrolled for the MMed(NucMed), and MSc in Nuclear Medicine. Two registrars passed the final fellowship examinations of the College of Nuclear Physicians of the CMSA, while one student received the MSc in Medical Sciences (Nuclear Medicine).

Two regional training courses were organised on behalf of the IAEA, namely a training course for technologists from Africa, and one on cell labelling for radiopharmacists from Africa. Prof Ellmann was the course director for the technologist training course, and Prof Rubow for the radiopharmacy course. The cell labelling course was a course on all aspects of radiolabelling of cells for students from all over Africa.

Drs Jen Holness and Alex Doruyter (both registrars), and Ms Valencia Marcus (radiographer) received PET/CT training through the IAEA's fellowship programme. Dr Holness received her four month training at the Nuclear Medicine department of Hammersmith Hospital, London, UK, and Dr Doruyter three months training at the Nuclear Medicine department in the Universitair Ziekenhuis Antwerpen, Belgium. Ms Marcus received three months training at the PET Centre of Guy's and St Thomas Hospital in London, UK.

Prof Ellmann and Prof Warwick formed part of a group set up by the College of Nuclear Physicians to standardise the curriculum for Nuclear Medicine specialist training in South Africa. This can now be used as a guide to training activities at Stellenbosch University and Tygerberg Hospital.

### Radiation Oncology

The department provides training to 4<sup>th</sup> and 5<sup>th</sup> year medical students.

Supernumerary registrars from Kenya & Uganda are in training.

### Radiobiology

Two MSc students and one PhD student were recruited to begin their studies in 2013. Draft curricula were developed and circulated amongst divisional Heads of MICO for implementation in 2013.

### Radiodiagnosis

#### Postgraduate Qualifications:

i. Fellowship of the College of Radiologists of the Colleges of Medicine of South Africa -FCRad(Diag) SA:

Drs Natasha Tjongerero, Jacqueline du Toit, Braham van der Merwe, Nadir Omar and Shaun Scheepers were awarded the

ii. Degree of Master of Medicine – M.Med (Radiological Diagnosis):

Drs Nadir Omar, Shaun Scheepers and KwakuPeprah

# MEDICAL IMAGING & CLINICAL ONCOLOGY

## **Registrar Training Program:**

The 4-year registrar training program 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 Program, which systematically covers the postgraduate curriculum in a 4-year cycle.

## **Modular Academic Program:**

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 thirteen enrolments for the M.Med Radiological Diagnosis (Part I) courses in Physics, Anatomy and Physiology.

## **International Observer:**

Dr Olubukola Ajiboye, a Senior Registrar in the Department of Radiodiagnosis at the Lagos University Teaching Hospital, Lagos, Nigeria was a clinical observer in the Division from 14 May – 30 June 2012.

The Division hosted five 5<sup>th</sup> Year MB,ChB elective students from Stellenbosch University.

## **Special Achievements: Medical Physics**

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

Dr Wilhelm Groenewald attended an IAEA Task Force meeting on "Developing a strategy to harmonize academic education and clinical training of Medical Physicists in Africa in Vienna, Austria from 21 – 25 May 2012.

Ms Anne-Mari Rossouw attended an ESTRO (European Society for Radiotherapy and Oncology) course on "Risk Management and Patient Safety" in Brussels, Belgium from 15 – 18 November 2012.

## **Special Achievements: Nuclear Medicine**

The Western Cape Academic PET/CT Centre is the only PET/CT Centre outside Europe to receive EARL accreditation. This accreditation programme was established in order to support imaging sites, which perform FDG PET/CT oncology examinations, in meeting the requirements indicated in the European Association of Nuclear Medicine's imaging guideline. The goal is to enhance the quality standard of PET/CT investigations for both daily use and for multicentre studies, thereby ensuring similar performance of PET/CT systems within a multicentre setting by harmonising acquisition and processing of PET/CT scans. Accredited PET/CT centres of excellence can compare, exchange and combine FDG-PET/CT findings, including Standardised Uptake Values, since data are collected and processed in a standardised manner. Achieving this truly international status is a credit to the hard work of the staff at the PET/CT Centre, particularly the manager Ms Shereen Bejai and the Medical physicist Mr Tumelo Moalosi.

## **Special Achievements: Radiation Oncology SASMO/SASCRO CONGRESS**

### **General Presentations**

Paris, G. The perceptions and expectations of lung cancer patients attending a South African state Oncology Centre: An observational cross sectional prospective qualitative study on 40 patients

Ms van Eck A. "Teens and twenties" – when dying gets in the way of living

## Poster Presentations

Dr Du Toit, N. A case report:

Adenocarcinoma of the sigmoid colon and metastatic neuro-endocrine carcinoma in a 56 year old

Dr Eksteen, S. Case studies of Hepatocellular Carcinoma (HCC) in Tygerberg Hospital

Dr Fourie, L. Introduction of PET-CT scanning impacts treatment decisions in the management of cervix carcinoma patients in a public hospital

Dr Heunis, M. Intra operative breast irradiation: Dosimetry, monitoring and auditing

Dr Langenhoven, L. A case of disseminated epithelioid hemangio-endothelioma

Ms Leo, L & Ms Maree, A – Radiotherapy challenges with AIDS related Kaposi's Sarcoma

Dr Opakas, J. The impact of PET-CET on the management of cancer of the uterine cervix in an obese patient: A case report

Dr Paris, G. We were the 1<sup>st</sup>! – Our experience and opportunity in the radio therapeutic treatment of lung cancer using novel implanted fiducials and electromagnetic tumour localization and tracking

Mrs Brink, P. Initiating a treatment information and support system for patients requiring radiotherapy.

iii. Dr Fourie Bezuidenhout was awarded 4<sup>th</sup> prize in the RSSA Poster Competition for his work entitled: "How to mend a broken heart" Co-authors: Y. Sato, J. Lawrenson, E Banderker, A. Maydell, RD Pitcher.

## Special Achievements: Radiodiagnosis

**Awards: SASPI Inaugural Congress, Sandton Convention Centre, November 2012**

i. Dr Jose Alves gained 3<sup>rd</sup> Prize in the RSSA Travel Award category for his oral presentation "The diagnostic accuracy of MR and fluoroscopic mucous fistulography in the pre-operative evaluation of infants with anorectal malformation: a pilot study". Co-authors: D Sidler, JW Lotz, RD Pitcher.

ii. Dr Jacqueline du Toit was awarded 3<sup>rd</sup> Prize in the RSSA Poster Competition for her research entitled: "The accuracy of radiology voice recognition reports at a tertiary South African hospital". Co-authors: SM Hattingh, RD Pitcher

## Head of Department Prof MR Moosa

### SUMMARY

The past year was a very busy one for the Department, with increased activity both on the service delivery as well as the academic sides. The highlights were the commissioning of the new Haematology Facility in D8, which will allow for much improved care of haematology patients. The refurbished ward was officially opened by Mr Theuns Botha (see cover photograph). However, the event that impacted most heavily on the Department was the commissioning of Khayelitsha Hospital, one of the main reasons for the impressive increase in patient numbers seen in the Department. The other highlight of the year was a very successful strategic Pharmacology workshop which should see the Division becoming one of the leading centres not only in South Africa, but on the continent.

### Personnel

The Department experienced the sad loss of Prof Chris Bolliger, a prolific researcher and a respected senior member of the Department. His passing has left a major vacuum in the Department which will be difficult to fill. The year also saw the retirement of Professors Stephen Hough and Faffa Jordaan. Both spent almost their entire working lives in the Faculty and are respected teachers and clinicians. The previously unnamed basic science laboratory that owes its existence to Stephen Hough was named in his honour. Happily Prof Hough will continue to be involved in the department on a sessional basis. Prof Jordaan will also continue in the Department until his post is filled. Among new appointees, were Dr Eric Decloedt, in Pharmacology and Dr Oz Ameen in Neurology, both important appointments. Dr Karen Barnard was appointed *locum tenens* physician in Endocrinology. Drs Coenie Koegelenberg and William Ferris were both awarded associate professorships.

### Service Delivery

The commissioning of the Khayelitsha Hospital, the first public hospital of our new



democracy, was a long awaited event which met a huge need. The impact on General Medicine was felt immediately; there has been a dramatic increase in our patient load in General Medicine and a knock-on effect with increase in the tertiary components. In addition, the restructuring of operations in the admissions ward F1 to include a shift system resulted in the ward being inundated, and suboptimal conditions for patients, staff and students, a matter that has been brought to the attention of both hospital and faculty management. Despite the enormous pressures, staff continued to provide outstanding service generating several congratulatory letters from satisfied patients/family.

Despite the challenging fiscal environment, the Department benefited richly from the acquisition of valuable equipment that will increase the scope of investigations that can be done within the Department and enhance our status as a teaching hospital. These pieces of equipment included the endoscopic ultrasound for Pulmonology, capsule endoscopy and scope washers for Gastroenterology. The hospital management also renovated the staffroom in F1. The commissioning of the Haematology ward (D8), alluded to earlier, should see an improvement in the quality of care received by haematology patients.

# MEDICINE

## Academic activities

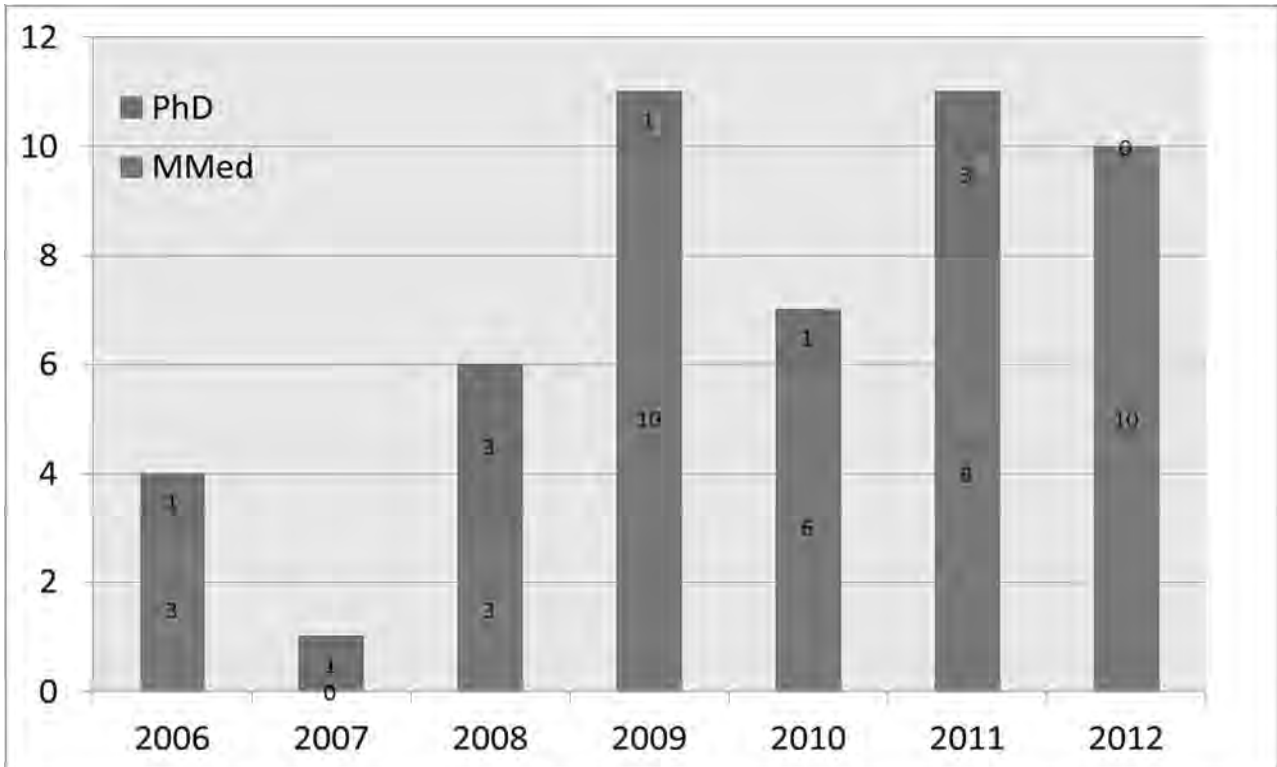
There was a significant increase in the research outputs of the Department, despite the high clinical workload that the Department carries.

FCP PART I	FCP PART II	OTHER
Pass rate (%): 73/56	Pass Rate (%): 71/57	Pass rate: 100/100
Dr M Alteer	Dr D Kotze	<b>Cert Gastro</b>
Dr Z Cassimjee	Dr S Sebastian	Dr M Marais
Dr A Coetzee	Dr N Bapoo	
Dr R Cooper	Dr A Coetzee	<b>Cert ID</b>
Dr E Pretorius	Dr R Cooper	Dr P Botha
Dr P Rossouw	Dr T Greyling	Dr I Heys
Dr M Swart	Dr A Nortje	
Dr P Tredoux	Dr P Tredoux	<b>Cert Cardio</b>
Dr K Bezuidenhout	Dr W Bruwer	Dr C Kyriakakis
Dr U Brijlal	Dr J Moses	Dr W Lubbe
Dr J Hellig	Dr P Rossouw	
Dr J Shaw		<b>Cert Nephro</b>
Dr P vd Merwe		Dr J Wala
Dr A Pellizzon		
Dr M Cass		<b>Cert Rheum</b>
Dr R du Toit		Dr E Richter
Dr E Wilken		

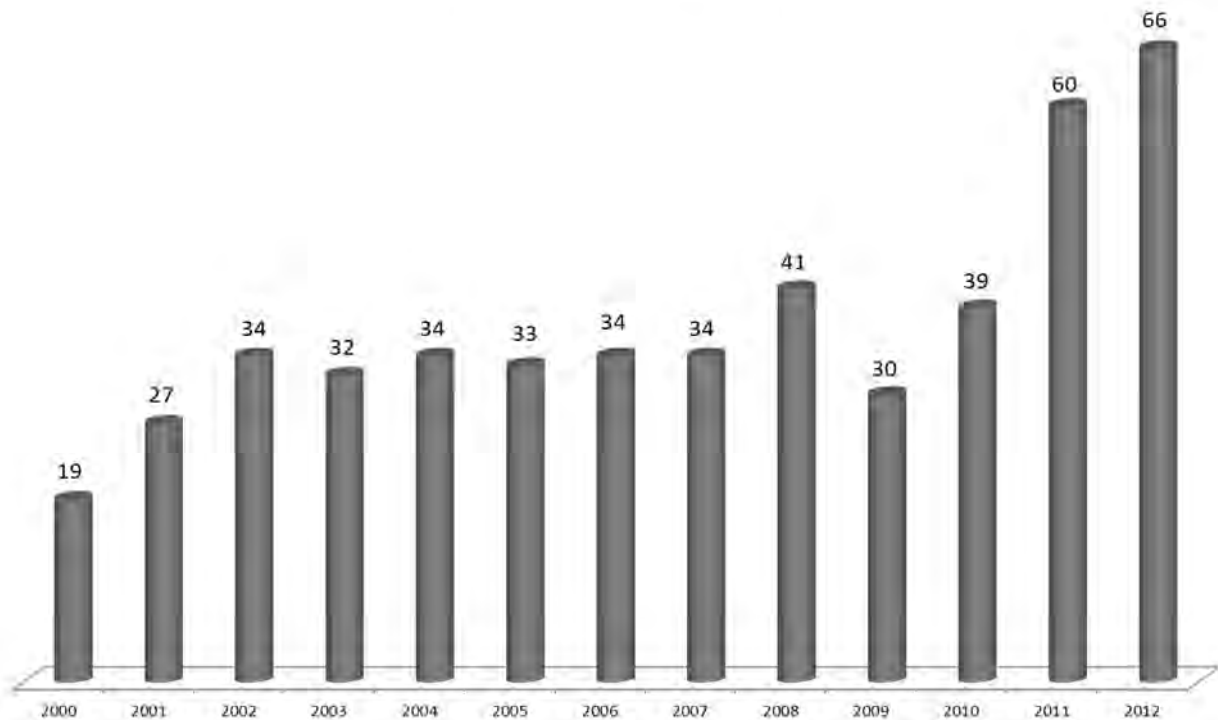
**Table:** Successful candidates in the College of Physicians examinations. The percentages reflect the pass rates of our candidates in the first and second semester examinations.



# MEDICINE



Publications Dept of Medicine  
DOE Listed 2000 - 2012



**Figure:** The top figure is the number of masters and doctoral students who graduated in the past 7 year. Although there were no doctoral graduates the number do masters awarded was one of the highest in recent years. The lower figure represents the number of publications in peer-reviewed journals in the past year.

# MEDICINE

The lack of doctoral awards was a disappointing but the number of masters students graduating and the increase in publications was very gratifying. The increase in publications was not as dramatic as in the previous year and a strategy to improve research output in the department is to be developed. The pass rate of the candidates sitting for the College of Physicians examinations are shown in the table. The results in the first semester were somewhat better than in the second. The format of the College of examinations is changing as is the use pedagogic principles. The examinations now include MCQs for Part I (and these may be introduced for Part II in due course), the use of moderators and standard setting. Professor Moosa serves on the Council of College of Physicians. Members of the Department serve on various Faculties, national and international structures and serve society on a broad front.

The challenging facing the Department continue to be the incredible pressure around the Ward F1, a situation that seems to be deteriorating as a result of the immense disease burden faced, the burgeoning student numbers with limited capacity for expansion at the hospital, and the modest research output. The Department however is talented and committed enough to find ways of addressing all these challenges.

*MR Moosa*

Professor and Acting Executive Head:  
Medicine  
April 30, 2013

## **DIVISION OF CARDIOLOGY**

**Head: Prof AF Doubell - MB Ch B, B Sc  
Hons, FCP (SA), M Med, Ph D**

### **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 (4 clinics per week: 3 general cardiology clinics and 1 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.

Our effort at excellence in service delivery, teaching and research is still hampered by critical shortages of staff (cardiologist, medical officer, technical staff and nursing staff). As far as equipment is concerned it must be noted that critical deficiencies still exist e.g. lack of monitors in the emergency coronary care unit (A6) and in the echo unit as well as a lack of echocardiography facilities in the emergency areas in the hospital. The cardiac catheterization laboratory (cathlab) installed in December 2011 (West-side cathlab) is still fully functional must it must be noted that the backup cathlab (East-side cathlab) is now 13 years old and we are experiencing problems with maintaining it in service. Planning must be initiated to replace this system with a cheaper (single plain) 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 13 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 SAHeart, official Journal of the South Africa Heart Association. The Journal now appears in electronic and printed form and is accredited by the Department of Education (DOE).

# MEDICINE

## Staff

### Professors

Prof AF Doubell

### Specialist Cardiologists

Dr H Weich

Dr P Herbst

The fourth cardiologist post is currently filled by a senior registrar to increase our training capacity. This is a temporary measure for a three year training cycle ending 31 July 2013.

### Cardiologists in training

Dr W Lubbe (training cycle started 1 December 2009)

Dr C Kyriakakis (training cycle starts 1 January 2010)

Dr A Pecoraro (training cycle started 1 August 2010)

Dr Mwazo (supernumerary trainee from Kenia – training cycle started in August 2011)

### Medical Officers

Dr HP Cyster

Dr L Nel – research appointment funded by the Cardiology Research Fund  
5/8 Medical officer post in echocardiography vacant (this post is currently used to fund the post Dr Pecoraro is appointed in – supplemented with a Discovery grant awarded to Dr Pecoraro)

### Research Staff – University of Stellenbosch appointments

Prof L Burgess

Me M Carstens

### Technical Staff

**Control Technologist** 1 (Yanita Singh)  
– transferred to Red Cross Hospital on 31 January 2013

**Technologists** 4  
(Marinda Swanepoel, Jorandi Loubser, Lusanda Matyeni, Luzaan Papenfus)

**Technical Assistants** 5  
(M. Africa, C Faroe, S. Baron, H. Charles, E. Kainda)

**Technology students** 4  
(Alet Meiring, Sheila Matshuka, Inaayat Mahomed, 1 vacant)

### Administrative Staff

Secretary  
Typist

Ylana Waller  
Erika Burger

## Registrars

Rotated for periods of 6 months

Dr Mazhar Amirali

Dr Karla Bezuidenhout

Dr Mo Jansen

Dr Elmo Pretorius

Dr Donald Simon

Dr Chikezi Nwamko

Dr Marwaan Sauls

Dr Adreano Pellizzon

### Senior Registrars from UCT rotating for Echocardiography training

Rotated for periods of 6 weeks

Dr Shaheen Panday

Dr Tawanda Butau

Dr Blanche Cupido

### Emergency medicine registrars

Rotated for periods of 6 weeks

Dr Yolandi du Plessis

Dr Ebrahim D'Andrea

Dr Sue Maharaj

### 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

In 2010 we were fortunate in receiving applications for training in cardiology from a number of exceptional candidates. In order to train an additional cardiologist it was decided to keep a consultant post vacant for one training cycle (3 years) and to appoint a senior registrar against this post. On completion of this training cycle in July 2013 the post will revert back to the consultant post.

##### Medical officer

In order to create an additional research/training post in cardiology it was agreed with management to keep a post in echocardiography (5/8 medical officer post) vacant in the short term in order to utilize this post to establish a research/training post for one training cycle (three years ending on 31 July 2013). On completion of this training cycle the post will revert back to the 5/8 medical officer post in echocardiography. During this period the echocardiography service required from this post will be provided

# MEDICINE

by the cardiology trainee appointed against this post.

## Technologists

Our control technologist, Yanita Singh transferred to Red Cross Hospital in January 2013 and the post is currently vacant.

## Nursing staff

The acute nursing shortage in the coronary care unit continues to remain a challenge with respect to optimal medical care.

## Lack of Equipment

### Monitors

We are still awaiting monitoring equipment for the echocardiography laboratory (1 of 4 monitors required received in 2013). The monitors in A6 will require optimization next year.

### 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. One new mobile machine has been allocated to the coronary care unit and should be delivered early in 2010. 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) In Patients

A6 admissions	
Unit	1166
Ward	780
D4 elective admissions	508
<b>Total</b>	<b>2454</b>

Patients seen in the emergency room	1113
Resuscitations	72
Streptokinase toegedien	40
<b>b) In Patient consultations</b>	<b>3941</b>

\* (new recording system-still to be audited)

### c) Outpatients

Cardiac Clinic	
New patient consultations	775
Follow up patient consultations	3333

## Lipid Clinic

New patient consultations	45
Follow up patient consultations	475
Adult cardiology total	4628
Paediatric cardiology clinic	937

### d) Electrocardiography

Standard ECG	15226
Exercise ECG	1120
Holter recordings	236
<b>Total</b>	<b>16582</b>

### e) Echocardiograms

TTE (adult)	4826
TTE (paediatric)	339
TEE	194
Dobutamin stress echo	107
Exercise stress echo	36
<b>Total</b>	<b>5562</b>

### f) Cardiac catheterisation

Left and coronary	1284
Femoral:	319
Radial:	965
Grafts (incl. in above)	35
Aortograms	
(incl. in coronary stats)	7
FFR (incl. in coronary stats)	57
Pulmonary arteriogram	
(incl. under MVP)	14
Right heart studies	36
<b>Total</b>	<b>1320</b>

### g) Coronary interventions

PCI (number of patients)	549
PTCA balloons	285
Stents	459
Direct stents (included above)	188
Coronary aspirations	
(incl. above)	80
Intravascular	
ultrasound (IVUS)	12

### h) Intra aortic balloon pump (IABP)

30

### i) Percutaneous Mitral Balloon

Valvuloplasty	14
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### j) Divers cardiac interventions

ASD closure	1
PDA closure	2
Aortic valvuloplasty	1
Pulmonary valvuloplasty	3
Tricuspid valve replacement (TVI)	0
Coarctation stent	0

# MEDICINE

PFO closure	0
Myocardial biopsy	1
IVC stent	1
Renal denervation	3
k) <b>Valve screening (fluoroscopy)</b>	54
l) <b>Pericardial aspirations</b>	51
Pericardioscopy	19
m) <b>Pacemaker implantation</b>	
New	144
Replacement	23
Lead replacement	2
Lead implant	3
Lead extraction	0
Epicardial lead	1
<b>Total</b>	<b>173</b>
VVI	45
VVIR	68
VDD	0
DDD	0
DDDR	24
CRT	18
Loop recorder	2
n) <b>Temporary pacing</b>	115
A6	70
Cathlab	45
o) <b>Pacemaker follow up</b>	1018
p) <b>ICD insertion</b>	11
q) <b>Swan Ganz catheters</b>	0
r) <b>Arterial lines</b>	10
s) <b>Ventilation</b>	89

## Academic Activities

The unit is actively involved in the departmental teaching program.

### 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 audit performed by the University provided good feedback and the comments by the students gave high praise to the module.
- Student Interns (late rotation) rotate through Cardiology for a 7 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 (4 posts) accommodates the curriculae of both the Central University of the Free State and the Durban Institute of Technology.

### Post-graduate

- A structured teaching program was presented for registrars rotating through Cardiology for 6 months at a time.
- The registrar training program is the only program in the country that includes structured and supervised echocardiography training.
- Two of our senior registrars completed their cardiology training. Dr Lubbe and Dr Kyriakakis were the top two candidates (out of 8) during the examination.
- Prof Doubell was an examiner in the August/October Cert Cardiology examination.

### Continued medical education

- An echocardiography outreach program 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).

### Outstanding achievements in 2012

Philip G. Herbst, Zaheera Cassimjee, Alfonso J.K. Pecoraro and Anton F. Doubell.  
Award for the best research poster at the Annual Academic Day, Department of Medicine, Faculty of Health Sciences. 2012

### A Doubell

Member of the exco of the South African Heart Association  
Editor of the cardiology journal, SA Heart.

## Research Output

### A. Journal articles – Subsidised

1. Esterhuysen A, van der Westhuizen K, **Doubell AF, Weich H**, Scheffer C. Application of the finite element method to the fatigue life prediction of a stent for a percutaneous heart valve. *Journal of Mechanics in Medicine and Biology*. 2012; 12(1):1-18
2. **Herbst PG**. Accreditation in Echocardiography: The time to act is now. *SA Heart* 2012; 9(3): 154-161.
3. **Doubell AF**. TAVI in Africa - Destined for the townships or dashing for the "ivory towers"? *SA Heart* 2012; 9(1): 2-5.
4. **Doubell AF**. The SA Heart Association Registry: time to SHARE your data. *SA Heart* 2012; 9(2) : 78-81.
5. Van Aswegen KHJ, Smuts AN, Scheffer C, **Weich HSVH, Doubell AF**. Investigation of leaflet geometry in a percutaneous aortic valve with the use of fluid-structure interaction simulation. *Journal of Mechanics in Medicine and Biology* 2012; 12(1): 1250003-1 - 1250003-15.
6. **Lubbe WW, Herbst PG**. Making heads or tails of a coarctation. *SA Heart* 2012; 9(3): 198-203.
7. **Van der Bijl P**, Heradien M, **Doubell AF**, Brink PA. QTc prolongation prior to angiography predicts poor outcome and associates significantly with lower left ventricular ejection fractions and higher left ventricular end-diastolic pressures. *Cardiovascular Journal of Africa* 2012; 23(10): 541-545.
8. **Van Der Bijl P**, Van Der Bijl P. Cardiotoxicity of plants in South Africa. *Cardiovascular Journal of Africa* 2012; 23(9): 446-447.
9. **Weich HSVH**, Mabin T, Van Wyk J, Van Zyl W, Vivier R, Philips A, Van Greune R. First experience with the Edwards SAPIEN transcatheter aortic valve implantation (TAVI). *SA Heart* 2012; 9(1): 6-13.
10. **Weich HSVH**, Van Wyk J, Van Zyl W, Bapat V. Image in cardiology. *SA Heart* 2012; 9(1): 46-47.
11. **Weich HSVH**, Van Wyk J, Van Zyl W, Vivier R, Philips A, Mabin T. First case of trans

apical implantation of an aortic valve in a patient with dextrocardia. *Journal of Cardiothoracic Surgery* 2012; 7: 24.

12. **Weich HSVH**. Balloon aortic valvuloplasty in the era of transcatheter aortic valve implantation (TAVI): an opportunity to revisit a previously discouraged treatment option. *SA Heart* 2012; 9(2): 96-99.

### B. Journal articles - non-subsidised

1. **Weich HSVH**. Transcatheter tricuspid valve replacement. *Interventional Cardiology* 2012; 7(1): 59-62.
2. **Burgess LJ, Pretorius D**. Declaration of Helsinki abandoned by FDA – its effect on the ethical aspects of clinical trial conduct in South Africa and other developing countries. *South African Journal of Bioethics and Law*, 2012; 5(2): 91-94

### C. Chapters in books

1. **Burgess LJ**, Strugo V. Chapter 23 – Globalization in Clinical Research. In: Saini R (Editor). *Fundamentals of Clinical Trial and Research, India: Paras Medical Publisher, 1<sup>st</sup> edition, 2012*
2. Katsoulis L, Chikota H, Hayward D, **Burgess LJ**, Strugo V. Chapter 3 – Building a Healthy Mechanism for Good Clinical Practice-Compliant Clinical Trials: African Perspective In: Bairu M, Chin R (Editors). *Global Clinical Trials Playbook – Capacity and Capability Building, USA: Elsevier/Academic Press Publications, 1<sup>st</sup> edition, 2012 (ISBN 978-0-12-415787-3)*
3. **Burgess LJ**, Chikota H, Hayward D, Katsoulis L, Strugo V. Chapter 4 – Clinical Trial Sites Capabilities: Standard Operating Procedures. In: Bairu M, Chin R (Editors). *Global Clinical Trials Playbook – Capacity and Capability Building, USA: Elsevier/Academic Press Publications, 1<sup>st</sup> edition, 2012 (ISBN 978-0-12-415787-3)*

## D. Proceedings National and International

1. Philip G. Herbst, Zaheera Cassimjee, Alfonso J.K. Pecoraro and **Anton F. Doubell**. Overcoming the limitations of current echocardiographic criteria used in the diagnosis of subclinical rheumatic heart disease. 13<sup>th</sup> congress of the South African Heart Association, Sun City, South Africa 2012. *SAHeart*. 2012; 9(3):175
2. J. Moses, **A.F. Doubell**, P.G. Herbst, K.J.C. Klusmann and H.S.V.H. Weich, Non-ST elevation myocardial infarction in three hospital settings in South Africa. Does level of care influence management and outcome? A retrospective cohort study. 13<sup>th</sup> congress of the South African Heart Association, Sun City, South Africa 2012. *SAHeart*. 2012; 9(3):186
3. Alfonso Pecoraro, Zaheera Cassimjee, Philip Herbst and **Anton Doubell**. Morphologic assessment of the rheumatic mitral valve. 13<sup>th</sup> congress of the South African Heart Association, Sun City, South Africa 2012. *SAHeart*. 2012; 9(3):191

## E. Presentations at the Annual Academic Day of the Faculty of Health Sciences, Stellenbosch University.

1. **Philip G. Herbst, Zaheera Cassimjee, Alfonso J.K. Pecoraro and Anton F. Doubell**. Overcoming the limitations of current echocardiographic criteria used in the diagnosis of subclinical rheumatic heart disease. 2012.
2. **J Moses, AF Doubell, PG Herbst**, KJC Klusmann and **HSVH Weich**, Non-ST elevation myocardial infarction in three hospital settings in South Africa. Does level of care influence management and outcome? A retrospective cohort study. 2012.
3. **Alfonso Pecoraro, Zaheera Cassimjee, Philip Herbst and Anton Doubell**. Morphologic assessment of the rheumatic mitral valve. 2012.

## F. Other Presentations at National and International Congresses (abstracts not published).

1. **Doubell AF**. When to do Percutaneous Mitral Balloon Valvotomy (PMBV). 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
2. **Doubell AF**. Percutaneous Mitral Balloon Valvotomy (PMBV). Patient selection and technique. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
3. **Herbst PG**. Echocardiographic prosthetic valve assessment. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
4. **Herbst PG**. Troubleshooting during echocardiographic prosthetic valve assessment. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
5. **Herbst PG**. Critical thinking in echocardiography. Congress of the Society for Anaesthetists of South Africa (SASA). Cape Town 2012
6. **Herbst PG**. Echocardiography - Doppler assessment. Congress of the Society for Anaesthetists of South Africa (SASA). Cape Town 2012.
7. **Herbst PG**. Echocardiography - Systolic function assessment. Congress of the Society for Anaesthetists of South Africa (SASA). Cape Town 2012
8. **Herbst PG**. Echocardiographic principles for critical thinking in valve disease. Cardiothoracic Surgery Meeting. Bellville 2012.
9. **Herbst PG**. Respiratory cardiac interaction – Echocardiographic assessment. Red Cross Hospital Master class in Echocardiography. Cape Town 2012.
10. **Herbst PG**. Systolic function – Echocardiographic assessment. Red Cross Hospital Master class in Echocardiography. Cape Town 2012.
11. **Herbst PG**. Echocardiographic assessment of Aortic Stenosis.

SUNvalve TAVI workshop. Stellenbosch 2012.

12. **Weich HSVH.** TAVI live case presentation (3 cases). 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
13. **Weich HSVH.** Hybrid TAVI combined with CABG – case presentation. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
14. **Weich HSVH.** Practical aspects of TAVI. SUNvalve TAVI workshop. Stellenbosch 2012.
15. **Pecoraro A.** Medical therapy of Hypertrophic Cardiomyopathy. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
16. **Pecoraro A.** TAVI case presentation. 6<sup>th</sup> World Congress of Paediatric Cardiology and Cardiac Surgery. Cape Town 2013.
17. **Pecoraro A.** Faculty member for the Bloemfontein Trans Oesophageal Echocardiography course 2012.
18. **Pecoraro A.** Red Cross Hospital Master class in Echocardiography. Two case presentations (APVD and Sinus of Valsalva aneurysm). 2012
19. **Kyriakakis C.** Constrictive pericarditis - How to treat. Africa PCR. Cape Town 2013.
20. **Van der Bijl P.** Case presentation – Management of a pericardial effusion complicated by paraparesis. Africa PCR. Cape Town 2013.

## G. 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

Prof Doubell is the founder of the **National Cathlab Registry** initiative which aims to recruit all cardiac catheterization laboratories (cathlabs) in the country to participate. The registry continues to launch at new sites. Currently the roll-out of this program is being extended to all cathlabs wishing to participate.

**Centre for Medical Ethics & Law, Department of Medicine**  
**Prof Keymanthri Moodley**

## 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:

(Please adapt this to your dept. e.g. if you don't have Radiographers, but have e.g. Pharmacists on your establishment, please substitute accordingly)



# MEDICINE

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

## Output:

Prof Moodley supervised 6 PG diploma students. 11/12 trainees graduated from first cohort of ARESA trainees.

NIH grant of R9 million secured from 2011 to 2016.

GCP training and on line GCP Refresher program: 86 + 57 researchers trained

Online CPD program: 73 doctors completed training

Third stream income raised: **R2 122 830**

## 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, new equipment, etc. (highlights)

For 2012 – no new equipment or office space

### Community outreach

#### programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

**Ethics Hotmail and Ethics Hotline** – queries on ethical issues from general practitioners and other health care providers are answered either via e-mail or telephonically by the Unit. The number of queries received increased substantially over the past year. Details available on request within the limits of confidentiality.

## Tygerberg Ethics Discussion Group: Topics for 2012:

29 February – The use of methylphenidate in “healthy” students – Dr Chris Verster

29 March – Medical students' experiences of professional lapses and patient rights abuses in a South African Health Sciences Faculty – Dr Lauraine Vivian

31 May – Ghost Writing in Medical Publications – Dr. Malcolm de Roubaix

27 September – Deliberating about race as a variable in ethical review of Biomedical Research – Prof Anton Van Niekerk

25 October – Stigma in Genomics- Dr. Jantina De Vries

## 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

Phase 3 – interviews of researchers/pathologists, Western Cape and Gauteng

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.

### Collaboration in grant applications:

1. MRC Self-Initiated grant – unsuccessful
2. Research assistant grant - unsuccessful
3. NIH HIV Cure grant: collaborative application with University of North Carolina (UNC): scored 18, awaiting feedback.

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

### PROF K. MOODLEY

- London L, Kagee A, Moodley K, Swartz L. Ethics, human rights and HIV vaccine trials in low income settings. **Journal of Medical Ethics** 2012, 38 :286-293.
- Van Schalkwyk G, De Vries J, Moodley K. "It's for a good cause, isn't it?" – Exploring views of South African TB research participants on sample storage and re-use. **BMC Medical Ethics**, 2012, 13 (1):19.

### PROF S. KLING

- **Kling S**. Truth telling in clinical practice: Is it ever OK to lie to patients? *Current Allergy & Clinical Immunology* 2012;25(1):34-36.
- Yamashiro Y, Martin J, Gazarian M, **Kling S**, Nakamura H, Matsui A, Cucchiara S, Aloji M, Wynn EL, Mulberg AE. Drug Development - The Use of Unlicensed/Off Label Meds in Pediatrics. *J Pediatr Gastroenterol Nutr.* 2012 Sep 13. [Epub ahead of print].

### BOOK CHAPTERS

- Moodley K. Disaster Research Ethics-a South African Perspective – in "Disaster Research" 2011 (in Press). Springer
- Moodley K, Kling S, Roussouw T. Ethics in "Handbook of Internal Medicine" (2012) – Editor Prof R.M. Moosa ,(under review) Juta.

### NEWSLETTER

Two ARESA Newsletters Vol. 2 & 3 were circulated to all Research Ethics Committees in SA in June and December 2012. The newsletter is also circulated internationally via the NIH listserv.

### INVITED SPEAKER: International Presentations: 2012

- 26 -29 June - Assessing and enhancing the functions of Research Ethics Committees in the developing world. 11<sup>th</sup> World Congress of Bioethics, **Rotterdam, Netherlands**  
Presenters: Prof Henry Silverman (University of Maryland and PI of the Fogarty MERETI program), Prof Keymanthri Moodley (University of Stellenbosch and PI of the Fogarty ARESA program), Thabo Molebatsi (ARESAs trainee), Dr Hany Sleem and Dr Amal Matar (MERETI trainees)
- 12 July – Biobanking and Ethics, World Health Organisation, Ethics Seminar, **Geneva, Switzerland**
- 21 July – Research Logistics: Managing Data and Specimens, Ethical Considerations in HIV Genetics Research from an International Perspective, Office of AIDS Research, NIH, **Washington DC, USA**

### Teaching and Training (under, postgraduate and elective students)

#### A) Undergraduate Program:

##### MBCHB Ethics Module

The undergraduate teaching program in medical ethics and law was offered to 179 fifth year medical students in March 2012 for the 10th time since its inception. The module has been extended to cover more topics and now stretches over a period of 3 weeks.

Tutors: Keymanthri Moodley, Willie Pienaar and Sharon Kling. Three additional lecturers were invited to assist with tutorials and marking – Dr A Bawoodien, Dr Malcolm de Roubaix 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 40% to 88% with an average of 65%. Two students (Petrus Steyn and Anine Pentz) tied for the highest mark in the 2011 exam and each received the Ethics Prize sponsored by Mediclinic during the Oath taking ceremony in December 2012.

## **MBCHB 1**

### **Medical Ethics Lectures – Theme 3 in Health in Context Module**

6 lectures were presented to 372 first year health science students on ethics, law and human rights in February 2012. A range of topics was discussed and included:

1. Why is ethics important in healthcare?
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 healthcare

The team was led by Prof Moodley.

372 students wrote a WEB CT test with 20 Ethics MCQs. Results: 46% to 84% with an average of 70%. Class attendance improved in 2012 compared to 2011.

## **MBChB 2**

### **Medical Ethics Lectures – Introduction to Clinical Medicine**

5 lectures were presented to 245 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 Program:**

**2013 intake-Postgraduate Diploma in Health Research Ethics** – 37 applications were received. Eleven applicants met the eligibility criteria. These NIH sponsored trainees will attend module 1 of the program in February 2013.

### **Short Course: Dual Review of Research:**

Four students attended module 2 as a short course. Vulnerability in research: three students attended module 3 as a short course.

## **MPhil (Health Sciences Education) - University of Stellenbosch – graduated March 2012.**

Thesis: Teaching and assessment of clinical ethics and professionalism on ward rounds to undergraduate medical students at Stellenbosch University.

Candidate: Dr Louis Heyns, Dept of Paediatrics, Faculty of Health Sciences, Stellenbosch University.

## **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, Dept of Philosophy, University of Stellenbosch  
Oral exam set for 26-27 September 2013.

## **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, Dept of Philosophy

## **Postgraduate Diploma in Health Research Ethics – University of Stellenbosch**

1. Dr Tina Malan – Is there Therapeutic Misconception in Oncology Research?
2. Advocate Jamwell Masamgayi – Is the researcher-participant relationship in clinical research a contractual relationship?
3. Dr Geremew Tsegaye - Developing standard operating procedures for biobanking at an Research Ethics Committee in Ethiopia
4. Dr Ronell Leech - Complexities in biological sample use in research: perspectives of REC members in Gauteng
5. Sabina Luputa - Extrapolating principles of corporate governance to research ethics committees: perspectives from Zambia?
6. Jane Nabbuto – Advancing the ethics/science debate: An analysis of decision letters issued by an institutional research ethics committee in Uganda
7. Margaret Ellis – Pharmacogenetic informed consent: perspectives from participants at private clinical research sites in Gauteng, South Africa.

**6/7 trainees graduated in 2012.**

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## Special achievements

### APPOINTMENTS 2012

#### NATIONAL APPOINTMENTS:

- Member: National Health Research Ethics Council (NHREC) – appointed by the Minister of Health ( 5 meetings in Pretoria)
- Board member – South African Medical Research Council (MRC) – appointed by the Minister of Health (7 Board meetings for 2012 – in Cape Town )
- Member – Audit, Risk and IT Committee, MRC ( 4 meetings at MRC Cape Town)

#### INTERNATIONAL APPOINTMENTS:

- Data Safety Monitoring Board (DSMB) of the National Institutes of Health (United States) - 2009 to 2012
- SAGE Working Group on Immunisation in Humanitarian Crises at the World Health Organization (WHO) - 2011-2012,
- Brocher Foundation in Geneva in 2012 - international research scholar.

#### First Annual ARESA Research Ethics Seminar

120 delegates attended this annual seminar from various South African institutions as well as from Uganda, Namibia, Lesotho, Zambia and Ethiopia. A wide range of stimulating talks was delivered by South African ethicists (Prof Anton Van Niekerk, Dr Theresa Rossouw, Dr Lyn Horn, Prof Anne Pope, Prof Keymanthri Moodley) and international ethicists. International speakers hailed from the University of North Carolina (Prof Eric Juengst and Prof Stuart Rennie) and Oxford University (Dr Susan Bull). Prof Doug Wassenaar, Prof Ames Dhali, Prof Landon Myer, Dr Malcolm de Roubaix and Dr Jacquie Greenberg contributed to lively panel discussions along with some of the other speakers.

### THIRD INCOME STREAM

**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:

courses were offered and **86** investigators, site co-ordinators and research ethics committee members were trained.

Income generated: **R 278 744**

#### ERECCA program

Number of delegates completed: **57**

Income generated: **R 57 000**

#### Online Ethics CPD Program:

Number of delegates completed in 2012: **73**

Income generated: **R 31 526**

#### Research Ethics (ARESA) Short Courses:

Module 2 = R 17 500

Module 3 = R 17 500

**R 35 000**

#### GRANTS = R1 720 560:

Fogarty International Centre, NIH R25 grant – to develop a Postgraduate Diploma in Health Research Ethics: reviewer's score 20

Value of grant over 5 years = **\$ 1.2 million (R 9.6 million)** awarded.

For 2012: R 1 920 000 – R 304 000 (UNC) = **R1 616 000.**

Harry Crossley Grant - **R4 560**

Strategic Funding Grant, Faculty of Health Sciences, Stellenbosch University – **R 100 000**

#### TOTAL THIRD INCOME STREAM GENERATION VIA GRANTS AND COURSES:

**Gross Income = R 2 122 830**

### DIVISION OF DERMATOLOGY

**Prof H Francois Jordaan**

#### Summary of activities:

The missions of the department, namely effective administration, basic research, excellent service delivery, pre-graduate teaching, post-graduate teaching and outreach were achieved satisfactorily.

#### Resources:

Posts (Full time)	Number	Filled
Associate Professor		
Principal Specialist	1	1
Specialist	1	1
Registrar	4	4

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Medical Officer	1	0
Supernumerary Registrar	2	1
<b>Posts (sessional – how many hours worked per week)</b>		
Specialists		
Part time posts	1 4 hrs per week	1
Locum posts	1	1
Full time equivalents	4 hrs per week	
<b>Number of beds (usable)</b>	10	-

### Output:

Source:		OPD visits:	11542
For OPD visits	Dermatology Clerk	Patch tests:	20
For A8W admission	A8W Clerk	Admissions	7-8/ month
For PATCH tests	Registrar	Theatre procedures :	+/- 1000
For theatre procedures	Prof JW Schneider		

### Comment on output:

Patients were consulted by two specialists and 6 registrars. Patients expressed satisfaction with the quality of service. Special investigations such as skin biopsies for dermatopathology and patch tests contributed to the effective management of patients. Approximately 90 inpatients were managed. The commonest reasons for admission were widespread or complicated psoriasis, widespread dermatitis refractory to treatment, subepidermal blistering disorders, and patients with HIV-associated skin lesions. Co-operation with other departments are promoted actively. Registrars from Family Medicine and Occupational medicine rotate through dermatology and see patients at OPD.

## PART 2

### Faculty of Health Sciences

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

Installation of roof-mounted data projector IN THE SEMINAR ROOM OF opd

#### Community outreach

#### programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

- A monthly outreach Clinic at Worcester Hospital
- Six lectures for South-to-South Partnership for Comprehensive HIV care and treatment
- HIV and the skin course at University of Fort Hare, East London Campus
- Radio interviews: RSG (2)
- Educational lectures to members of the public
- Lectures to paediatricians, physicians, oncologists and gynaecologists
- Involvement in Telemedicine and eHealth, an MRC and MTN initiative
- Quarterly visits to Brewskloof Hospital
- Designing and planning a yearly GP workshop in dermatology
- Three annual training workshops for nurses
- Advanced HIV certificate on skin diseases for nurses in the Eastern Cape
- Advice to public in popular magazines
- Lectures on SJS/TEN at Somerset West Hospital and KBH
- Prof HF Jordaan/Dermatopathology Seminar at KZN

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

Number of publications from the department/division:33  
Text books and contributions to text books:

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## Teaching and Training (under, postgraduate and elective students)

Elective students 4

## Special achievements

- Prof HF Jordaan/member of the Melanoma Advisory Board
- Prof HF Jordaan/member of EXCO of the DSSA
- Prof HF Jordaan and Dr WI Visser / examiner College part 2 examination
- Dr WI Visser / invited speaker / Child TB Training Conference
- Dr WI Visser / invited speaker / SAFP Congress
- Dr WI Visser lectured nationally and internationally on the cutaneous side effects of the Epidermal Growth Factor Receptor Inhibitors
- Prof HF Jordaan / Honorary membership of the SASDS
- Prof HF Jordaan / invited lecturer at the annual Congress of the DSSA
- Dr SMH Kannenberg / presentation at Academic Year Day
- Prof HF Jordaan / involvement in eCPD for AOSIS
- Prof HF Jordaan / member of national Atopic Dermatitis Guideline Panel
- Dr B Tod / registrar prize at the annual congress of the DSSA

**Department of Endocrinology**  
**Prof B H Ascott-Evans**

## Summary of activities:

Consolidation of teaching, training and outreach programs.

SEMDSA Fellow elected to train at our unit – 2 senior regs for 1<sup>st</sup> time.

Basic lab increased no. of students training there.

## Resources:

Posts (Full time)	Number	Filled
Specialist	3	2
MO (x2), Sen Reg(x1), Med tech (x1)	4	5 ( SEMDSA Fellow extra)

## Posts (sessional – how many hours worked per week)

1 x Consultant (x 4 hrs)	2 x MO ( x4 hrs each)	12hrs/wk
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## Output:

<b>Admissions</b>	440
<b>Referrals</b>	3203
<b>DEXA's</b>	904
<b>Out Patients - New</b>	381
<b>Out Patients - Follow ups</b>	2898

## Comment on output:

High load and turnover of often very complex cases requiring extensive investigation.

Quaternary referral centre for certain conditions.

Slight increase in OPD cases – need to prune diabetic clinics.

## PART 2

### Faculty of Health Sciences

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

A 10 nil

Basic lab – various pieces of equipment. Thanks to MRM.

## Community outreach

### programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

Prof FS Hough – Member of Scientific Advisory Committee of the International Osteoporosis Foundation – represents the whole Africa region.

BAE: Section leader of Dept Health (and SEMDSA) 2012 Southern African Diabetes guidelines

W Ferris et al : **Collaborations**

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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:

SEMDSA councillors – WF, BAE (co-opted) BAE (SEMDSA) and FSH (NOFSA) organised the annual Endocrine, Diabetes and Metabolic Bone conference in April in Cape Town. W Ferris and Magda Conradie assisted.

FSH reelected chairman of NOFSA.

**Private:** Multiple CMEs at all levels throughout W. Cape, E Cape etc

On many advisory boards –BAE, FSH

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

Number of publications from the department/division

11 papers published. Plus 5 abstracts published in JEMDSA (for SEMDSA conference)

Text books and contributions to text books 3

## Teaching and Training (under, postgraduate and elective students)

FSH : Promotor of 5 Ph.D students

W F : Promotor for 3 Ph.D and 3 post-doc students

Various grants and funding successfully applied for by FSH and WF

## Special achievements and other highlights not covered by this template

### a) WF elected vice chair of SEMDSA excom

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 Gijzen 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.

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 Gijzen 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.

## Division of Gastroenterology and Hepatology

Prof CJ van Rensburg

## Summary of activities:

### Service Delivery

- Consultation of patients referred with Gastrointestinal and Liver Disease
- Diagnostic and therapeutic endoscopic service
- Liver biopsies under ultrasound guidance
- Oesophageal and ano-rectal motility and oesophageal pH and impedance studies
- Outreach programmes – media (radio and press) interviews and surveillance programmes

## Teaching and training

- Pre-graduate and post-graduate students in Gastrointestinal and Liver Disease and Diploma in Sedation and Pain

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management (both local and international students).

- Participate in Continued Medical Education programmes accredited with the HPCSA
- Participate in local and national pre- and post-graduate 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 post-graduate students for masters degrees (Stellenbosch University) and certification purposes (CMSA)

## Committee obligations

- Departmental: Management Committee, Continued Professional Development, Human Resources and Postgraduate.
- National: HOD and SAGES (President-elect and responsible for the academic portfolio).
- Co-chairman ISUCRS Congress 2014, Cape Town, South Africa, September 2014.

## Resources:

Posts (Full time)	Number	Filled
Head of Clinical Division	1	1
Senior Consultant	1	1
Senior Registrar	1	1
Rotating Registrar	1	1
Posts (sessional – how many hours worked per week)		
Specialist	1	4 hours per week
Medical Officer	1	8 hours per week

## Output:

### Outpatient Visits

New patients	4 061
Follow-up patients	10 061
Total	14 122

### Theatre procedures

Gastrosopies	4 058
Colonoscopies	1 660
Flexible sigmoidoscopies	90
Interventional ERCP's	319
Endoscopic dilations	59
Oesophageal Manometry studies	13
Stent placements (oesophagus, duodenum and colon)	81
Polypectomies (upper and lower GIT)	54
Double balloon enteroscopy	5

### Inpatient referrals and telephonic consultations:

1500

**Inpatients:** 2 beds with 80% occupancy

### Comment on output:

The Division of Gastroenterology experienced a significant increase in patient numbers ( $\pm 20\%$ ) compared with 2011, 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.

## PART 2

### Faculty of Health Sciences

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

1. Refurbishment of the theatres and the introduction of a dedicated endoscopy re-processing area with state-of-the art washing machines and adequately trained personnel equal to the task.
2. 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



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improved morbidity and cost-effective patient care.

3. The introduction of argon plasma coagulation facilitated the endoscopic treatment of vascular lesions of the gastrointestinal tract, endoscopic mucosal resection of
4. Highly skilled and motivated nursing personnel that contributed to efficient service delivery and improved patient care.
5. 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.

## **Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

1. 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 2012
2. Radio-interviews to inform the local and national communities on common gastrointestinal diseases (gastro-oesophageal reflux disease and irritable bowel syndrome were discussed during 2012). Listeners were allowed to call-in to the programme and any written requests for information was forwarded.

## **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 w.r.t research activities and research outputs:**

Number of publications from the department/division

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:**

LJ Jeffers, CJ Van Rensburg, AT 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 (under, postgraduate and elective students)**

1. Tutorials and post-intake ward rounds – pre- and post- graduate students and elective students (±6 per year)
2. Practical learning experiences in the Outpatient department, Endoscopy theatre and Motility laboratory of the division of Gastroenterology
3. MB ChB II Digestive 271 lectures
4. Supervision of research projects postgraduate students (MMed and CMSA Certificate in Gastroenterology)
5. Serve on committee for pre-and post graduate teaching (locally) and Heads of Departments Committee (nationally)
6. Examiners pre- and post graduate students (Stellenbosch University and CMSA)
7. External examiner for MPhil and PhD candidates

## **Special achievements and other highlights not covered by this template**

1. Recipient of the Astrazeneca Scholarship 2012 (Dr Marc Lambiotte) – “The role of H.Pylori infection in HIV immune reconstitution”.

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2. President-elect: South African Gastroenterology Society (SAGES) (Prof CJ van Rensburg)
3. Editor: Gastro Review – official journal of SAGES (Prof CJ van Rensburg)
4. Member of the Editorial board of *World Journal of Gastroenterology* (Prof CJ van Rensburg) and the *World Journal of Gastrointestinal Pharmacology and Therapeutics* (Prof CJ van Rensburg)

## General Internal Medicine 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	10 402
Medical wards	6 721
MOPD visits	7 426

### Comment on output:

The envisaged Khayelitsha service shift occurred officially from 1 April 2012 but the Emergency Admission ward F1 started accepting patients from the newly commissioned Khayelitsha Hospital from 1 February 2012. Ward F1 saw many operational changes to cope with the increase load. Notably a shift team was

created to cover the ward in a more organised and reliable way and began to resemble an Emergency Centre. This allowed increased efficiency and throughput in the ward. The changes saw a 25% increase in the numbers seen in the Emergency area. However Ward F1 suffered from overcrowding and an increased staff attrition rate. The increased numbers had a knock on effect in increasing admissions into the General Specialist beds within Medicine with peak occupancy above 100% and an average of 94% for the calendar year. This increase in patient numbers saw a slight rise in the inpatient mortality rate within General Medicine but this returned to the rates seen before the service shift by the end of the year. An analysis of the increased load showed that access to all areas of the Tygerberg drainage area had increased with numbers rising across all districts and not just from the Khayelitsha subdistrict. The system re-engineering in the Emergency Area saw an improvement in Clinical Governance with dedicated specialist/consultant leadership and management of the F1 Emergency area. The increase workload saw the establishment of improvement initiatives and new equipment injections and a few minor infrastructure upgrades that were aimed at supporting the re-engineering and ensuring its success. The improvement initiatives are ongoing to keep the flow and patient experience as optimal as possible.

## PART 2

### Faculty of Health Sciences

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

The emergency area of General Medicine, Ward F1 had the doctors Seminar room upgraded.

#### Community outreach

**programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

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The outreach and support to the east Metro district gradually increased over the 2012 calendar year. Eerste River Hospital and Khayelitsha Hospital were the main recipients of this outreach and support.

The Khayelitsha Hospital commissioning was supported by Drs Schrueder, Viljoen and Dr Mowlana with additional support from the Infectious Diseases team in the form of Dr Cronje Heys. This support involved consultant ward rounds as well as telephonic availability of advice.

Eerste River Hospital was supported through a loss of their senior clinician support with twice weekly Consultant ward rounds and telephonic support. This was maintained throughout 2012.

Elsies River Community health centre was provided mainly telephonic support by Dr Schrueder to facilitate referrals.

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

Number of publications from the department/division

Nil

Text books and contributions to text books

Nil

## Teaching and Training (under, postgraduate and elective students)

Total number of students rotating through General Medicine:

3rd yrs – 4 weeks – 240

4th yrs – 6 weeks – 195

5th yrs – 4 weeks – 201

SI's – 7 weeks – 201

Elective students – 52 students (Total of 323 weeks between the 52 students)

Postgraduate:

14 Rotating registrars on the MMed program are supervised in Gen Med on a continuous basis.

The division saw the institution of an end of block OSCE to objectively evaluate the

rotating registrars bring the divisions academic activities in line with other sub-specialist divisions.

A formal teaching program was implemented including a Consultant led weekly journal club to elevate academic discourse and improve professional development.

## DIVISION OF CLINICAL HAEMATOLOGY

Dr. Fatima Bassa

### Summary of activities:

- Highlight for 2012 was the opening of the special care unit in D8. It is functioning well and has significantly improved the level of care.
- The chemotherapy suite at X-Block was upgraded and enlarged. This has made administration of chemotherapy much more efficient and improved the patient experience significantly.
- Unit continues to be very busy with referral of many complicated and ill patients.

### Resources:

Posts (Full time)	Number	Filled
Consultants	2	2
Posts (sessional – how many hours worked per week)		
NIL		

### Output:

OUTPATIENTS

New outpatient referrals: 424

Follow up visits: 4498

Chemotherapy administrations: 1601

Admissions to D8: 883

### 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

# MEDICINE

these patients are entirely managed by Haematology with no assistance from General Medicine. This is difficult especially in view of the distance between D8 and the outpatient clinic, particularly when patients are unstable. Motivation for medical officer ongoing as his will greatly improve inpatient care and allow registrars to come to clinic on time to expedite outpatient care.

- 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 Winvogel, the manager of the unit is doing an exceptional job trying to ensure appropriate nursing care.
- Numbers of both outpatients and inpatients seen have significantly increased since last year.

## PART 2

### Faculty of Health Sciences

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

Please see above.

#### Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

Due to staff constraints and upgrading of the unit, we were unable to offer outreach in 2012.

#### Partnerships

##### National:

Collaboration on and submissions to creation of a national guideline for management of sickle cell anaemia (University of Witwatersrand)

International:

Collaboration: NIH (see below)

#### Private:

- 2 clinical trials have been undertaken. Both have ethics approval and will commence in 2013 subject to obtaining MCC approval (details below)
- Collaboration with pharmaceutical industry and other role players on the development of a cancer registry /database. Negotiations continuing
- Member of the Bayer advisory board for new oral anticoagulants

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

##### Publications:

- Sissolak G, Dipenaar A, Cruickshank AL, Desai F, Karabus C, McDonald A. Trauma related complications in SA patients with Haemophilia. *Haemophilia* 2012; Vol18, issue 6, p e405-407

##### Text books and contributions to text books:

- Submission towards 2 chapters in textbook: Handbook of Clinical Medicine

#### Research activities:

##### Dr F Bassa:

- Promoter for 2 MMed projects  
Dr M Cass – Evaluation of patients with neutropenia at the Haematology Unit at Tygerberg Academic Hospital  
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
- Advisory board – D43 grant : Developing Research Capacities in Africa for studies on HIV associated malignancies  
Clinical trials
- Roche: IV vs subcutaneous Rituximab +CHOP in patients with DLBCL  
Key Oncologics: Biosimilar Rituximab (RTXM83) Plus CHOP Chemotherapy  
Versus a reference Rituximab Plus CHOP

# MEDICINE

(R-CHOP) in patients with Diffuse large B-cell lymphoma (DLBCL)

- Co-investigator: Development of Stem cell, Blood and Nucleic acid H3 Africa Biorepositories
- Co-investigator: Tygerberg Hospital Adult Cancer Registry Database project
- Co-investigator: Retrospective analysis on treatment outcome in AIDS-related lymphoma at Tygerberg Hospital
- Co-investigator: A 5 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 G Sissolak:**

1. Principal Investigator of the NCI/NIH funded training program for capacity building in AIDS related malignancies (collaboration Stellenbosch and Columbia University) Title: "Developing Research Capacities in Africa for studies on HIV associated malignancies"
2. Principal Investigator of the NIH funded HIV+Tumour Molecular Characterization Project (collaboration Stellenbosch and George Washington Univ.) Title: "The East Coast AIDS and Cancer Specimen Resource Supplement"
3. Promotor on Dr.D.Kotze's Phd thesis "Prospective Analysis of Activation-induced Cytidine Deaminase Levels and EBV infection in Patients with HIV-related Lymphoma" in collaboration with Medical Virology and Columbia University
4. Co-Promotor on Mr.B.Flepisi's PhD thesis "Biomarkers of HIV associated malignancies and of drug interaction between anti-retrovirals and chemotherapy" in collaboration with Pharmacology. Promotor on Dr.J.Badenhorst's MMed project "Retrospective analysis on treatment outcomes of CML treated with tyrosine kinase inhibitors at Tygerberg Hospital".
5. Application for 1 clinical trial as PI (approval pending since July 2012): "A randomized, controlled, double-blind

Phase III trial to compare the efficacy, safety and pharmacokinetics of GP2013 plus cyclophosphamide, vincristine, prednisone vs. MabThera® plus cyclophosphamide, vincristine, prednisone, followed by GP2013 or MabThera® maintenance therapy in patients with previously untreated, advanced stage follicular lymphoma.

## **Teaching and Training (under, postgraduate and elective students)**

- Continued training /teaching/assessment of undergraduate medical students.
- Supervision/training/assessment of registrars from the Department of Medicine.
- Participation in postgraduate academic program-Dept of Medicine/Haematopathology
- Supervision and training of subspecialist registrar.
- Supervision/training of rotating registrar from the Division of Haematopathology, NHL
- Dr Bassa: module chair : late clinical rotation and member of undergraduate committee

## **Division of Infectious Diseases Dr Jantjie Taljaard**

### **Summary of activities**

#### **Out patient service:**

The Tygerberg Hospital Infectious Diseases Clinic (IDC) has prepared and initiated more than 4000 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 sub-district. Provincial efforts to develop more ART clinics in the TBH area did however not keep tract with the spread of the HIV epidemic to the north-eastern metro. Our clinic initiated a PEPFAR funded project (Share Care) in 2008 to support province in establishing new clinics by identifying areas in need, training staff and delivering interim

## 2012 HIGHLIGHTS

**Data Avenue** received a much-needed upgrade and was officially opened on 11 June 2012. Data Avenue can be regarded as the one-stop shop for Information and Communication Technologies. The various components provide support to end users and management in order to perform daily duties and to actively participate in critical decisions respectively. The new offices have been the catalyst for stronger relationships with other role players namely IT Infrastructure, System Controllers, Desktop Support and System Developers. It goes without saying that the new offices promote a good and harmonious working environment. The return on this investment will be seen for years to come.

Opening of the newly upgraded Data Avenue



**From right to left:** Dr Dimitri Erasmus (CEO) cutting the ribbon at the inauguration of the Data Avenue, Mr Adam Loff, Ms René Hay, Dr Paul Ciapparelli (COO), Mr Majdi Abdurahman and Mr Toufeak Salie (Director Finance)

System Developers



**From left to right:** Mr Graham Klein and Ms Teresa Kruger

System Controllers



**From left to right:** Ms Aziza Salie, Mr Steven Daniels, Mr Shadwick Jefftha, Mr Ridewaan Bardien and Mr Nizaam Adonis

System/Application Developers



**From left to right:** Mr Chris van Rensburg, Mr Aquila Hanise, Ms Réne Hay, Mr Ebrahim Fakier, Mr Mervin Miller and Mr William Sullivan

IT Support & Infrastructure



**From left to right:** Mr Abdullah Domingo, Mr Antonio Gordon, Ms Nandipha Foster, Mr Robin Hawkins, Ms Shonisani Netshimbupfe, Mr Earl de Jager, Mr Majdi Abdurahman, Mr Clint Bowers, Mr Jacques Steenkamp, Mr Calvin Adriaans and Ms Essie Esterhuizen

Information Management



**From left to right:** Mr Eduan Leukes, Ms Chantél Odendal, Mr Alfonso Malgas, Ms Desiree Pregnotato, Mr Darryl Visagie, Ms Chleo van Sitters, Mr Adam Loff, Ms Andisiwe Sothondoshe, Mr Toufeak Salie and Mr Siyabonga Wright (front)

# 2012 HIGHLIGHTS

## Opening of the Survivorship Clinic at Tygerberg Children's Hospital, Ward G3



The Tygerberg Children's Hospital opened the Paediatric Haematology Oncology Unit on 1 January 1974 at the initiative of Prof. Peter B. Hesseling. More than 30 years later Prof. D. Cristina Stefan, the Head of the Paediatric Haematology Oncology Unit, opened the Survivorship Clinic on Tuesday 17 January 2012. More than 1 000 children with cancer have been treated in the Unit until now. Leukaemia (cancer of the blood) and brain tumours were the most common malignancies. The aim of this Clinic is to follow up patients treated in the Unit previously offering information about education and cancer, and potential long-term or late effects from the treatment. All survivors that were treated in the children's ward at Tygerberg Hospital previously from 1974 are welcome to contact Ms Nelia Olivier on 021 938 4565 for an appointment.

### Long Service Awards



Seen in the pictures are a few of the recipients who has 40 years' service and more

On 24 October 2012, 577 staff members were awarded certificates in recognition of 20, 30 and 40 years of dedicated service. It was a formal function hosted by Tygerberg Hospital at Moyo at Spier, Stellenbosch, recognising long-serving staff members for their hard work and dedication to the public service. A total of 27 out of the 577 staff members received certificates for 40 years' service and longer. Prof. K. Househam (Head of Health), Dr Beth Engelbrecht (DDG: Secondary, Tertiary and Emergency Care) and the CEO of Tygerberg Hospital, Dr Dimitri Erasmus, personally handed these certificates to the staff members. Staff were beautifully dressed in their African attire, and were entertained by the Moyo entertainers and the Rudimental Band.

### Long Service Awards



The handing over of the certificates were done by Prof Keith Househam, Dr Beth Engelbrecht and Dr Dimitri Erasmus



From left to right: Dr Revere Thomson, Prof Shaheen Mehtar, Dr Fatima Bassa, Minister Theuns Botha, Dr Paul Ciapparelli and Ms Rachel Basson

## Minister Theuns Botha officially opening the new state-of-the-art Haematology Unit at Tygerberg Hospital



From left to right: Ms S Henry (Head of the Medical Module), Ms L Langenhoven, Ms N Windvogel, Minister Theuns Botha, Dr P Ciapparelli, Dr F Bassa and Ms R Basson

### Women's day Celebration



On 16 August, 500 female staff were entertained by the South African Navy Band in aid of Women's day at the Disa Hall. The event was sponsored by the Facility Board, Kuier Magazine, Media 24, Liberty, Servest and other external sponsors. Staff danced and sang their hearts out as the band played the song Lady in Red. Each woman received a goodie bag. Lucky draws were sponsored by Liberty. The master of ceremonies for the event was Mrs Denise Williams (Radio Tygerberg) and motivational speaker Ms Saafia February, a journalist from Kuier.

Facility Board celebrates Women's day  
Mr JP Valentine (board member) handing over a gift to patient Ms Kalina Jacobs in recognition of National Women's Day, with Mr Dawood Khan (deputy chairperson of Tygerberg Facility Board) assisting

### Facility Board, Women's day Celebration



# 2012 HIGHLIGHTS

## Harman Memorial Trauma & Emergency and Orthopaedic Module Winners



**From left to right:** Professional Nurse R. Abrahams; Professional Nurse B Lindenberg; Nursing Assistant J Moses; Nursing Assistant S. Davids; Staff Nurse D. Conradie; Area Manager S Kleinsmith; Nursing Assistant I Groenewald • **At the back left to right:** Staff Nurse A Fortuin; Nursing Assistant D. Price and Professional Nurse Z. Maans

### Harman Memorial Rotary Ann Winner



**From left to right:**

Mr Malcolm Saunders- past president , Ms Rene Lesch, Professional Nurse, Ms Martha Cloete - Award winner, Mr David Holtzhausen - President of Rotary club Bellville, Ms Andrea Jacobs Area Manager Paediatric Department and Ms Henrietta Venter

### Staff Wellness



### Staff Wellness



At the annual Staff Wellness days that were held on 9 and 11 October 2012, staff were treated to wellness screenings that included blood pressure, cholesterol, and eye testing as well as neck, shoulder, hand and foot massages.

Staff enjoying the foot and neck massages whilst other staff members are having their tests done.

## Nelson Mandela Day

The staff at Tygerberg Hospital celebrated the 94<sup>th</sup> birthday of former president Nelson Mandela on Wednesday 18 July 2012.

In celebration of this special day, employees set aside a few minutes to sing Happy Birthday to Nelson Mandela at the Disa Hall.

Other stakeholders like Pick n Pay Parow, Unistel, the Legal Advisors Department (Department of the Premier), Protea Hotel and Stellenbosch University set aside 67 minutes to visit various departments at the hospital.



Unistel staff with patient Akeezia Cloete and her mother Yolande Cloete



Pick 'n Pay Parow staff spent the morning with the Gene Louw patients, who were treated with muffins, coffee, tea, juice, fruit, cup of soup and entertainment.  
**From left to right** Bernadene Benjamic, Monday Oliver, Brandon Maritz, Angelique V.D. Westhuizen, Tanith Rader, Kim Parker and Neels Jonkers (front) with the Gene Louw patients



Unistel staff brought joy to ward G3 patients donating a CD player, CD's and sweet treats.



Disa Hall



# 2012 HIGHLIGHTS



## Stormers visit to Ward G4

Kulsum Joshua (patient – middle) with her mother Rushana (left) and Stormers player Bryan Habana.

Sergio Solomons and his father having a chat with Jean De Villiers.



## Christmas party

The annual Christmas party catering for 400 children and their caregivers was held on 6 December 2012. The entertainment for the day included a jumping castle, dancing, singing, Batman and Spiderman paying a visit and Father Christmas handing out gifts.



## Spring Karaoke

The very first ever Spring Karaoke was held on the 27<sup>th</sup> of September 2012.

Contestants were our very own staff members who had the crowd cheering throughout the show.

Judge Melanie Glenn (right) announced the winner Mr Albert Xipu with Mrs Laticia Pienaar handing over his prize. Looking on from the back: Mr Ebrahim Johnson (judge), Mr Willem Fransman (Programme Director), 2<sup>nd</sup> place winner Ms Jennifer Juta and 3<sup>rd</sup> place winner Mr Jeremy Petersen.

Mr Ebrahim Baatjies impersonating Mr Louis Armstrong.



The Smile Week was held during the week of the 19<sup>th</sup> -23<sup>rd</sup> November.

Pictured is 10 years old Cassidy Sitella of De Doorns who was born with a rare congenital deformity, microtia where the external ears are underdeveloped or non-existent.



Gerry Elsdon

The International Federation of Red Cross and Red Crescent Societies (IFRC) TB Goodwill Ambassador visited Ward C3A on 10 April. Ms Elsdon chatting to patient Ruben Sauls and his grandmother Ms Shirley Jochams.

## Casual Day



The committed staff of Tygerberg Hospital once again supported persons with disabilities and dressed as the part on Casual Day. The theme for the day was 'Get on Board', encouraging supporters to dress like sailors, captains or pirates.

Ms Astrid Scheffers resembles Jack Sparrow.

# MEDICINE

pharmacy and nursing services. During 2012 Elsie's river clinic become functional. The projects funding came to an end in September 2012 but bridging funding was negotiated until September 2013. This initiative made it possible to transfer >400 patients to a more appropriate level of care.

In spite of the increasing primary care burden on the clinic, we still need to fulfill our level 2/3 function. Specialist ID clinics (HPV/Cx Ca screening, HBV/HIV co-infection and high risk PMTCT and the HIV-renal disease clinic) is fully operational.

A business plan was drafted by Dr Taljaard (in collaboration with General Medicine and TBH management) for the establishment of a L2/L3 Infectious Diseases Referral Unit. The projected time for implementation was September 2012 but relied heavily on our ability to decrease the number of primary care patients accessing care at TBH. Fruitful negotiations with Tygerberg Sub district HAST managers during 2012 made it clear that this deadline will not be reached. A new schedule was established with the deadline moving to September 2013. By then all stable primary care patients (except patients from Bellville South / Kasselsvlei) will be referred down to primary care clinics.

The electronic database facilitating patient care and follow-up contributes significantly toward faster consultations, better communication with clinics and ability to audit output.

The HIV pharmacy continued to deliver easily accessible services to our patients and contributed significantly toward improving

the patient experience. As the number of primary care patients become less the need for an onsite pharmacy may need to be reassessed.

## **In patient service:**

Infectious diseases in-patient 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. Weekly antibiotic stewardship rounds in surgical and medical ICU's in collaboration with Medical Microbiology continues to take place.

Building of the new source isolation ward for medical patients (located in ward D10) started at the end of 2012 and should be completed by June 2013.

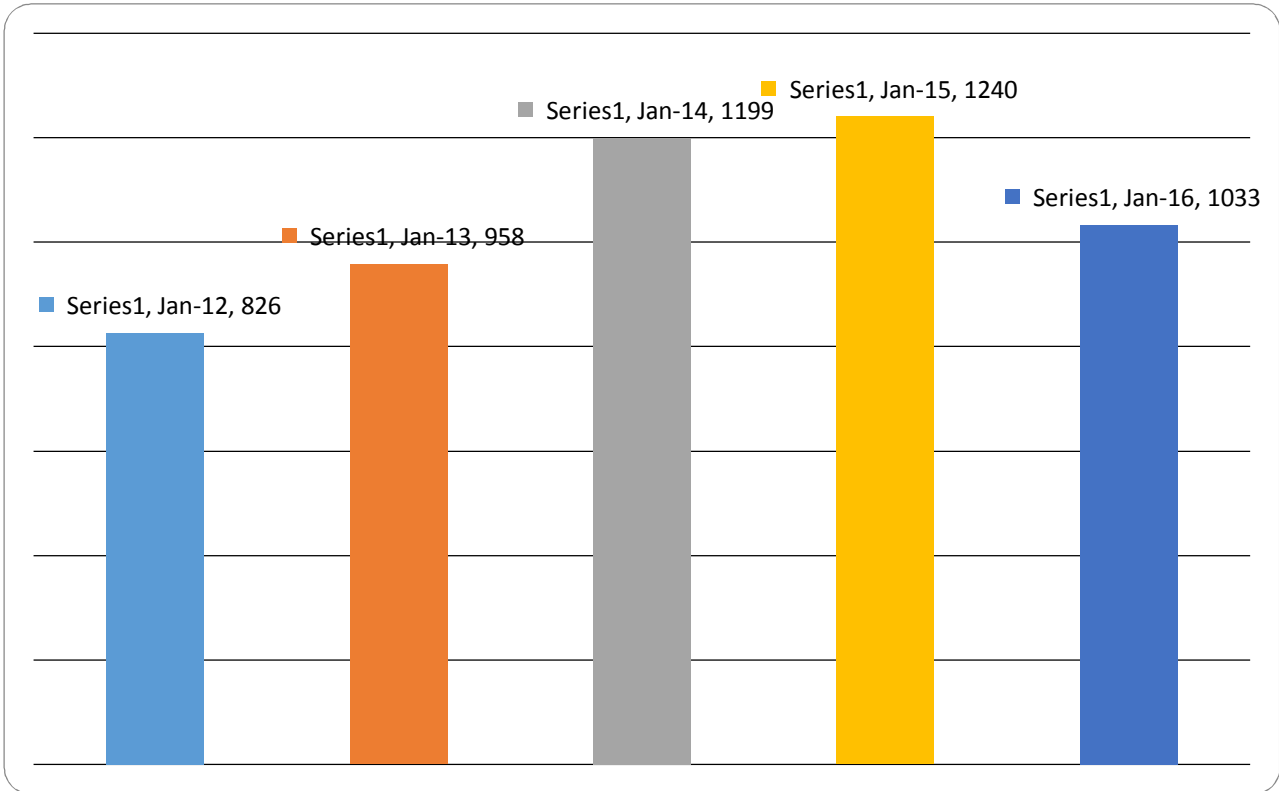
Dr Botha started new ID consultation rounds in the Divisions of Nephrology and Haematology, specifically to gain more experience and to advise on infections in transplant patients and neutropenic patients.

## **Antibiotic Stewardship:**

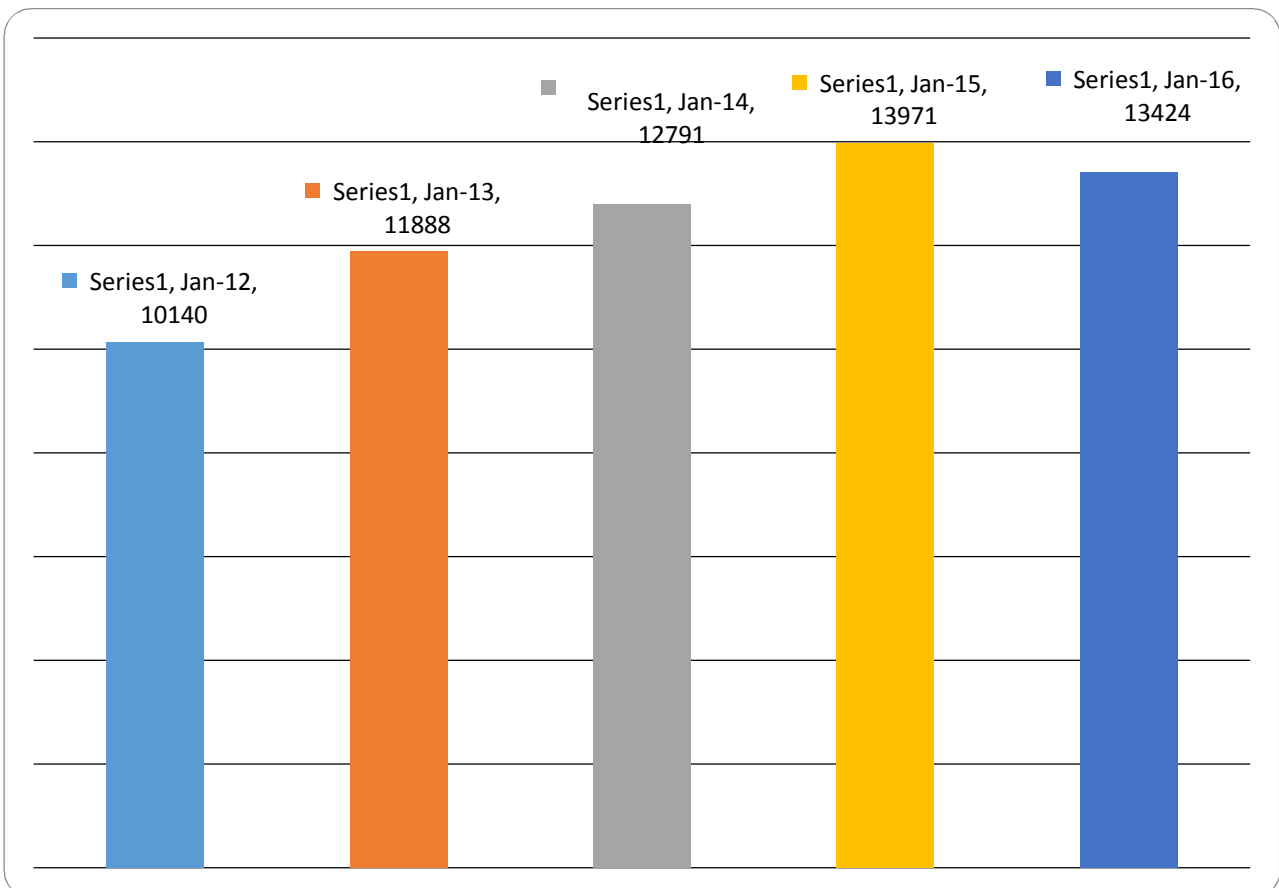
The Tygerberg Antibiotic Stewardship Committee (TASC) was re-established during 2012. A new antibiotic prescription sheet will be introduced during 2013, antibiotic stewardship rounds will be extended to general wards and regular point prevalence studies will be undertaken. The antibiotic guideline was also updated and will be distributed in poster format to all clinical areas.

# MEDICINE

## Patients on ART at TBH IDC (2008 – 2012)



## TBH IDC - Total number of clinic visits (2008 – 2012)



# MEDICINE

## Outreach:

Monthly outreach visits to TC Newman, Paarl Hospital, Worcester and Brewelskloof Hospitals continued. Outreach to Kayelitsha was discontinued in September 2012.

Further outreach activity planned for 2013 includes weekly visits to Eersteriver Hospital.

## Management:

Quarterly multidisciplinary business meetings takes place in order to continuously evaluate the care that is being delivered. Staff members represented at the meetings include doctors, nurses and pharmacists.

Monthly mortality and morbidity meetings – mortalities are discussed in detail and used as a learning opportunity to change or enhance our patient care.

## Teaching:

Dr Cronje Heys completed his ID subspecialization and Dr Arifa Parker was awarded a discovery sub-specialization grant for 2013 - 2014. Dr Taljaard chaired the Infectious Diseases and Immunology theoretical module for 4<sup>th</sup> years. All the members of the division, Drs Botha, Prozesky, Thebe and Zeier, are involved with undergraduate teaching.

All the members of the division was involved in CME activities during 2011 including STD management courses for nurses and HIV management courses for doctors, nurses and pharmacists. Dr Thebe mentored 2 nurses to complete their NIM-ART training.

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 sub-district doctors continued.

The University of Fort Hare collaboration continued in 2012. The group of 40 registered nurses were the 6<sup>th</sup> group of students to complete the 1 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 are funded by research. Current protocols include our ShareCare down referral project, HPV Project (a study investigating the effect of cART on HPV infection in HIV positive women), the hepatitis B-HIV cohort study, and a comparative study of the progression of cervical dysplasia in HIV infected vs. non-infective women. Dr Prozesky remained part of the highly successful leDEA database project Apart from publications in journals the team has also completed several clinical audits and contributed to academic meetings.

## Resources

Posts	Number	Filled
Sub-specialist Grade 2 (shared with Division of General Medicine)	2	2
Principle medical officer (full time)	2	2
Subspecialist registrar	0	0
Posts (sessional –hours per week)		
Specialist	6	6

# MEDICINE

## Output

### Speciality Clinics:

ADULT ART STATS	2008	2009	2010	2011	2012
NEW STARTED ON ART	368	399	511	491	465
TRANSFER OUT (TFO)	192	170	202	409	480
TRANSFER IN (TFI)	18	38	56	86	44
LOST TO FOLLOW (LTF)	104 (12.5%)	111 (11.5%)	139 (11.5%)	174 (14%)	144 (14%)
DEATHS	21 (2.5%)	26 (2.7%)	31 (2.5%)	28 (2.2%)	39 (3.7%)
<b>TOTAL NUMBER ON ART</b>	<b>826</b>	<b>958</b>	<b>1199</b>	<b>1240</b>	<b>1033</b>

ADULT HIV CLINIC VISITS	2008	2009	2010	2011	2012
DOCTOR VISITS	5888	6593	7324	7233	5079
NURSE VISITS	4241	5293	2281	4233	4016
PHARMACY VISITS	-	-	3184	2505	2858
<b>TOTAL CLINIC VISITS</b>	<b>10 140</b>	<b>11 888</b>	<b>12 791</b>	<b>13 971</b>	<b>13 429</b>

### Comment on output

There is a slight decrease of outpatient visits. This is in line with our mandate to change the level of care at the clinic from a L1 service to a L2/3 service.

## Part 2

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

Building of the Source Isolation Ward for medical patients (Ward D 10) commenced late 2012 in line with the business plan written by Dr Taljaard. Estimated date of completion is June 2013. This ward will provide appropriate isolation to patients with diseases transmissible via the respiratory route. With the current burden of disease it is estimated that most patients admitted to the ward will have tuberculosis or suspected tuberculosis.

### Partnerships

#### National

Dr Taljaard

Appointed to the Provincial AIDS Council under chairmanship of the MEC for Health

Member of the Provincial HAST Policy Advisory Forum

Co-writer of the Provincial Infectious Diseases Framework accepted as an official policy document of the province in 2011

Stellenbosch University Rural Medical Education Partnership Initiative (SUR-MEPI) Project leader on 2 activities as part of this NIH grant and collaborates with the Knowledge translation Unit at UCT lung institute on another activity.

1. Research capacity building at Brewelskloof TB Hospital in Worcester by establishing a research forum and developing a clinical database for clinicians. A data capturer will be appointed in 2012 and research projects will be identified with the aim to publish in peer reviewed journals.
2. Continuous CME activities to Worcester HAST, Worcester Family Medicine and

Internal Medicine Divisions and Brewelskloof TB Hospital via a monthly combined academic and clinical meeting at Worcester Hospital.

3. Introducing PALSA-plus HIV/TB/STI training to undergraduate medical students as part of the ID theoretical module – this is a first in the country initiative that started in Febr 2012.

University of Fort Hare School of Nursing – training of primary care nurses in Management of HIV/TB and STI.

Dr. Prozesky. Principle site investigator for the leDEA Southern Africa HIV data collection initiative. Specifically piloting the programme - **To determine TB outcomes by linking South African ART programs with provincial TB registries** – at Tygerberg Hospital.

National EDL committee member.

#### **Achievements wrt research activities and research outputs:**

Number of publications from the department/division

Text books and contributions to text books.

25 Publications:

1. Gender differences in survival among adult patients starting antiretroviral therapy in South Africa: a multicentre cohort study.  
Cornell M, Schomaker M, Garone DB, Giddy J, Hoffmann CJ, Lessells R, Maskew M, **Prozesky H**, Wood R, Johnson LF, Egger M, Boule A, Myer L; International Epidemiologic Databases to Evaluate AIDS Southern Africa Collaboration. PLoS Med. 2012;9(9):e1001304. Epub 2012 Sep 4.
2. Tenofovir in second-line ART in Zambia and South Africa: collaborative analysis of cohort studies. Wandeler G, Keiser O, Mulenga L, Hoffmann CJ, Wood R, Chaweza T, Brennan A, **Prozesky H**, Garone D, Giddy J, Chimbetete C, Boule A, Egger M; leDEA Southern Africa Collaboration. J Acquir Immune Defic Syndr. 2012 Sep 1;61(1):41-8.
3. Rates and predictors of failure of first-line antiretroviral therapy and switch to second-line ART in South Africa. Fox MP, Cutsem GV, Giddy J, Maskew M, Keiser

O, **Prozesky H**, Wood R, Hernán MA, Sterne JA, Egger M, Boule A; leDEA-SA collaboration. J Acquir Immune Defic Syndr. 2012 Aug 1;60(4):428-37.

4. Electronic decision protocols for ART patient triaging to expand access to HIV treatment in South Africa: a cross sectional study for development and validation. Mitchell M, Hedt BL, **Eshun-Wilson I**, Fraser H, John MA, Menezes C, Grobusch MP, Jackson J, **Taljaard J**, Lesh N. Int J Med Inform. 2012 Mar;81(3):166-72.
5. Current status and future prospects of epidemiology and public health training and research in the WHO African region. **Nachega JB**, Uthman OA, Ho YS, Lo M, Anude C, Kayembe P, Wabwire-Mangen F, Gomo E, Sow PS, Obike U, Kusiaku T, Mills EJ, Mayosi BM, Ijsselmuiden C. Int J Epidemiol. 2012 Dec;41(6):1829-46. doi: 10.1093/ije/dys189.
6. Impact of immune reconstitution inflammatory syndrome on antiretroviral therapy adherence. **Nachega JB**, Morroni C, Chaisson RE, Goliath R, Efron A, Ram M, Maartens G. Patient Prefer Adherence. 2012;6:887-91.
7. Impact of timing of antiretroviral therapy initiation on survival of cervical squamous intraepithelial lesions: a cohort analysis from South Africa. **Zeier MD, Nachega JB**, Van Der Merwe FH, **Eshun-Wilson I, Van Schalkwyk M, La Grange M**, Mason D, Louw M, Botha MH. Int J STD AIDS. 2012 Dec;23(12):890-6.
8. Antiretroviral therapy adherence and drug-drug interactions in the aging HIV population. **Nachega JB**, Hsu AJ, Uthman OA, Spinewine A, Pham PA. AIDS. 2012 Jul 31;26 Suppl 1:S39-53.
9. Adherence to antiretroviral therapy during and after pregnancy in low-income, middle-income, and high-income countries: a systematic review and meta-analysis. **Nachega JB**, Uthman OA, Anderson J, Peltzer K, Wampold S, Cotton MF, Mills EJ, Ho YS,

- Stringer JS, McIntyre JA, Mofenson LM. *AIDS*. 2012 Oct 23;26(16):2039-52.
10. Earlier initialization of highly active antiretroviral therapy is associated with long-term survival and is cost-effective: findings from a deterministic model of a 10-year Ugandan cohort. Mills FP, Ford N, **Nachega JB**, Bansback N, Nosyk B, Yaya S, Mills EJ. *J Acquir Immune Defic Syndr*. 2012 Nov 1;61(3):364-9.
  11. Second-line antiretroviral therapy: long-term outcomes in South Africa. Murphy RA, Sunpath H, Castilla C, Ebrahim S, Court R, Nguyen H, Kuritzkes DR, Marconi VC, **Nachega JB**. *J Acquir Immune Defic Syndr*. 2012 Oct 1;61(2):158-63.
  12. Update on World Health Organization HIV drug resistance prevention and assessment strategy: 2004-2011. Jordan MR, Bennett DE, Wainberg MA, Havlir D, Hammer S, Yang C, Morris L, Peeters M, Wensing AM, Parkin N, **Nachega JB**, Phillips A, De Luca A, Geng E, Calmy A, Raizes E, Sandstrom P, Archibald CP, Perriens J, McClure CM, Hong SY, McMahon JH, Dedes N, Sutherland D, Bertagnolio S. *Clin Infect Dis*. 2012 May;54 Suppl 4:S245-9.
  13. Cross-cultural adaptation and validation of the self-reporting questionnaire among HIV+ individuals in a rural ART program in southern Uganda. Nakimuli-Mpungu E, Mojtabai R, Alexandre PK, Katabira E, Musisi S, **Nachega JB**, Bass JK. *HIV AIDS (Auckl)*. 2012;4:51-60.
  14. Progression and persistence of low-grade cervical squamous intraepithelial lesions in women living with human immunodeficiency virus. **Zeier MD**, Botha MH, van der Merwe FH, **Eshun-Wilson I**, **van Schalkwyk M**, **la Grange M**, Mason D, Louw M, **Nachega JB**. *J Low Genit Tract Dis*. 2012 Jul;16(3):243-50.
  15. Sub-optimal CD4 T-lymphocyte responses among HIV infected patients who develop TB during the first year of ART. **Eshun-Wilson I**, **Taljaard JJ**, **Nachega JB**. *J AIDS Clin Res*. 2012 Jan 29;3(135).
  16. Boceprevir and telaprevir for the treatment of chronic hepatitis C genotype 1 infection: an indirect comparison meta-analysis. Cooper CL, Druyts E, Thorlund K, **Nachega JB**, El Khoury AC, O'Regan C, Mills EJ. *Ther Clin Risk Manag*. 2012;8:105-30.
  17. HIV-Related Stigma, Isolation, Discrimination, and Serostatus Disclosure: A Global Survey of 2035 HIV-Infected Adults. **Nachega JB**, Morrioni C, Zuniga JM, Sherer R, Beyrer C, Solomon S, Schechter M, Rockstroh J. *J Int Assoc Physicians AIDS Care (Chic)*. 2012 May-Jun;11(3):172-8.
  18. Differences in clinical outcomes among hepatitis C genotype 1-infected patients treated with peginterferon alpha-2a or peginterferon alpha-2b plus ribavirin: a meta-analysis. Druyts E, Mills EJ, **Nachega J**, O'Regan C, Cooper CL. *Clin Exp Gastroenterol*. 2012;5:11-21.
  19. Safety and effectiveness of efavirenz versus nevirapine-based regimens in resource-limited settings: evidence, clinical practice and modelling projections. Uthman O, Mofenson LM, **Nachega JB**. *AIDS*. 2012 Mar 13;26(5):639-41.
  20. Guidelines for improving entry into and retention in care and antiretroviral adherence for persons with HIV: evidence-based recommendations from an International Association of Physicians in AIDS Care panel. Thompson MA, Mugavero MJ, Amico KR, Cargill VA, Chang LW, Gross R, Orrell C, Altice FL, Bangsberg DR, Bartlett JG, Beckwith CG, Dowshen N, Gordon CM, Horn T, Kumar P, Scott JD, Stirratt MJ, Remien RH, Simoni JM, **Nachega JB**. *Ann Intern Med*. 2012 Jun 5;156(11):817-33.
  21. HIV Treatment Adherence, Patient Health Literacy, and Health Care Provider-Patient Communication: Results from the 2010 AIDS Treatment for Life International Survey. **Nachega JB**, Morrioni C, Zuniga JM, Schechter M, Rockstroh J, Solomon S, Sherer R. *J Int*

- Assoc Physicians AIDS Care (Chic). 2012 Mar-Apr;11(2):128-33.
22. Integration of data from multiple sources for simultaneous modelling analysis: experience from nevirapine population pharmacokinetics. Svensson E, van der Walt JS, Barnes KI, Cohen K, Kredo T, Huitema A, **Nachega JB**, Karlsson MO, Denti P. Br J Clin Pharmacol. 2012 Sep;74(3):465-76.
  23. Rise in rifampicin-monoresistant tuberculosis in Western Cape, South Africa. Mukinda FK, Theron D, van der Spuy GD, Jacobson KR, Roscher M, Streicher EM, Musekiwa A, Coetzee GJ, Victor TC, Marais BJ, **Nachega JB**, Warren RM, Schaaf HS. Int J Tuberc Lung Dis. 2012 Feb;16(2):196-202.
  24. Methodology matters: what type of research is suitable for evaluating community treatment supporters for HIV and tuberculosis treatment? Maher D, Harries AD, **Nachega JB**, Jaffar S. Trop Med Int Health. 2012 Mar;17(3):264-71.
  25. Depression, alcohol use and adherence to antiretroviral therapy in sub-Saharan Africa: a systematic review. Nakimuli-Mpungu E, Bass JK, Alexandre P, Mills EJ, Musisi S, Ram M, Katabira E, **Nachega JB**.

## Teaching and Training (under-, postgraduate and elective students).

### Undergraduate

Chair of Infectious diseases and Immunology module

### Post graduate

Sub spesialisasie in Infeksie siektes – Dr Cronje Heys

Post basic training for nurses in HIV management (University of Fort Hare) - J Taljaard (didactic lectures), family clinic doctors and nurses (1 week TBH practical rotation)

### Special achievements

Treating a large number of chronic disease patients with regimens unforgiving of non-adherence while at the same time streamlining patient flow to avoid treatment fatigue requires more than a regular clinic visit. The IDC interactive clinical database is running smoothly. Paper-based note-taking is still preferred by physicians and required by hospital regulations, but here it is done on a template which is a per-visit updated report of previous diagnoses, treatment status, medications and laboratory investigations. Prescription errors are mostly eliminated and doctors respond to prompts, easing rotating staff into their new jobs. Monitoring and reporting of clinical conditions, treatment associated adverse events, mortality and morbidity reports, provincial statistics, and collaboration on national and southern African cohorts have all been made possible by electronic record-keeping. Transfer-out letters are instantly created and neatly summarize years of data in an instant. Apart from the ID Clinic database, the Infectious Diseases consultation database keeps record of referrals, while the COLPOS database, the soon-be-implemented lymphoma and hepatitis databases form secure, convenient and powerful server-based tools for retrospective and future monitoring of these cohorts.

With HIV being a chronic disease, patients are expected to remain on treatment for decades. But they do move around to other provinces! Not surprisingly, they also return to our care after a year or two. Future choice of treatment regimens depend on good record-keeping and easy access to clinical notes. Lack of storage space within the clinic has prompted the implementation of an electronic e-filing system. This is web-based, giving doctors remote access to patient folders and management protocols of Infectious Diseases/HIV. Offices are being liberated from overflowing filing cabinets and mountains of clinic folders. The database has now expanded to include support of the newly established HBV/HIV co-infection clinic in collaboration with the divisions of medical virology and gastroenterology.



# MEDICINE

Example of information generated by database:

## Adults: Number of patients who started during the month

Gender	Total
Female	17
Male	11
	<b>28</b>

## Number of patients on TBH Rollout by the end of the month

Gender	Total
Female	750
Male	449
	<b>1199</b>

## Number of patients who stopped TBH Rollout ART during the month

Gender	Endpoint	Total
Female	Died	2
Female	Interrupt Therapy for Rollout	1
Female	Lost to Follow Up	16
Female	Transferred	4
Male	Died	1
Male	Lost to Follow Up	14
		<b>38</b>

## Division of Nephrology Prof MR Davids

### Summary of activities

#### Resources

Posts (full time)	Number	Filled
Nephrologists	3	3
Registrars	4	4
Posts (sessional – how many hours per week)		
	0	

#### Output

Admissions:  
Ward A7 – total 333 admissions  
Patients on chronic dialysis at year-end:  
Haemodialysis – 68; peritoneal dialysis – 52

OPD visits for the year:

Nephrology OPD - 2213 (new 372, follow up 1841)

Peritoneal Dialysis Clinic -	725
Transplant Clinic -	2616
Haemodialysis Units -	8121

Procedures:

Haemodialysis: Chronic 7233, acute 889

Plasmapheresis: 153

Charcoal haemoperfusion: 7

Kidney biopsies: 182

Kidney Transplants:

New renal transplants – 18

Living donor transplants – 13

Surviving pts followed up at TBH – 165

Cumulative total transplants - 911

# MEDICINE

Assessments for dialysis/transplant program:  
Total assessed xx, accepted xx, not accepted xx, no decision xx.

## Part 2

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

New water treatment system resulting in dramatically improved water quality

### Community outreach programmes / community service and interaction.

Nephrology training of fellows from the developing world continues: Dr Wala from Kenya completed his training. Drs Abene and Gimba from Nigeria came for 3-month visits to train in peritoneal dialysis. Dr Kapembwa from Zambia started his nephrology training and will stay for 2 years. These fellows are sponsored by the International Society of Nephrology and the International Society of Peritoneal Dialysis.

PPIs with Paarl and Vredenburg Units of National Renal Care, and Hermanus Unit of Fresenius Medical Care continues successfully. Improves access to dialysis and improves QOL of patients involved.

### Partnerships

National

Private sector

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.

### Achievements wrt research activities and research outputs:

Number of publications from the department/division

Text books and contributions to text books. KAMEL KS, DAVIDS MR, LIN S-H, HALPERIN ML.

Interpretation of electrolyte and acid-base parameters in blood and urine. In *The Kidney*, Saunders, Philadelphia, USA, 2011: 897-929.

NEL JD, MOOSA MR. The outcome of HIV-positive patients admitted to intensive care units with acute kidney injury. In *Renal Failure - The Facts*, Intech, Rijeka, Croatia (local name: Hrvatska), 2012: 197-202.

VAN HOOFF J, VAN DER WALT I, KALLMEYER J, MILLER D, DAWOOD S, MOOSA MR, CHRISTIAANS M, KARPF C, UNDRE N.

Pharmacokinetics in stable kidney transplant recipients after conversion from twice-daily to once-daily Tacrolimus formulations.

*Therapeutic Drug Monitoring* 2012; 34 : 46-52.

### Supervision of Masters Research Projects

BAPOO NA. New onset diabetes in renal transplant recipients at Tygerberg Hospital. *MMed*, 2012. 23 pp. Supervisor: Nel JD.

### Teaching and Training (under-, postgraduate and elective students).

Internal Medicine registrars trained in nephrology (Drs Andre Nortje, Nabeel Bapoo, Reda Elarbi, Jacques van Deventer). Dr Sebastian continues his sub-specialist training. Good pass rate in nephrology for undergraduate MBChB students.

### Special achievements

Prof Davids conducted a teaching visit to Nepal as an Educational Ambassador of the International Society of Nephrology.

## Division of Neurology

PROF J CARR

### Summary of activities:

#### Resources:

Posts (Full time)	Number	Filled
3	3	3
Posts (sessional – how many hours worked per week)		
1		12

#### Output:

Outpatient visits:	34 969
Admissions:	391
EEG	1 423
EMG	561
Sleep Studies	38

#### Comment on output:

Output unchanged compared to previous years.

# MEDICINE

## PART 2

### Faculty of Health Sciences

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

None

#### Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

Ongoing outreach to Worcester and Helderberg hospitals.

#### Partnerships

National:

Private:

#### International:

GEO-PD (Genetic Epidemiology of Parkinson's Disease Consortium)

Movement Disorders Society: Task Force on Africa

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

Number of publications from the department/division

1. Haylett WL, Keyser RJ, du Plessis MC, van der Merwe C, Blanckenberg J, Lombard D, Carr J, Bardien S. Mutations in the parkin gene are a minor cause of Parkinson's disease in the South African population. *Parkinsonism & Related Disorders* 2012 Jan;18(1):89-9.
2. Carr J. Classifying myoclonus: a riddle, wrapped in a mystery, inside an enigma. *Parkinsonism & Related Disorders* 2012 Jan;18 Suppl 1:S174-6.
3. Botha H, Carr J. Attention and Visual Dysfunction in Parkinson's disease. *Parkinsonism & Related Disorders* 2012; e-publication.
4. Van Der Merwe C, Haylett WI, Harvey J, Lombard D, Bardien S, Carr J. Factors influencing the development of early- or late-onset Parkinson's disease in a cohort of South African patients. *South African Medical Journal* 2012; 102(11) : 848-851.
5. Botha H, Ackerman C, Candy S, Carr JA, Griffith-Richards S, Bateman KJ. Reliability and Diagnostic Performance of CT Imaging: Criteria in the Diagnosis of Tuberculous Meningitis. *PLoS ONE*. June 2012 | Volume 7 | Issue 6 | e38982.

#### Text books and contributions to text books

LRRK2-Associated Parkinson's Disease. Parkinson's Disease. 2nd Edition. Editors Pfeiffer RF, Wszolek ZK, Ebadi M. (in press).

#### Teaching and Training (under, postgraduate and elective students)

Professor Carr is chairperson of the Neuroscience block.

**Department of Medicine, Division of Pharmacology**  
**Prof B Rosenkranz**

#### Summary of activities:

##### Services:

The service function of the Division of Pharmacology includes Therapeutic Drug Monitoring (TDM, 32 drugs) and the operation of the nationwide Tygerberg Poison Information Centre, both offered as a 24-hour service. A total number of 22 129 samples were analysed in the TDM laboratory in 2012, of which 51% 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 6596 consultations; 42% of the cases were related to non-drug chemicals, 40% to drug overdoses, 10% to biological exposures and 8% was non-patient related calls. 36% of the calls came from the Western Cape and remarkably, 64% actually 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 Ethics Committee of the Faculty of Medicine and Health Sciences.

# MEDICINE

## Teaching:

Under- and postgraduate programmes for medical and physiotherapy students were successfully presented by the Division of Pharmacology. The revised curriculum for MB, ChB students includes a new Clinical Pharmacology module for fifth year students. This newly designed 3-week module has first been held by the Division in 2012.

The Diploma in Pharmaceutical Medicine course was successfully presented by the Division, together with Tiervlei Trial Centre. In 2012, 15 students participated in this programme. The course received Affiliate status by the EU IMI initiative PharmaTrain; this important network assists in international recognition and in joint teaching programmes with course providers internationally.

Three MSc and 4 PhD students were registered in the Division in 2012, an additional PhD student from the Department of Paediatrics was co-supervised by Prof Rosenkranz. Three MSc students received their degrees in this year. In addition, 3 German medical students (Wuerzburg University) performed the practical work of their medical thesis (Dr med) in the Division.

The Division was co-organiser of the 2nd Annual Novartis & Stellenbosch University Clinical Science Workshop.

## Research:

The clinical pharmacology research addressed the pharmacokinetics of TB drugs and antiretrovirals in special patient populations, 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.

## Resources:

Posts (Full time)	Number	Filled
Professor	1	1
Senior Specialist / Researcher	4	3
Principle pharmacist / Scientist	2	2
Researcher	1	0
Technologists	6	6
Administrative assistant	1	1
Technical Assistant	1	1
Posts (sessional – how many hours worked per week)		
Specialist	3	3

The Division was actively supported by 2 Honorary Lecturers, clinical consultants and external experts assisting with some of the teaching load.

## Output:

Tygerberg Poison Information Centre / –  
Consultations: 6 596  
Laboratory services (TDM) – Analyses: 22 129

## Comment on output:

Further staff development in the Division will assist in providing an appropriate clinical pharmacology consultancy service to Tygerberg Hospital and to the Province. The toxicology service provided by the Tygerberg Poison Information Centre remains 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

# MEDICINE

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 Medicine and Health Sciences Infrastructure development – upgrading, new equipment, etc. (highlights)**

The contact to the clinical departments was strengthened by increased involvement of Clinical Pharmacology in teaching and special clinical pharmacology and toxicology ward rounds, provided

#### **Partnerships**

##### **National / Nasionaal:**

- 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 collaborative research projects.
- Research co-operation with the Tygerberg Department of Paediatrics and Child Health, the Desmond Tutu TB Centre, the Division of Haematology 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 17<sup>th</sup> 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 serves as member of this Committee and as webmaster for SASBCP.
- Prof. Rosenkranz is board member of the NGO, HOPE Cape Town, which is closely affiliated with the Faculty of Medicine and Health Sciences.

##### **Private:**

Analysis of drugs for private pathologists and other institutions.

Biological tests are regularly performed for the WP Blood Transfusion Services.

The importance of the Tygerberg Poison Information Centre for industry is highlighted by regular donations from the Agricultural Crop Protection Dealers Association of SA.

##### **International:**

International research collaborations continued with the Clinics for Infectious Diseases, University of Wuerzburg, Germany and the Department of Pharmacy, 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 capacity building and training for South African and German postgraduate students, training seminars and student exchange visits. Three medical students from Wuerzburg spent 5 months each in the Division of Pharmacology.

Prof Rosenkranz is 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, SAICAM and AFRO steering group on a project: Feasibility Study for a Sub-Regional Poison Centre in the East Africa. Multi-stakeholders meetings in Lusaka, Zambia.

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

Number of publications from the department/division

1. Fasinu P, Bouic P, Rosenkranz B. Liver-based in vitro technologies for drug biotransformation studies – a review. *Curr Drug Metabol* 2012; **13**: 215-224.

2. Fasinu PS, Bouic PJ, Rosenkranz B. An overview of the evidence and mechanisms of herb-drug interactions. *Frontiers in Pharmacology* 2012; **3**(69): 1 – 19.
3. Fasinu PS, Rosenkranz B. Durg-drug interaction in ageing HIV-infected individuals. *African Journal of Pharmacology* 2012; **6**(38): 2710-2723.
4. Rosenkranz B. Snake bites, spider bites and scorpion stings. *CME* 2012; **30**(10): 355.
5. Müller GJ, Mödler H, Wium CA, Veale DJH. Scorpion sting in southern Africa: diagnosis and management. *CME* 2012; **30**(10): 356 – 361.
6. Müller GJ, Mödler H, Wium CA, Veale DJH, Marks CJ. Snake bite in southern Africa: diagnosis and management. *CME* 2012; **30**(10): 362 – 381.
7. Müller GJ, Wium CA, Marks CJ, du Plessis CE, Veale DJH. Spider bite in southern Africa: diagnosis and management. *CME* 2012; **30**(10): 382 -391.
8. Njovani XW, Fasinu PS, Rosenkranz B. Comparative evaluation of warfarin utilisation in two primary healthcare clinics in the Cape Town area. *Cardiovascular Journal of Africa* 2012; **23**: 1-5.
9. Fasinu PS. When garlic makes you pregnant. *New Voices in Sciences* 2012, 29.
10. Huisamen B, Dietrich D, Bezuidenhout N, Lopes J, Flepsi B, Blackhurst D, Lochner A. Early cardiovascular changes occurring in diet-induced, obese insulin-resistant rats. *Mol Cell Biochem* 2012; **368**: 37-45.
11. Fasinu P, Choonara YE, Khan RA, Du Toit LC, Kumar P, Ndesendo VMK, Pillay V. Flavonoids and polymer derivatives as CYP3A4 inhibitors for improved oral drug bioavailability. *Journal of Pharmaceutical Sciences* 2012; DOI 10.1002/jps.23382.
12. Kiser JJ, Zhu R, D'Argenio DZ, Cotton MF, Bobat R, McSherry GD, Madhi SA, Carey VJ, Seifart HI, Werely CJ, Fletcher CV. Isoniazid pharmacokinetics, pharmacodynamics and dosing in South African infants. *Therapeutic Drug Monitoring* 2012; **34**: 446-451.
13. 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 Pediatrics* 2012 (published on November 21, 2012 as Epub ahead of print)
14. Zhu R, Kiser JJ, Seifart HI, Werely CJ, Mitchell CD, D'Argenio DZ, Fletcher CV. The pharmacogenetics of NAT2 enzyme maturation in perinatally HIV exposed infants receiving isoniazid. *Journal of Clinical Pharmacology* 2012; **52**: 511-519.

Text books and contributions to text books  
NA

### Conference contributions

1. Leach K, Rosenkranz B, Bloom BJ, McCauley T. Icatibant duration of action during bradykinin challenge. American Academy of Allergy Asthma and Immunology (AAAAI) Annual Meeting, Orlando, March 2012.
2. Trummlitz G, Nell H, van Schalkwyk D, Rosenkranz B, Stonier P. S- and R-flurbiprofen pharmacokinetics following repeated transdermal medication to healthy subjects. Annual European Congress of Rheumatology EULAR 2012, Germany, June 2012.
3. Rosenkranz B. Rational dosing of drugs in children – a therapeutic challenge. 5<sup>th</sup> All Africa Congress on Basic and Clinical Pharmacology, Accra, Ghana, July 2012.
4. Van Rensburg L, van Zyl JM, Wiid IJF. Drug Susceptibility Testing of Mycobacterium tuberculosis to Drug Entrapped Liposomes. 5<sup>th</sup> All Africa Congress on Basic and Clinical Pharmacology, Accra, Ghana, July 2012.
5. Smith J, van Zyl JM, Barry DM, Maritz G. Prophylactic surfactant treatment for respiratory distress syndrome in preterm lambs: Comparison of a novel peptide-containing synthetic surfactant (Synsurf) with porcine-derived surfactant (Curosurf®). 6<sup>th</sup> European Congress of

- Pharmacology (EPHAR 2012), Granada, Spain, July 2012.
6. Van Zyl JM, Smith J, Hawtrey A. Utilization of deadspace, capnometry, lung mechanics, blood gas analysis and radiography to determine the efficacy of a peptide-containing synthetic lung surfactant in a rabbit surfactant-depleted model. 6<sup>th</sup> European Congress of Pharmacology (EPHAR 2012), Granada, Spain, July 2012.
  7. Van Zyl JM, Vermant J, van Loon W, Vandebriel S, Smith J, van der Bijl P. Thermodynamic comparison of lung surfactant replacements. 6<sup>th</sup> European Congress of Pharmacology (EPHAR 2012), Granada, Spain, July 2012.
  8. Van Rensburg L, van Zyl JM, Seifart HI, Smith J. Studies of liposomal preparations of anti-tubercular drugs. 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  9. Ramaroka S, Kruger M, Rosenkranz B. Unlicensed and off label drug use in highly specialized paediatrics ambulatory care. 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  10. Van Zyl JM, Smith J, van der Bijl P, Vermant J, van Loon W, Vandebriel S. Adsorption kinetics and inactivation of pulmonary surfactant replacements. 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  11. Bauer NB, von Bibra MVB, Rosenkranz B, Cotton MC, Klinker H, Rabie H. Do subtherapeutic drug levels of efavirenz or lopinavir predict virological failure in children on antiretroviral therapy? 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  12. Wium CA, Muller GJ, Veale DJH. Paediatric pesticide poisoning: The Tygerberg Poison Information Centre Experience (1993 – 2010). 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  13. Fasinu PS. The potential of *H. Hemerocallidea* and *S. Frutescens* for herb-drug interaction with antiretroviral drugs. 56<sup>th</sup> Annual Academic Day, Faculty of Health Sciences, Stellenbosch University, August 2013.
  14. Rosenkranz B. HAE: The situation in South Africa. Workshop "From genetics through international research to national guidelines and health care services: Quo vadis Romania?" Romania, August – September 2012.
  15. Wium CA, Veale DJH, Marks C, Tagwireyi D, Menge T, Rhalem N. Poison Centre's in Africa: A one year comparative study (2011). The 8th Congress of Toxicology in Developing Countries (8CTDC), Bangkok, Thailand, September 2012.
  16. Fasinu P, Gutmann H, Schiller H, Birlinger B, Bijasson L, Faller S, Seifart H, Bouic P, Rosenkranz B. Herb-drug interaction potential of popular South African Medicinal herbs: an in vitro assessment. 46<sup>th</sup> Annual congress of the SASBCP in association with the Department of Family Medicine (UP) and TOXSA, Pretoria, October 2012.
  17. Rosenkranz B. Rational dosing of drugs in children a therapeutic challenge. 46<sup>th</sup> Annual congress of the SASBCP in association with the Department of Family Medicine (UP) and TOXSA, Pretoria, October 2012.
  18. Bauer N, von Bibra M, Rosenkranz B, Cotton M, Klinker H, Rabie H. Do subtherapeutic drug levels of efavirenz or lopinavir predict virological failure in children on antiretroviral therapy? SA HIV Clinicians Society Conference, Cape Town, November 2012.

Prof Rosenkranz is Associate Editor of *Frontiers in Pharmaceutical Medicine and Outcomes Research*.

## **Teaching and Training (under, postgraduate and elective students)**

### **Under-graduate:**

The Division actively contributed to undergraduate teaching of medical and physiotherapy students. The main focus of the academic lecturing service was teaching of undergraduate MB, ChB medical students beginning from the foundation phase and throughout the curriculum. The revised curriculum for MB, ChB students includes a new Clinical Pharmacology module for fifth year students. This newly designed 3-week module has been presented by the Division in 2012. An elective medical student performed her research project in the Poison Information Centre.

Bedside teaching of Clinical Pharmacology was provided by members of the Division and other clinical consultants. Pharmacology teaching of physiotherapy students familiarizes them with the appropriate use of drugs and their side effects that potentially could affect physical therapy treatment of patients.

### **Post-graduate:**

The Division was able to significantly expand its Pharmaceutical Medicine postgraduate diploma course. In 2012, 15 students participated in this programme (diploma or short course). The course received Affiliate status by the EU IMI initiative PharmaTrain; this important network will assist in international recognition and in joint teaching programmes with course providers internationally.

Three MSc and four PhD students were supervised by the Division throughout the year, an additional PhD student from the Department of Paediatrics was co-supervised by Prof Rosenkranz. Three MSc students received their degrees in this year (Desiré Fouché, Lyné van Rensburg – both with distinction – and Dr Anthony Liwa). In addition, 3 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, Pharmacology contributed to lecturing of MSc students in Physiotherapy, and twelve pharmacist intern students were tutored individually during a two week period in the Division in aspects relating to pharmacology and toxicology as part of their requirements set by the HPCSA and the SA Pharmacy Council, respectively.

The Division was co-organiser of the 2nd Annual Novartis & Stellenbosch University Clinical Science Workshop in October 2012. The workshop addressed issues around clinical epidemiology, biostatistics, and modelling and simulation, ethics in drug development, and benefit risk assessment. A total of 38 participants, mainly postgraduate students, attended

## **Special achievements and other highlights not covered by this template**

The Division developed a Strategic Plan as roadmap for its future role and function. As the first step, an audit of current activities, infrastructure and outputs was performed. As the second step, the Division held a Strategic Planning Workshop on 13-14 November 2012. All staff of the Division participated, together with members of the Department of Medicine, other Departments in the Faculty, Faculty Management, Tygerberg Hospital and external guests. This resulted in an Action Plan for (Clinical) Pharmacology, with the key elements undergraduate education, postgraduate education, bioanalytics & TDM, Tygerberg Poison Information Centre, research, income generation & funding, marketing, and networking & opportunities. The Executive Committee of the Division will now be responsible for implementation of the Action Plan.



## Pulmonology Prof E M Irusen

### Summary of activities:

#### ANNUAL REPORT – A5ICU (2012)

A5 ICU functions as a 7-bed unit provided that a full complement of nursing staff is available. The unit is currently under the combined supervision of both respiratory and critical care specialists (3 permanent consultants, 2 part time consultants and 1 senior registrar in respiratory medicine). The current nurse: patient ratio is 1:2. Although classified as a medical ICU, the current shortage of ICU beds in the Western Cape occasionally warrants the admission of non-medical patients.

In 2012 260 patients were admitted to the ICU, 213 (81%) of whom were medical patients and 41 (19%) non-medical. Of the non-medical patients, 17(41%) were referred from the Obstetrics- Gynaecology department and 24 (59%) were Post-surgical patients. One-hundred-and-twelve (43%) patients were male and 147 (57%) patients were female. The average age of the patients was 39 years and the mean length of stay per patient was 5.5 days. There were 33 deaths for the year, translating into a 12.7% ICU mortality rate.

The limitation that the shortage of trained ICU nursing staff imposes on the number of admissions to the ICU remains an on-going problem. Currently there are 16 (opposed to 18 in 2011) registered nurses allocated to the unit, 10 of whom are trained in critical care. In addition there are 4 staff nurses and 5 nursing assistants. This continuing staff shortage resulted in A5ICU functioning as a 6 bed unit on a regular basis throughout the year. Measures to recruit more ICU trained nurses remain paramount with increased advertisement for senior nursing posts and increased incentives as possibilities.

Noteworthy in 2012 was a visit to the unit from WC MEC Theuns Botha in response to a letter of praise in the Cape Times and a subsequent Christmas lunch for the staff.

We continued to implement the Best Care Always campaign bundles for VAP and CLABSI. Calf pumps for mechanical DVT prophylaxis as well as subglottic-suctioning

devices were acquired, all as part of the BCA campaign bundles. This effort was recognised and our unit was awarded with the excellence in infection control award for the year 2012.

The ICU was painted and further upgrades are in progress.

No new ventilators were acquired in 2012. There still remains a need for additional ventilators especially with the ever increasing demand for ICU beds and the fact that our technologist service is no longer available 24/7. Bed pressure remains extremely high with a full bed-occupancy throughout the year. There remains an urgent need to expand the number of Medical ICU beds to provide care to the increasing number of critically ill patients our drainage area is faced with.

I believe that should these issues be addressed viz. the nursing and bed shortage and lack of adequate equipment, the service that we provide to our community will be greatly improved.

#### THEATRE

The 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. Unit was very sad to note the sudden unexpected passing of Prof Chris Bolliger – his research experience and endeavours will be sorely missed.

# MEDICINE

## Resources:

Posts (Full time)	Number	Filled
Professor Principal Specialist	2	2
Specialist	2	2
Registrar (Number only)	5	5
Senior Registrar	2	2
<b>Posts (sessional – how many hours worked per week)</b>		
Specialists	3	1
Part time posts		
Locum posts		
Full time equivalents		
<b>Number of ICU beds:</b>	<b>7</b>	<b>7</b>
Ass Dir Clin Technologist	1	1
Chief Clinical Technologist	2	2
Clinical Technologist	5	5

## SPECIAL CLINICS C7C EAST OUT PATIENT DEPARTMENT

There were 1059 new patients assessed and 1722 patients who are seen on a chronic basis

<b>Lung function Lab - Total procedures</b>				<b>6616</b>
			total per month	average per month
<b>Primary evaluations</b>			4670	389
<b>Paediatric lung function</b>			932	78
<b>Plethysmography</b>			533	44
<b>Helium dilution-lung volumes</b>			20	2
<b>Diffusion capacity</b>			332	28
<b>Exercise studies</b>			129	11
<b>Broncho-provocation tests</b>			0	0
<b>Intensive Care - Total procedures</b>				<b>120573</b>
			<b>Adult</b>	<b>Paediatric</b>
			<b>Total</b>	<b>Average per month</b>
<b>Bloodgases</b>	13430	14688	28118	1119
<b>Haematocrits</b>	13430	14688	28118	1119
<b>Ventilator circuits</b>	129	269	398	11
<b>Ventilator calibrations</b>	1718	3854	5572	143
<b>Arterial line placement/repair</b>	2417	3707	6124	201
<b>Pulmonary artery catheter placement/repair</b>	66		66	6
<b>CVP placement/repair</b>	1095	108	1203	91
<b>Haemodynamic studies</b>	104		104	9
<b>MIP &amp; MEP procedures</b>	93		93	8
<b>Assistance with ventilation</b>	4824	7875	12699	402
<b>Blood sample collection</b>	99	49	148	8
<b>Electrolytes/Metabolytes (Na, K, Ca, Cl, Glu &amp; Lac)</b>	13430	14688	28118	1119
<b>Monitor assembled</b>	2504	7308	9812	209

# MEDICINE

## ICU Stats

Month	Total number of admissions	Medical	Non-Medical	Number of death
January	19	16	3	4
February	20	17	3	1
March	27	24	3	4
April	24	18	6	2
May	29	19	10	1
June	18	17	1	2
July	22	19	2	2
August	23	15	5	3
September	13	11	1	1
October	27	19	7	3
November	21	21	0	3
December	17	17	0	7
<b>Total</b>	<b>260</b>	213	41	33
<b>Percentage</b>				<b>12.7</b>

## Bronchoscopy Theatre

Bronchoscopy	Rigid Bronchoscopy	Forceps Biospy	Foreign body	Bronchial washings	BAL	TBNA	Tru-cut Biopsy	Abrahms needle biopsy	TTNA	Thoracic ultrasound	ICD	Thoracoscopy	GA	Total
32	2	6	2	15	1	14	0	2	21	21	5	2	23	72
50	6	9	2	23	4	20	0	3	30	41	2	1	20	99
52	4	7	1	24	12	9	2	4	29	24	3	1	19	93
41	2	1	0	11	7	8	0	2	13	29	2	1	15	73
46	3	5	1	12	1	17	0	4	23	34	3	0	24	80
46	2	1	3	14	10	15	3	4	27	35	5	1	18	89
48	2	6	0	19	8	12	0	1	19	27	8	1	22	90
39	0	5	1	15	3	11	1	2	16	30	3	1	15	73
48	1	12	1	27	0	14	1	0	21	19	2	0	22	82
50	0	16	1	29	3	17	1	7	32	40	4	1	23	94
45	0	9	3	18	1	20	1	5	23	36	3	1	16	86
48	1	4	5	23	1	23	2	4	19	27	0	0	16	78

# MEDICINE

## **Partnerships**

Prof EM Irusen

Faculty

Module Chair: Respiratory

Inter-departmental: Training of registrars from anaesthesiology, occupational medicine and emergency medicine in internal medicine, radiology and pulmonology.

Department:

Co-Chair: Thursday Academic Programme

Regional

Prof CT Bolliger

Co-operates with National Council against Smoking (NCAS) in tobacco control measures, work-shops in smoking cessation

Prof Bolliger, department of Medicine:

Chairman of Research Committee

## **National**

### **Prof EM Irusen:**

Serves on advisory boards of GSK and MSD

SA Thoracic Society

- Past-President
- Scholarship reviewer
  - College of Medicine examiner
  - National examiner: Masters & PhD dissertations
  - CPD: about 30 lectures/yr on all aspects of Resp Disease

### **Prof CT Bolliger:**

1. Consultant for GSK, Pfizer
2. Consultant to a private Swiss hospital group at the Hirslanden Clinic, Aarau, Switzerland
3. Consultant to the following hardware companies: Superdimension, Calypso
4. Works closely with the Swiss Federal Office of Public Health, currently implementing a project called "Hospital Quit Support", establishing smoking cessation clinics at all major Swiss hospitals.
5. Task force member of ATS/ERS task force on flexible bronchoscopy guidelines
6. Co-operation with Pulmonology / Thoracic Surgery Rikshospitalet, Oslo, Norway

7. Chairman smoking cessation guidelines for the Africa/Middle East region

## **International**

### **Prof EM Irusen**

- i) COPD Coalition: I'm on international executive. We've lobbied with WHO on anti-smoking strategies & work with healthcare professionals and governments to prioritise the care of COPD patients. We also co-ordinate World COPD day.
- ii) GOLD National Leader (GOLD-Global Initiative for Chronic Obstructive Lung Disease)
- iii) TASS Project: Targeting Asthma in Sub-saharan Africa. Has been extensively involved in outreach in terms of respiratory health –especially asthma, throughout sub-saharan Africa.
- iv) Collaborative Research: Prof T Robbins, University of Michigan: Respiratory Epidemiology.  
Journal Reviewer:  
Clinical Drug Investigation  
Clinical Infectious Diseases

### **Prof CT Bolliger**

Editor-in-chief: Respiration (journal).

Editor-in-Chief: Progress in Respiratory Research (Book Series)

Prof Bolliger is on the following editorial boards:

Associate Editor Nicotine Tobacco Research

EB member of Brazilian Respiratory Journal

Consultant to CHEST

Pneumon (Greek national pulmonology journal)

Prof Bolliger is president of EAB (European Association of Bronchology and Interventional Pulmonology). 2010

### **Prof CT Bolliger**

- ERS evaluation committee member
- Project leader HQS, national hospital based smoking cessation project

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

### Journal Articles (subsidised)

**ALI AYM, SAFWAT T, ONYEMELUKWE G, OTAIBI MAA, AMIR AA, NAWAS YN, AOUINA H, AFIF MH, BOLLIGER CT.** Smoking prevention and cessation in the Africa and Middle East Region: A consensus draft guideline for healthcare providers - executive summary. *Respiration* 2012; **83**: 423-432.

**BERNASCONI M, KOEGELEBERG CFN, VON GROOTE-BIDLINGMAIER F, MAREE DM, BARNARD BJ, DIACON AH, BOLLIGER CT.** Speed of ascent during stair climbing identifies operable lung resection candidates. *Respiration* 2012; **84**: 117-122.

**BOLLIGER CT.** *Respiration* in 2012. *Respiration* 2012; **83**: 1.

**CARR MI, KOEGELEBERG CFN, VON GROOTE-BIDLINGMAIER F, MOWLANA A, SILOS MH, HAVERMANT T, DIACON AH, BOLLIGER CT.** Blood loss during flexible bronchoscopy: a prospective observational study. *Respiration* 2012; **84**: 312-318.

**CONRADIE M, KOEGELEBERG CFN, CONRADIE M, ASCOTT-EVANS BH, HOUGH FS.** Pulmonary hypertension and thyrotoxicosis. *Journal of Endocrinology, Metabolism and Diabetes of South Africa (JEMDSA)* 2012; **17**(2): 101-104.

**GASPARINI S, ZUCCATOSTA L, BONIFAZI M, BOLLIGER CT.** Bronchoscopic treatment of emphysema: state of the art. *Respiration* 2012; **84**: 250-263.

**KANNENBERG SMH, JORDAAN HF, KOEGELEBERG CFN, VON GROOTE-BIDLINGMAIER F, VISSER WI.** Toxic epidermal necrolysis and Stevens-Johnson syndrome in South Africa: a 3-year prospective study. *Qjm-An International Journal of Medicine* 2012; **105**: 839-846.

**KOEGELEBERG CFN, JOUBERT Z, IRUSEN E.** Tricyclic antidepressant overdose necessitating ICU admission. *SAMJ South African Medical Journal* 2012; **102**(5): 293-294.

**KOEGELEBERG CFN, VON GROOTE-BIDLINGMAIER F, BOLLIGER CT.** Transthoracic ultrasonography for the respiratory physician. *Respiration* 2012; **84**: 337-350.

**LOUW M, BRUNDYN K, SCHUBERT PT, WRIGHT CA, BOLLIGER CT, DIACON AH.** Comparison of the quality of smears in transbronchial fine-needle aspirates using two staining methods for rapid on-site evaluation. *Diagnostic Cytopathology* 2012; **40**(9): 777-781.

**THAKKAR MS, VON GROOTE-BIDLINGMAIER F, BOLLIGER CT.** Recent advances in therapeutic

bronchoscopy<sup>1</sup>. *Swiss Medical Weekly* 2012; **142**: w13591:1 - 11.

**ZÖLLNER EW, LOMBARD CJ, GALAL U, HOUGH FS, IRUSEN E, WEINBERG E.** Hypothalamic-pituitary-adrenal axis suppression in asthmatic school children. *Pediatrics* 2012; **130**: e1512-e1519.

### Journal Articles (NON-subsidised)

**BALKEMA C, IRUSEN E.** The perils of critical care: ventilator-associated pneumonia. *The Specialist Forum* 2012; **12**(10): 42-45.

**IRUSEN E.** Deciphering the new global initiative for chronic obstructive lung disease (GOLD) guideline. *Current Respiratory Care Report* 2012; **1**: 183-188.

**OZOH OB, KOEGELEBERG CFN, BRAUNS R, BOLLIGER CT, VON GROOTE-BIDLINGMAIER F, WRIGHT CA, LOUW M, SCHUBERT PT, IRUSEN E.** The diagnostic yield and safety of fine needle aspiration of intrathoracic hydatid cysts: A three-year retrospective study. *South African Respiratory Journal* 2012; **18**(2): 39-46.

**VON GROOTE-BIDLINGMAIER F, KOEGELEBERG CFN.** A practical guide to transthoracic ultrasound. *Breathe* 2012; **9**(2): 132-142.

### Books

**AWOTEDU AA, IRUSEN E.** *Asthma in Africa*. Ibadan University Press, Ibadan, Nigeria 2012:370 pp.

**BOLLIGER CT, HUMBERT M, SOUZA R, SIMONNEAU G.** *Pulmonary Vascular Disorders*. Karger, Basel, Switzerland 2012:289 pp.

**IRUSEN E.** *Lung Diseases - Selected State of the Art Reviews*. InTech, Rijeka, Croatia (local name: Hrvatska) 2012:690 pp.

### Chapters in Books

**AWOTEDU AA, IRUSEN E.** Introduction - Asthma in Africa. In *Asthma in Africa*, Ibadan University Press, Ibadan, Nigeria, 2012: 1-4.

**GROBLER C, MAREE DM, IRUSEN E.** Functional evaluation in respiratory disorders. In *Lung Diseases - Selected State of the Art Reviews*, InTech, Rijeka, Croatia (local name: Hrvatska), 2012: 581-602.

**IRUSEN E, AWOTEDU AA.** Drugs used in the management of asthma. In *Asthma in Africa*, Ibadan University Press, Ibadan, Nigeria, 2012: 237-225.

**IRUSEN E.** Asthma in pregnancy. In *Asthma in Africa*, Ibadan University Press, Ibadan, Nigeria, 2012: 213-226.

**IRUSEN E.** Asthma pathophysiology and pathology. In *Asthma in Africa*, Ibadan University Press, Ibadan, Nigeria, 2012: 63-75.

# MEDICINE

## Masters completed

**BRUWER JW.** *Malaria in the Intensive Care Unit of a Tertiary Hospital in a non-endemic area of South Africa: A nine-year retrospective descriptive study.* MMed, 2012. 22 pp. Studieleier: Koegelenberg CFN. Medestudieleier: Iruzen E.

**COOPER R.** *Respiratory failure from Pandemic 2009 Influenza A (H1N1) in the Western Cape, South Africa: Adverse prognostic indicators.* MMed, 2012. 33 pp. Studieleier: Koegelenberg CFN. Medestudieleier: Iruzen E, Taljaard JJ.

**NORTJE AJ.** *The pharmacokinetics of anti-tuberculous drugs given enterally in patients requiring intensive care: a pilot study.* MMed, 2012. 26 pp. Studieleier: Bolliger CT.

## Rheumatology: Dr M Manie

### Summary of activities

Our 2 full-time rheumatologists still have to share their time between running the Thursday firm in the division of General Medicine and running the division of Rheumatology. Dr Yosef Latief in addition to his work in the Division of Pharmacology joined the Division of Rheumatology on a part time basis.

A major boost for our patients was securing funding for the use of biologic drugs for inflammatory arthritis. Five patients were identified and the first group was initiated on this therapy in September 2012. The division started using the newly furnished ultrasound room for the examination of musculo skeletal conditions. In addition we acquired a new state of the art portable ultrasound machine for the evaluation of the musculo skeletal system.

The dynamic sister Fortuin has initiated a patient education program in the arthritis clinic.

### Resources

Posts (full time)	Number	Filled
Principal specialist	1	1
Specialist	1	1
Registrar	2	2

Posts (sessional – how many hours per week)		
2	8	hours/week

### Output

Outpatient visits: 3 911  
Admissions: 233

### Part 2

#### Faculty on Health Sciences

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

As mentioned above we have acquired and furnished a room dedicated to the use of musculo-skeletal ultrasound and acquired a new state of the art ultrasound machine.

### Comment on output

There has been a slight increase in out-patient numbers and we face increasing numbers requiring admission, particularly ill patients with connective tissue diseases.

### Part 2 Faculty on Health Sciences

#### Infrastructure development – upgrading, new equipment, etc.

As mentioned above we have acquired and furnished a room dedicated to the use of musculo-skeletal ultrasound and acquired a new state of the art ultrasound machine.

#### Community outreach programmes / community service and interaction. Please focus on initiatives in 2011, especially wrt MDG and projects in Africa.

We have continued our out - reach to Worcester Hospital and we have a well-functioning arrangement with Paarl Hospital who has a trained rheumatologist to manage some patients in their drainage area. We have also continued with our down referral of stable arthritis patients to the secondary and primary care hospitals.

#### Achievements wrt research activities and research outputs:

Number of publications from the department/division

Text books and contributions to text books.

Dr Manie contributed 2 Chapters in the rheumatology section of the yet to be published SA text book of Medicine.

# MEDICINE

## **Teaching and Training**

**(under-, postgraduate and elective students).**

The video teaching program on basic musculo-skeletal examination by Dr Tooke is nearing completion.

## **Special achievements**

One of the year's highlights was the hosting of the International Arthritis day which was well supported by the patients and public, at the Tygerbear Centre in October 2012.

# OBSTETRICS & GYNAECOLOGY

## Head of Department

### Prof GB Theron

#### Brief history at Tygerberg Hospital

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 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 Tygerberg Hospital (TBH) and the University of Stellenbosch, Department of Obstetrics and Gynaecology. Prof Theron succeeded Prof Kruger in March 2010.



#### Summary of activities

Our mission – 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.

Planning for the commissioning of the new Khayelitsha Hospital in March 2012 was done. The new hospital serves as a level 1 referral hospital for both midwife obstetric units in Khayelitsha. All level 2 and 3 patients are referred to Tygerberg Hospital.

Generation of external funds for research and post-degree fellowships is a priority for the department.

Posts (full time):	Number on establishment	Number Filled
Chief Specialist	3	3
Principal specialist and	4	4
Natural Scientist (specialist)	2	1
Specialist	10	10
Registrar	22 (1 each at Worcester + Paarl Hosp)	22
Medical Officer	14	14
Intern	12	12
Technologist	2	2
Radiographer	2	2
Posts (sessional)		
Specialists	5 persons 42 hours/week	filled
Part time posts	2 specialist posts filled with 5/8 <sup>th</sup> appointment	

Number of beds	Obstetrics	Gynaecology
	107	43 (+ 15 radiation therapy beds)



## OBSTETRICS & GYNAECOLOGY

<b>OBSTETRIC REPORT:</b>	<b>2011</b>	<b>2012</b>
<b>IN PATIENTS:</b>		
Admissions	8471	10 105
Total number of deliveries	5864	7 576
Normal vertex deliveries	3265	4 137
Forceps deliveries	7	33
Vacuum extractions	53	200
Breech deliveries	107	130
Caesarean sections	(42.3%)	(44%)
Twins	144	401
Number of Low birth weight babies < 2500g	2179 (37.2%)	3079 (40.6%)
Very Low birth weight babies < 1500g	480 (7.9%)	1017 (13.4%)
Extremely low birth weight babies < 1000g	376 (6.2%)	435 (6.3%)
Perinatal Mortality Rates (> 500g - < 1000g)	596/1000	559/10000
(>1000g)	40/1000	38.2/1000
<b>MATERNAL DEATHS:</b>		
<b>Total number</b>	<b>17</b>	<b>14</b>

<b>FETAL EVALUATION CLINIC:</b>	<b>2011</b>	<b>2012</b>
<b>ANTENATAL FETAL HEART RATE MONITORING:</b>		
Total number of patients	1936	1293
New patients	1498	1068
Follow-up patients	438	225
Twins	59	90
External cephalic versions	70	30
<b>DOPPLERS:</b>		
Total number of patients	4093	4907
New patients	2672	2898
Follow-up patients	1421	1199
Fetal evaluation referrals (back to AN clinic, HRC or C2A)	1622	707
<b>TYGERBERG HOSPITAL OUT PATIENTS:</b>		
<b>OBSTETRICS:</b>	18096	21 704
<b>Second visit and high risk patients</b>		
New patients	111	87
Post-natal patients	545	516
Diabetic clinic	1268	1439
Special care clinic	821	745
Anaesthetic referrals	278	411
Cardiac clinic (new information)	191	123 new/158 follow-up
<b>TOTAL:</b>	<b>21403</b>	<b>23 772</b>

# OBSTETRICS & GYNAECOLOGY

<b>GYNAECOLOGICAL REPORT</b>		
<b>IN PATIENTS</b>	<b>2011</b>	<b>2012</b>
Seen on call	4366	3907
Total admissions	3672	2932

<b>OPERATIONS:</b>		
Cold knife biopsies	43	-
Operative hysteroscopies (general theatre)	76	44
Vaginal hysterectomies	60	59
Abdominal hysterectomies (including TAH and BSO)	231	220
Laparotomies	85	79
Ectopic pregnancies : Laparoscopy	12	-
Laparotomy	74	82
Total Laparoscopic hysterectomies	-	14
Radical hysterectomies	-	10
Vaginal repair anterior / posterior	-	67

<b>OUT PATIENTS:</b>		
Follow-up patients (general gynaecology)	4441	4119
New patients (general gynaecology)	2648	2453
Endocrinology	745	662
Colposcopy clinic	2211	2108
Andrology	411	358
Oncology	1719	1788
Cytology	207	221
TOP (evaluations seen at Gynaecology)	1242	1060
<b>GEC THEATRE</b>		
Terminations of pregnancies	906	1453
Day theatre cases	94	143
Hysteroscopies	355	374
<b>GRAND TOTAL</b>	<b>15 655</b>	<b>16 751</b>

**Statistics compiled by :** Dr GS Gebhardt and Prof GB Theron

# OBSTETRICS & GYNAECOLOGY

## General Specialist Services

### Summary of activities

The General Specialist Services (GSS) is by far the largest sub division of the Specialised and Highly Specialised O & G Services within Tygerberg Hospital. Apart from the clinical service at Tygerberg Hospital, it oversees the clinical governance of all O & G

Services within the Metro East.

### Resources

POST	NUMBER	FILLED
Chief Specialist	1	1
Specialist	6	6
Specialist District Obstetrician	1	1

### Output

This platform manages the critical service in which all undergraduate- and postgraduate training (apart from the registrar subspecialist training) takes place and all 8 Tygerberg-based specialists are also senior lecturers on the joint Stellenbosch University platform and share in the teaching, training and research activities of the academic department. The GSS is also active with skills training of interns, medical officers, midwives and allied health care workers.

### Comment on output

With the general specialist platform appointing mostly newly qualified, enthusiastic and energetic specialists it is only expected that they will develop their specific interest areas. This is actively supported and encouraged and has allowed dr Hannes van der Merwe to do sub-specialisation in maternal fetal medicine and dr Jenny Butt to do the fellowship in oncology. The subspecialisation is done over 4 years (instead of 2), as they still perform their full general specialist clinical and managerial activities. All specialists are also encouraged to develop managerial and leadership capabilities from the start; 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 is busy developing a unit dedicated to, minimally invasive gynaecological surgery. All cases are carefully selected and performed laparoscopically or hysteroscopically. Since 2011 they have performed over 80 cases. Traditionally these cases would have been done via open laparotomy, but were successfully completed laparoscopically.

Advanced laparoscopic cases (which excludes fertility surgery, diagnostic laparoscopies, sterilizations and BSO's for ER+ve breast carcinoma patients) include:

- 14 total laparoscopic hysterectomies. 3 of these were performed at our outreach centres including Frere Hospital and Eerste River Hospital.
- 2 laparoscopies during pregnancy. Both were symptomatic masses in pregnancy and cystectomies were performed. Both pregnancies continued without adverse incident.
- 15 cases of severe endometriosis.

The major complication rate is in keeping with the international literature (0.2-1%). The only complication thus far was a bladder injury, which was recognized and repaired laparoscopically.

Most patients, including laparoscopic hysterectomies, are discharged on day 1 post surgery and this saves money with regards in patient costs. Training of registrars is one of their main priorities. Since 2011, 8 registrars have been exposed to laparoscopic surgery. Dr Thomas is currently also completing a master's degree in advanced laparoscopy (with the University of Surrey).

## OBSTETRICS & GYNAECOLOGY

There are currently 7 consultants and 1 district obstetrician specialist. The specialists based at Tygerberg Hospital liaise with the obstetric and gynaecology specialists at Karl Bremer-I, Kayelitsha- I and Helderberg Hospitals, which form part of the GSS in Metro East. The GSS is headed by Dr S Gebhardt.

The rest of the personnel on the GSS platform consists of 14 medical officers, 15 registrars (each complete one year general specialist obstetrics, a further 9-12 months general specialist gynaecology, 2 months family planning, 2 months colposcopy and 3-6 months relief functions whilst rotating here) and 13 interns. The GSS manages 113 ward beds: 42 antenatal (the full ward F2 and 14 obstetric beds in ward J4); 44 postnatal beds (wards J2 and J5) and 27 gynaecology (in J4 and F ground).

The daily high risk (specialist referral) clinics managed 21 704 patients in 2012. In addition, the 5 general specialist gynaecology clinics per week managed 6560 patients. The family planning unit became part of the general specialist platform after the departure of Dr Petrus Steyn and is now managed by Dr Judy Kluge. Apart from the daily clinics there are two specialist referral clinics on Tuesdays and Thursdays. The family planning clinic managed 7798 clients in 2012. They also have one laparoscopic sterilisation list per week and have an active drive to promote the use of intra-uterine devices [>500 devices were placed in 2012].

The GSS also manages the termination of pregnancy (TOP) programme with 2 termination of pregnancy slates per week (1453 procedures done in 2012). With the service shifts from metro west to metro east in 2012, the unit is in the process of taking over the referrals from Site B that currently drains to GF Jooste and it is envisaged that an additional 2 slates will be needed in 2013.

The acute O&G service is the most demanding function of the GSS and their Emergency Center is in charge of all acute specialist obstetrics and gynaecology referrals from 8 midwife obstetric units, community health centres, clinics and 4 district hospitals within Metro East. The 24-hour O&G Emergency Centre is earmarked for renovation in 2013 and currently consists of a triage area (4 obstetric and 3 gynaecology beds with 19 dedicated acute (high risk antenatal and delivery) beds, a 24 hour emergency theatre as well as an additional elective theatre on 3 days of the week. The complete labour ward complex includes a further 8 step-down postnatal beds and the 4 bedded obstetrical critical care unit and its associated 4 bed step down ward; all part of the highly specialised services. There were 10 105 women evaluated in the obstetrics part of the triage area in 2012 with a further 3907 women seen in the gynaecology section.

During 2012, on-going challenges with the seamless management of patients between the two service divisions within the labour ward led to the incorporation of the 16 highly specialised beds in the labour ward as part of the Emergency Center for the clinical management of patients. The GSS platform specialists and medical officers currently support the clinical work in these areas and patient flow is now seamless; depending on the need of the client. To support this work after hours, the departmental on-call consultant support was increased to include an additional consultant on call for the highly specialised beds and the gynaecology service; with the other consultant on call for the acute labour ward. The critical care unit (OCCU) is managed by dr Eduard Langenegger, and the clinical manager for the Emergency Center is dr Hannes van der Merwe.

The GSS is a consultant-delivered service since 2010; befitting a hospital that only sees specialised and highly specialised clients. All

non-specialist referrals are managed at the appropriate district hospital. The GSS strives to have a fair allocation of day- and after hour duties to all personnel and since 2010 an active recruiting and aggressive interview program has ensured that all available posts are filled at all times. There is a weekly quality assurance meeting with the nursing unit managers and a two-weekly general specialist planning meeting.

In April 2012 the service and drainage shifts that started in 2009 concluded with the opening of Khayelitsha Hospital with a fully-fledged, 24 hour obstetrics and gynaecology service with referral of cases requiring specialist intervention from the whole of Khayelitsha to Tygerberg Hospital. The increased work load at Tygerberg was supported by the appointment of 2 additional medical officers, one additional consultant, and 16 obstetric beds with the associated nursing personnel and additional elective obstetric theatre time. We also received extensive additional equipment including cardiographs, delivery beds, infant resuscitation units and transport incubators. The additional beds had to be accommodated within the existing infrastructure. The increased work load has led to increased bed-occupancy and a caesarean section rate that increased from 37% to 44%, but the perinatal mortality continued to decline (the PNMR was 45.7 in 2010, 40.5 in 2011 and 38.2 in 2012 for babies >1000g).

## Outreach

The general specialist services do outreach to the surrounding district hospitals and midwife obstetric units. There is a gynaecology clinic and colposcopy outreach service on a two weekly basis at Eerste Rivier Hospital with a monthly theatre list as well. The colposcopy outreach service every second week at Helderberg Hospital has been running for more two years now and the service is currently being audited to determine the impact. Equipment was

obtained at Helderberg and it is planned to make it a weekly service at Helderberg in 2013. In addition, training and feedback sessions are done on a monthly basis at the midwife obstetric units in the Tygerberg drainage area. There are on-going skills training sessions using the national ESMOE models and modules at the MOUs and for the interns. The GSS provides regular help to the service at Khayelitsha Hospital and will start with weekly sterilisation lists and colposcopy clinics in 2013. Laparoscopic surgery at Karl Bremer is also planned for 2013.

The outreach activities in Metro East are planned and governed by a separate ad-hoc technical task team for Women's Health that report to the greater Geographical Services Area meeting in the District Health Services. This meeting is an important interface with hospital specialists, family physician specialists, district managers and nursing personnel attending. The technical work group monitors skills training at Michael Mapongwana, Site B and Macassar, Grabouw, Delft and the other MOUs; IUD training (including outreach to West Coast and Winelands), TOP services at the CHCs, clinical governance issues such as risk reduction during obstetric surgery, colposcopy outreach services and family planning.

## Partnerships

### International

Dr Hannes van der Merwe works with :

- Dr Kolotkin. Duke University – North Carolina (USA). Super obese outcome in pregnancy. IWQOL – lite quality of the life questionnaire.
- Prof J Deprest. Leuven NUniversity – Leuven (Belgium). FETO patient information survey.

**Publications** : Peer reviewed 1

# OBSTETRICS & GYNAECOLOGY

## 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

### Resources :

Posts (full time)	Number	Filled
Specialist	1	1

### Output

Female Programme	2011	2012
Patients counselled in clinic	10 410	9 829
Doctor consultations	-	579
Patients accepting a method (includes patients from Clinic, J2, J4 and J5)	15 134	12 430
Clinic	-	7 664
Post natal wards (J2, J5)	-	4 263
Gynaecology wards (J4, FG)	-	503
Sterilisations performed at time of caesarean section, Postpartum and interval	841	1 064
Referred for sterilisation	246	254
Cancellation of sterilization	60	65
Female condom use	1510	1 460
Emergency	59	66

contraceptive use		
Intra-uterine Contraceptive device (IUD)	284	578
IUD insertion post-surgical TOP /MVA of miscarriage	8	108
<b>Cervical smears</b>		
Total taken	334	342
<b>Male programme</b>		
Consultation before		
vasectomy	535	587
Vasectomy done	233	230
Male condoms issued	29 5620	20 6200

### Comment on output

Even though there was a decline in patients counselled in the family planning clinic from the previous year (2011), the numbers still show a steady increase from 2009 and 2010.

All women accessing the obstetrics and gynaecology service within Tygerberg Hospital have contraception options offered and discussed with them.

The reason for the decline in condoms distributed throughout Tygerberg Hospital is due to the removal of the condom dispensing units while renovations were being completed within the hospital. A requisition has been made to hospital maintenance for the re-positioning of these condom dispensing units.

A positive development is the increase in intrauterine device (IUD) insertions from 284 in 2011 to 578 in 2012. There were two reasons for this increase. Firstly the TOP provider was trained to perform IUD insertions post-surgical TOP. Secondly the numbers of post placental insertion following a normal vaginal birth and caesarean section birth increased. The increase in IUD provision and training of staff providing this method is in accordance with the mandate of increased

# OBSTETRICS & GYNAECOLOGY

access to long acting reversible contraception (LARC), methods as stated in the recently published National Contraception and Fertility Planning Policy and Service Delivery Guidelines. The provisions of LARC help decrease the unintended pregnancy rate and therefore support the achievement of the Millennium Developmental Goals (MDGs)

## Part 2

### Faculty of Health Sciences

#### Community outreach

#### programmes/community services and interaction :

#### Provided by registered nurses in the unit

- Training the trainer of the Cape Winelands District, Mrs Adams
- Nursing students from the Advanced Midwifery course rotate through the Family Planning clinic
- Lectures on new developments for the nursing staff as part of a nursing seminar for the whole region held at Tygerberg Hospital.

#### Training provided by Dr Kluge

This was achieved by performing outreach IUD training :

- IUD training for 20 nursing personnel from the Klipfontein/ Mitchell's Plain Substructure.
- IUD training for 10 nursing personnel from the West Coast area held in Piketberg

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

Dr Kluge is currently the principal investigator of a randomised controlled trial involving cervical priming prior to Surgical Termination of Pregnancy which started in May 2012.

#### Teaching and Training (under, 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. This is done under the supervision of Dr Kluge

#### Special achievements

##### Awards

Paper published by Dr Kluge and Prof Hall, was the third most frequently downloaded publication from the International Journal of Gynaecology and Obstetrics : July 2011 to July 2012.

## OBSTETRIC CRITICAL CARE UNIT

#### Summary of activities

Admitted 519 critically ill patients during 2012 and provided effective critical care service for these patients, preventing long term morbidity and mortality. Compared to 2011 there were 70 more admissions, in spite of the increase in work load, there were only 5 mortalities during this period.

The newly established 4 bedded step-down unit equipped by Phillips as part of an on going project, helped to increase OCCU admission rates. 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

# OBSTETRICS & GYNAECOLOGY

## Output

	2011	2012
Admissions	510	519
Invasive Ventilation	56	56
Intra-arterial lines placed	292	368
Central venous lines placed	151	105
Non-invasive ventilation	60	40
Step-down unit	-	800

## 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

### International

Phillips research project

### Research activities and outputs

#### Number of publications from the division

Peer reviewed 1

#### Text books and contributions to text books

1 chapter

### Teaching and training

Dr Langenegger is making good progress with his PhD

ESMOE training

OCCU training

### Special achievements and highlights :

Combined research programme with the University of Nottingham

Initiated and motivated funding from Phillips International to expand critical care resources.

## GYNAECOLOGICAL ONCOLOGY

### Summary of activities

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.



# OBSTETRICS & GYNAECOLOGY

## Personnel

Posts (Full time)	Number	Filled
Chief specialist	1	1
Senior specialist	1	1
Fellow*	1	1

\*Funded with a bursary.

## Output

	2011	2012
Carcinoma cervix	237	271
Carcinoma endometrium	63	60
Carcinoma ovary	38	56
Carcinoma vagina	4	3
Carcinoma fallopian tube	0	1
Uterine sarcoma	14	14
Mesothelioma	-	2
Spesiale kategorie	-	2
Carcinoma vulva	17	23
Melanoma vulva	0	1
Bartholin gland	1	1
Other : Unknown primary	2	6
Other : Organs	11	2
Gestational trophoblastic disease	15	19
Gestational trophoblastic neoplasia	7	9
Stump	-	1
<b>Total cancer patients :</b>		
New	373	397
Follow-up	1 394	1 401
<b>Colposcopy clinic :</b>		
New	1 208	1 043
Follow-up	1 000	1 044
<b>Cytology clinic:</b>		
New	24	37
Follow-up	183	180
<b>Staging clinic:</b>	610	631
<b>Procedures:</b>		
Lletz	681	682
Cervical biopsies	818	708
Cytology cervix	1214	1237

## Community outreach programmes community services and interactions

- The unit for Gynaecological oncology visits Worcester- and Paarl Hospitals on a fortnightly rotation. The aim of the visits :
  1. Training of specialists, registrars and medical officers working in these hospitals.
  2. 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. Several half-day courses on cervical cancer screening have been presented in the Western Cape Province including George, Oudtshoorn and in the Metro region. The demand for this course remains high.
- The team started outreach visits to the academic units in East London.
- Another CME activity initiated by the Unit is the Northern Suburbs Gynaecologic Oncology meeting that is an outreach programme towards private gynaecologists with the focus of gynaecologic malignancy.
- The unit's role in education in the rest of Africa was strengthened by a training course at the National University of Rwanda.
- The unit remains intimately involved in activities of the South African Society for Gynaecologic Oncology.

### National

- The unit collaborates in a study on uptake of screening for cervical cancer in South Africa. The

# OBSTETRICS & GYNAECOLOGY

principal investigator is Prof Greta Dreyer from the University of Pretoria.

- The unit is involved in an HPV observation study in HIV positive patients. The recruitment into the study is now completed. This study takes place in collaboration with Dr M Zeier (Principal Investigator) from the Infectious Diseases unit in Tygerberg Hospital. The work has led to two publications in international journals.

## Private

Dr Dlamini, has been appointed as a fellow with a Discovery bursary.

## International

Prof Botha serves on the nomination committee of the IGCS (International Gynaecological Cancer Society)

- Meeting with the University of Utrecht to set up collaborations.

## Research activities and outputs

An important HPV vaccination trial in co-operation with an international team led by the well-known Prof Anna Giuliano.

This was a large multi-centre study on vaccination and screening to prevent cervical cancer is now nearly completed. The community benefits directly from the study. More than 1000 primary school girls received HPV vaccines and their mothers were screened for cervical cancer.

**Publications** : Peer reviewed 2  
Other 4

## Teaching and training :

Important priorities of the unit include teaching, training and research. Dr M Dlamini is in his second year of training a subspecialist in gynaecological oncology and Dr J Butt has also joined the unit as a fellow.

## REPRODUCTIVE MEDICINE

### Summary of activities

Service delivery Firm IV. Obstetrics and Gynaecology activities. Outpatient and Infertility operating theatre as well as hysteroscopy outpatient theatre. Gynaecology, infertility and endocrine clinic.

### Resources

Post (Full time)	Number	Filled
Chief specialist	1	1
Specialist	2 (one of which is a 5/8 <sup>th</sup> post)	2 (one of which is a 5/8 <sup>th</sup> post)
Specialist Natural Scientist	2	1
Technologist	2 (one of which is a 5/8 <sup>th</sup> post)	2 (one of which is a 5/8 <sup>th</sup> post)
Fellows HPCSA members	4	3*
*Two full time posts funded through bursaries, one part-time over 4 years		

# OBSTETRICS & GYNAECOLOGY

<b>Output :</b>	<b>2011</b>	<b>2012</b>
Number of semen analyses	654	595
Number of post-vasectomy patients (Included in total)	239	390
Wet semen preparations examined	654	595
Semen counts performed	415	205
Samples examined after centrifugation	239	405
Supravital semen stains evaluated	16	15
Semen morphology smears prepared	1121	1200
Semen morphology smears stained	1121	1200
Sperm morphology evaluations performed	2181	2241
Antispermatozoa antibody tests performed	329	205
Reports placed on computer system	654	595
Fructose tests (Azoospermia samples)	34	20
<b>In vitro fertilisation (IVF)</b>		
Patients aspirated	78	112
Number of ova handled	216	112
Semen samples prepared for ova inseminations	72	672
Number of patients receiving embryo transfers	51	79
Semen samples prepared for IUI	52	35
Testis biopsies performed	-	9
Embryo cryopreservation procedures performed	-	3
Semen samples cryopreserved	-	10

## Comment on output

- ART procedures increased significantly compared to previous year.
- New CO2 incubator and dissecting microscope were obtained through funding from Stellenbosch University.

## Community outreach programmes / community services and interaction

- Namibia outreach – Prof Siebert went to Windhoek twice in 2012 to perform operations.
- Paarl outreach – Dr Matsaseng operates in Paarl twice a month.

## Part 2

### Faculty of Health Sciences

#### Infrastructure development – upgrading, new equipment, etc (highlights) :

- Nikon dissecting microscope
- Labotec Forma CO2 incubator

## Partnerships

### National

Prof Stefan du Plessis  
(Medical Physiology, Stellenbosch University)

Prof Ralph Henkel  
(University of the Western Cape)

Prof Carin Huyser  
(Steve Biko Academic Hospital – Pretoria)

Me Nolan Muller  
(Anatomical Pathology – Tygerberg Hospital)

# OBSTETRICS & GYNAECOLOGY

Dr D Botha  
(Port Elizabeth)  
Dr P Dalmeyer  
(Port Elizabeth)  
Dr K Coetsee  
(Fellow from Durban)  
Dr C Venter  
(Fellow from Klerksdorp)

## Private

Aevitas  
Training of fellows and registrars  
Prof P Bouic  
(Synexa, Capet Town)

## International :

Dr S Oehninger (USA)  
Dr W Ombelet (Belgie)  
Dr D Kotze (USA)  
Prof M Sousa (Portugal)  
Dr K Coetzee (Turkey)  
Dr V Rawe (Argentina)  
Dr J Olmeda (Argentina)  
Msr W Claasens (Australia)  
Dr J Rhemrev (Netherlands)  
Dr A Wetzels (Netherlands)  
Dr L Bjorndahl (Sweden)  
Prof S Gunalp (Turkey)  
Dr F Roth (Switzerland)  
Me S Hollenstein (Switzerland)

## Number of publications from the Department/ Division

Peer reviewed 11

## Textbooks and contributions to textbooks

2 Contributions

## Teaching and Training (under-, postgraduate and elective students)

- 2 BSc Hons in Reproductive Biology – (both graduated Cum Laude)

- 3 MSc in Reproductive Biology  
PhD – DJ Kotze, The evaluation of different embryo markers and their subsequent effect on embryo development, implantation and pregnancy outcome in an in-vitro fertilization program
- DSc – TF Kruger, The role of sperm morphology in assisted reproduction (ART)

Workshops – Chairman Igno Siebert

- Laparoscopy workshop, Stellenbosch University – 4 & 11 May
- Advanced suturing and laparoscopy workshop, Red Cross Hospital – 2 & 3 June
- Advanced suturing and laparoscopy workshop, Red Cross Hospital – 3 & 4 November

## Special achievement

- Prof TF Kruger was awarded a DSc degree. He is the fourth person to receive a DSc degree from the Faculty of Medicine and Health Sciences, since the faculty was founded in 1956
- Mr DJ Koze was awarded a PhD degree.

## MATERNAL AND FETAL MEDICINE

### Summary of activities

Manages women with pregnancies at very high risk

### 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 and one part-time general specialist being trained over 4 years.

# OBSTETRICS & GYNAECOLOGY

Output :	2011	2012
Diabetic Clinic	1268	1439
Special Care Clinic	821	745
Anaesthetic referrals	278	411
Cardiac Clinic	191	123 new 158 follow-up

## Part 2

### Faculty of Health Sciences

#### Partnerships

##### National

Co-ordinator and member of Maternal Mortality (NCCEMD) assessors in Western Cape.

##### International :

Prof DR Hall works with :

**United Kingdom.** Cochrane Collaboration: Working on systematic reviews. Status: one completed 2011, one ongoing.

**Australia.** Preterm prelabour rupture of membranes close to term trial. National Principal Investigator for South Africa. Status: Recruitment ongoing.

**Canada.** The Centre for Research in Women's Health, Director: ME Hannah, University of Toronto. Agreement to collaborate and/or share information. Status: Ongoing, low key.

**Canada.** PIERS Study. A WHO funded, screening study for pre-eclampsia in developing countries. Status: Publication submitted to BMJ.

**Canada.** PIERS on the Move Study. An internationally funded study on pre-eclampsia using a screening score and cell phone technology. Status: Recruitment stage (first year).

**Canada and South Africa.** 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 stage (first year).

#### Prof W Steyn works with

- PIERS Project – study together with the University of British Columbia, Vancouver
- New initiative – University of Utrecht; University of British Columbia (see above).
- Academic collaboration and partnership – University of Utrecht; University of British Columbia (see above).
- Edgardo Abalos (Argentina), Lelia Duley (UK) and David Henderson-Smart (Australia) on Cochrane reviews on Moderate Hypertension in Pregnancy (Published 2007).

#### Prof G Theron works with

- The International Maternal Pediatric 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. Approval by the Medicine

# OBSTETRICS & GYNAECOLOGY

Control Council 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 Pediatric 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 is the final stages of development.

## Private

Provide ongoing consultation to patients at very high risk managed by private participating gynaecologists.

## Number of publications from department / division

### Publications

Peer reviewed	11
Other	4

## Teaching and Training (under-, postgraduate and elective students)

One PhD student and 2 fellows.

## Special achievements and other highlights not covered by this template

Prof Hall received the Post Graduate Diploma (Applied Ethics) Cum Laude from Stellenbosch University.

## OBSTETRIC AND GYNAECOLOGY ULTRASOUND AND FETAL MEDICINE

### Summary of activities

2012 was a very busy and challenging year for the ultrasound Unit. The total workload of the unit has increased significantly (by 6.7%) in the past year, reflecting the change in drainage area referring to us. The limited increase in total workload was only achieved by reduction certain previously existing services, in order to cope with the case load.

Posts (Full time)	Number	Filled
Head (Principal Specialist)	1	1
Chief Medical officer	1	1
Chief Ultrasonographer	1	1
Ultrasonographer	1	1
Posts (sessional – how many hours worked per week)		
Medical officer	5 hours	Filled

### Output :

Obstetrics	2011	2012
Total visits	7 729	8 235
Twin visits	1 221	1 465
Fetal anomaly visits	891	1 064
Doppler visits	3 765	4 472
Invasive procedures	356	313
Fetal medicine clinic	256	332
Fetal medicine admissions	56	43
Level III visits	3 253	4 681
Gynaecology		
Total visits	1 599	1 717
Level III visits	1 054	921

## **Comment on output :**

In contrast to the limited increase in overall workload, we note 30% increase in the level III work (54% of all gynae work and 57% of all obstetric work) indicating that the change in case mix that was noted the year before is continuing.

This is also reflected in the 29% increase in patients seen at the subspecialist fetal medicine clinic which delivers a holistic care package for women with complicated pregnancies requiring detailed fetal surveillance. This clinic is managed by a subspecialist, a fellow and a registrar and manages mainly women with complicated twin pregnancies, severe placental insufficiency as well as red cell iso-immunisation. The number of fetal medicine admissions remains limited because outpatient surveillance is optimized by sometimes assessing women several times per week to avoid admission.

There was a very significant increase in first referrals for fetal anomalies (803 clients for the year, compared to 620 in 2011, a 29.5% increase of new cases) as well as an increase in total visits related to fetal anomalies (19.5% increase since last year). The increase in these cases is mainly caused by the expanded provision of routine obstetric ultrasound services at level I and level II facilities in the drainage area, in line with the provincial policy. These cases are always complex and require extensive counseling. The contribution of the Clinical Genetics team is invaluable for the counseling of parents with affected fetuses, as well as with their decision making and follow up, and this team urgently needs to be expanded to keep up with the ever increasing demand.

The number of twin visits continues to increase (20% increase since last year and now 18% of the obstetric work or 30% of the number of fetuses scanned). Multiple pregnancies are far more challenging and

time consuming to scan. Only complicated twins are scanned at the TBH Ultrasound Unit (uncomplicated ones stay at level II).

In spite of the increase in referrals for fetal anomalies, we have been able to contain the number of diagnostic procedures overall due to a change of approach to genetic screening, counseling and testing in our region, whereby we rely much stronger on a detailed ultrasound assessment to select the women in whom invasive testing would be most cost-effective.

A substantial number of intrauterine transfusions were performed (17), several of these in women referred from the private sector.

## **Part 2**

### **Faculty of Health Sciences**

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

An advanced 3D-4D ultrasound unit was purchased and received in March 2012. The improved image quality is essential to manage the increased case load of complicated anomalies and twin pregnancies.

A colour Doppler apparatus was purchased for the Fetal Evaluation Clinic, making it much easier for the staff there to obtain Doppler tracings of the umbilical artery. As a consequence we have noted a reduction on referrals to the ultrasound unit for this indication.

A third terminal and license was purchased for the Astraia-database, to reduce waiting time for patients and staff alike, since the writing and printing of reports is now significantly faster.

#### **Community outreach programmes/community services and interaction**

Prof Geerts gave a structured and “personalised” feedback to facility managers after a formal audit process to

identify barriers to the implementation of the official provincial guideline regarding obstetric ultrasound services in the different facilities of Metro East. The impact of the feedback will be formally assessed in 2013 and the goal is to increase equitable access to high quality ultrasound services for all pregnant women in the drainage area.

The training program for junior registrars to ensure their basic obstetric ultrasound skills has been highly effective in ensuring they can meet the need for patient care from the early stages of their career. When staff numbers allow it, this training has also been offered to medical officers of TBH, as well as visiting practitioners who work in rural areas in other provinces.

The staff of the ultrasound unit continues with the practical training and formal assessment of CPUT students (BTech(Ultrasound)). Successful students often make a huge difference in more remote areas during their community service.

Prof Geerts is an ESMOE trainer and remains an active member of the Diagnostic Ultrasound Unit, a forum where fetal medicine specialists, paediatricians and geneticists from both Western Cape universities, as well as private practice meet 4-6 times a year to discuss policies and interesting or complex cases.

Prof Geerts collaborates with the Division of Human Genetics for the development of an educational video for patients, regarding prenatal screening and diagnostic testing. The video is developed to help standardise the information given to parents and to reduce individual counseling time spent by the genetic counselors. It will also be an important source of information for practitioners, both in the public and private sector.

Dr M du Toit is a fellow in Maternal and Fetal Medicine, on consignment by University of the Free State. She will be equipped with invaluable expertise in this field when

returning to her alma mater in the second half of 2013.

## Partnerships

### National

- The new provincial policy on Obstetric and Gynaecological ultrasound services, submitted by Dr Gebhart and Prof Geerts, was revised and approved.
- There is an ongoing collaboration with members of the Department of Psychiatry from Universities of Cape Town and Stellenbosch, on a prospective study to assess the effects of maternal stress as well as metamphetamine use on the developing fetus.

### Private

Prof Geerts was elected President of SASUOG and continues to be a member of the SA Society for Maternal and Fetal Medicine.

- Prof Geerts is collaborating with the IPA Forum, a large organization of general practitioners, to make accreditation in obstetric ultrasound a reality in South Africa. Steps are underway to implement this accreditation process, with the assistance and support of SASUOG.
- The meetings of the Diagnostic Ultrasound Unit provide a forum for obstetrics and gynaecology sonologists in Cape Town private practice to discuss complex cases and review current clinical approach.

### International

- (UK) D Khumar, Oxford University Press (collaborated with Dr M Urban, then from University of Cape Town, for a 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"). The work addresses the current status and



# OBSTETRICS & GYNAECOLOGY

shortcomings of prenatal screening and diagnosis in South Africa, in the public as well as the private sector. Publication of the book is awaited.

- (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 stillbirths 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.
- (Netherlands) Data from a previous study performed in the ultrasound unit are being incorporated in an international "individual-patient-data meta-analysis" on the prediction of maternal and perinatal outcome in severe early onset preeclampsia, named POPULAR. The results have not yet been communicated.
- (Nigeria) Dr Ehigha Enabudoso, the first foreigner trained in Fetal Medicine at TBH (2011), is now developing a fetal medicine referral unit in his own University (Benin) and negotiations are underway to assist him with a training course in ultrasound and fetal medicine.

**Number of publications from the department/division** Peer reviewed 2

**Number of text books and contributions to text books** 1 chapter

## Teaching and Training (under, postgraduate and elective students)

- Three formal one-day obstetric ultrasound courses (aimed at different scanning levels and attended by private practitioners and employees of the public sector) are offered as accreditation courses with formal

assessment of theoretical knowledge and practical scanning skills.

- Currently two fellows are in training for the subspecialty in Maternal and Fetal Medicine. Prof Geerts is responsible for their fetal medicine module.
- Routine teaching activities in the US Unit
- Hands-on training and formal assessment of ultrasound skills for registrars in obstetrics and gynaecology and radiology, medical officers and BTech(US) students of CPUT.

## FILM AND TELEVISION UNIT

### Summary of activities

The unit continues to produce DVD footage of a high quality for training of under- and post graduate students.

### Resources

Posts (Full time)	Number	Filled
*Manager and Cinematographer	1	1

\*Post is remunerated by Stellenbosch University.

### Output

Productions during 2012

- 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 sterilization completed. This DVD, as well as the completed termination of pregnancy DVD were made available to the WHO Reproductive Health Library.

# OBSTETRICS & GYNAECOLOGY

## Comment on output

- A number of projects were commenced during 2012 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 multi-media educational activities and OSCE and OSPE examinations.

### UROGYNAECOLOGY AND RECONSTRUCTIVE PELVIC

#### Summary of activities

The Urogynaecology Unit experienced a productive year during 2012

#### Resources

Posts (Full time)	Number	Filled
Specialist	1	1
Physiotherapist / Research Assistant (part-time)	1	1
Sessional post	1	1

#### Output

	2011	2012
New patients seen	176	219
Follow-up patients seen	901	804
<b>Urodynamic studies</b>		
performed	107	-
Operative procedures		
performed	-	100

## Comment on output

The perineal clinic which has been moved to GSH at the colorectal unit, due to the lack of equipment, is functioning well at GSH. With the support of Tygerberg Management, much needed devices and equipment for complicated reconstructive surgery and incontinence surgery has been purchased. The unit is expanding its laparoscopic expertise. More theatre time was made available for urogynaecological surgery resulting in reducing waiting time for surgery. Clinics which were rescheduled to establish a one-stop clinic function, are operating successfully. The clinic includes a urogynaecological consultation service and a physiotherapy service on the same day.

#### Partnerships

##### National

Dr van Rensburg holds the position of secretary on the SAUGA committee and is also a member

of the 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.

##### Publications

Peer reviewed 1

##### The PASS Network

The Principle Investigator of the PASS Network is Prof HJ Odendaal :

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

## OBSTETRICS & GYNAECOLOGY

a partner in this unprecedented effort. The PASS Network is comprised of five elements:

- 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

By the end of 2012 5009 infants were included in the cohort of whom the oldest child being followed-up is 6 years of age.

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 characterized cohort suitable for long-term follow-up and intervention studies.

Prof Odendaal is the local principal investigator. Funding has been obtained for another 5 years, from 2011-2016. Recruitment is proceeding well; as of the end of December 2012, more than 5009 participants

have been recruited, of whom the oldest child being followed-up is 6 years old.

This is a 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

	2011	2012
Journal Articles (subsidized)		
Maternal Fetal Medicine	12	15
Reproductive Medicine	5	11
Gynaecological Oncology	-	2
Gynaecology / Education	2	2
Other	-	1
<b>Total</b>	<b>19</b>	<b>31</b>
<b>Journal Articles (non-subsidized)</b>		
Reproductive Medicine	3	-
Gynaecological Oncology	1	4
Maternal Fetal Medicine	5	4
Obstetrics and Gynaecology	3	1
Urogynaecology	1	0
<b>Total</b>	<b>12</b>	<b>9</b>

## PAEDIATRICS AND CHILD HEALTH

Head of Department

Professor Mariana Kruger



### EXECUTIVE SUMMARY – 2012

Tygerberg Children's Hospital is situated in the Tygerberg Academic Hospital, a central hospital, serving the Eastern Metropolitan region of Cape Town and the North-eastern districts of the Western Cape province.

There were 15 113 children admitted in 2012 (5311 to highly specialised paediatrics and 9802 to general paediatrics wards). This is a 14% increase compared to 2011 and overall bed occupancy of 80%.

The paediatric ambulatory services showed growth of 13% for general paediatrics and 4% for paediatric subspecialist services.

Bed occupancy were particularly high for the neonatal and the paediatric intensive care unit wards and even with the two new wards opening in 2012, namely the Paediatric High Care Unit (paediatric Subspecialist division) and a general neonatology ward (general paediatrics division), The bed occupancy was 131 % for neonatal ICU and 92% for the paediatric intensive care unit (PICU) respectively. There was an increase of 34% in critical care admissions, which clearly demonstrates the increasing pressure on the limited intensive care beds for neonates and children in the province. In the general paediatric division the emergency service were separated from the general paediatric outpatients to enable triage of sick children.

Major causes of death in neonatology was premature related complications (52%) To decrease neonatal mortality rates interventions to reduce premature labour should be introduced. Pneumonia was the main cause of death for older children (25%).

The department had good teaching outputs with 94% of undergraduate students successfully qualified, 12 post graduate students graduated as paediatricians and 4 subspecialists. In addition 3 postgraduate students completed the MMed (Paed) and 1 a PhD.

Research wise, there were 100 scientific articles with pioneering work by Professors Nulda Beyers & Anneke Hesselning (DTIC - Kochon prize), Mark Cotton (HIV/AIDS), Simon Schaaf (MDR-TB), Johan Schoeman (Neurology PANDA), Dr Etienne Nel (Gastroenterology ESPGHAN postgraduate course), Dr Kobus van der Walt (S2S Research Award of U.S. \$ 15 million). Ten staff members received the Rector's Award for outstanding overall performance.

*Mariana Kruger*

# PAEDIATRICS AND CHILD HEALTH

## RESOURCES AND OUTPUT

### Human Resources

Posts (full-time)	Number	Filled
Professor/Chief Specialist	2	2
Chief Specialist	1	1
Principal Specialist	6	5
Senior Specialist	23+1 (5/8)	23+1 (5/8)
Senior Registrar	7 (PGWC N=3)	7 (PGWC N=3)
Registrar	31 (2 supernumery)	31
Medical Officer	26	26
Posts (sessional – hours per week)		
Specialist	5 (44 hours/week)	5 (44 hours/week)
Number of beds	268	268

Summary of Output	2012	2011	2010
General Paediatrics			
Inpatients	9802 (15% growth)	8523 (-1,2% growth)	8630
Outpatients	14178 (12,8% growth)	12568 (4%growth)	12074
Subspecialist Paediatrics			
Inpatients	5311 (13% growth)	4694 (-10% growth)	5226
Outpatients	14152 (4,25% growth)	13574 (7,6% growth)	12604

### Output

#### Subspecialist Paediatrics

##### Total patient admissions 2012 (Clinicom data)

*A9 NICU	A9 PICU	A9 High Care	Trachea Unit	G1	G3	G7	G9	Total
518	694	104	41	1150	717	769	1318	<b>5311</b>

\*A9 NICU includes High-care beds, since Clinicom cannot separate data.

##### Bed Occupancy Rate 2012 (Clinicom data)

*A9 NICU	A9 PICU	A9 High Care	Trachea Unit	G1	G3	G7	G9	Total
131%	92%	45%	53%	87%	55%	77%	66%	<b>76%</b>

\*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, 4 Registrars, 10 Medical Officers

### A9 Intensive Care Unit

Staff: 1 Consultant (on rotation), 2 Registrars, 1 Medical Officer

Beds n=8	2012	2011	2010
Admissions	518	617	408
Average Hospital Stay in Days	5	6	8,2#
Average Bed Occupancy %	92%	93% (Only NICU)	80%#
% Growth	51%	51%	5,4%
Caesarean Sections	2821 (40,5%)	2521 (41%)	2122
Deaths	85	63 (10,2%)	76 (18,62%)

#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=36	2012	2011	2010
Admissions	1150	1029	987 (1036*)
Average Hospital Stay in Days	9	10	10,5*
Average Bed Occupancy %	87%	81%	96,6%*
% Growth	7,4%	-1,5%	4,3%
Deaths	25	30 (2,9%) (12 outborn)	33 (3,34%)

\*Data from Clinicom

### A9 Paediatric Intensive Care Unit

Staff: Prof R Gie, Drs P Goussard, S Kling, L Heyns, 2 Registrars, Medical Officer

Beds n=8	2012	2011	2010
Admissions	694	598 (PICU)	629
Average Hospital Stay in Days	4,86	6	#
Average Bed Occupancy %	92%	85%	#
% Growth	34%	#	#
Deaths	84 (11,9%)	52 (8%)	74 (11,8%)

# Clinicom combined data with NICU – no split for PICU, therefore cannot provide data

# PAEDIATRICS AND CHILD HEALTH

## A9 Paediatric High Care Unit

Staff as mentioned above. (High Care Unit opened May 2012)

<b>Beds n=8</b>	<b>2012</b>
Admissions	178
Average Hospital Stay in Days	2,5
Average Bed Occupancy %	61%
% Growth	New service
Deaths	1

## A9 Tracheostomy Unit

Staff as mentioned above:

<b>Beds n=10</b>	<b>2012</b>
Admissions	23
Average Bed Occupancy %	45%
Deaths	2

## Ward G9 Paediatric Pulmonology and Allergy

Staff: Prof R Gie, Drs P Goussard, Dr G Poole, Dr T Gray, 2 Registrars, Shared Medical Officer in G9

<b>Pulmonology Beds n=10</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Admissions Pulmonology	656	511	512
Average Hospital Stay in Days	5,78	6,75	7,0
Average Bed Occupancy %	66,24%	78%	#76%
% Growth	27%	/	/
Deaths	2	5	2 (0,4%)

# Includes for all 3 subdisciplines in G9: Pulmonology; Cardiology & Neurology

Theatre procedures and Other Activities

- Bronchoscopies : 284
- Thoracic surgery : 72

## Ward G9 Neurology

Staff: Profs J Schoeman, Drs R van Toorn, Dr R Solomons (outpatient clinics and outreach), P Springer, H Saunders, PAM Brink (Senior Registrar), 2 Registrars, Shared Medical Officer for G9

<b>Beds n=10</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Admissions	414	392	397
Average Hospital Stay in Days	5,7	6,75	6,75
Referral other wards	238		
Average Bed Occupancy %	75%	135%	129%
% Growth	1%	None	62%
Deaths	8 (1,9%)	5 (1,2%)	14 (3,52%)

# PAEDIATRICS AND CHILD HEALTH

\*Clinicom data (Combined with paediatric pulmonology)

Other Activities

- Paediatric & Neonatal EEGs reported: 630
- Outreach clinics to Paarl/Worcester hospital (patients seen): 352

## Ward G9 Paediatric Endocrinology

Staff: Drs E Zöllner, D Abraham, Registrar, and shared Medical Officer for G9

Beds n=5	2012	2011	2010
Patients admitted	79 Diabetics	91 Diabetics	98 Diabetics
	117 Endocrinology	102 Endocrinology	73 Endocrinology
Admission Total	196	193	171 (139*)
Average Hospital Stay in Days	5,5	7	10
Average Bed Occupancy %	56,6%	74%	82%*
% Growth	1,5%	1,1%	13,2%
Deaths	0	0	1 (0,6%)

\*Data from Clinicom

## Ward G7 Gastroenterology

Staff: Drs E Nel, Dr S Ströbele, Registrar, and shared Medical Officer for G7

Beds n=9	2012	2011	2010
Admissions	279	317	285
Average Hospital Stay in Days	18,09	12,6	15,4
Average Bed Occupancy %	83%	89%	90,3%
% Growth	-11,9%	11,1%	-22,5%
Deaths	10 (3,5%)	9	19 (6,6%)

\*Clinicom data & CHIP data

Theatre procedures

- Gastroscopy (including colonoscopy) 36
- Colonoscopy 10
- Liver Biopsy 12

## Ward G7 Infectious Diseases Unit

Staff: Prof MF Cotton, Dr H Rabie (HIV Clinic), Registrar, Shared Medical Officer for G7

Beds n=14	2012	2011	2010
Admissions	200	226	193
Average Hospital Stay in Days	17,3	16,4	16,8
Average Bed Occupancy %	83%	89%	72%



## PAEDIATRICS AND CHILD HEALTH

% Growth	-6%	11,1%	- 11,9%
Deaths	4	7	11 (5,6%)
HIV related (CHIP)	All	All	10
Infected (CHIP data)	4	7	10

\* Clinicom data combined with gastroenterology therefore cannot determine

### Ward G3 Oncology & Haematology

Staff: Profs M Kruger, C Stefan, Drs A Dippenaar, R Uys, 2 Registrars

Beds n=9	2012	2011	2010
New patients	42 Haematology	51 Haematology	30 Haematology
	48 Oncology	44 Oncology	60 Oncology
Admissions	415	343	475
Average Hospital Stay in Days	5	5,3	3,4
Average Bed Occupancy %	60,16%	48,2%	51,5%
% Growth	21%	/	23%
Deaths in G3	12	5	10
Day patients	1100	1181	1317

\*Clinicom data

### Ward G3 Nephrology

Staff: Dr C du Buisson, Dr JL Shires – part-time, Registrar, Shared Medical Officer for G3

Beds n=4	2012	2011	2010
Admissions	126	168	140
	11 day cases for infusions only	142	
Average Hospital Stay in days	6	12	6
Average bed occupancy %	52%	92%	81%
Deaths	2	1	1

- Renal biopsies (all done in G3) 24
- Acute dialyses (all done in PICU) 12
- Outlying patients 56
- Ward referrals 328

### Ward G3 & G10 Cardiology

Staff: Drs J Lawrenson, G Comititis, R De Decker (Red Cross children's Memorial Hospital), 2 Senior Registrars, 2 Registrars

Beds n=10 (G3=5, G10=5)	2012	2011	2010
Admissions	155 (includes G3)	148 (G10 - 37; G3 - 111)	147

## PAEDIATRICS AND CHILD HEALTH

Average Hospital Stay in Days	*	*	*
Average Bed Occupancy %	*	*	*
Inpatient Echocardiography	772	649	708
Inpatient Consultations	1094	707	*

\* Clinicom data combined with nephrology and general paediatrics therefore cannot be calculated

Offered at RXH as common platform of service delivery

- RXH theatre procedures, operations 280
- RXH theatre catheterizations 214
- Outreach clinic at Worcester Hospital 129

### OUTPATIENT COMPLEX

#### Subspecialist Clinics

	2012	2011	2010
<b>Clinics</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>
Haematology	261	259	177
Immunology	176	146	113
Oncology	418	448	392
Pulmonology	1399	1381	1308
Gastroenterology	614	527	604
High-risk Babies	1740	1671	1442
Neurology	2687	2685	2537
Allergy	654	713	689
Premature Follow-up	284	277	347
Nephrology	1343	1201	1103
Cardiology	937	1076	1032
Bronchopulmonary Dysplasia	21	22	23
Diabetic	610	598	586
Endocrinology	636	530	490
Rheumatology	280	183	205
Infectious diseases	1392	1308	1003
Genetics	476	367	293
Pharmacy prescriptions	224	178	250
<b>Total</b>	<b>14152</b>	<b>13574</b>	<b>12604</b>

### General specialist services

Total Patient Admissions 2012 (Clinicom data)

G2	J3	G8	G10	GG Short Stay	Total
2087	642	783	1429	4861	<b>9802</b>

# PAEDIATRICS AND CHILD HEALTH

## Bed Occupancy Rate 2012 (Clinicom data)

G2	J3	G8	G10	GG Short Stay	Total
93%	83%	86%	70%	68%	<b>80%</b>

## Neonatology

### Ward G2 Neonatal Unit – Babies born in TBH

Staff: 2 Consultants (on rotation), 1 Senior Registrar, 2 Registrars, 2 Medical Officers, 1 Intern (if available)

Beds n=38	2012	2011	2010
Admissions	2087	1845	2017 (2037*)
Average Hospital Stay in Days	5	6,0	6,3*
Average Bed Occupancy	93%	85%	150%*
% Growth	9,4%	-2,5%	- 12,3%
Deaths	71	66 (3,5%)	53 (2,62%)

\* Data from Clinicom

### Ward J3 Neonatal Unit – Babies born in TBH

Staff: 1 Consultant (on rotation), 0 Registrar, 2 Medical Officers

Ward opened April 2012

Beds n=38	2012
Admissions	642
Average Hospital Stay in Days	9
Average Bed Occupancy	83%
% Growth	New service
Deaths	1

\*Data from Clinicom

### Ward G8 Neonate & Kangaroo-mother Care – Step-down Facility

Staff: 1 Consultant (on rotation), 0 Registrar, 1 Medical Officer, 1 Intern

Beds n=30	2012	2011	2010
Admissions	783	834	736 (855*)
Average Hospital Stay in Days	12	11,1	11,25*
Average bed occupancy %	86%	80%	80%*
% Growth	-7,5%	-2,5%	-11,8%
Deaths	4	0	2 (0,27%)

\*Data from Clinicom

# PAEDIATRICS AND CHILD HEALTH

## Ward G10 General Paediatrics

Staff: Dr R Solomons, Dr H Finlayson, 1 Registrar, 2 Medical Officers, 2 Interns

Beds n=25	2012	2011	2010
Admissions	1429	1119	820
Increase in Admissions	28%	36%	168%
Average Bed occupancy	70%*	70,8%*	66,74%
Average Hospital Stay in Days	5,4	6,33*	5,3
Deaths	11 (0,77%)	10 (0,89%)	6 (0,73%)

\*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	2012	2011	2010
Total Admissions to G Ground	4861	4629	4738
% Increase in General Admissions	5%	-2%	-2%
Average Admissions per day	13 (range 10-18)	13	13
Average Hospital Stay in Days	1.0	1,2	
% Average Bed Occupancy	72%	73%	75%
Average Gastro Beds Daily Occupancy %	59%	63%	74%
Average Gastro Daily Occupancy % (Gastro Season Feb-May) – 8 Beds during Gastro Season instead of the usual 6	78%	80%	/
Deaths	16	13	17 (0,13%)
HIV-related Mortality	0	3	2
HIV Exposed	1	2	0

## General Paediatrics: Emergency & Clinics

Clinics	2012	2011	2010
OPD 8am-4pm: Emergency & Routine	8825	7668	7277
	6247 New referrals	5512 New Referrals	
	2578 Booked	2156 Booked	
Daily average seen	35	31	29

## PAEDIATRICS AND CHILD HEALTH

Annual OPD after hours: 4pm-8am & weekend – Emergency	5353	4900	4797
Daily average seen after hours (4pm-8am)	15		
OPD after hours: 4pm-8am %	38%	39%	39%
<b>Total</b>	<b>14178</b>	<b>12568</b>	<b>12074</b>

### 2012 Morbidity & Mortality

#### PIIP data

Total births in TCH (TBH): n = 6960

- Perinatal Mortality Rate (PNMR) ( $\geq 500\text{g}$ ) = 70,3/1000
- Early Neonatal Death Rate (ENNDR) ( $\geq 500\text{g}$ ) = 14,6/1000
- Perinatal Mortality Rate (PNMR) ( $\geq 1000\text{g}$ ) = 39,9/1000
- Early Neonatal Death Rate (ENNDR) ( $\geq 1000\text{g}$ ) = 6,8/1000

Mortality of babies born in TCH (TBH) per birth weight category: n=90

Birth Weight	% Mortality 2012	% Mortality 2011
$\leq 1000\text{g}$	29,1	21,6
1001 to 1500g	3,3	4,6
1501 to 1999g	2,4	1,5
2000 to 2499g	1	0,8
$\geq 2500\text{g}$	0,3	0,3

Causes of death of babies born in TCH (TBH): n=90

Cause of Death	% of Total 2012	% of Total 2011
Prematurity-related Complications	52,0	46,7
Extreme Prematurity	29,3	18,9
Infection-related	17,1	21,1
Peripartum Hypoxia	8,9	11,1
Congenital Anomalies	17,1	16,7
Other	0,8	1,1

% Deaths of babies referred to TCH per weight category

2012 : n = 74

Birth Weight*	% Mortality 2012	% Mortality 2011
$< 1000\text{g}$	14,5	33,3
1000 to 1499g	17,7	25
1500 to 1999g	9,7	8,3
2000 to 2499	11,3	8,3
$\geq 2500\text{g}$	46,8	25

# PAEDIATRICS AND CHILD HEALTH

\*Weight categories as a percentage of total deaths (outborn)

Causes of deaths of babies referred to TCH

2012 : n = 74

Note: This is for all neonates born outside TCH, and not just those who were in G1.

Cause of death*	% of Total 2012	% of Total 2011
Prematurity-related Complications	31 (41,8%)	1 (8,3%)
Infection-related	15 (20,5%)	4 (33,3%)
Extreme Prematurity	9 (12%)	3 (25%)
Peripartum Hypoxia	7 (9,5%)	2 (16,7%)
Congenital Anomalies	11 (15,0%)	2 (16,7%)
Other	10 (7,4%)	/
Total Deaths	7	12

\*Please note: Other co-morbidities not reflected.

Outborn babies mortality according to referral area of origin

Geographic Service Area	2012	%
Metro East:		
Northern SD	15	20%
Eastern SD	16	21%
Tygerberg SD	6	8%
Khayelitsha SD	5	7%
Winelands (Paarl area)	18	24%
Overberg (Worcester drainage area)	3	4%
Unknown	11	14%

Geographic distribution of the NICU admissions and death of babies born outside and referred to TCH

Place of Origin (Hospital)	Number 2012	Percentage 2012
Karl Bremer	60	8,6
Paarl	49	7
Helderberg	49	7
Worcester	13	1,8
Ander/Other	11	1,5
Swartland	10	1,4
Khayelitsha	8	1,1
Hermanus	7	1
Caledon	3	0,4

# PAEDIATRICS AND CHILD HEALTH

CHIP MORTALITY for all sub-specialist paediatric wards (2012)

CHIP Mortality	Deaths	Hosp. Mortality Rate
*0-28 days	12	1,6
28 days – 1 year	66	2,2
1-5 year	49	1,4
5-13 years	13	1,1
13-18 years	8	1,9
<b>Number of deaths</b>	<b>148</b>	<b>1,7</b>

\*Please note: Excluding neonatal deaths

Length of Stay	Number	%
DOA	2	1,35
<24 hours	49	33,1
1-3 days	30	20,3
4-7 days	22	14,8
8-14 days	8	5,4
>14 days	37	25

Gender	Number	%
Female	70	47,2
Male	78	52,7

Main Causes of Death in Children*	Number	%
Pneumonia, ARI	37	25
Septicaemia, Possible Serious Bacterial Infection	18	12,1
Acute Diarrhoea with Hypovolaemic Shock	13	8,7
Other Nervous System	13	8,7
Cirrhosis, Portal Hypertension, Liver Failure, Hepatitis	8	5,4
Congenital Heart Disease	5	3,3
Myocarditis	5	3,3
*Other Respiratory diseases	5	3,3
Tumours	5	3,3
TB : Miliary, other extra-pulmonary	4	2,7

\*Please note: Other co-morbidities not reflected.

## 5 Facilities where most patients were referred is from

Referring facility	Number	%
Khayelitsha Hospital	25	17
Helderberg Hospital	22	15

## PAEDIATRICS AND CHILD HEALTH

Not referred	15	10,1
Paarl Hospital	11	7,4
Delft CHC	10	6,7
Eerste River Hospital	10	6,7

HIV - mortality	Number	%
Negative	91	61,4%
Exposed	15	10%
Infected	12	8.1%
	Stage III 4	
	Stage IV 5	
Not tested	16	10,8%
Unknown	14	9.4%

### Mortality according to Weight Category

Weight Category	Number	%
OWFA	5	3,3
Normal	72	48,6
UWFA	48	32,4
Marasmus	16	10,8
Kwashiorkor	5	3,3
Marasmic Kwashiorkor	2	1,3

### Mortality per Ward

Ward	Number
A9 PICU	84
G G Ground	16
G10 - General	11
G3 Onco	11
G7 - Gastro	10
G9 - Neuro	8
G7 - Infect	4
G9 - Resp	2
G3 - Nephro	2
G9 - Cardio	0
<b>Total</b>	<b>148</b>



# PAEDIATRICS AND CHILD HEALTH

## Average hospital stay exceeding 30 days

(Data captured on a single day)

Neonatology	22	Ex prem with complications and/or poor weight gain.
PICU & High Care Complex	8	Tracheostomy & ventilation

## Infrastructure Development

### General Paediatrics

#### Neonatology:

- A 24 bed Level 2 ward, J3 was opened to accommodate the additional very low birth weight neonatal load from the Khayelitsha area. Thirteen beds were transferred from G2 while 11 additional beds were created to accommodate the referrals to Tygerberg Children's Hospital

#### General Paediatrics

Offices were opened on the 5th floor in Tygerberg Hospital. Drs Hassan, Redfern and Smit are based there. Included is a boardroom.

#### GG:

A point of care Blood Gas analyser was placed in Gground. This has been very succesful in improving emergency care.

### Subspecialist Paediatrics

#### Paediatric Intensive Care

- In August 2012 the paediatric high care unit was opened with the equipment mostly procured from a donation from the Swiss based Fondation Albatros (\*see in table below). This unit was used as a step down unit for the paediatric ICU. In the 7 months that the 4 bed unit was operational 139 children were admitted to the unit with an average stay of 2.5 patient days. This made a tremendous difference to the standard and safety of care.

### Tygerberg Children's Hospital Trust Contribution to Infrastructure

DATE	SUPPLIER	EQUIPMENT	AMOUNT
30/03/2012	Kwa-Nama Holdings	Bookcase and coffee table purchased for TCH Trust Offices	R 1 822.86
30/03/2012	Telfa TF Engineering	2 chairs for TCH Trust Offices	R 1483.42
07/05/2012	Mason Complete Office Solution	2 Bulletin Boards for C3A	R 1 735.65
*21/06/2012	SSEM Mthembu Medical (Pty) Ltd	3 Cardiorespiratory Monitors for Paeds High Care and PICU	R 283 347.00
*28/08/2012	Respiratory Care Africa (Pty) Ltd	4 x RCA Simple CPAP machines for NICU and High Care	R 139 764.00
03/12/2012	Philani Employment Project	Fresco Art painting for TCH as outreach	R 1 800.00
		<b>TOTAL</b>	<b>R 429 952.92</b>

# PAEDIATRICS AND CHILD HEALTH

## Part 2

### Community Outreach Programmes/Community Service and Interaction & Partnerships

#### International

##### Expert Members

- **Prof M Kruger**
  - SIOP Continental President for Africa
  
- **Prof HS Schaaf**
  - Invited expert on the National Paediatric Essential Medicines List committee and the National MDR-TB Advisory Committee
  - Invited expert on the European Centers for Disease Control on the issue of "Management of contacts of MDR- and XDR-TB cases" as well as on expert group for WHO on the use of the new anti-TB drug (bedaquiline) in TB treatment regimens. He is also now chair of the Lung Health Section of the International Union against TB and Lung Diseases (The Union) and serves on their Board of Directors (an NGO)
  
- **Prof RP Gie**
  - Involved in 2012 with the National Tuberculosis programs of the Republics of Bangladesh, Ethiopia and Mozambique in training physicians in childhood tuberculosis and developing childhood tuberculosis policies for the countries
  - Chairperson of the Global Drug Facility attached to the World Health Organization and was involved in developing new childhood tuberculosis guidelines for the WHO

##### Education & Training

- Prof DC Stefan
  - External examiner in Harare, Zimbabwe
  - Teaching and training of pediatricians, oncologists, general practitioners in Namibia, Kenya and Ethiopia
- Profs M Kruger, DC Stefan, Drs A van Zyl & R Uys
  - Members of the organizing committee SIOP Africa

- Successfully organized the 4th International Paediatric Hematology / Oncology Workshop – 19-20 March 2012
- Successfully organized the Pediatric Haematology/Oncology Workshop Outreach Programme – 19 October 2012

##### Outreach

- Prof DC Stefan
  - Medical advisor for pediatric oncology guidelines in Rwanda -
  - Twinning with the pediatric hematology oncology unit in Namibia - all members of the team
  - Twinning project with Windhoek Central Hospital Namibia

##### Partnerships

- Prof DC Stefan
  - Invited as member of BL clinical trial in Africa (National Cancer Institute)
  - Research study in SA (HIV malignancy) – collaboration with York University, Namibia
  - GTF-CCC member of the task force
  - Collaboration with Ivory Coast, Rwanda, Tanzania, Kenya
- Neurology:
  - Collaborative research with Prof Marceline Van Furth from the Free University, Amsterdam.
- Infectious Diseases
  - PATA- funding patient advocates
- Gastroenterology:
  - Cooperation with ESPGHAN to provide postgraduate training in Paediatric Gastroenterology to paediatricians in southern Africa
- Cardiology
  - Research partnership on rheumatic heart disease screening – World Heart Federation

#### National

##### Education & Training

- Paediatric Intensive Care/Paediatric Pulmonology

# PAEDIATRICS AND CHILD HEALTH

- The unit developed and ran a national paediatric pulmonology workshop "Here be Lungs" at which international speakers including the internationally renowned pulmonologist Prof Andrew Bush: March 2012.
- The unit took part in the "Childhood International Childhood Tuberculosis workshop; Goudini, Western Cape ,November 2012.

## Partnerships

- **Haematology/Oncology**
  - The chair of the SA paediatric cancer register is located at Stellenbosch University/Tygerberg Children's Hospital
- **Developmental Paediatrics**
  - PANDA (Paediatric Association of Neurodevelopmental specialists)
- **Infectious Diseases**
  - NDOH – Development of Guidelines for adolescents and children with HIV and TB Western Cape DOH – Development of guidelines
- **Pulmonology**
  - The paediatric pulmonology service still remains the paediatric bronchoscopy training service of choice with subspecialists in training from Red Cross War Memorial Hospital and Sub-Saharan countries being trained in the facility
- **Cardiology**
  - Dr H Pribut – additional exposure of trainee subspecialist registrar to rarely performed procedures
- **Gastroenterology, Hepatology and Nutrition**
  - SAGES, Gastro Foundation

## Regional

### Education & Training

- **Dr EWA Zöllner/Endocrinology**
  - Endocrine academic program at Groote Schuur Hospital (GSH) and participation in their endocrine journal club

- **Infectious Diseases**

- 1 Day workshop hosted on "The HIV infected Adolescent"
- 1 Day workshop hosted on "Drug resistance in paediatric HIV "

## Outreach

- **Endocrinology:**

- Link to St Josephs Home is maintained by patient discussions with the staff and training visits by the DNE

- **Haematology/Oncology**

- Clinic outreach, Western Cape
- Opening Survivorship Clinic – 17 Jan 2012 - Dr R Uys

- **Developmental Paediatrics:**

- Outreach to Paarl Hospital, Paarl school for cerebral palsy and Sivuyile special care

- **Neonatology:**

- Neonatologists do ward rounds in the neonatal and kangaroo mother care (KMC) wards at Helderberg and Eerste River Hospital
- Khayelitsha District Hospital operating from Tygerberg Hospital, led by the level 2 general paediatric head, Dr Malek, including a quarterly morbidity and mortality meeting.
- Ward rounds and in-service training at Helderberg Hospital and Khayelitsha Hospital twice a month (Paediatric and Neonatal) – Dr Hassan
- Once a month perinatal morbidity and mortality meetings at Helderberg Hospital, including feedback re neonates transferred to Tygerberg Children's Hospital. – Dr Hassan
- Co-ordination of and assistance with PPIP for the Metro East. Previously PPIP in Metro East fragmented and at some sites poorly collected. A central database has been set up in ward J3 for the importing of PPIP data from all facilities in the Tygerberg drainage area. Furthermore, various hospitals and MOUs are assisted by Dr Van Niekerk in the collection and capture of data required for PPIP. – Dr Magriet van Niekerk and Dr Hassan

# PAEDIATRICS AND CHILD HEALTH

- Neonatal clinic started at newly-opened Delft MOU (weekly clinic); and taken over at Site B MOU (previously Mowbray Maternity Hospital medical officer). These clinics offer both follow-up of at-risk babies discharged from facilities in Metro East as well as babies referred by the nursing staff at the various MOUs. This decreases the workload at the various hospitals and improves access to care since the parents do not need to travel to the larger hospitals. This also allows the earlier detection of babies and children needing a higher level of care, and to aid with the referral to various allied health professionals as necessary.- Dr M van Niekerk.
- Monthly neonatal resuscitation training at Khayelitsha Hospital and MOUs; Tygerberg Hospital (combined with obstetrics); Helderberg Hospital; Delft, Grabouw and Macassar MOUs. – Dr M van Niekerk.
- Ward rounds are conducted at the Neonatal and KMC wards at Eerste River Hospitals by Dr M du Preez
- **General Paediatrics:**
- MDR TB Clinics: Outreach for MDR-TB and complicated TB cases has also continued to two subdistricts – Khayelitsha (at Town Two) every first Wednesday of the month (302 patient visits), which also included in service training of Khayelitsha doctors to manage these cases, and Kraaifontein (at Scottsdene) every second month on last Wednesday of the month (58 patient visits).
- Brooklyn Chest Hospital: Responsibility for the BCH Children's wards together with a TCH registrar and a full-time BCH MO. Ward rounds are done twice weekly, of which one is also an opportunity for medical officer training and case presentations by Dr Andre Burger from Brewelskloof for discussion. BCH has 65 children's beds and manages complicated TB cases – 130 new admissions for 2012 – Prof HS Schaaf

- **Infectious Diseases:**

- HIV service held at Helderberg Hospital, Eerste River Hospital, TC Newman, Grabouw CHC, Micheal Mapongwana **CHC and Delft CHC**
- **Paediatric Intensive Care**
- Neonates and children are accepted from surrounding clinics, level 1 and level 2 hospitals. Good communication is maintained by the PICU to improve level of care at these institutions.
- **Cardiology**
- Worcester Hospital – 3 monthly clinics
- George Hospital – telephonic consultative service; 1 outreach clinic organised in 2012 as pilot
- East London group – 6 monthly clinics

## Partnerships

- **Developmental Paediatrics:**

- Collaboration with the Tygerberg Hospital school regarding establishment of an LSEN unit for pre-school children with developmental delay.

## Partnerships in the Private Sector

- **Endocrinology:**

- Novo Nordisk donates the salary for the diabetics educator.

- **Hematology/Oncology**

- Offer clinical advice and second opinions to private patients referred by pediatricians and oncologists

- **Infectious Diseases**

- Right to Care and Abbott Hosting of fully funded work shop

- **Pulmonology**

- Dr P Goussard has a outreach program to the private practices in the region surrounding Tygerberg Children's Hospital and both consults and performs bronchoscopies for the neonatal and paediatric services.

## Part 3

### Teaching & Training

#### Postgraduate Students

*Successful PhD candidate, Stellenbosch University*

Dr SEV Innes – Lipoatrophy in pre-pubertal children on antiretroviral therapy in South Africa. Promoters: Profs MF Cotton, B Rosenkranz, Dr EWA Zöllner

*Existing PhD students*

Dr UD Feucht - Evaluating and improving the care of HIV-infected and HIV-affected children in the first years of the implementation of a large-scale antiretroviral therapy programme in Pretoria, South Africa. Promoters: Profs M Kruger, B Forsyth

Dr P Goussard - Bronchoscopic assessment and management of children presenting with clinical significant airway obstruction due to tuberculosis. Promoter: Prof/Prof RP Gie

Dr A Mandalakas – Development of a novel conceptual framework of childhood tuberculosis within which to study the impact of an isoniazid preventative therapy (IPT) program for childhood TB prevention in high burden communities. Promoters: Profs AC Hesselning & RP Gie

Dr R Solomons with NRF bursary – Improving early diagnosis of tuberculous meningitis in children. Promoters: Profs J Schoeman (Stellenbosch University), M van Furth (Free University Amsterdam)

Joint PhD degree with Free University Amsterdam – Profs J Schoeman (Stellenbosch), M van Furth (Amsterdam)

Dr R van Toorn - Childhood tuberculous meningitis: challenging current management strategies. Promoters: Profs JF Schoeman, HS Schaaf

Dr EWA Zöllner – Adrenal suppression in asthmatic children on steroids. Promoters: Profs S Hough, E Irušen

Ms M Zunza - 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 settings. Promoters: Prof MF Cotton, Dr MM Esser

#### **PhD Application Submitted**

Dr A Bekker - Prevention and treatment of perinatal and infant tuberculosis in the HIV era

**Promoters: Profs AC Hesselning, HS Schaaf**  
**Successful Candidate in:**

#### **Cert Neonatology (SA), CMSA**

- Dr SK van der Merwe

#### **Cert Developmental Paediatrics (SA), CMSA**

- Dr A Redfern
- Dr HH Saunders

#### **Cert Pulmonology (SA) Paed, CMSA**

- Dr GA Poole

#### **Dipl HIV Medicine (SA) Paed, CMSA**

- Dr C Edson

#### **MMed (Paed), Stellenbosch University**

- Dr H Hassan: Title: "The clinical manifestations and outcomes in HIV-infected children with Cryptococcus at Tygerberg Children's Hospital"
- Dr G Morkel: Title: "Bloodstream infections and antimicrobial resistance patterns in a South African neonatal intensive care (ICU)"
- Dr JR Murray: Title: "Cost and indications of blood transfusions in Pediatric Oncology in an African hospital"

#### **FC Paed(SA) Part I, CMSA**

- Drs C Geldenhuys, M Grantham, W Hough, C Jacobs, Y Kooblal, H Liebenberg, L Mwenda, V Netshituni, L Pretorius, A van Eck

#### **FC Paed(SA) Part II, CMSA**

- Drs B Baadjies, GP de Bruin, LV Heyns, Z Kajee, I Kruger, S McClou, G Morkel, J Morrison, M Mouton, J Murray, M Palmer, L Swanson

# PAEDIATRICS AND CHILD HEALTH

## Training Awards:

Dr ED Nel - Received financial support from the European Society of Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), from an unrestricted grant of 35000 Euro annually for two years by the Nestle Nutrition Institute (NNI) to train a fellow in paediatric gastroenterology

## Undergraduate Students

94.14% pass rate

## Education-related Activities

- The Education Committees of the Department comprised as follows:
  - Undergraduate: Drs D Abraham, R van Toorn, R Solomons, CJ du Buisson, A van Zyl, L Heyns (chairperson), GF Kirsten
  - Postgraduate: Drs S Kling (chairperson), ED Nel, H Finlayson, Van Toorn, Stefan
  - PhD: Profs M Kruger (chairperson), N Beyers, JF Schoeman, HS Schaaf, MF Cotton, AC Hesselning
- All consultants are involved with under- and postgraduate teaching on a daily basis. Additional education activities included:
  - Senior registrars in training:
    - Paediatric Pulmonology: Dr GA Poole, funded by bursary from Nycomed Pharmaceuticals, and Dr TC Gray, funded by bursary from the Discovery Foundation
    - Developmental Paediatrics: Dr HH Saunders, funded by Discovery Foundation
    - Paediatric Cardiology: Dr B Rossouw
    - 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
    - Paediatric Neurology: Dr PAM Brink
  - Colleges of Medicine of South Africa (CMSA):
    - Convenors/External Examiners:
      - Diploma in Child Health (DCH): Dr G Kali
      - Cert Neonatology (SA): Prof J Smith

## Part 4

### Research

#### **Achievements with regard to Research Activities and Research Outputs**

#### **NRF Ratings:**

- Profs PR Donald, HS Schaaf – A2
- Profs J Schoeman, M Cotton – B3
- Prof P Hesselning – C1
- Profs J Smith, DC Stefan, Dr H Rabie – C3 rating

#### **Publications**

General and Subspecialist Paediatrics, Department of Paediatrics and Child Health, Stellenbosch University and Tygerberg Children’s Hospital

The Children’s Infectious Diseases Clinical Research Unit (KID-CRU), Department of Paediatrics and Child Health, Stellenbosch University and Tygerberg Children’s Hospital

Desmond Tutu TB Centre (DTTC), Department of Paediatrics and Child Health, Stellenbosch University and Tygerberg Children’s Hospital

#### **Journal Articles (Subsidised)**

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2. ANDRONIKOU S, VAN DER MERWE DJ, **GOUSSARD P**, TOMAZOS N. Usefulness of lateral radiographs for detecting tuberculous lymphadenopathy in children - confirmation using sagittal CT reconstruction with multiplanar cross-

- referencing. *SA Journal of Radiology* 2012; 16(3) : 87-92.
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  6. **COTTON MF, RABIE H.** Group B streptococcal disease in infants. *Lancet* 2012; 379 : 502-503.
  7. **CUEVAS LE, BROWNING R, BOSSUYT P, CASENGHI M, COTTON MF, CRUZ AT, DODD LE, DROBNIOWSKI F, GALE M, GRAHAM SM, GRZEMSKA M, HEINRICH N, HESSELING AC, HUEBNER R, JEAN-PHILIPPE P, KABRA SK, KAMPMANN B, LEWINSOHN D, LI M, LIENHARDT C, MANDALAKAS AM, MARAIS BJ.** Evaluation of tuberculosis diagnostics in children: 2. Methodological issues for conducting and reporting research evaluations of tuberculosis diagnostics for intrathoracic tuberculosis in children. Consensus from an expert panel. *Journal of Infectious Diseases* 2012; 205(2) : S209-S215.
  8. **DAVIES M-A, BOULLE A, TECHNAU K, ELEY B, MOULTRIE H, RABIE H, GARONE D, GIDDY J, WOOD R, EGGER M, KEISER O.** The role of targeted viral load testing in diagnosing virological failure in children on antiretroviral therapy with immunological failure. *Tropical Medicine & International Health* 2012; 17(11) : 1386-1390.
  9. **DIACON AH, DAWSON R, DU BOIS J, NARUNSKY K, VENTER A, DONALD PR, VAN NIEKERK C, ERONDU N, GINSBERG AN, BECKER P, SPIGELMAN MK.** Phase II Dose-Ranging Trial of the Early Bactericidal Activity of PA-824. *Antimicrobial Agents and Chemotherapy* 2012; 56(6) : 3027-3031.
  10. **DIACON AH, DAWSON R, VON GROOTE-BIDLINGMAIER F, SYMONS G, VENTER A, DONALD PR, VAN NIEKERK C, EVERITT D, WINTER H, BECKER P, MENDEL C, SPIGELMAN MK.** 14-day bactericidal activity of PA-824, bedaquiline, pyrazinamide, and moxifloxacin combinations: a randomised trial. *Lancet* 2012; 380 : 986-993.
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  14. **DONALD PR, MARITZ JS, DIACON AH.** Pyrazinamide pharmacokinetics and efficacy in adults and children. *Tuberculosis* 2012; 92(1) : 1-8.
  15. **DRAMOWSKI A, MORSHEIMER MM, JORDAAN AM, VICTOR TC, DONALD PR, SCHAAF HS.** Rifampicin-monoresistant

- Mycobacterium tuberculosis disease among children in Cape Town, South Africa. *International Journal of Tuberculosis and Lung Disease* 2012; 16(1) : 76-81.
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  20. GOPAL S, WOOD WA, LEE SJ, SHEA TC, NARESH KN, KAZEMBE PN, CASPER C, **HESELING PB, MITSUYASU RT.** Meeting the challenge of hematologic malignancies in sub-Saharan Africa. *Blood* 2012; 119(22) : 5078-5087.
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## Journal Articles (Non-subsidised)

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2. ANDRONIKOU S, GOVENDER N, RAMDASS A, **VAN TOORN R**. MRI appearances of tuberculous meningitis in HIV-infected children: a paradoxically protective mechanism?. *Imaging in Medicine* 2012; 4(3) : 359-366.
3. **DU BUISSON CJ**. The ins and outs of urinary tract infections in children. *South African Paediatric Review* 2012; 9(3) : 15-20.
4. **GOUSSARD PL, GIE RP, KLING S**. Approach to a hyperlucent lung in children. *South African Paediatric Review* 2012; 9(3) : 6-13.
5. **KLING S**. Asthma exacerbations in children. *South African Paediatric Review* 2012; 9(3) : 22-27.
6. **KRUGER M, STEFAN C**, REYNDERS D, STONES DK, DAVIDSON A, POOLE J, WAINWRIGHT L, THEJPAL R, DE JAGER L,

- HENDRICKS M, **HESELING PB**. Childhood histiocytosis in South African paediatric oncology units. *Pediatric Blood & Cancer* 2012; 59(6) : 1045.
7. **MADIDE A, SMITH J, ODENDAAL HJ**. Methamphetamine use by pregnant women: impact on the neonate and challenges for the perinatal team. *Obstetrics and Gynecology* 2012; 22 : 8-11.
  8. **PAPADOPOULOS NG, ARAKAWA H, CARLSEN K.-H, CUSTOVIC A, GERN J, LEMANSKE R, LE SOUEF P, MÄKELÄ M, ROBERTS G, WONG G, ZAR H, AKDIS CA, BACHARIER LB, BARALDI E, VAN BEVER HP, DE BLIC J, BONER A, BURKS W, CASALE TB, CASTRO-RODRIGUES JA, CHEN YZ, EL-GAMAL YM, E, KLING S**. International consensus on (ICON) pediatric asthma. *European Journal of Allergy and Clinical Immunology* 2012; 67(8) : 976-997.
  9. **REYNDERS D, KRUGER M, OMAR F**. Delay in presentation and treatment of patients with confirmed osteosarcoma to a single South Africa institution. *Pediatric Blood & Cancer* 2012; 59(6) : 1049.
  10. **SCHAAF HS, SEDDON JA**. Epidemiology and management of childhood multidrug-resistant tuberculosis. *Clinical Practice* 2012; 9(6) : 701-713.
  11. **SEDDON JA, HESSELING AC, DUNBAR R, COX H, HUGHES J, FIELDING K, GODFREY-FAUSSETT P, SCHAAF HS**. Decentralised care for child contacts of multidrug-resistant tuberculosis. *Public Health Action* 2012; 2(3) : 66-70.
  12. **SMIT L, HASSAN H**. Realising children's rights in healthcare. *South African Paediatric Review* 2012; 9(3) : 28-44.
  13. **SOLOMONS R, SCHOEMAN JF, VAN TOORN R**. Approach to headaches in children. *CME* 2012; 30(1) : 31-32.
  14. **STEFAN C, HARFORD J, STONES DK, NEWTON R, RODRIQUEZ-GALINDO C**. Hope for African children with cancer: African Pediatric Oncology Group. *Pediatric Blood & Cancer* 2012; 59 : 349.
  15. **STEFAN C, STONES DK, POOLE J, KRUGER M, VUJANIC G**. Treatment of neuroblastoma in Africa: Which one and at what cost?. *Pediatric Blood & Cancer* 2012; 59(6) : 1060.
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  17. **ZIMRI K, HESSELING AC, GODFREY-FAUSSETT P, SCHAAF HS, SEDDON JA**. Why do child contacts of multidrug-resistant tuberculosis not come to the assessment clinic?. *Public Health Action* 2012; 2(3) : 71-75.

## Proceedings – International

1. **VAN WYK AC, GRAY TC, WRIGHT CA**. Lymphomatoid granulomatosis: a rare cause of granulomatous inflammation on fine needle aspiration in an HIV positive child . XXIXth Congress of the International Academy of Pathology, Cape Town International Convention Centre, Cape town, South Africa, Wiley Blackwell 2012: 57.

## Proceedings – National

1. **ACKERMANN C, INNES S, TALIEP R, VAN TOORN R, COTTON M**. White matter signal abnormalities in children with HIV-related brain disease. Abstract 133. 56th Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, Stellenbosch University 2012: 136-137.
2. **PITCHER R, LOMBARD C, COTTON M, BENINGFIELD S, ZAR HJ**. Persistent chest radiographic abnormalities in HIV-infected children. Abstract 140. 56th Annual Academic Day, Faculty of Medicine and Health Sciences, Tygerberg, South Africa, Stellenbosch University 2012: 140-141.

## 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.

# PAEDIATRICS AND CHILD HEALTH

## Special Achievements and Highlights

- **Prof MF Cotton:**
  - 19th Conference on Retroviruses and Opportunistic Infections (CROI), Seattle, Washington in March 2012. Title: "Nevirapine versus Ritonavir-boosted lopinavir for HIV-infected children"
- **Dr ED Nel:**
  - The first ESPGHAN Post Graduate Course in Paediatric Gastroenterology, 25-30 March 2012
- **Desmond Tutu TB Centre (DTTC):**
  - ORAP – Sustainable operational research training workshop. Train 2 staff members from TBH per annum
  - KOCHON prize – Won the 2012 Stop TB Partnership Kochon Prize (US \$65,000 ) for its ground-breaking research on childhood TB; Kuala Lumpur, Malaysia, 13-17 November 2012
- **South-to-South:**
  - On 17 October 2012 the S2S Program for Comprehensive Family HIV Care & Treatment received US\$14,999,432 funding for Cooperative Agreement No. AID-674-A-12-00031; HIV-Innovations for Improved Patient from the United States Agency for International Development/ South Africa Health Office. Activity Title: Developing and Institutionalizing an Innovative Capacity Building Model to Support South African government Priorities to Improve HIV/TB Health Outcomes for Priority Populations
- **Prof JF Schoeman**
  - Lifetime achievement award by the Paediatric and neurodevelopmental association of Southern Africa (PANDA SA).
- **Dr R van Toorn**
  - Elected as treasurer of PANDA SA.
- **Dr EWA Zöllner:**
  - Received the "Best Paper Award" at the ALLSA conference in July 2012.
- **Prof DC Stefan:**
  - Nomination in the Ministerial Advisory Committee on the Prevention and Control of cancer in South Africa
- **Dr R Uys**

- Tygerberg Hospital School Governing Body (Vice- Chair)
- **Dr E Malek**
  - Invited as a member of an international Swedish based research steering group on Oral Rehydration Therapy related research
- **Drs DR Abraham**
  - Best lecturer of the Faculty of Medicine and Health Sciences, awarded at the SI ball last year. An award dedicated by the final year students for their best lecturer.
- **Rectors Award for General Performance**
  - Prof M Kruger
  - Prof N Beyers
  - Dr M Claassens
  - Mrs M Bester
  - Sr J Crisp
  - Mrs SL Brand
  - Mrs J Saffier
  - Ms C de Vos
  - Mr K Smith
  - Ms L Maliwa

## Conferences: Participants & Attendees

### International

- **Prof M Kruger**
  - Developing High Quality Standards for e-Learning Programs in Research Ethics and Regulation in North-South Partnerships, Brocher Foundation, Geneva, 16 - 18 January 2013
  - 44th SIOP Congress of the International Society of Paediatric Oncology (SIOP): October 5-8, 2012 in London, United Kingdom. Titles: Oral presentation: Consent Competency in Afrikaans-speaking Children in South Africa; Poster presentation: Childhood Histiocytosis in South African Paediatric Oncology Units
  - 7th SIOP Asia Congress, Yogyakarta, Indonesia, 22-24 April 2012. Invited speaker: Ethical issues in stem cell transplantation
  - SIOP Africa 2012, Woodstock, Cape Town, 21-23 March 2012. Welcome address, Round table discussion, Adapted treatment regimes:

# PAEDIATRICS AND CHILD HEALTH

retinoblastoma, Session 8 chair & Invited speaker: Justice, rare diseases and Africa

- **Prof DC Stefan:**
  - Invited speaker – International pediatric cancer and pediatric Cancer Care in Africa; Annual International Conference on Child Health Kigali Rwanda
  - Invited speaker First Namibian Medical Society Pediatric Congress
  - Invited speaker “Cancer in Africa” Philadelphia University USA
  - Invited speaker SIOP Africa
- **Dr A Bekker**
  - Presented: 2012 UNION conference in Kuala Lumpur, November 2012; “TB treatment considerations for neonates and infants”
- **Dr ED Nel**
  - Improving the outcome of Severe Acute Malnutrition. Nestle Nutrition Institute of Africa Scientific Meeting, Windhoek, Namibia, 13 June 2012.
  - Hepatitis co-infection. 4th International Workshop on HIV Pediatrics. Washington DC, USA. 20-21 July 2012.
- **Paediatric Gastrointestinal Problems: CMT CME course.**
- ESPGHAN Post Graduate Course in Paediatric Gastroenterology. 25-30/3/2012:
  - HIV disease and the Intestine
  - Gastroesophageal Reflux
  - Persistent Diarrhoea
- ESPGHAN Post Graduate Course in Paediatric Gastroenterology. 7-12/10/2012
  - TB Abdomen
  - Paediatric Gastrointestinal
  - Functional Gastrointestinal Complaints

## National

- **Prof M Kruger**
  - Annual Novartis & Stellenbosch University Clinical Science Workshop, Faculty of Medicine and Health Sciences, 22 and 23 October 2012
  - Invited speaker: Paediatric Clinical Trials in Developing Countries - Ethical Issues

- Here by Lungs Conference, Lanzerac Hotel, Stellenbosch, 16-17 February 2012. Welcoming address

- **Dr A van Zyl**
  - Invited speaker MASAC Education Symposium, 16-17 November
  - Prof Johan Smith:
    - Conferences organized:
      - *Here Be Lungs; 15 – 17 February 2012*
    - Workshops hosted:
      - High-frequency oscillation workshops
        - A) 9 – 11 May 2012
        - B) 14 – 16 November 2012
- **Dr GTJ Kali**
  - Presented at SAPA August 2012: “Predictors of outcome after cooling in HIE”
- **Prof GF Kirsten:**

## Presented:

- Medi-Clinic Neonatal Nursing Seminar, Morningside Medi-Clinic, Johannesburg, January 2012
- Care of the VLBW infant
- Feeding of the VLBW infant
- Oxygen therapy in the NNICU
- Non-invasive ventilation
- Retinopathy of prematurity
- Blood transfusions in neonates
- GF Kirsten. Here be Lungs Conference, Stellenbosch. 16 & 17 February 2012. An Approach to the newborn who is difficult to wean from ventilation.
- GF Kirsten. Understanding the shared responsibility of Caring for the Very Low Birth weigh Infant. Med-Clinic Meeting. Arabella. September 2012
- GF Kirsten. Interpretation of the full blood count of a newborn infant. Medi-Clinic Neonatology Seminar. Cape Town November 2012
- **Dr A Bekker**
  - Presented at Here Be Lungs 15 – 17 February 2012: “Perinatal TB”
  - Presented at the 4th ICAN African Conference, November 2012: “Advances in Paediatric Infection, Prevention and Control”



# PAEDIATRICS AND CHILD HEALTH

- **Dr GTJ Kali**

- Presented at SAPA August 2012: "Predictors of outcome after cooling in HIE"

- **Dr Adrie Bekker**

- Presented at Here Be Lungs 15 – 17 February 2012: "Perinatal TB"
- Presented at the 4th ICAN African Conference, November 2012: "Advances in Paediatric Infection, Prevention and Control"

- **Dr S O’Ryan**

- Presented at Bana Pele 22 August 2012; "2010 AHA Neonatal Resuscitation Guidelines: Updates and Implementation in Developing Countries"

- **Prof HS Schaaf:**

- 30th Annual Meeting of the European Society for Paediatric Infectious Diseases, 8-12 May 2012, Thessaloniki, Greece
- Zero TB Deaths, 29 May – 1 June 2012 – Meeting at Harvard University, Cambridge, Massachusetts, USA
- 3rd SA TB Conference, 12-15 June, Durban, South Africa.
- International Symposium: Excellence in Pediatric HIV and TB Coinfection Care in Ukraine. 11-12 October 2012, Kiev, Ukraine
- 6th International Childhood TB training conference, 22-26 October 2012, Goudini, South Africa
- Biennial Conference/Workshop on drug-resistant TB: Current practice, controversies and clinical challenge. 26-28 October 2012, Cape Town, South Africa
- Paediatric drug-resistant TB: Turning research into practice. 31 October-2 November 2012, Johannesburg, South Africa.
- 43rd Union World Lung Health Conference, 13-17 November 2012, Kuala Lumpur, Malaysia

- **Dr ED Nel**

- Aetiology and Management of GERD. SAGES 2012. Durban. 9-11 August 2012

## Regional

- **Prof M Kruger**

- Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI): Writing a successful NIH R01 grant application workshop, Stellenbosch University Faculty of Health Sciences, 3 April 2012. Title: Human subjects, regulatory requirements
- Radio Tygerberg: : Invited speaker – Kinderkanker, 7 March 2012
- RSG - Wat sê die dokter: Invited speaker – International Childhood Cancer Day, 15 February 2012
- UCT Paediatric Refresher Course 2012, University of Cape Town, 14-17 February 2012. Chair – Ethico-legal Symposium

- **Dr R Uys:**

- Childhood Cancer Awareness Presentation, CANSA Symposium, West Coast (2 Feb)
- Childhood Cancer Awareness Talk (12 June 2012) to Health Promoting Schools Cluster
- Meeting (Nursing staff, Educators) Beacon Valley Primary School
- Childhood Cancer Awareness Talk on Bush Radio (30 July 2012)

- **Dr P Springer**

- Radio interview Media 24 on Down Syndrome

- **Prof GF Kirsten**

- Non-invasive ventilation of the newborn with a very low birth weight. Workshop on high-frequency ventilation (HFOV), Department of Paediatrics and Child Health, Faculty of Health Sciences, 14 May 2012.
- Non-invasive ventilation of the newborn with a very low birth weight. HFOV workshop, Department of Paediatrics and Child Health, Faculty of Health Sciences, 17 November 2012.

- **Dr A Bekker**

- Presented at Paediatric TB course, Goudini, October 2012: "Congenital & Neonatal TB"

- **Dr S O’Ryan**

# PAEDIATRICS AND CHILD HEALTH

- o Presented at Abbott CME 27 September 2012; "2010 AHA Neonatal Resuscitation

Guidelines: Updates and Implementation in Developing Countries" Part 5

## CENTRES

### THE CHILDREN'S INFECTIOUS DISEASES CLINICAL RESEARCH UNIT (KID-CRU)

Director: Prof MF Cotton

Date	Name	Meetings/Conferences	Place
5 – 8 March 2012	Prof Cotton – Principal Investigator	CROI 2012	Seattle, USA
10 – 11 May 2012	Prof Cotton	2 <sup>nd</sup> Pan-African Infectious Diseases Conference (Moderator)	Johannesburg, SA
27 – 29 June 2012	Prof Cotton	IMPAACT Group meeting - <b>member of the primary therapy study group</b>	Washington DC, USA
20 – 21 July 2012	Prof Cotton	4th International Workshop on HIV Pediatrics <b>Member of organizing committee</b>	Washington DC, USA
22 – 27 July 2012	Prof Cotton	IAS Conference – 4th International workshop on Pediatric HIV	Washington DC, USA
24 – 25 August 2012	Prof Cotton	Bana Pele <b>Talk:</b>	Limpopo, SA
17 – 19 September 2012	Prof Cotton	Vaccine Strategies Against Tuberculosis Workshop <b>Talk:</b> BCG Disease and Live Vaccines in HIV infected Children	Durban, SA
9 – 11 November 2012	Prof Cotton	International African Vaccinology Conference	Cape Town, SA
25 – 28 November 2012	Prof Cotton	SA HIV Clinicians Society Conference <b>Talk:</b> INH Prophylaxis	Cape Town, SA
25 – 29 June 2012	J Louw G Fourie J Coetzee M Smuts M Theunissen B Laughton	IMPAACT Group meeting	Washington DC, USA
5 – 8 March 2012	S Innes	Conference on Retroviruses and Opportunistic Infections	Seattle, USA

## PAEDIATRICS AND CHILD HEALTH

12 April 2012	Dr L Frigati	Immunization Presentation	Western Cape Department of Health, SA
22 – 27 July 2012	Dr M Rossouw	<p>IAS Conference – 4th International workshop on Pediatric HIV</p> <p><b>Abstract:</b> Safety and Efficacy of Efavirenz Sprinkled and Liquid Formulations administered in combination with didanosine and emtricitabine in HIV-1-infected infants and children 3 months to 6 years of age: Week 48 analysis of the A1266922 study</p>	Washington DC, USA

### Studies

Sponsor: IMPAACT

#### A. IMPAACT

##### 1. P1041

Sponsor -DAIDS/NIH  
 Subjects enrolled -412  
 First patient enrolled: April 2005  
 Study completed: February 2009

##### 2. P1060

Sponsor -DAIDS/NIH  
 Subjects enrolled: 87 patients  
 First patient enrolled: November 2006  
 Study ongoing

##### 3. P1066

Sponsor -DAIDS/NIH  
 Subjects enrolled: 2 patients  
 First patient enrolled: July 2010  
 Study ongoing

##### 4. P1073

February 2010 - continue  
 Screened = 21 and Enrolled = 15  
 Sponsor: IMPAACT

##### 5. 1077BF

May 2011 – continue  
 Screened = 27 and Enrolled = 16  
 Sponsor: IMPAACT

##### 6. P1084

Duration: May 2011 - continue  
 Screened = 23 and Enrolled = 1  
 Sponsor: IMPAACT

##### 7. P1070

Screened = 5 and Enrolled = 4

#### IMPAACT assessment

KIDCRU received an overall score of 1 (exceeded IMPAACT standards). Refer extract from report:

“The PERC (Performance Evaluation Review Committee) has reviewed all of the data and the final assessment was presented to the Network Executive Committee (NEC) for IMPAACT Year 3 CRS performance. The PERC did not receive any requests for changes or corrections to your site’s CRS evaluation for the period of February 1, 2011 through January 31, 2012.

There were five areas of evaluation, not including scientific contribution, to which your CRS was assessed and

received an IMPAACT evaluation rating. The five areas of evaluation and your site’s rating are as follows:

- Accrual is Outstanding
- Data Management is Excellent
- Regulatory Compliance score is Adequate
- Monitoring is Adequate
- CAB Meets Standards

Your site’s overall score is 1, which means your CRS exceeds IMPAACT standards with > 25 subjects on average per month on study on intervention trials over a 12 – month period. The PERC congratulates you on your accomplishments.”

The report is available on request.

# PAEDIATRICS AND CHILD HEALTH

## B. CIPRA

### 1. Project 2

Sponsor: DAIDS/NIH  
 Subjects enrolled: 136  
 Active patients: 105  
 Study started: 31 August 2005  
 Study is ongoing  
 Publication in NEJM: Early Antiretroviral Therapy and Mortality among HIV-Infected Infants. Nov 2008

### 2. Project 4

Sponsor: DAIDS/NIH  
 Subjects enrolled: 193  
 Active patients: 143  
 Study started: 10 May 2005  
 Study is ongoing

## C. GSK

### 1. APV 20002

Sponsor: Glaxo Smith & Kline  
 Subjects enrolled: 23  
 Study started: 17 March 2008  
 Study is ongoing

### 2. APV 29005

Sponsor: GSK  
 Subjects enrolled: 5  
 Study started: 19 August 2008  
 Study is ongoing

## D. HEU

Sponsor: University of Vancouver (Canada)  
 Enrolled subjects: 95  
 Active patients: 50  
 Study is ongoing

## E. P1043

Sponsor: Westat  
 Enrolled subjects: 136  
 Study started: January 2007  
 Study is ongoing

Enrolment ended 26 July 2010; follow up to be completed before 10 December 2010

## F. ROCKEFELLER

Sponsor: Rockefeller Foundation  
 Subjects enrolled: 19 (at KIDCRU); 32 (at Paarl)

## G. VPM Phase II

November 2011 – November 2012  
 Screened = 126 and Enrolled = 48  
 Sponsor: Vanderbilt University

## H. CHER Neurodev

Duration: January 2006 – December 2011  
 Enrolled = 179  
 Sponsor – Harry Crossley Foundation + MRC + NRF

## I. SUB STUDIES

RO1  
 Sponsor: Wistar  
 Started March 2006  
 Subjects enrolled: 41 (Active patients: 34)

### Maternal sub study

Started: September 2006  
 Enrolled: 183

### Maternal Assessment sub-study

Title: Association of Maternal Depression and other Psychiatric Outcomes With Long-Term neurodevelopment in HIV-positive infants Receiving Early or Delayed Antiretroviral Treatment

### Total number of assessments completed:

8-16 weeks:	<b>62</b>
18-24 weeks:	<b>60</b>
10-12 months:	<b>151</b> (Exposed: <b>31</b> , Unexposed: <b>23</b> , Infected: <b>97</b> )
18-20	<b>142</b>

## PAEDIATRICS AND CHILD HEALTH

months:	(Exposed: <b>32</b> , Unexposed: <b>20</b> , Infected: <b>89</b> )
30 months:	<b>139</b> (Exposed: <b>30</b> , Unexposed: <b>23</b> , Infected: <b>83</b> )
42 months:	<b>129</b> (Exposed: <b>30</b> , Unexposed: <b>18</b> , Infected: <b>81</b> )
60 months:	<b>48</b> (Exposed: <b>20</b> , Unexposed: <b>19</b> , Infected: <b>9</b> )

A number of mothers were identified with probable clinical depression and were referred to their local psychology services.

### Neurodevelopmental Sub study

Sponsor: Cipra/MRC/Harry Crossley

Subjects enrolled: 179

Study started: March 2006

Jeanne Louw is a voting member of the IMPAACT Site Management and Clinical Care Resource Committee

### CIPRA Neurodevelopmental sub-study

Study title: The effects of early versus delayed antiretroviral treatment on the short and long term neurodevelopmental outcome of children who are HIV positive.

### We have performed the following assessments to date:

#### 10 – 12 months

38 HIV unexposed control group

31 HIV exposed, uninfected control group

109 HIV infected

#### 18 - 20 months

35 HIV unexposed control group

22 HIV exposed, uninfected control group

98 HIV infected

### 2 ½ years

27 HIV unexposed control group

18 HIV exposed, uninfected control group

93 HIV infected

### 3 ½ years

33 HIV unexposed control group

22 HIV exposed, uninfected control group

96 HIV infected

### 5 years

28 HIV unexposed control group

21 HIV exposed, uninfected control group

10 HIV infected (still in process – to finish December 2011)

The neurodevelopmental component of CHER+ has grown out of this work, as well as improving the knowledge of the performance of South African Children on the Griffiths Mental Development Scales (2006 edition). Dr Laughton was invited by Association for Research in Infant and Child Development in London (which developed the test) in May 2010, to present her findings on the longitudinal scores of these infants. This was also presented to the Brain and Behaviour society in Cape Town.

### HIV motion correction sub study:

Title: Magnetic Resonance Imaging Sub-study

In collaboration with scientists from University of Cape Town and Boston University to conduct an MRI study on the children in CHER. The scientists developed software to correct for movement, and have been able to successfully conduct 17 MRIs on 5-year old children without sedation out of 22. This is a major contribution as previously it has been impossible to conduct MRIs on children this age without sedation or anaesthesia. Neurodevelopmental scores will then be correlated with findings on brain imaging to contribute to scientific knowledge regarding the effects of HIV on the brain.

## PAEDIATRICS AND CHILD HEALTH

### Ongoing Research Support:

<b>COTTON, MF ACTIVE</b>		
USAID 674-A-00-09-00001-00 The major goal of this program: To Provide Technical, Program, and System Support for Family-focused HIV Services. No overlap with other projects	10/01/2011 – 9/30/2012 \$2,900,000	0.60 calendar / 5%
NIH R01 AI 076199 The major goal is to examine the Utility of Interferon-Gamma Release Assays in TB-HIV co-infected Children No overlap with other projects	8/1/2011 – 7/31/2012 \$410,000	0.60 calendar / 5%
NIH 5U01AI069521 Stellenbosch University Clinical Trial Unit – IMPAACT projects. The major goal is to conduct HIV clinical trials funded through IMPAACT. No overlap with other projects	02/01/2012 – 01/31/2013 \$1,181,201	4.8 calendar / 40%
CDC #2009-N - 11094 Tuberculosis Trials Consortium. The major goal of this project is to develop and undertake tuberculosis-related clinical trials. No overlap with other projects	10/01/2011 – 09/30/2012 \$351,676	0.60 calendar / 5%
NIH: 5R01HD069169-02 PK and Toxicity of Secondline Antituberculosis Drugs in HIV-Infected Children. The major goal is to describe pharmacokinetics and safety of 2nd-line anti-tuberculosis medications in children No overlap with other projects	04/01/2012 – 03/31/2013 \$403,759	0.60 calendar / 5%
NIH: R01 HD071664 Longitudinal Neuro-imaging and Cognitive Study of HIV-Infected Children Major goals of the project: Clinical and Cognitive assessment of children at 7 and 9 years of age No overlap with other projects	09/30/2011 – 06/30/2012 \$196,307	0.40 calendar / 3.33%
Social & Scientific Systems, Inc: BRS-IMPCT-S-11-000331-001458 Task order is to secure the services of Mark Cotton, MD as IMPAACT Network Executive Committee Member (NEC) No overlap with other projects	06/01/2011 – 05/31/2012 \$18,172	0.96 calendar / 8%
Social & Scientific Systems, Inc: BRS-IMPCT-S-11-000331-001552 Task order is to secure the services of Mark Cotton, MD as IMPAACT Network PERC Co-Vice Chair. No overlap with other projects	06/01/2011 – 05/31/2012 \$21,378	1.2 calendar / 10%

# PAEDIATRICS AND CHILD HEALTH

## **Clinical Quality Management – Data Manager**

Completed annually as per DAIDS requirements. Opportunities for improvement have been identified during the past year as a result of ongoing Quality Assurance (QA) and Quality Control (QC) activities. This includes SOP and Clinical Skills Training, timely completion of case report files and missed visit follow-up. Corrective actions have been put in place and it was established that the CQMP does not require any modifications.

Member of the Forms and Data Reduction working group within IMPAACT (since 2007)

As part of the larger mission of the DMRC, to ensure quality data collection, the Forms and Data Reduction (FDR) working group has been established with the mission to:

- Review and help with design of generic and protocol-specific forms
- Review code sets used in generic forms (e.g., diagnoses, signs/symptoms, chemistry/haematology tests)
- Contribute to forms standardization across networks

## **CAB activities 2012 (Community Advisory Board)**

- Meetings once a month
- The group is divided in smaller working groups of 2 or 3.
- They will come in on clinic days to talk to the parents in the waiting rooms.
- Play with children
- Teach moms what educational games they can play with their children to help with the development of their children
- Help with recruitment based on training acquired
- Outreach programs from home or in the community to educate people re: HIV/AIDS/Tuberculosis by means of talks, presentations, posters and pamphlets.

- Motivational / Educational talks at schools, churches, youth groups and community forums
- Support to bereaved families who lost a loved one.
- Support to fellow CAB members who is sick or going through difficult times
- Help with field trips with the adolescent CAB
- Protocol specific training and protocol development training
- Skills-building workshops and other trainings
- Give input on site research priorities to RCAB
- Complete survey monkey questionnaires

## **Awards and Accomplishments**

1. **Allison Riddick:** Post graduate diploma in Palliative Medicine (UCT).
2. **Jacky Crisp:** Masters in Nursing Science (University of George Washington) & Rector's Achievement for General Performance
3. **Marchalaine Hendricks:** Masters in Nursing Science (University of George Washington)
4. **Marie Theunissen:** ICAB Vice Chair and International Adolescent CAB Chair
5. **Joan Coetzee:** Higher Cert in Management (Cum Laude) & Membership of South African Institute of Health Care Managers (SAIHCM)
6. **Kurt Smith:** Rector's Achievement for General Performance
7. **Chantal De Vos:** Rector's Achievement for General Performance
8. **Mariejie Bester:** Rector's Achievement for General Performance

## **International visitors**

1. Professor Y Bryson – Visiting Professor, UCLA, Los Angeles  
8 October – 30 October 2012

# PAEDIATRICS AND CHILD HEALTH

2. Gareth Mercer - Canada graduate scholarship Michael Smith foreign study supplement  
9 July 2012 – June 2013

Recruitment and retention for clinical trials for GCP

Developing of Standard operating Procedure workshops for GCP

## Training and Development

Weekly teachings and presentations are being held on different work related aspects and guest speakers have been invited. This can be viewed on

**G:\PERSONEEL\PEDIAT\KIDCRU\Training\Weekly training\Weekly training\Teaching 2012 presentations**

## CAB training 2012

- Jan:  
Confidentiality Marie
- Feb:  
Program planning Marie/Joan
- March  
Standard Operating Procedures Joan
- April  
ARV Art exhibition UCT
- May  
Protocol overviews Mercia
- June  
Sexual Health Maylene
- July  
Lipodystrophy Steve
- Aug  
Child Health Study update Helen
- Sept  
Standard Operating Procedures Joan
- October  
Hygiene Maylene/Lindee
- Nov  
Self-empowerment / Personal development Joan

Protocol training for all members of staff is ongoing.

## SOUTH2SOUTH PROGRAMME FOR COMPREHENSIVE FAMILY HIV CARE & TREATMENT

*Director :Dr K van der Walt*

## Summary of activities

During 2012 South2South provided technical assistance and capacity building to the National Department of Health, and in various provinces to improve maternal and child HIV/TB health outcomes. South2South trained 943 health workers and provided mentoring in 332 mentorship sessions to frontline health workers involved in PMTCT, paediatric and adolescent HIV/TB, pharmacy systems, and psychosocial support systems. South2South refined support activities to include a combination of training, mentoring, quality improvement, and research to support knowledge translation for frontline health workers and to provide evidence-based educational outreach.

## Resources:

All positions are funded 100% by PEPFAR/USAID funds.

There are 16 full time posts filled which include 1 clinical program director and 1 operations director.

## Faculty of Health Sciences

### Community outreach

**programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

South2South provided capacity building and technical assistance to National Department of health and in various provinces. Training and mentoring programs aimed to improve the HIV/TB health outcomes of priority populations, i.e. pregnant women, infants, children,



# PAEDIATRICS AND CHILD HEALTH

adolescents, and those who are HIV/TB co-infected. District support programs have been implemented in the Northern Cape (Pixley-ka-Seme District), Eastern Cape (Amathole District), and Western Cape (Cape Winelands District).

## Partnerships

### International:

- Within the southern Africa region South2South has provided training support to PATA (Paediatric AIDS Treatment for Africa). The South2South Paediatric HIV Toolkit was adapted for use by health professionals throughout Africa, and is being disseminated by PATA through training events.
- South2South's training material on Disclosure of HIV with Children was adapted for international dissemination by AIDSTAR-One (AIDS Support and Technical Assistance Resources, Sector I, Task Order 1).
- South2South is in the process of developing a web-based training tool repository for use by all PEPFAR-funded organizations in southern Africa.
- South2South provided training support to personnel from ICAP-Tanzania and ICAP-Uganda in comprehensive paediatric HIV/TB management.
- South2South has established a formal agreement with the Institute of Healthcare Improvement to support the quality improvement mentoring that South2South personnel provides to DOH structures. IHI is seen as a prominent international leader in quality improvement in health care.

### National:

- South2South works closely with other PEPFAR-funded organizations in each of the provinces where district-level support is provided, i.e. Anova, Health Systems Trust, Right to Care, Keth'Impilo, FHI360, and ITECH.
- South2South is a key specialist-support partner at the National PMTCT Steering Committee and NDOH Paediatric and

Adolescent HIV/TB Technical Working Group.

- South2South provided technical assistance to the NDOH Nutrition Directorate through the development of national breastfeeding training material.
- At provincial level South2South has established close relationships with provincial DOH regional training centres, and relevant program managers to improve the quality of HIV/TB services to priority populations.

## Teaching and Training (under, postgraduate and elective students)

South2South training and mentoring is provided as in-service training to health workers in rural areas with a heavy HIV/TB disease burden. Training is followed up by mentoring, combined with quality improvement coaching, to ensure knowledge is translated and guidelines are implemented. The following capacity building outputs were achieved during 2012:

- Number of training sessions conducted: 70
- Number of individuals trained: 943
- Number of mentorship sessions conducted: 332
- Number of facilities supported through mentoring: 26

## Special achievements and other highlights not covered by this template

- South2South has been awarded a \$20 million cooperative agreement by USAID for the period 2012-2017 to continue with innovative capacity building program development and implementation.

# PAEDIATRICS AND CHILD HEALTH

## **DESMOND TUTU TB CENTRE (DTTC)**

**Director: Prof N Beyers**

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

1. Central DTTC offices in process of being refurbished to create “open office” environment.
2. The 2 field offices in Ravensmead and Uitsig are being maintained
3. For the Community TB-HIV Integration project – most of the community VCT Centres have been donated to NGOs and the whole project will finally exit during 2013 when all the assets will be donated and the close-out documents completed.
4. The fleet of vehicles has been maintained and new vehicles purchased.
5. Facilities to allow access for Mr Dunbar's service dog are still in the process of being developed (garden, grass) – many delays experienced
6. Kitchen refurbished to allow wheelchair access to garden for Mr Dunbar
7. Website ([www.sun.ac.za/tb](http://www.sun.ac.za/tb)) maintained

### **Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

#### **Projects and studies with community interaction and outreach:**

1. Monthly meetings with City of Cape Town and Western Cape Government to jointly decide on activities
2. A Trial management Committee has been established with Terms of Reference. This committee meets monthly and have representatives of City of Cape Town, Western Cape Government, NGOs, NHLS
3. The PEPFAR project has started its close-out activities and donated infrastructure and assets to City of Cape Town and to various NGOs

4. COMAPP (Community AIDS Prevention Project) has started in 5 sub-districts of Cape Town.
5. 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
6. 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 sub-district level in Cape Town
7. Training on request of Cape Town Health Directorate:
  - a. clinic staff were trained on the HIV/AIDS/STI/TB (HAST) integrated audit tool
  - b. 50 GPs were trained on TB
  - c. Counsellors and clinic staff were trained on TB adherence.
8. 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 sub-district to reduce the number of TB defaulters. This pilot project will now be rolled out to all the clinics in Cape Town
9. PMTCT services:
  - a. Support to all health sub districts around Cape Town.
10. The TB-free Kids Project in Ravensmead and Uitsig is continuing in the community by the Community Health Advocates who do home visits and trace TB patients and get them back on treatment.
11. The community paediatric studies at DTTC are done mainly in Ravensmead, Uitsig and Site C, Khayelitsha. Although these are research studies, the focus is

# PAEDIATRICS AND CHILD HEALTH

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.

12. Studies on the management of children in contact with MDR-TB and with MDR-TB have been established in Site B Khayelitsha and the management of children with MDR TB continues.
13. 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.
14. Women in Networks (WIN) project is continuing in Site C Khayelitsha. In this project we partner with the Philani Nutrition Centre in a project aimed at ensuring that children access the childcare grant. Virgin Unite has awarded additional funding.
15. 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.
16. 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 2011 there were 10 TB Clinical Forums and 544 health care workers attended
17. A 5 day Operational Research Protocol development Workshop for colleagues from the Department of Health in each of the 9 provinces and their associated academic institutions was held in 2012 – people from the 9 provinces attended and 13 proposals were developed.
18. A workshop on manuscript writing for colleagues from the Department of Health was conducted in June and numerous manuscripts are in the process of being finalized for submission.
19. A new community cluster randomized trial (Population ART to Reduce Transmission - PopART) has been funded

and has established 9 field sites for this trial

## Partnerships

### International:

1. DTTC remains a Collaborating Centre of the International Union Against TB and Lung Disease
2. DTTC has numerous ongoing collaborations with the following:
  - a. London School of Hygiene and Tropical Medicine
  - b. University of Zambia
  - c. KNCV
  - d. University of Amsterdam
  - e. HPTN (HIV Prevention Trials Network)
  - f. CDC Tuberculosis Clinical Trials Consortium (TBTC): with >20 international sites
  - g. Imperial College, London
  - h. All Indian Institute of Medicine
  - i. St John Medical College, India
  - j. Charite Hospital, Berlin, Germany
  - k. McGill University, Canada

### National:

1. 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.
2. National TB Programme has requested that DTTC presents research data at the quarterly National meetings
3. DTTC hosts an annual meeting with the National TB Programme to establish new priorities for TB Research in SA.
4. All activities are planned in close collaboration with the various levels of the department of health. A monthly meeting is held with Government Partners
5. All activities are planned and implemented with the support of the local Community Advisory Boards (CABs)

## PAEDIATRICS AND CHILD HEALTH

6. South African TB Vaccine Initiative (SATVI)
7. Division of Clinical Pharmacology, University of Cape Town:
8. Health Economics Unit: University of Cape Town
9. University of Western Cape: Human Nutrition Division
10. South African MRC: Centre for Biostatistics
11. South African centre for Epidemiological Modelling and Analysis (SACEMA)
11. Get tested and treated for TB – Tygerburger (Brackenfell) – 12 April 2012
12. Radio Interview-Wena Moelich Kick TB – 4 April 2012
13. 21 May 2012 - Zamstar office key handover , Drankenstein Sub district, Paarl
14. Liyethusa Izinga Le TB Embekweni Nase Khayandi – Indaba -June 2012
15. HRH Princess Stephanie Visits TB Centre – 6 June 2012 -Tygerburger (Parow)
16. HRH Princess Stephanie's visit, The Weekend Argus Visit to HIV and TB centre fit for a princess 15 December 2012

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

Number of publications from the department/division: **41**

### **Media exposure:**

1. SA version of LA Boheme opera brings TB message to the stage – Weekend Argus – 25 February 2012
2. Desmond Tutu uses pedal power to show his support for children with TB – Cape Argus – 7 March 2012
3. Need to fight TB with Multiple Weapons-North American Correspondent, MEdPage today – 12 March 2012
4. Radio Interview - RSG: Nulda Beyers re TB – 22 March 2012
5. Children are in dire need of TB treatment – Prof Gie and James Seddon – Pretoria News – 23 March 2012
6. The avoidable scourge that is TB – Mail & Guardian -23 March 2012
7. South Africa: TB-the Forgotten Children – Health E- Cape Town
8. Medics suffer high exposure to TB-Mail & Guardian – 30 March – 4 April
9. Get tested and treated for TB – Tygerburger (Brackenfell) – 12 April 2012
10. Radio Interview-Wena Moelich Kick TB – 4 April 2012

### **Teaching and Training (under, postgraduate and elective students)**

1. 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 2012 there were 10 TB Clinical Forums and 544 health care workers attended
2. A 5 day Operational Research Protocol development Workshop for colleagues from the Department of Health in each of the 9 provinces and their associated academic institutions was held in 2012 –people from the 9 provinces attended and developed proposals.
3. Prof Donald Enarson visited DTTC twice to teach and mentor the staff of DTTC
4. 50 GPs were trained on a TB workshop
5. A workshop on manuscript writing was conducted in June and numerous manuscripts are in the process of being finalized for submission.
6. Prof Hesseling and Prof Beyers teach in the M Clin Epidemiology course
7. Prof Beyers teaches in various Faculty courses including the NIH Ethics course and the Masters Classes for researchers

## PAEDIATRICS AND CHILD HEALTH

8. The Annual Childhood TB Course was again held at Goudini in 2012 and participants from more than 20 countries attended. The course will be repeated in 2013.

### Special achievements

1. Visitor by HSH Princess Stephanie of Monaco (Organisation: Fight AIDS Monaco)
2. Penny Rose has been accepted by IUTLD to do an Operational TB research course of 3 modules. (May 2012)
3. Mareli Claassens – HB&MJ Thom Award – Nov 2012
4. DTC awarded the Stop TB Partnership Kochon Prize

### Ongoing Research Support

<b>PROF. NULDA BEYERS</b>		
<b>ACTIVE</b>		
NIH / FHI 360 / LSHTM (UM1 068619): HPTN 071 PopART: Cluster Randomized Trial of Combination HIV Prevention in Zambia and South Africa. No overlap with other projects	10/01/2011 – 05/31/2013 \$4,209,823	Prof Nulda Beyers (PI) = 20% Effort
International Initiative for Impact Evaluation (3ie) / LSHTM: PopART Social Science Formative Research: Community HIV Prevention, Treatment and Care Landscapes in Zambia and South Africa. No overlap with other projects	09/01/2012 – 05/31/2013 \$78,635	Substudy of PopART
USAID / IUATLD (GHN-A-00-08-00004-0): Drug Resistant Tuberculosis in Children. No overlap with other projects	01/01/2013 – 12/31/2013 \$103,509	Prof Nulda Beyers (PI) = 0% Effort / Prof Simon Schaaf (Project Director) = 7.5% Effort
USAID / IUATLD (GHN-A-00-08-00004-0): Line Probe Assay. No overlap with other projects	10/01/2012 – 09/30/2013 \$177,644	Prof Nulda Beyers (PI) = 10% Effort
USAID / IUATLD (GHN-A-00-08-00004-0): Operational Research Assistance Program. No overlap with other projects	01/01/2013 – 12/31/2013 \$230,095	Prof Nulda Beyers (PI) = 30% Effort
USAID / URC (FY2012-P19-4740): National TB Control Programme (NTP). The major goal is to identify challenges in the NTP and build capacity to address those challenges. No overlap with other projects	12/01/2012 – 09/30/2013 \$89,286	Prof Nulda Beyers (PI) = 10% Effort
BMGF / LSHTM: Policy and Advocacy Corre. No overlap with other projects	09/01/2011 – 08/31/2012 (NCE) \$105,713	Prof Nulda Beyers (PI) = 0% Effort for NCE Period

## PAEDIATRICS AND CHILD HEALTH

CDC / PEPFAR (5U2GPS000739-05): Pediatric-TB/HIV PEPFAR. . No overlap with other projects	07/01/2011 – 12/31/2012 (NCE) \$1,701,828	Prof Nulda Beyers (PI) = 20% Effort
UBS Optimus Foundation: TB Smelling Among Children. No overlap with other projects	01/01/2009 – 12/31/2011 (NCE: 05/31/2013) CHF 123,978	Prof Nulda Beyers (PI) = 0% Effort / Dr Mareli Claassens (Co-Applicant) = 35% Effort
<b>PROF. ANNEKE HESSELING</b>		
<b>ACTIVE</b>		
CDC #10FED1007388 Tuberculosis Trials Consortium. The major goal of this project is to develop and undertake tuberculosis-related clinical trials. No overlap with other projects	10/01/2012 – 09/30/2013 \$240 000	15%
MVA85A Tuberculosis Vaccine Prime and Selective Delayed BCG Boost in Infants of HIV Infected Mothers. No overlap with other projects	7/01/2012 – 9/30/2014 £836 608	15%
NIH (5R01HD069169-02): PK Study. No overlap with other projects	04/01/2012 - 03/31/2013 \$403 759	30%
IUATLD: The Centre for Strategic Health Information and Operational Research. No overlap with other projects	07/01/2012 - 12/31/2012 (NCE) \$9 343	No effort for NCE period
Immune polarization in childhood tuberculosis: the role of helminthic co-infection. No overlap with other projects	08/01/2011 – 08/31/2012 (NCE: 07/31/2013) € 236 206.00	No effort for NCE period
Academic Partners - The purpose of this strategic collaboration is to establish a longer term relationship between WVI (World Vision International) and DTTC to enhance each partner's collaborative advantage in the field of Childhood TB and related infectious diseases. No overlap with other projects	01/26/2013 - 12/31/2016 \$227 000	0.60 calendar / 5%
NIH Grant 5U2RTW007370-05 International Training Corporative Agreement. No overlap with other projects	06/01/2011 - 05/31/2012 \$6 332	
UM1 AI068632-07 Tuberculosis Scientific Committee (TBSC) Chair and P1108 Protocol Chair. No overlap with other projects	06/01/2011 - 05/31/2012 \$47 831	3.60 calendar / 30%

## PAEDIATRICS AND CHILD HEALTH

<b>MRS. SUE-ANN MEEHAN</b>		
<b>ACTIVE</b>		
CDC / PEPFAR (5U2GGH000320-02): Community HIV Prevention Centres. No overlap with other projects	09/30/2012 – 09/29/2013 \$354,737	100%
<b>DR. KAREN DU PREEZ</b>		
<b>ACTIVE</b>		
PEPFAR / WITHS PHRU (U2G/PS000739-03): Childhood TB Linking Hospital and Community Care. No overlap with other projects	08/01/2011 – 12/31/2012 (NCE: 10/31/2013) R734,850	20%
<b>DR. MARELI CLAASSENS</b>		
<b>ACTIVE</b>		
PEPFAR / WITHS PHRU: TB Initial Treatment Default. No overlap with other projects	08/01/2011 – 12/31/2012 R567,693	25%

### Training, conferences, workshops presented – numerous including:

1. 28 Feb – 2 March – PopART workshop- Stellenbosch
2. 16-20 April 2012 – Operational Research Assistant Programme - Proposal Development Workshop – 45 delegates attended at Erinvale Estate, Somerset West. Presented: Don Enarson, Nulda Beyers, Brenda Smuts, Mareli Claassens and Pren Naidoo
3. 16-18 May 2012, PopART workshop, President Lodge, Jhb-Implementation of PopART.  
8 delegates. Sue-Ann Meehan.  
Presentation at Quarterly National TB Meeting, “A Community HCT model for Integrated HIV and TB services and linkage to care”.
4. Where: Pretoria. Dates: 30-31 May 2012
5. 29-31 May 2012, Operational Research Assistant Programme 3rd Wave Follow-up workshop, Lanzerac, Stellenbosch. Presented: Nulda Beyers, Brenda Smuts, Mareli Claassens and Pren Naidoo
6. 21-22 June 2012-Best Practice Workshop, Spier-Pren Naidoo
7. Training given – City and Province Participants. Full name of training – “Best Practices” workshop. Spier. Date – 21, 22 June 2012. Presented by whom – Pren Naidoo, Sue-Ann Meehan, Brenda Smuts, Nozizwe Makola and Erica Jacobs
8. Training given – 27 Participants. Audit Tool training. Worcester. Date – 4,5 April 2012. Presented by whom – Pren Naidoo, Sue-Ann Meehan, Brenda Smuts, Nozizwe Makola and Erica Jacobs
9. Training given – 60 Participants PMTCT Workshop. Tygerberg Campus. Date – 14,15,16,17 May 2012. Presented by whom – Pren Naidoo, Brenda Smuts, Nozizwe Makola and Wendy Nongubo
10. Training given – 51 Participants. Full name of training – Lay Counsellor Training. Malmesbury. Date – 28 June 2012. Presented by whom – Brenda Smuts and Margaret van Niekerk
11. Training given – 22 Participants. Full name of training – UNION National

## PAEDIATRICS AND CHILD HEALTH

- Tuberculosis programmes. Where – Stellenbosch. Date - 4 May 2012.  
Presented by whom – Anneke Hesselning, Rob Gie, Peter Donald
12. Workshop: Completing the electronic HCT register – A practical application. 17 COMAP project staff (including 3 professional nurses, 5 enrolled nurses and 9 HIV counsellors). Presented by: Sue-Ann Meehan and Anje Coetzer. Venue: Stellenbosch University. Dates: 12 September 2012
  13. Training: Reducing Initial TB Defaulters (4 sessions). Names: 124 government health employees . Presented by: Pren Naidoo and Nozizwe Makola. Venue: Government venues. Dates: 21 August, 04, 06, 07 September 2012
  14. Training: Sputum induction technique. Names: Paediatric Team. Attended/Presented: Presented by Elizabeth Walters. Venue: Clinical Skills Lab. Dates: 7 August
  15. Workshop: Best Practices (HAST toolkit training). Presented: Presented by Pren Naidoo, Judy Caldwell and Nozizwe Makola. Attended by: 38 participants working in government services. Venue: Devonvale. Dates: 03-04 October 2012
  16. Workshop: TB flipchart adherence training. Presented: Presented by Erica Jacobs. Attended by: 20 TB adherence counsellors. Venue: Stellenbosch University, Tygerberg campus. Dates: 23-24 October 2012
  17. Workshop: HAST toolkit for PMTCT component. Presented by: Pren Naidoo and Sue-Ann Meehan. Attended by: 38 participants working in government services. Venue: Devonvale. Dates: 2012
  18. Training: HCT dissemination meeting (PEPFAR project). Names: Attended by 48 SU staff who were part of this project . Attended/presented: Presented. Presented by: Sue-Ann Meehan. Venue: Strand Towers hotel. Dates: 25 October 2012



## Head of Department

Prof Soraya Seedat

Prof Soraya Seedat is professor of psychiatry in the Department of Psychiatry and holds the South African Research Chair in Posttraumatic Stress Disorder from the Department of Science and Technology and National Research Foundation. In addition, she co-directs the Medical Research Council Unit on Anxiety and Stress Disorders.



## Summary of activities

NEPAD Grant secured for an African Schizophrenia outcome study collaboration for period 2008 -2012 Stanley Medical Research Institute Research Award Grant 2010 -2012

## Resources

Posts (full time)	Number	Filled
Head of Department	1	1
Principal specialists	2	2
Specialists	5	5
Registrar	7*	7*
Medical Officer	0	0
Posts (sessional – how many hours per week)		
Specialists	0	0
Part time posts	0	0
Locum posts	0	0
Full time equivalents	0	0
Number of beds (usable):	41 (+3 seclusion)	41 (+3 seclusion)

# PSYCHIATRY

## Output

Buite pasiënt besoeke / Outpatient visits:		
	2011	2012
J.LG - Adults	1627	1317
Liaison/Emergency Psychiatry – Adults	1778	1572
F.LG – C&A	2854	2816
Total Outpatient Visits	6259	5705
Opnames / Admissions:		
DG - Adults	245	192
D.LG - Adults	220	251
DG - C&A	105	107
D.LG - C&A	91	116
Total Admissions	661	666
Teater prosedures / Theatre procedures:		
ECT	28(4pt's)	57 (9pt's)

The department also delivers a full clinical service at Stikland Psychiatric 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

There has been an increase in admissions to ward D-Lower ground for both adults and adolescents. This ward manages the more severely ill psychiatric patients and thus the numbers reflect a possible shift in the profile of our admissions. Access to inpatient beds have remained in demand, again because of increased numbers of more ill (including physically ill and more severely depressed) patients requiring hospital admission. Methamphetamine and HIV related admissions have remained high. Many patients are still required to be waitlisted prior to admission.

## Part 2

### Faculty on Health Sciences

Infrastructure development – upgrading, new equipment, etc.

The first phase of establishing a separate child and adolescent in-patient psychiatric unit (G.LG) which was expected to be completed in 2010 is now finally awaiting completion in 2013. Further phases include the renovation

and switch of the adult (J.Lg) and child & adolescent (F.Lg) out-patient departments.

### Community outreach programmes / community service and interaction. Please focus on initiatives in 2011, especially wrt MDG and projects in Africa.

\*\*Ongoing service delivery and in-service training (adults and children) continued in community mental health clinics in the West Coast/Winelands and Eastern Metropole Districts. Besides 24-hour telephonic support, registrars are seconded to clinics for a half day each per week. To help combat the escalating substance problems in the Western Cape, the department continued to provide psychiatric support, outreach and training to a number of substance treatment NGO's, including SANCA, Sultan Bahu, Toevlug, Ramot and Hesketh King as well as government departments including the DSD. **Dr's Lize Weich** continued the training of primary health care workers in the Western Cape in the management of substance use disorders.

\*\*The Assertive Community Treatment (ACT) team at Stikland Hospital, under guidance of **Dr Ulla Botha**, continues with support to individuals with psychiatric illness and their families in the metro. This service includes a day centre for the Northern suburbs at Stikland Hospital.

**Prof Christine Lochner** reported that the Mental Health Information Centre (MHIC), directed by Ms Janine Roos since 2011, hosted another Brain Awareness Week, which is an international DANA Alliance campaign dedicated to raising public awareness of the progress, promise and benefits of brain research. As a Brain Awareness Week partner, the MHIC once again celebrated this event from 12–18 March 2012. MHIC-staff visited learners from Excelsior and Scottsdene Secondary Schools. The learners were presented with talks on the effects of substance abuse and the brain, the psychological impact of trauma in general and various research projects currently underway at the MRC Unit on Anxiety and Stress Disorders. Information booklets and brochures were distributed to different school libraries. During BAW 2012, a number of radio talks on brain health and functioning were also organized. The MHIC furthermore also organized an interactive play by the Drama Department of Stellenbosch University for first-year students on brain health and brain research.

The MHIC also took part in the University of Stellenbosch Wellness Days in 2012. The MHIC furthermore did poster presentations at the University of Stellenbosch Community Interaction Symposium in September 2012, as well as at the Faculty of Health Sciences and Medicine's Annual Academic Year Day (August 2012).

Via the MHIC, the Department of Psychiatry also maintains regular contact with consumer support groups such as SA Depression and Anxiety Group, Cape Mental Health, BIG/MIND, SA Federation for Mental Health and the Post Natal Depression Support Group.

Other important partners are the Department of Health: Mental Health & Substance Abuse Sub-Directorate, professional organisations such as the SA Society of Psychiatrists, the SA Medical Association, the Medical Research Council and the pharmaceutical industry. The new MHIC website and database are up and running and have been well-received by mental health professionals. The MHIC revised all their information brochures on anxiety and mood disorders and re-printed them. These can be downloaded from the website [www.mentalhealthsa.org.za](http://www.mentalhealthsa.org.za). The MHIC aims to be in touch with the whole community of Southern Africa by means of a call/e-mail centre and recently initiated a sms service to be able to get information to people in rural areas that do not have access to computers. Via the call centre, with a 24-hour turnaround period, the MHIC provides information on mental health/disorders and do referrals to the most appropriate care.

**Dr Jannes Bornman** succeeded Dr Francois Pretorius, as Head of the Clinical Unit at Worcester Hospital.

## Partnership

National - Private sector – International

\*\* The South African Research Chair in Posttraumatic Stress Disorder under the leadership of Prof Soraya Seedat entered its 5<sup>th</sup> year of funding from the Department of Science and Technology and has continued to engage in collaborative research efforts nationally and internationally and train students and masters, doctoral and postdoctoral levels.

\*\*The MRC Unit on Anxiety Disorders under the leadership of Prof Dan Stein, **Prof Soraya Seedat, and Prof Christine Lochner** continued functioning as a cross-University Centre (including the University of Cape Town (UCT)) in which several different Principal Investigators focus collaboratively on key scientific themes.

The FAS Prevention sub study, Ethics Project number N 06/07/129A, was approved on 6 October 2009 and commenced on 1

November 2009. Preliminary findings of the study were released at a media briefing day in September 2011. The project is nearing completion and the final results will be released at the end of 2012.

**\*\*Prof Robin Emsley** secured a NEPAD Grant for African Schizophrenia outcome study collaboration. Funding was allocated for the period 2008 to 2012.

The study is being conducted in collaboration with Prof Gureje from the University of Ibadan in Nigeria. Part of the funding was for capacity development, thus young psychiatrists from both Stellenbosch and Ibadan Universities as well as research nurses from Ibadan have already received training in research methodology and inter-reliability testing during 2008.

**\*\*In her capacity as provincial psychiatric substance services co-ordinator Dr Lize Weich** was involved in various projects. She also served as a member of the SANCA Board, the steering committee for SA Quality Measures, the opioid treatment advisory board as well as the Western Cape Substance Abuse Forum executive committee.

## Achievements wrt research activities and research outputs:

Number of publications from the department/division

Text books and contributions to text books.

The Department of Psychiatry is actively involved in original research covering a wide variety of topics including anxiety disorders, schizophrenia and genetics. In 2012, 14 papers were presented at international congresses and 53 nationally. Furthermore, approximately 68 articles and 5 book chapters were published.

## Journal Papers (published in accredited journals)

1. **AHMED F, SPOTTISWOODE BS, CAREY PD, STEIN DJ, SEEDAT S.** Relationship between neurocognition and regional brain volumes in traumatized adolescents with

and without posttraumatic stress disorder. *Neuropsychobiology* 2012; **66** : 174-184.

2. **ALLEN R, ALONSO-BETANCOURT O, BURNS J, CHABALALA J, ERLACHER H, GROBLER G, JEENAH Y, KEWANA M, KOEN L, LELOKA L, MASHAPU S, MILLIGAN P, MOOSA Y, MOTLANA M, NASSEN R, NICHOL R, NIEHAUS DJH, PARKER JS, PRETORIUS J, RAMA A, RAMLALL S, RAS J, RATAEMANE S, SE.** The South African Society of Psychiatrists (SASOP) and SASOP State Employed Special Interest Group (SESIG) position statements on psychiatric care in the public sector. *South African Journal of Psychiatry* 2012; **18**(3) : 133-148.
3. **ASMALL L.** Letter to the editor: do we need to re-think the 10/66 dementia study for Africa. *International Journal of Geriatric Psychiatry* 2012; **27** : 1315-1316.
4. **AYLING E, AGHAJANI M, FOCHE JP, VAN DER WEE N.** Diffusion tensor imaging in anxiety disorders. *Current Psychiatry Reports* 2012; **14** : 197-202.
5. **BREUER E, STOLOFF K, MYER L, SEEDAT S, STEIN DJ, JOSKA JA.** Reliability of the lay adherence counsellor administered Substance Abuse and Mental Illness Symptoms Screener (SAMISS) and the International HIV Dementia Scale (IHDS) in a primary care HIV Clinic in Cape Town, South Africa. *Aids and Behavior* 2012; **16** : 1464-1471.
6. **CAREY PD, LOCHNER C, KIDD M, VAN AMERINGEN M, STEIN DJ, DENYS D.** Quetiapine augmentation of serotonin reuptake inhibitors in treatment-refractory obsessive-compulsive disorder: is response to treatment predictable?. *International Clinical Psychopharmacology* 2012; **27** : 321-325.
7. **CAREY PD, SULIMAN S, GANASEN KA, SEEDAT S, STEIN DJ.** Olanzapine monotherapy in posttraumatic stress disorder: efficacy in a randomized, double-blind, placebo-controlled study.
8. *Human Psychopharmacology-Clinical and Experimental* 2012; **27** : 386-391.
9. **CHILIZA B, ASMAL L, EMSLEY RA.** Early intervention in schizophrenia in developing countries: focus on duration of untreated psychosis and remission as a treatment goal. *International Review of Psychiatry* 2012; **24**(5) : 483-488.

10. **CHURCHWELL JC, CAREY PD, FERRETT HL, STEIN DJ, YURGELUN-TODD DA.** Abnormal striatal circuitry and intensified novelty seeking among adolescents who abuse methamphetamine and cannabis. *Developmental Neuroscience* 2012; **34** : 310-317.
11. **EMSLEY RA, NUAMAH I, HOUGH D, GOPAL S.** Treatment response after relapse in a placebo-controlled maintenance trial in schizophrenia. *Schizophrenia Research* 2012; **138** : 29-34.
12. **EMSLEY RA, OOSTHUIZEN PP, KOEN L, NIEHAUS DJH, MARTINEZ G.** Symptom recurrence following intermittent treatment in first-episode schizophrenia successfully treated for 2 years: a 3-year open-label clinical study. *Journal of Clinical Psychiatry* 2012; **73**(4) : e541-e547.
13. **FLISHER AJ, DAWES A, KAFAAR Z, LUND C, SORSDAHL K, MYERS B, THOM R, SEEDAT S.** Child and adolescent mental health in South Africa. *Journal of Child and Adolescent Mental Health (Southern African Journal of Child and Adolescent Mental Health)* 2012; **24**(2) : 149-161.
14. **FLISHER AJ, DAWES A, KAFAAR Z, LUND C, SORSDAHL K, MYERS BJ, THOM R, SEEDAT S.** Child and adolescent mental health in South Africa. *Journal of Child and Adolescent Mental Health (Southern African Journal of Child and Adolescent Mental Health)* 2012; **24**(2) : 149-161.
15. **FRANK-SCHULTZ F, NAIDOO P, CLOETE KJ, SEEDAT S.** The Child Posttraumatic Stress Disorder Checklist in a sample of South African youth - Establishing factorial validity. *Journal of Nervous and Mental Disease* 2012; **200** : 692-698.
16. **GRANT JE, ODLAUG BL, CHAMBERLAIN SR, KEUTHEN NJ, LOCHNER C, STEIN DJ.** Skin picking disorder. *American Journal of Psychiatry* 2012; **169** : 1143-1149.
17. **HEAPS JM, JOSKA JA, HOARE J, ORTEGA M, AGRAWAL A, SEEDAT S, ANCES BM, STEIN DJ, PAUL R.** Neuroimaging markers of human immunodeficiency virus infection in South Africa. *Journal of Neurovirology* 2012; **18** : 151-156.
18. **HOARE J, FOUCHE JP, SPOTTISWOODE BS, DONALD K, PHILLIPPS N, BEZUIDENHOUT H, MULLIGAN C, WEBSTER V, ODURO C, SCHRIEFF L, PAUL R, ZAR H, THOMAS K, STEIN DJ.** A diffusion tensor imaging and neurocognitive study of HIV-positive children who are HAART-naïve "slow progressors". *Journal of Neurovirology* 2012; **18** : 205-212.
19. **HOARE J, WESTGARTH-TAYLOR J, FOUCHE JP, SPOTTISWOODE BS, PAUL R, THOMAS K, STEIN DJ, JOSKA JA.** A diffusion tensor imaging and neuropsychological study of prospective memory impairment in South African HIV positive individuals. *Metabolic Brain Disease* 2012; **27** : 289-297.
20. **HUEY ED, FERRARI R, MORENO JH, JENSEN C, MORRIS CM, POTOCNIK FCV, KALARIA RN, TIERNEY M, WASSERMANN EM, HARDY J, GRAFMAN J, MOMENI P.** FUS and TDP43 genetic variability in FTD and CBS. *Neurobiology of Aging* 2012; **33** : 1016.e9-1016.e17.
21. **IPSER JC, SYAL S, BENTLEY J, ADNAMS CM, STEYN B, STEIN DJ.** 1H-MRS in autism spectrum disorders: a systematic meta-analysis. *Metabolic Brain Disease* 2012; **27** : 275-287.
22. **JORDAAN GP, WARWICK JM, NEL DG, HEWLETT RH, EMSLEY RA.** Alcohol-induced psychotic disorder: brain perfusion and psychopathology—before and after anti-psychotic treatment. *Metabolic Brain Disease* 2012; **27** : 67-77.
23. **KADER R, SEEDAT S, KOCH JR, PARRY CDH.** A preliminary investigation of the AUDIT and DUDIT in comparison to biomarkers for alcohol and drug use among HIV-infected clinic attendees in Cape Town, South Africa. *African Journal of Psychiatry* 2012; **15** : 346-351.
24. **KOEN L, NIEHAUS DJH, WRIGHT GEB, WARNICH L, DE JONGH G, EMSLEY RA, MALL S.** Chromosome 22q11 in a Xhosa schizophrenia population. *SAMJ South African Medical Journal* 2012; **102** : 165-166.
25. **LACHMAN A, CLOETE KJ, KIDD M, SCHOEMAN R.** The clinical utility and cost

- effectiveness of routine thyroid screening in adult psychiatric patients presenting at Stikland Hospital, Cape Town, South Africa. *African Journal of Psychiatry* 2012; **15** : 36-41.
26. **LACHMAN A, CLOETE KJ, KIDD M, SCHOEMAN R.** The clinical utility and cost effectiveness of routine thyroid screening in adult psychiatric patients presenting at Stikland Hospital, Cape Town, South Africa. *African Journal of Psychiatry* 2012; **15** : 36-41.
  27. **LACHMAN A, NASSEN R, HAWKRIDGE S, EMSLEY RA.** A retrospective chart review of the clinical and psychosocial profile of psychotic adolescents with co-morbid substance use disorders presenting to acute adolescent psychiatric services at Tygerberg Hospital. *South African Journal of Psychiatry* 2012; **18**(2) : 53-60.
  28. **LACHMAN A.** Dual diagnosis in adolescence - An escalating health risk. *Journal of Child and Adolescent Mental Health (Southern African Journal of Child and Adolescent Mental Health)* 2012; **24**(1) : 5-7.
  29. **LACHMAN A.** IACAPAP PARIS 2012 - Through the eyes of an African recipient of the Donald J Cohen Fellowship. *African Journal of Psychiatry* 2012; **15** : 442-444.
  30. **LIM SS, VOS T, FLAXMAN AD, DANAEI G, SHIBUYA K, ADAIR-ROHANI H, AMANN M, ANDERSON HR, ANDREWS KG, ARYEE M, ATKINSON C, BACCHUS LJ, BAHALIM AN, BALAKRISHNAN K, BARMES J, BARKER-COLLO S, BAXTER A, BELL ML, BLORE JD, BLYTH F, BONNER C, BORGES G, BOURNE R, B.** A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012; **380** : 2224-2260.
  31. **LOCHNER C, FOUCHE JP, DU PLESSIS S, SPOTTISWOODE BS, SEEDAT S, FINEBERG NA, CHAMBERLAIN SR, STEIN DJ.** Evidence for fractional anisotropy and mean diffusivity white matter abnormalities in the internal capsule and cingulum in patients with obsessive–compulsive disorder. *Journal of Psychiatry & Neuroscience* 2012; **37**(3) : 193-199.
  32. **LOCHNER C, GRANT JE, ODLAUG BL, STEIN DJ.** DSM-5 field survey: skin picking disorder. *Annals of Clinical Psychiatry* 2012; **24**(4) : 300-304.
  33. **LOCHNER C, GRANT JE, ODLAUG BL, WOODS DW, KEUTHEN NJ, STEIN DJ.** DSM-5 field survey: hair-pulling disorder (Trichotillomania) . *Depression and Anxiety* 2012; **29** : 1025-1031.
  34. **LOCHNER C, SIMMONS C, KIDD M, CHAMBERLAIN SR, FINEBERG NA, VAN HONK J, IPSER JC, STEIN DJ.** Differential effects of escitalopram challenge on disgust processing in obsessive–compulsive disorder. *Behavioural Brain Research* 2012; **226** : 274-280.
  35. **LONDON L, MATZOPOULOS R, CORRIGALL J, MYERS JE, MAKER A, PARRY CDH.** Conflict of interest: a tenacious ethical dilemma in public health policy, not only in clinical practice/research. *South African Journal of Bioethics and Law* 2012; **5**(2) : 102-108.
  36. **MATZOPOULOS R, PARRY CDH, CORRIGALL J, MYERS J, GOLDSTEIN S, LONDON L.** Global Fund collusion with liquor giant is a clear conflict of interest. *Bulletin of the World Health Organization* 2012; **90** : 67-69.
  37. **MOLLER M, DU PREEZ JL, EMSLEY RA, HARVEY BH.** Social isolation rearing in rats alters plasma tryptophan metabolism and is reversed by sub-chronic clozapine treatment. *Neuropharmacology* 2012; **62** : 2499-2506.
  38. **MOROJELE NK, SABAN A, SEEDAT S.** Clinical presentations and diagnostic issues in dual diagnosis disorders. *Current Opinion in Psychiatry* 2012; **25** : 181-186.
  39. **MYERS BJ, PETERSEN Z, KADER R, PARRY CDH.** Moving beyond access: towards a quality-orientated substance abuse treatment system in South Africa. *SAMJ South African Medical Journal* 2012; **102**(8) : 667-668.
  40. **NAUDE CE, CAREY PD, LAUBSCHER R, FEIN G, SENEKAL M.** Vitamin D and calcium

- status in South African adolescents with alcohol use disorders. *Nutrients* 2012; **4** : 1076-1094.
41. **NIEHAUS DJH, JORDAAN E, KOEN L, MASHILE M, MALL S.** Applicability and fairness of the oral examination in undergraduate psychiatry training in South Africa. *African Journal of Psychiatry* 2012; **15** : 119-123.
  42. **OSHODI YO, ADEYEMI JD, SEEDAT S.** Psychiatric morbidity in hypertensives attending a cardiology outpatient clinic in West Africa. *Nigerian Journal of Clinical Practice* 2012; **15**(1) : 84-88.
  43. **PARRY CDH, BURNHAMS NH, LONDON L.** ISSUES IN PUBLIC HEALTH - A total ban on alcohol advertising: presenting the public health case. *SAMJ South African Medical Journal* 2012; **102**(7) : 602-604.
  44. **PARRY CDH, FERREIRA-BORGES C, POZNYAK V, LONNROTH K, REHM J.** The international study on alcohol and infectious diseases: three priorities for research. *Addiction* 2012; **108** : 1-2.
  45. **PLUDEMANN A, FLISHER AJ, MCKETIN R, PARRY CDH, LOMBARD CJ.** Methamphetamine use and sexual risk behavior among high school students in Cape Town, South Africa. *Journal of Child & Adolescent Substance Abuse* 2012; **21** : 181-191.
  46. **RAEMAEKERS M, DU PLESSIS S, RAMSEY NF, WEUSTEN JMH, VINK M.** Test-retest variability underlying fMRI measurements. *Neuroimage* 2012; **60** : 717-727.
  47. **ROOS A, LOCHNER C, KIDD M, VAN HONK J, VYTHILINGUM B, STEIN DJ.** Selective attention to fearful faces during pregnancy. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2012; **37** : 76-80.
  48. **ROOS J.** Register on the Mental Health Information Centre of Southern Africa database. *SAMJ South African Medical Journal* 2012; **102**(8) : 640.
  49. **SAXTON J, HOFBAUER RK, WOODWARD M, GILCHRIST NL, POTOCHNIK FCV, HSU H-A, MILLER ML, PEJOVIC V, GRAHAM SM, PERHACH JL.** Memantine and functional communication in Alzheimer's disease: results of a 12-Week, international, randomized clinical trial. *Journal of Alzheimers Disease* 2012; **28** : 109-118.
  50. **SCHNEIDER M, CHERSICH M, NEUMAN MG, PARRY CDH.** Alcohol consumption and HIV/AIDS: the neglected interface. *Addiction* 2012; **107** : 1369-1371.
  51. **SCHOEMAKER J, STET L, VRIJLAND P, NABER D, PANAGIDES J, EMSLEY RA.** Long-term efficacy and safety of asenapine or olanzapine in patients with schizophrenia or schizoaffective disorder: an extension study. *Pharmacopsychiatry* 2012; **45** : 196-203.
  52. **SMIT I, KOEN L, NIEHAUS DJH, JORDAAN E, BOTHA UA.** Neurological soft signs as an endophenotype in an African schizophrenia population – a pilot study I. *African Journal of Psychiatry* 2012; **15** : 124-127.
  53. **SORSDAHL K, STEIN DJ, WEICH LEM, FOURIE D, MYERS BJ.** The effectiveness of a hospital-based intervention for patients with substance-use problems in the Western Cape. *SAMJ South African Medical Journal* 2012; **102**(7) : 634-635.
  54. **SPIES G, FENNEMA-NOTESTINE C, ARCHIBALD SL, CHERNER M, SEEDAT S.** Neurocognitive deficits in HIV-infected women and victims of childhood trauma. *Aids Care* 2012; **24**(9) : 1126-1135.
  55. **SPOTTISWOODE BS, DU PLESSIS S, GRETSCHEL A, LOTZ J.** Functional MRI in pre-surgical planning: case of study and cautionary notes. *SA Journal of Radiology* 2012; **16**(3) : 107-110.
  56. **SULIMAN S, STEIN DJ.** Dealing with post-traumatic stress disorder in general practice. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2012; **54**(4) : 308-311.
  57. **SYAL S, HATTINGH CJ, FOUCHE JP, SPOTTISWOODE BS, CAREY PD, LOCHNER C, STEIN DJ.** Grey matter abnormalities in social anxiety disorder: a pilot study. *Metabolic Brain Disease* 2012; **27** : 299-309.
  58. **VAN PLETZEN E, STEIN DJ, SEEDAT S, WILLIAMS DR, MYER L.** Recall of early non-fatal suicidality in a nationally

representative sample of South Africans. *Ethnicity & Health* 2012; **17**(1-2) : 149-159.

59. **VAN SCHALKWYK G, BOTH A H, SEEDAT S.** Comparison of 2 dementia screeners, the Test Your Memory Test and the Mini-Mental State Examination, in a primary care setting. *Journal of Geriatric Psychiatry and Neurology* 2012; **25**(2) : 85-88.
60. **VERSTER GC, VAN NIEKERK AA.** ISSUES IN MEDICINE - Moral perspectives on stimulant use by healthy students. *SAMJ South African Medical Journal* 2012; **102**(12) : 909-911.
61. **VERSTER GC, VAN NIEKERK AA.** Moral perspectives on stimulant use in healthy students. *SAMJ South African Medical Journal* 2012; **102**(12) : 909-911.
62. **VYTHILINGUM B, ROOS A, FAURE SC, GEERTS L, STEIN DJ.** Risk factors for substance use in pregnant women in South Africa. *SAMJ South African Medical Journal* 2012; **102**(11) : 851-854.
63. **WARWICK JM, CAREY P, CASSIMJEE N, LOCHNER C, HEMMINGS S, MOOLMAN-SMOOK H, BEETGE EC, DUPONT P, STEIN DJ.** Dopamine Transporter Binding in Social Anxiety Disorder: the effect of Treatment with Escitalopram. *Metabolic Brain Disease* 2012; **27** : 151-158.
64. **WRIGHT GEB, NIEHAUS DJH, VAN DER MERWE L, KOEN L, KORKIE LJ, KINNEAR CJ, DROGEMOLLER BI, WARNICH L.** Association of MB-COMT polymorphisms with schizophrenia-Susceptibility and symptom severity in an African cohort. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2012; **39** : 163-169.

## Journal Papers (published in non-accredited journals)

1. **BOTHA M, GRACE L, BUGARITH K, RUSSELL VA, KIDD M, SEEDAT S, HEMMINGS SMJ.** The impact of voluntary exercise on relative telomere length in a rat model of developmental stress. *BMC Research Notes* 2012; **5** : 697-703.
2. **PARRY CDH.** A call to support the new KBS journal. *International Journal of Alcohol and Drug Research* 2012; **1** : 1.
3. **SEEDAT S.** Interventions to improve psychological functioning and health outcomes of HIV-infected individuals with a history of trauma or PTSD. *Current HIV/AIDS reports* 2012; **9** : 344-350.
4. **SPIES G, AFIFI TO, ARCHIBALD SL, FENNEMA-NOTESTINE C, SAREEN J, SEEDAT S.** Mental health outcomes in HIV and childhood maltreatment: a systematic review. *Systematic Reviews* 2012; **1** : 30-57.
5. **SPIES G.** Brain invasion. *Mail and Guardian* 2012; 4.

## Proceedings International

1. **ASMAL L.** Investigating MCI and dementia in Africa: potential blind spots in our vision. Brain Ageing and Dementia in Developing Countries Symposium, Safari Park Hotel, Nairobi, Kenya, 2012: 1.
2. **DU PLESSIS S.** Impaired frontal-striatal function in antiretroviral naïve HIV positive South African Xhosa subjects. 18th Annual Meeting of the Organization for Human Brain Mapping, China National Convention Center, Beijing, China, 2012: 1.
3. **DU PLESSIS S.** Influence of different HIV subtypes on HIV dementia (GRK1522/I) HAND in South Africa: mutual interaction between HIV subtype C and dopamine and its impact on HAND development and progression (GRK1522/II). International Research Training Group (IRTG 1522) Symposium, Institute of Virology, Wurzburg, Germany, 2012: 1.
4. **EMSLEY RA.** Nurses' perceptions of assessment, causes and management of partial/non-adherence to medication: results of the EMEA ADHES survey in schizophrenia. 20th European Congress of Psychiatry, Prague Congress Centre, Prague, Czech Republic, Elsevier 2012: 1.
5. **FOUCHE JP.** Evidence for cortical thinning in HIV positive children on highly active antiretroviral treatment. 18th Annual Meeting of the Organization for Human Brain Mapping, China National Convention Center, Beijing, China, 2012: 1.
6. **LACHMAN A.** Psychosocial profile of psychotic adolescents with a co-morbid dual diagnosis of substance use presenting to Tygerberg Hospital. International Association for Child and Adolescent Psychiatry and Allied Professionals Congress 2012, Palais des Congrès de Paris, Paris, France, 2012: 1.
7. **LOCHNER C.** Hair-pulling disorder (HPD, or trichotillomania): white matter changes



- and their clinical correlates*. 18th Annual Meeting of the Organization for Human Brain Mapping, China National Convention Center, Beijing, China, 2012: 1.
8. **POTOCNIK FCV**. *Ethical and medico-legal considerations in the elderly*. International Association for Gerontology and Geriatrics (IAGG) Congress, President Hotel, Sea Point, South Africa, 2012: 1.
  9. **POTOCNIK FCV**. *Impact on burden of disease: improved clinical outcomes with Zinc and Vitamins A & D*. Brain Ageing and Dementia in Developing Countries Symposium, Safari Park Hotel, Nairobi, Kenya, 2012: 1.
  10. **POTOCNIK FCV**. *Update on Alzheimer's Disease*. Dementia South Africa Congress, Upper East Side Hotel, Woodstock, South Africa, 2012: 1.
  11. **ROOS A**. *Hair-pulling disorder (trichotillomania): white matter changes and their clinical correlates*. 18th Annual Meeting of the Organization for Human Brain Mapping, China National Convention Center, Beijing, China, 2012: 1.
  12. **SEEDAT S**. *Epigenetics: how important is it to psychiatry*. Mental Health Challenges for Africa in the 21st Century: Joint Meeting of the African Association of Psychiatrists and Allied Professionals (AAPAP) and the Association of Psychiatrists in Nigeria (APN), De Renaissance Hotel, Lagos, Nigeria, 2012: 1.
  13. **SULIMAN S**. *Brain derived neurotrophic factor, posttraumatic stress disorder and memory*. 28th World International College of Neuropsychopharmacology Congress, Stockholm, Sweden, 2012: 1.
  14. **SULIMAN S**. *Brain derived neurotrophic factor, posttraumatic stress disorder and memory*. American Psychiatric Association 165th Annual Meeting, Pennsylvania Convention Center, Philadelphia, USA, 2012: 1.
  15. **CHILIZA B, ASMAL L, EMSLEY R**. *Baseline characteristics of first-episode psychosis patients in Cape Town*. 8th International Conference on Early Psychosis: From Neurobiology to Public Policy, San Francisco, USA, 2012
- ### Proceedings National
1. **AHMED F**. *Structural brain changes in HIV infected women with and without childhood trauma*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 161.
  2. **ALLEN R**. *Are we minding the gap?*. 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 104.
  3. **ASMAL L**. *Cochrane systematic review of quetiapine versus other atypical antipsychotics for schizophrenia*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 162.
  4. **ASMAL L**. *Family intervention for schizophrenia: an exploratory qualitative study*. 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 104.
  5. **BAKELAAR SY**. *A comparison of cognitive functioning, resilience, and childhood trauma among individuals with SAD and PTSD*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 162.
  6. **BAKELAAR SY**. *Social anxiety disorder (SAD) in patients with or without early childhood trauma: relationship to behavioral inhibition and behavioral activation, quality of life, and ethnicity*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 163.
  7. **BARNARD MP**. *High risk pregnant women and case management: efficacy of prevention in a community with the highest fetal alcohol syndrome prevalence in the world*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 163.
  8. **BATES HLP**. *A qualitative study of the views of patients with HIV and childhood trauma in South Africa on the consent process for a cohort study*. 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 164.
  9. **BREET EM**. *The relationship between intimate partner violence, HIV-related*

- stigma and mental health among people living with HIV: a cross sectional study.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 164.
10. **BREET EM.** *The relationship between intimate partner violence, HIV-related stigma and mental health among people living with HIV: a cross sectional study.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 164-165.
  11. **BRUWER BR.** *Association between childhood adversities and long-term suicidality among South Africans: results from the South African Stress and Health Study.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 165.
  12. **CHILIZA B.** *Early intervention in schizophrenia in developing countries.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 105.
  13. **DE VRIES MM.** *Comparison of drinking practices, knowledge and attitudes of adults residing in communities taking part in the FAS prevention study in South Africa.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 166.
  14. **DE VRIES MM.** *Prospective ascertainment of infants in two communities in the Western Cape: identifying predictors of fetal alcohol spectrum disorders in pregnancy.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 165-166.
  15. **DU PLESSIS S.** *Biomarkers for HIV HAND using functional neuroimaging measurements - a systematic review and meta-analysis.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 167-168.
  16. **DU PLESSIS S.** *Impaired frontal-striatal function in antiretroviral naive HIV positive South African Xhosa subjects.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 167.
  17. **DU PLESSIS S.** *The challenges of functional magnetic resonance imaging in a developing country.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 158.
  18. **FAIRBAIRN LR.** *Efficacy and mechanism of action of intrahippocampal D-cycloserine in an animal model of posttraumatic stress disorder.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 168.
  19. **FOUCHE JP.** *Evidence for cortical thinning in HIV positive children on highly active antiretroviral treatment.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 168-169.
  20. **FOUCHE JP.** *Examining cortical thickness in subjects with obsessive compulsive disorder: a freesurfer analysis of a multi-site cohort.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 160.
  21. **FOUCHE JP.** *Examining cortical thickness in subjects with OCD: A Freesurfer analysis of a multi-site cohort.* CSIR Center for High Performance Computing Annual Meeting 2012, Durban, South Africa, 2012: 1.
  22. **HEMMINGS SMJ.** *BDNF Val66Met and DRD2 Taq1A polymorphisms interact to influence PTSD symptom severity: a preliminary investigation in a South African population.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 169.
  23. **HEMMINGS SMJ.** *BDNF Val66Met and DRD2 Taq1A polymorphisms interact to influence PTSD symptom severity: a preliminary investigation in a South African population.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 106.
  24. **HORN A.** *HIV-associated neurocognitive disorders in Europe and Africa.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 169-170.
  25. **JARVIS L.** *Greater burden of mental health disorders amongst HIV/TB co-infected individuals in an African setting: a comparative analysis in South Africa and Zambia.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 160.

26. **KADER R.** *A preliminary investigation of the AUDIT and DUDIT in comparison to biomarkers for alcohol and drug use among HIV-infected clinic attendees in Cape Town, South Africa.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 170.
27. **KADER R.** *Hazardous and harmful use of alcohol and drugs and health status among South Africa patients attending HIV clinics.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 171.
28. **LACHMAN A.** *Clinical and psychosocial profile of adolescents with a dual diagnosis (psychosis and substance use) at the child psychiatry Tygerberg hospital.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 159.
29. **LACHMAN A.** *Psychiatric disease and pain.* The Pain South Africa Congress, CSIR International Convention Centre, Pretoria, South Africa, 2012: 1-148.
30. **LACHMAN A.** *The clinical utility and cost effectiveness of routine thyroid screening in adult psychiatric patients presenting at Stikland Hospital, Cape Town, South Africa.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 171.
31. **LOCHNER C.** *Differential effects of escitalopram challenge on motor inhibition and cognitive flexibility in OCD and hair-pulling disorder (Trichotillomania).* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 172.
32. **LOCHNER C.** *DSM-5 field survey: hair-pulling disorder (Trichotillomania).* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 171-172.
33. **LOCHNER C.** *DSM-5 field survey: skin picking disorder.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 172.
34. **LUCKHOFF M.** *Suicidal behaviour in a schizophrenic Xhosa population.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 125.
35. **LUCKHOFF M.** *Suicidal behaviour in a Xhosa schizophrenia population.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 161.
36. **MALAN S.** *Molecular mechanisms of D-cycloserine in a fear extinction posttraumatic stress disorder (PTSD) animal model.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 173.
37. **MARTIN LI.** *The 39-item Child Exposure to Community Violence (CECV) scale: exploratory factor analysis and relationship to PTSD symptomatology in trauma-exposed children and adolescents.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 126.
38. **MARTIN LI.** *The 39-item Child Exposure to Community Violence (CECV) scale: exploratory factor analysis and relationship to PTSD symptomatology in trauma-exposed children.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 173.
39. **MARTIN LI.** *The relationship between anxiety sensitivity and childhood trauma in a random sample of adolescents from a representative sample of secondary schools.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 158.
40. **NASSEN R.** *A case series of HIV-positive children and adolescents referred to a child and adolescent mental health service for neuropsychiatric evaluation.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 128.
41. **NASSEN R.** *Neuropsychiatric manifestations of HIV in children and adolescents receiving highly active antiretroviral therapy (HAART).* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 113.

42. **NIEHAUS DJH.** *Does the gender of examiners determine the academic performance of medical students?.* Annual Conference on the Scholarship of Teaching and Learning 2012, Lord Charles Hotel, Somerset West, South Africa, 2012: 19.
43. **ROSENSTEIN D.** *A methodological systematic review of the parameters for single voxel HMRS of the limbic associated circuitry: in anxiety disorders.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 174.
44. **SEEDAT S.** *Sleep and stress: current perspectives.* South African Society of Sleep Medicine (SASSM) Congress, Elangeni Hotel, Durban, South Africa, 2012: 1.
45. **SITHOLE MB.** *Posttraumatic stress, depression and cognitive deficits in sexual abuse.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 174-175.
46. **SPIES G.** *Cognitive-behavioural interventions for common mental disorders in HIV: a review.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 175.
47. **SPIES G.** *Mental health outcomes in HIV and childhood maltreatment: a systematic review.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 175.
48. **SULIMAN S.** *Trauma appraisal, sleep, and working memory responses in acute stress disorder.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 176.
49. **SULIMAN S.** *Trauma appraisal, sleep, and working memory responses in clinically determined acute stress disorder.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Georgia and the South Sandwich Islands, South African Medical Association Health and Medical Publishing Group 2012: 131.
50. **SULIMAN S.** *Trauma appraisal, sleep, and working memory responses in clinically determined acute stress disorder.* MRC Research Day, South Africa, 2012: 1.
51. **VERSTER GC.** *Psychiatry and end-of-life decisions.* 17th Biennial National Congress (South African Society of Psychiatrists), Misty Hills Country Hotel, Johannesburg, South Africa, South African Medical Association Health and Medical Publishing Group 2012: 119.
52. **VINK M.** *Maturation of reactive and proactive inhibitory control.* 56th Annual Academic Day, Faculty of Medicine and Health Science, Tygerberg, South Africa, 2012: 177.
53. **VOGES J.** *It's simpler, but is it better? Comparing a comprehensive communication assessment tool with a global rating.* Annual Conference on the Scholarship of Teaching and Learning, Lord Charles Hotel, Somerset West, South Africa, 2012: 31.

## General Presentations

1. **POTOCNIK FCV.** *Alzheimer 's disease, driving and testamentary capacity.*
2. **POTOCNIK FCV.** *Alzheimer's disease, update.*
3. **POTOCNIK FCV.** *Aspects of Alzheimer's disease.*
4. **POTOCNIK FCV.** *Drug therapy for Alzheimer's disease.*
5. **POTOCNIK FCV.** *Early detection, management and presentation of Alzheimer's disease.*
6. **POTOCNIK FCV.** *Medico-legal and ethical aspects of Dementia.*
7. **SPOTTISWOOD BS, DU PLESSIS S, GRETSCHEL A, LOTZ JW.** *THE VALUE OF FUNCTIONAL MRI IN PRE-SURGICAL PLANNING: CASE STUDY AND CAUTIONARY NOTES.*

## Chapters in Books

1. **ELS C, KUNYK D, BARAK Y, THOMAS E, SCHARF D.** *Detoxification: treatment of the "other" tobacco.* In *Disease interrupted: tobacco reduction and cessation*, CreateSpace Independent Publishing Platform, USA, USA, 2012: 195-206.
2. **PANDAY S, RANCHOD C, NGCAWENI B, SEEDAT S.** *The situation of the youth in South Africa.* In *Youth violence - Sources and solutions in South Africa*, UCT Press, Claremont, South Africa, 2012: 95-140.
3. **PIENAAR WP.** *Addiction: philosophy and ethics.* In *Substance use and abuse in South Africa: insights from Brain and behavioural sciences*, UCT Press, Claremont, South Africa, 2012: 309-328.
4. **THOMAS KGF, FERRETT HL.** *Neurocognitive effects of alcohol abuse and dependence.* In *Substance use and*

*abuse in South Africa: insights from brain and behavioural sciences*, UCT Press, Claremont, South Africa, 2012: 157-174.

5. **WANG PS, AGUILAR-GAXIOLA S, ALHAMZAWI AO, ALONSO J, ANDRADE LH, ANGERMEYER M, BORGES G, BROMET EJ, BRUFFAERTS R, BUNTING B, CALDAS DE ALMEIDA JM, FLORESCU S, DE GIROLAMA G, DE GRAAF R, GUREJE O, HARO JM, HINKOV HR, HUM CY, KARAM EG, KOVESH V., LEE S, LEVI.** Treated and untreated prevalence of mental disorder worldwide. In *Oxford textbook of community mental health*, Oxford University Press, New York, USA, 2011: 50-66.

**Teaching and Training** (under-, postgraduate and elective students).

Number of FC Psych Part II successful candidates:

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

1. **Mmed Degrees Completed \*\*** Check Afrikaans terms used below;

**BODENSTEIN S.** *Schizophrenia-window-of-hope.com: Development of a psycho-educational internet resource for the South African setting.* MMed, 2012. 30 pp. Studieleier: Niehaus DJH. Medestudieleier: Koen L.

2. **MASHILE M.** *Correlation of non-verbal communication skills with academic performance in the late rotation psychiatry module: sub-study-comparison of written examination marks with oral examination marks.* MMed, 2012. 30 pp. Studieleier: Niehaus DJH. Medestudieleier: Koen L.

### Masters completed

1. **ASMAL L.** *A systematic review of Quetiapine versus other atypical antipsychotics for schizophrenia.* MScGeneeskWet, 2012. 139 pp. Studieleier: Emsley RA. **MSc (Clinical Epidemiology)**
2. **BODENSTEIN S.** *Schizophrenia-window-of-hope.com: Development of a psycho-educational internet resource for the South African setting.* MMed, 2012. 30 pp.

Studieleier: Niehaus DJH.  
Medestudieleier: Koen L.

3. **LACHMAN A.** *A retrospective chart review of the clinical and psychosocial profile of psychotic adolescents with comorbid substance use disorders presenting to acute adolescent psychiatric services at Tygerberg Hospital.* MPhil, 2012. 30 pp. Studieleier: Emsley RA. Medestudieleier: Hawkrigde S, Nassen R. **(MPhil in Child and Adolescent Psychiatry)**
4. **MASHILE M.** *Correlation of non-verbal communication skills with academic performance in the late rotation psychiatry module: sub-study-comparison of written examination marks with oral examination marks.* MMed, 2012. 30 pp. Studieleier: Niehaus DJH. Medestudieleier: Koen L.
5. **VERSTER GC.** *The ethics of stimulant use in healthy students.* MPhil, 2012. 90 pp. Studieleier: Van Niekerk AA

**Ms Almarie Janse Van Rensburg** was appointed as the new Teaching and Learning Co-ordinator in March 2012.

**Special achievements and other highlights not covered by this template.**

### Prof. Soraya Seedat

Humboldt Research Award

### Dr Laila Asmal

Best oral presentation at National conference of the South African Society of Psychiatrists

MB & MJ Thom award for sabbatical study  
RWS Cheetham Award (best published paper on cross-cultural psychiatry in 2011)  
HPCSA recognition of Unit as a teaching department and for subspecialty trainee numbers, Neuropsychiatry Unit Department of Psychiatry, Tygerberg Hospital.

### Dr Bonga Chiliza

Chairman on the SASOP Western Cape Sub-group  
Chairman of the South African YMCA National Board  
Chairman of the Annual Academic Day Committee in the Faculty of Health Sciences.  
Elected Deputy Chair of the Board of Life Choices

# PSYCHIATRY

## **Dr Stefan du Plessis**

International Research Training Grant, Germany-South Africa (2009-2012) (Extended for a 4<sup>th</sup> year)

The Biological Psychiatry Special Interest Group of The South African Society of Psychiatrists, Research Career Award (2012)

## **Mr JP Fouche**

EU Marie Curie International Staff Exchange Scheme grant for the European South African Research Network in Anxiety Disorders (EUSARNAD) for travel to Leiden, The Netherlands, 2012.

CSIR Centre for High Performance Computing student travel award for travel to CHPC annual meeting 2012, Durban, South Africa.

## **Dr Anusha Lachman**

Donald J Cohen Fellowship for Child & Adolescent Psychiatrists and Allied Professionals, IACAPAP Paris 2012

Publication incentive

Selected to contribute to the American Association International Relations Column and African Association of Child & Adolescent Psychiatrists Annual Newsletter on behalf of the DJ Cohen Fellow recipients.

## **Prof. Christine Lochner**

NRF Incentive funding for rated researchers (2010-2014)

NRF Competitive Programme for Rated Researchers (2011-2012)

NRF Competitive Programme for Rated Researchers (2012-2013) – new application  
Harry/Doris Crossley Awards (1 project; funding for 3 other projects as co-applicant)  
Trichotillomania Learning Centre Research grant (2010-2012)

## **Dr Felix Potocnik**

\*\* HPCSA recognition of unit as a teaching department as for subspecialty trainee numbers, Old-age (Geriatric) Psychiatry Unit, Department of Psychiatry at Stikland Hospital

## **Dr Annerine Roos**

NRF Thuthuka grant

Harry Crossley research funds

## **Dr Georgina Spies**

Claude Leon Postdoctoral Fellowship

Harry Crossley Study Funding

## **Ms Sharain Suliman**

NRF Thuthuka grant

Hendrik Vrouwes Research Scholarship

Harry Crossley funding

## **Dr Eileen Thomas**

Internal Department Award: Janus Steyn Award for Academic Excellence Mmed Part I

## **Dr Leigh van der Heuvel**

Internal Department Award: Janus Steyn Award for Academic Excellence FC Psych Part II

Department Award : Best Registrar 2012

## Head of Department Professor B.L. Warren

### DIVISION OF SURGERY

#### Head of Division

Professor B.L. Warren

#### Head of General Specialist Services:

Surgery - Dr JdeV Odendaal

### UNITS & STAFFING

- Surgical Gastroenterology – Professor BL Warren (Head)
  - Monday Firm – Dr AvV Lambrechts
  - Tuesday Firm – Dr J Lübbe
  - Wednesday Firm – Dr H Louwrens
  - Thursday Firm – Dr CE Cooper
  - Friday Firm – Dr FE Maree
- Vascular Surgery – Professor DF du Toit (5/8ths part-time Head), Drs JdeV Odendaal (Co-Head), JP Mouton
- Head-, Neck- and Breast Surgery – Professor JP Apffelstaedt (Head), Dr KJ Baatjes
- Surgical Intensive Care – Drs CE Fourie (Head), N Ahmed, I Aggenbach
- Burn Unit – Drs AE van der Merwe (Head), M Jansen
- Trauma Surgery – Drs AvV Lambrechts (part-time Head), LP Taylor (Clinical Head)
- Karl Bremer Hospital Surgical Service – Dr AE Victor (Head)

21 Registrars on Tygerberg Hospital staff establishment, plus one each employed by Karl Bremer, Paarl and Worcester Hospitals and 2 supernumerary Registrars (Nigeria and Namibia) rotate, on a 3-monthly basis, to do service in above-mentioned units and also cover the affiliated Provincial Hospitals.

An increased service load was anticipated with the full commissioning of the new



Khayelitsha Hospital and an adjustment of referral pathways within the Cape Town Metropole, whereby the populous suburb of Khayelitsha became part of the Tygerberg Hospital drainage area (effective April 2010). Additional funding available for this allowed for the creation of two new specialist positions, as well as additional Registrar and

Medical Officer posts (one each). The long quest for a fulltime Specialist in Trauma Surgery finally ended with the appointment of Dr Liezel Taylor on 01 February 2012.

SELECTED STATISTICS (Figures in parenthesis indicated percentage change from 2011)

- Average Bed-occupancy C1D-East Surgical admissions ward – 170% (- 11%)
- Admissions C1D-East Surgical admissions ward – per month 556 (+ 10%)
- Trauma Patients Treated – 18778 (+ 1.5%)
- Patients requiring Resuscitation Unit Admission – 1097 (unchanged, probably since 2011 figures represented saturation of capacity)

# SURGICAL SCIENCES

## COMMENT

The full impact of the "Khayelitsha shift" has not yet been felt, as it only occurred towards mid-year. Aforegoing selected statistics reflect nonetheless an ongoing and increasing patient load, particularly with respect to acute admissions. Major resuscitations and ventilation of new patients (trauma and non-trauma) occurred regularly in the general admissions area, since the Resuscitation Unit was already full. Access to emergency theatre and surgical ICU beds remained a challenge. One additional full day elective theatre list became operational, but the envisaged opening of a third emergency theatre, as well as increasing Surgical ICU beds from 12 to 14 did not materialise, because of staffing issues in Anaesthesiology and Nursing.

The Division's focus on outreach continued, with the new Khayelitsha Hospital and Paarl Hospital (High Care/ICU focus) added to the list of institutions regularly visited by Specialist Staff.

## ACADEMIC

This Division hosted the annual Surgical Registrars Symposium and the 40<sup>th</sup> Annual Congress of the Surgical Research Society of Southern Africa back-to-back in July 2012. Five MMed(Chir) degrees of the University of Stellenbosch were awarded at year end, with Drs Stefan Hofmeyr and Helene Louwrens graduating *cum laude*.

### CARDIOTHORACIC SURGERY

**Head of Department: Prof. G. Rossouw**

#### Summary of activities:

Rendering a cardiothoracic-surgery service of outstanding quality Training registrars and auxiliary staff

Resources:	Posts:	Filled	Vacant
Professional Nurses	35	27	8
Staff nurses	12	10	2
Nurses	10	8	2
Administrative	3	3	0
Housekeeping	7	7	0

Theatre	6	6	0
Technologists	3	3	0
Registrars	4	4	0
Specialists	3,5	3,5	0

#### Output:

Outpatient visits	1 380
Multidisciplinary meetings	144
Admissions	1 470
Open-heart cases	363
Thorax cases	207
Endoscopy	53
Trauma cases	55
Other cases	101
Red Cross	40

#### Deaths

Heart	19
Lungs	2
Trauma	3

#### Comment on output:

Despite staff and theatre-time shortages, 4,6% more open-heart cases were performed in 2012 than the previous year. This indicates that staff renders exceptional work despite many challenges.

#### Infrastructure development:

New endoscopy equipment was acquired, but could not be used yet due to a logistical problem with the procurement of appropriate trolleys or work stations.

#### Community outreach:

Due to the workload it is not possible to sacrifice staff to launch community-outreach programmes.

#### Partnerships:

On national level the department was responsible for the national registrar symposium (Hannes Meyer) that was held in Cape Town in 2012. We were also involved with a thoracoscopic workshop that was presented at the University of the Free State. Presentations were also made at local paediatric congresses. On international level a unit in Paris was visited for acquiring aortic valve repair techniques. Two international congresses were attended.



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Collaboration with the private sector at the local Kuils River and Panorama hospitals is going well, with registrars and specialists that also participate in journal-club discussions there. Private specialists also sacrifice their time to participate in training in the department.

### Research activities:

A PhD study is registered, and an article was published in a leading journal.

### Teaching and training:

A total of 50 undergraduate lectures were presented.

A total of 90 postgraduate training opportunities were presented.

Approximately 30 elective students rotated in the department.

Five new library books were also acquired.

## NEUROSURGERY

**Head of Department: Prof HB Hartzenberg**

### Summary of activities

The Division of Neurosurgery is involved in clinical and service work on the Tygerberg Academic Hospital platform but performs a vital function on the Academic platform with the Faculty of Medicine and Health sciences. Teaching, training research and community outreach remain the core functions of this division.

### Resources:

(Please adapt this to your dept. e.g. if you don't have Radiographers, but have e.g. Pharmacists on your establishment, please substitute accordingly)

Posts (Full time)	Number	Filled
<b>Chief Specialist and HOD.</b> Prof HB Hartzenberg	1	Yes
<b>Specialist Neurosurgeons</b> Dr AJ Vlok Dr A Gretschel	2	Yes
<b>Principal Medical Officer</b> Dr H Govender	1	Yes
<b>Registrars</b> Dr S Naidoo Dr D Mutyaba Dr S Lachman Dr C Steyn Dr Z Ebrahim	5	Yes
<b>Supernumerary Registrars</b> Dr K Mensah (Ghana) Dr K Albibi (Libya)	2	Yes
Posts (sessional – how many hours worked per week)		
<b>Specialist Neurosurgeon</b> Dr H Vivier	20 hours	Yes

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**Output:**

**Out patient stats per month Jan 2012 to December 2012**

C5BW Neuro Surgery	<b>NEW</b>	<b>83</b>	<b>110</b>	<b>95</b>	<b>98</b>	<b>93</b>	<b>104</b>	<b>98</b>	<b>95</b>	<b>61</b>	<b>110</b>	<b>68</b>	<b>42</b>	<b>1057</b>
	FOL	196	221	197	173	210	210	259	209	204	291	184	121	2475
<b>C5BW Neuro Surgery Total</b>		<b>279</b>	<b>331</b>	<b>292</b>	<b>271</b>	<b>303</b>	<b>314</b>	<b>357</b>	<b>304</b>	<b>265</b>	<b>401</b>	<b>252</b>	<b>163</b>	<b>3532</b>

**The patient admissions:**

<i>A4W Neuro Surg High Care</i>													
Type	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Average length of stay (ALOS)	7	6	6	5	7	6	5	6	6	5	5	6	
Bed Occupancy Rate (BOR)	128%	123%	142%	133%	143%	141%	139%	138%	143%	148%	148%	138%	
Admissions	125	130	145	151	145	140	178	145	169	181	180	152	1841
Patient days	715	644	795	717	800	764	778	771	771	827	802	773	
Beds in use	18	18	18	18	18	18	18	18	18	18	18	18	
Inpatient days	715	644	795	717	800	763	778	771	770	827	801	772	
Day Patients						1			1		1	1	
Deaths		3	3	3	2	4	6		2	1		1	
Separations	101	113	126	134	116	125	142	129	138	152	162	126	
<i>A4W Neuro Surg ICU</i>													
Type	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	
Average length of stay (ALOS)	4	3	2	4	3	3	3	4	3	3	4	5	
Bed Occupancy Rate (BOR)	19%	19%	14%	22%	14%	21%	22%	19%	26%	24%	21%	40%	
Admissions	12	22	24	18	22	21	27	20	29	27	22	27	271
Patient days	72	65	52	78	51	76	82	69	93	88	75	147	
Beds in use	12	12	12	12	12	12	12	12	12	12	12	12	
Inpatient days	72	62	52	78	51	76	82	69	93	88	75	147	
Day Patients		6											
Deaths	5	2	7	5	4	7	5	2	6	4	4	10	
Separations	17	19	24	22	18	22	28	19	30	27	21	27	
Total												2112	

A total of 2112 admissions

These stats below include 9 cardiothoracic beds

<i>A4E Neuro Surg + Thoracic Surg</i>												
Type	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
Average length of stay (ALOS)	11	9	9	10	10	7	8	9	10	7	8	8
Bed Occupancy Rate (BOR)	50%	63%	59%	65%	65%	60%	53%	61%	58%	49%	68%	60%
Admissions	48	68	68	61	68	69	75	68	52	67	85	65
Patient days	485	563	565	607	629	559	512	582	543	467	634	573

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The total cases in A4 east are difficult to separate as the unit has 9 cardiothoracic beds that clinicom could not separate in terms of patient admissions. A rough estimate of the total neurosurgery admissions to this ward is difficult. Most patients in this ward are transferred for nursing care and rehabilitation from the units in A4 west. There are usually pediatric neurosurgery admissions to this ward as well as small numbers of new adult patients.

## **Operative Procedures:**

A total of 379 elective procedures were done

## **Comment on output:**

The Total admissions to ward A4 west is less than the previous year by 1000 patients which is somewhat hard to believe as we still have a high bed occupancy rate. We will need to pay more attention to accuracy of data.

The out patients numbers have increased with almost 200 more new patients being seen and over 300 more follow up cases.

With regards operative procedures there has been an increase in numbers and this is mainly due to the additional list on Fridays where 79 cases were done on this Friday list. Efficiency related to the Friday list is being addressed and this should increase the numbers of operations that is possible on this list.

## **Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

Lectures are given via the Stellmed system of the University to Primary and Secondary level health care personnel on head injury management.

A spine service is rendered at the Worcester Hospital in terms of surgery for spinal

conditions in the Worcester drainage are. Dr AJ Vlok travels to Worcester once every second month to the surgery

## **Partnerships**

### **Private:**

Specialist Neurosurgeon, Dr D Lamprecht, employed for registrar teaching and training with DOE sponsorship.

A number of workshops are arranged with private companies for teaching purposes.

### **International:**

Head Injury Research with London School of Tropical Medicine and Public Health

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

Number of publications from the department/division

### **Journal Articles:**

Spottiswood BS, du Plessis S, Gretschel A, Lotz J. Functional MRI in pre surgical planning: case study and cautionary notes. SAJR 16:107-110, 2012

## **Congress presentations: Authors and Co-authors:**

### **22nd Biennial Congress of the Society of Neurosurgeons of South Africa:**

#### **Armin Gretschel:**

1. THE VALUE OF FUNCTIONAL MRI IN PRE-SURGICAL PLANNING: CASE STUDY AND CAUTIONARY NOTES  
B.S. Spottiswoode, S. Du Plessis, A. Gretschel, J. Lotz
2. COMBINING STRUCTURAL AND FUNCTIONAL MRI WITH 3D MODEL PRINTING AS A NEUROSURGICAL PLANNING TOOL  
B.S. Spottiswoode, Y. Chang, S. Engelhardt, A. Gretschel
3. TRANSCRANIAL STAB WOUNDS - A RETROSPECTIVE ANALYSIS TO AESS THE

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INCIDENCE OF SEPTIC COMPLICATIONS FOLLOWING PENETRATING STAB WOUNDS TO THE HEAD

Gretschel, HB Hartzenberg

Academic Year day:

Functional MRI in pre surgical planning:

case study and cautionary notes

## Ian Vlok:

The CRASH 3 Trial

## HB Hartzenberg:

1. The outcomes of Pituitary surgery - Microscopic versus endoscopic era
2. Prehospital Airway Management in Severe Traumatic Brain Injury: Could Less Be More  
Sobuwa S, Hartzenberg HB, Geduld H
3. Association of Prehospital Transport Times on Outcome following Severe Traumatic Brain Injury  
Sobuwa S, Hartzenberg HB, Geduld H

## Registrars:

1. EVALUATION OF LOCALLY MANUFACTURED PATIENT SPECIFIC CUSTOM MADE IMPLANTS FOR CRANIAL DEFECTS USING A SILICONE MOLD  
S Naidoo, A Gretschel
2. A REVIEW OF PNEUMONIA IN A PUBLIC SECTOR NEUROSURGICAL HIGH CARE UNIT  
Dr M.Z. Ebrahim\*, Dr A.J. Vlok

Prof HB Hartzenberg was the convener of the Society of Neurosurgeons Congress at the Lord Charles, Somerset West in October 2012.

We also hosted 2 workshops at the Faculty of Medicine and Health Sciences as part of the above congress.

Prof Hartzenberg convened an Endoscopic Pituitary workshop with the world renowned Neurosurgeon & Pituitary surgeon Prof Paolo Cappabianca from Naples, Italy.

Dr Ian Vlok convened a Spinal workshop.

Text books and contributions to text books

## Teaching and Training (under, 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 program of teaching and training of Neurosurgery post graduate training.

Prof HB Hartzenberg was supervisor of Masters Student in Emergency medicine students from the University of Cape Town. We have had elective students from Australia and Germany and Britain throughout 2012.

## Special achievements

Prof HB Hartzenberg received the rector's award for general achievement in 2012.

**Dr S Naidoo** received the BBraun award for one of two best papers by a registrar at the 22<sup>nd</sup> Biennial Conference of the Society of Neurosurgery of SA.

**Dr A Gretschel** received the BBraun award for one of two best papers by a junior specialist at the 22<sup>nd</sup> Biennial Conference of the Society of Neurosurgery of SA.

The prizes are overseas BBraun run workshops in the area of Neurosurgery

## DEPARTMENT OF OPHTHALMOLOGY

Head of Department PRO. DAVID MEYER

## Summary of activities

This annual report reflects the dedicated work of all the committed staff of the Division of Ophthalmology who under challenging conditions rendered an exceptional tertiary service to the patients in our drainage area and beyond.

During 2012 **24 968** patients visited our outpatient department (4.7% more than the previous year), making it the busiest surgical clinic in the hospital. During 2012 **624** (467 in 2011) premature babies were screened for

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retinopathy of prematurity (ROP) of whom 3 required retinal laser treatment. This represents 34% 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 **3105** (2962 in 2011).

Surgical cases totalled **2781** operations (2662 in 2011 = 4.5% increase) divided into **603** day surgery cases (a 38% increase from 2011); **1376** general ophthalmic cases and **802** (5.7% increase over 2012) cataract operations. Trauma still contributes significantly to our general ophthalmic cases. The increase in day surgery cases is primarily driven by Avastin intravitreal injections for diabetic patients. Ophthalmic Laser procedures totalled about 908 cases.

During outreach efforts 34 additional operations and 107 consultations were performed in Namibia.

The overall increase in service delivery is remarkable given the static number of doctors and unacceptably high support and nursing staff shortages. The service delivery took place in parallel with a very active academic and research program. Sincere gratitude to every single dedicated staff member.

### Resources:

Posts (Full time)	Number	Filled
CONSULTANTS	4	4
OPTOMETRIST	1	1
ULTRASONOGRAPHER	1	1
MEDICAL OFFICERS	3	3
REGISTRARS	7 + 3 Supernumery	7 + 3 Supernumery
Posts (sessional – how many hours worked per week)		
SPECIALIST	2	31

### Output:

Outpatient visits **Total: 24 968**

- Sub-Specialist Clinics serving Ophthalmology:
- Medical Retina
- Surgical Retina
- Pediatric Ophthalmology
- Oculoplastics
- Cornea and anterior segment
- Refraction (1100 refraction clinic visits)

Admissions:

D4=51, G4=201, D7=2853 Total: **3105**

Theatre procedures:

General ophthalmic	1 376
Day surgery	603
Cataract	802
<b>Total</b>	<b>2781</b>

ROP Screening 624

### Laser procedures

Yag laser	356
Argon laser	469
Diode laser	80 (est)
ROP laser	3
<b>Total</b>	<b>908</b>

### Comment on output:

During 2012 **24 968** patients (23 868 for medical reasons and 1100 for refraction only) attended our outpatient department, making it the busiest surgical clinic in the hospital – with a 4.7% rise in numbers compared to 2011. During the year 624 premature babies were screened for retinopathy of prematurity (ROP) of whom 3 required retinal laser treatment. This is 34% more than the previous year and it underscores the significant contribution our Division is making to the welfare of our hospital's neonatal care.

Patient admissions to our wards (D7,D4 and G4) totalled **3105**– 3% more than the previous year.

Surgical cases totalled **2781** operations (2662 in 2011 = 4.5% increase) divided into **603** day surgery cases (a 38% increase from

2011); **1376** general ophthalmic cases and **802** (5.7% increase over 2012) cataract operations. Trauma still contributes significantly to our general ophthalmic cases. The increase in day surgery cases is primarily driven by Avastin intravitreal injections for diabetic patients. Ophthalmic Laser procedures totalled about **908** cases. The central academic hospitals cannot continue to render the required ophthalmic services to an ever increasing population hence the establishment of secondary eye care units outside of these academic complexes still remains the only acceptable long-term solution for responsible eye care to the communities.

Province furthermore needs to consider creating a single tertiary dedicated eye hospital to serve the whole province and then continue supporting the two secondary service centres at the two main teaching complexes.

## **Part 2**

### **Faculty of Health Sciences**

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

Unfortunately no significant purchases could be made from the Division's equipment wish list because of unfavourable budget allocations.

#### **Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

The Division's main outreach programme focusses on the country of Namibia. This initiative is driven by Prof Meyer. It has been a 10 year initiative focussing on assisting the specialists in Namibia to manage difficult ophthalmic cases and performing surgery on these patients. In 2012 he visited Windhoek on 2 occasions, consulting 107 patients and operating on 34 cases. He also lectured at the Medical Association of Namibia's annual Congress in Windhoek.

On 27 September 2012 Dr Richard Kamwe, national minister of Health and Welfare,

Government of Namibia personally awarded a Certificate of Appreciation to Prof David Meyer for outreach work performed in that country over a 10 year period. This was an expression of gratitude to both the recipient and the University of Stellenbosch.

### **Partnerships**

#### **National:**

1. Academically and clinically the divisions of Ophthalmology at Groote Schuur, Red Cross and Tygerberg Academic Hospitals 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. A Strabismus Symposium was held at Tygerberg Academic Hospital in 2012 where all three teaching institutions participated leading up to the creation of a national Pediatric and Strabismus Society.
2. The collaborative research initiative in retinal diseases continues between this division and the department of Human Genetics at the University of Cape Town.
3. This division trains one registrar at a time for the National Defence Force at 2 Military Hospital. This collaboration has existed successfully for almost 20 years. The new registrar joined our Division in 2011.
4. 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.

#### **Private:**

1. The Cape Eye Hospital, as part of the post-graduate accredited teaching platform, renders academic as well as technical support with instrumentation and training (e.g. Excimer Laser refractive surgery and corneal

transplant surgery) not readily available to our registrars at Tygerberg Academic Hospital.

2. Tygervalley Eye and Laser Centre has also agreed to allow registrars from the Faculty of Health Sciences to visit and learn. This is especially valuable as they possess the only Femtosecond laser in the Western Cape.

### International:

The first supernumery 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.

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

#### Journal Articles (subsidised)

1. **ABU-AMERO KK, KONDKAR AA, SALIH MA, ALORAINY IA, KHAN AO, OYSTRECK DT, BOSLEY TM.** Partial chromosome 7 duplication with a phenotype mimicking the HOXA 1 spectrum disorder. *Ophthalmic Genetics* 2012; **20**(1) : 1-7.
2. **LIU Y, WHIGHAM BT, WHEELER J, WILLIAMS SEI, RAUTENBACH RM, ZISKIND A, RAMSAY M, CARMICHAEL TR, ASHLEY-KOCH AE, RAND ALLINGHAM R, HAUSER M.** The role of lysyl oxidase-like 1 DNA copy number variants in exfoliation glaucoma. *Molecular Vision* 2012; **18** : 2976-2981.
3. **OTUTU M, NACHEGA JB, HARVEY J, MEYER D.** The prevalence of refractive error in three communities of Cape Town, South Africa. *South African Optometrist* 2012; **71**(1) : 32-38.
4. **OYSTRECK DT, MORALES J, CHAUDHTY I, ALORAINY IA, ELKHAMRY SM, PASHA TMU, BOSLEY TM.** Visual Loss in Orbitofacial Neurofibromatosis Type 1. *Ophthalmology* 2012; **119**(10) : 2168-2173.
5. **SMIT DP, MEYER D.** Intralesional bleomycin for the treatment of periocular capillary hemangiomas. *Indian Journal of Ophthalmology* 2012; **60**(4) : 326-328.
6. **SMIT DP.** Anti-infective ophthalmic preparations in general practice. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2012; **54**(4) : 302-307.
7. **SMIT DP.** Dealing with dry eye disease in general practice. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2012; **54**(1) : 14-18.
8. **SMIT DP.** Eyelid problems in general practice. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2012; **54**(3) : 214-219.

#### Journal Articles (NON-subsidised)

1. **GOODING C, HALL DR, KIDD M, ZISKIND A.** Macular thickness measured by optical coherence tomography correlates with proteinuria in pre-eclampsia. *Pregnancy Hypertension* 2012; **2**(4) : 387-392.
2. **MEYER D.** Are we slowly erasing "Idiopathic" from our Ophthalmic Vocabulary?. *Middle East African Journal of Ophthalmology* 2012; **19**(4) : 355-356.
3. **OYSTRECK DT, LYONS CJ.** Comitant strabismus Perspectives, present and future. *Saudi Journal of Ophthalmology* 2012; **26**(3) : 265-270.

### Teaching and Training

- 3 MMed students are supernumery students. One from the SA Defense Force and two from the Northern Cape Province. These students are under contract to return to their respective employers for service 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 commenced protocol development in 2012.
- The increased number of MBChB students that need to be exposed to clinical ophthalmology in their student intern year, 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

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ophthalmic care centres in the Metropole.

## Special achievements and other highlights not covered by this template

Dr Caroline Gooding, a registrar in the Division not only completed her MMed (Ophth) cum laude, but also 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. This is only the second time that this medal has been won by a Stellenbosch graduate.

### ORTHOPAEDIC SURGERY

Head of Department: DR JACQUES DU TOIT

#### Summary of activities

##### Service Delivery:

Infrastructural and organizational changes to accommodate the massive increase in emergency orthopaedic "Burden of Disease".

##### Research:

Initiation of an official "Orthopaedic Research programme" to improve the quality and quantity of publications from our department.

##### Teaching and Training:

The high success rate of our National exams for our post-graduate candidates was maintained. Initiation of "Overhauling" our MBChB III Musculoskeletal Curriculum

##### Resources:

Posts (Full time)	Number	Filled
Head	1	1
Consultants	8	8
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:

##### Service Delivery:

Due to the increase in the population in Tygerberg Hospital catchment area, the burden of emergency orthopaedic trauma has increased significantly. A large amount of time and energy was spent on adapting to this massive patient increase, but maintaining high quality of service delivery.

##### Comment on output:

Initiation of an Audit programme to monitor our output and improve on all three aspects of our tasks/aims and responsibilities

#### Part 2

### Community outreach programmes / community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

The Paediatric Orthopaedic Department has initiated an outreach / community service programme in conjunction with Steps Charity to improve the quality of Clubfeet care in Sub-Sahara Africa.

South African Paediatric Orthopaedic Society Instructional course on the Ponseti method for the treatment of Clubfeet:

- 4/5 May 2012  
University of Stellenbosch Medical Campus
- Visit to Uganda to meet with Dr Shatique Pirani, who initiated the Uganda Clubfeet programme, to plan Clubfeet treatment protocols for South Africa and Sub-Sahara Africa
- Planning of outreach programmes and instructional courses for Botswana and Namibia in 2013

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

Number of publications from the department/division 2012:

#### Journal Articles (subsidised)

1. **DAVIS JH.** Obesity and early reoperation rate after elective lumbar spine surgery: a populationbased study. *SA Orthopaedic Journal* 2012; 11 (3) : 106.



2. **HUGO D, DE JONGH HR.** Greater trochanteric pain syndrome. *SA Orthopaedic Journal* 2012: 11 (1) : 28 – 33.
3. **IKRAM A.** Injuries complicating musical practice and performance: The hand surgeon's approach to the musician-patient. *SA Orthopaedic Journal* 2012: 11(3) : 104.
4. **PRETORIUS HS.** Evaluation on non-operative treated symptomatic isolated full-thickness supraspinatus tears. *SA Orthopaedic Journal* 2012: 11(3) : 104.
5. **ROBERTSON ICM.** Human hip impingement morphology: An evolutionary explanation. *SA Orthopaedic journal: 11(3) : 102-103.* SEDDON JA, DONALD PR, **VLOK GJ,**
6. **SCHAAF HS.** Multidrug-resistant Tuberculosis of the Spine in children – characteristics from a high burden setting. *Journal of Tropical Pediatrics* 2012: 58(5) : 341-347.
7. **THIART M.** Proximal humerus chondroblastoma with a secondary aneurysmal bone cyst. *SA Orthopaedic Journal* 2012: 11(2) : 52-55.
8. **VAN DEN HEEVER DJ, SCHEFFER C, ERASMUS PJ, DILLON EM.** Classification of gender and race in the distal femur using self organising maps. *Knee* 2012: 19 : 488-492.

## Proceedings International

**VAN DEN HEEVER DJ, SCHEFFER C, ERASMUS PJ, DILLON EM.** Development and testing of patient-specific knee replacements. 34<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS), IEEE San Diego, California, USA, 2012: 4875-4878.

## Masters completed

**ANLEY CM.** Does the addition of a wrist arthroscopy alter the initial management of patients with an intra-articular distal radius fracture? *MMed*, 2012. 36 pp. Study leader: Ikram A, Pretorius HS.

**PAULSEN PJ.** An assessment of the intermediate outcome for congenital

idiopathic clubfoot treated with the Ponseti technique in a tertiary public health sector hospital in South Africa, *MMed*, 2012, 33 pp. Student leader: Du Toit J.

**PETERSEN I.** Investigating the Single Anterior Incision Transverse Approach to the Antecubital Fossa: For Distal Biceps Tendon Rupture Repair and Coronoid Process Fracture Fixation – a cadavar study. *MMed*, 2012. 40 pp. Study leader: Pretorius HS, Page B.

The Department of Orthopaedics are actively involved in improving Orthopaedic output and quality of publications in our specific "Burden of Disease" profile (To be implemented 2013).

Improving infrastructure to enhance research output

Teaching on Research

Implementation of a specific research programme

## Teaching and Training (under, postgraduate and elective students)

### Undergraduate Teaching:

The undergraduate programme was extremely successful for the 2012 year. We achieved a high success rate and had excellent feedback from our students.

During 2012/2013 we have initiated the overhaul of our MB ChB III Musculoskeletal Curriculum.

### Post-graduate Training:

Once again we had a 100% pass rate in our National exams by our post-graduate candidates.

### Elective students:

A large amount of pre- and post-graduate elective students, rotated through our department. They find the "hands on" and practical approach to Orthopaedics very useful to improve their knowledge and skills in the field of Orthopaedics.

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**PAEDIATRIC SURGERY**  
**Head of Department**  
**PROFESSOR SW MOORE**

## Summary of activities

(Clinicom)

Paediatric Surgery currently functions within 18beds in ward G4 in TBH, but more than 50% of its patients lie within the beds of the Paediatric service outside of this ward.

Paediatric Surgery admitted 1807 patients to ward G4 in 2012 (Clinicom)  
 277 urgent Paediatric in-patient 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 1414 outpatients (Clinicom) seen in the 2 specialized clinics (general Paediatric surgical clinic and ano-rectal clinic).  
 There were an additional 798 daily emergency referrals from G ground Paediatric admissions

## Surgical procedures

The available theatre time (very limited) could handle 415 elective procedures  
 Day theatre list: 584 elective procedures  
 Total elective procedures: 999 cases (Clinicom)

There were also 944 emergency procedures performed on children < 13 yrs

## Resources

Posts (full time)	Number	Filled
CONSULTANT	2	2
REGISTRAR	2	2
MEDICAL OFFICER	1	1
Posts (sessional – how many hours per week)		
CONSULTANT	16 hrs	16 hrs

## Output

Outpatient visits: 1275  
 Speciality Clinics: GGround referrals 551  
 Admissions: 1807

Theatre procedures:  
 Total : 1943 procedures

## Comment on output

- Output is limited due to very limited resources, particularly theatre time. Long waiting lists and many cancellations.
- See high number of emergency procedures in relation to elective cases.
- Case load is increasing dramatically with the Khayelitsha shift with little extra resources to allow the capacity to deal with them.

## Part 2

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

1. Development of Seminar room in ward G4 for meetings and teaching purposes
2. Re-organization of Divisional office to ward G4
3. Upgrading of computer facilities
4. Institution of database for Paediatric surgical cases
5. Further development of administration and e-mail
6. Strong motivation for extra theatre time.

### Community outreach programmes / community service and interaction. Please focus on initiatives in 2012, especially wrt MDG and projects in Africa.

- Improved liason and service to clinics/ Khayelitsha hospital
- Development of referral guidelines for clinics
- Teaching initiative with University of Zimbabwe established – Prof Moore invited as external examiner
- Teaching initiative with University of Namibia established through Prof Moore
- Advisory service to Africa paediatric oncology initiative

# SURGICAL SCIENCES

## Partnerships

Private sector :Blaauwberg Hospital-Public private partnership explored

## Achievements wrt research activities and research outputs:

Number of publications from the department/division

Text books and contributions to text books.

Publications in

A. Peer reviewed journals 11 published in 2012

B. Chapters in books 1 published in 2012

C. Revision of student handbook " Student guide to Paediatric surgery"

D. revision and translation of Afrikaans version " studente notas in PEDIATRIESE CHIRURGIE" under way

**TOTAL 12 published in 2012**

## Teaching and Training (under-, postgraduate and elective students).

The teaching commitment involves both undergraduate and post-graduate teaching programmes.

**Undergraduate teaching** Paediatric surgical staff are involved in teaching 2<sup>nd</sup> year MBChB ,3<sup>rd</sup> yr MBChB , 4<sup>th</sup> and 5<sup>th</sup> yr MBChB and Student Interns as well as being involved in tests and examinations in General Surgery as well as Paediatric surgery component of undergraduate Middle Surgical rotation

**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 2012 was the further development of the new MMed programme at the University of Stellenbosch as a HPCSA

approved 4 year Masters programme to allow specialization in Paediatric Surgery. had 3 enrolled postgraduate students in 2012 and follows a systematic teaching and training course.

## 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 Wednesday afternoon teaching programme has been established which includes an Mortality and morbidity review, a journal club, and systematic teaching by Prof Heinz Rode who is funded out of DOE funding for this purpose.
- A regular postgraduate teaching round has been commenced
- Presentations and participation at other forums fairly regular
- Foetal assessment joint meetings introduced
- Registrar teaching round Prof Moore instituted on Thursdays

## Program Highlights

- Dr Marion Arnold was successful in the Colleges of Medicine final examination of the Fellowship in Paediatric Surgery of South Africa (FCPS(SA)). She has completed the requirements for the MMed degree in Paediatric Surgery and will graduate at the 2013 graduation ceremony
- Dr N Tshifularo was first graduate MMed (Paed Surgery) at the University of Stellenbosch received his degree at the 2012 graduation ceremony

# SURGICAL SCIENCES

## Special achievements

Dr C Zabiegaj Zwick (registrar) received the best paper award (in open competition) at the Hepatobiliary and Transplantation Symposium in Johannesburg

**PLASTIC AND RECONSTRUCTIVE SURGERY**  
**Head of Department: Prof. Frank Graewe**

## Summary of activities

In November 2012 we had a Smile week sponsored by Smile foundation South Africa. We operated on children with congenital craniofacial and cleft lip and palate deformities. We also operated on another 2 children on a separate occasion sponsored by FIFA and facilitated by Smile foundation. We performed more complex reconstructive procedures in multidisciplinary surgical teams where microsurgical techniques were involved. This was made possible by the newly established PAC-ICU where patients can be monitored postoperatively.

## Resources

Posts (full time)	Number	Filled
Consultants	2	2
Registrars	3	3
Supernumerary registrar	1	1
DoE funded sessions	5	5
Posts (sessional – how many hours per week)		
Consultant	10	10

## Output

**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)

## Comment on output

We got a new cleft lip and palate, rhinoplasty and ear reconstruction surgical instrument sets sponsored by Smile foundation South Africa.

Tygerberg Hospital purchased new liposuction surgical equipment.

## Teaching and Training (under-, postgraduate and elective students).

Continuous postgraduate training in Plastic Surgery, elective medical students from Stellenbosch University and abroad. We employed Dr Liezl du Toit, a plastic surgeon from the private sector to support our cleft, lip and palate unit and to give dedicated tutorial sessions to our registrars. This was funded by DoE funds through the University of Stellenbosch.

## Urology

### Head of Department

**Acting: Dr A van der Merwe in the place of Prof CF Heyns**

## Summary of activities

The Department is still rendering a good service despite restrictions with regard to theatre time, staff shortage compared to the number of outpatients, beds (especially in the intensive care unit), modern equipment and infrastructure. The dedication and loyalty of senior nursing staff is one of the biggest assets of the Department. Permanent staff who is working for TBH for years brought stability to the main theatre. Sr Witbooi, a contract worker, is also extremely indispensable. Another big asset is the enthusiasm of the consultants, clinical assistants and medical officers, who not only just render an excellent clinical service, but also perform better than any other urology department in South Africa in the fields of research, congress reports and publications. Dr Jo van der Merwe was successful in his final examination at the College of Medicine of South Africa. The specialist clinics take a lot of pressure from general outpatients and they are essential in the smooth running of the Department. Scope theatre is one of the busiest areas in Urology and forms perhaps the most important single area outside main theatre. The pressure is taken away from main theatre in terms of patient waiting lists. Scope

# SURGICAL SCIENCES

theatre has a record amount admissions during this period.

<b>Admissions</b>	<b>2012</b>	<b>(2011)</b>
Ward D6 =	1308	(1271)
Ward D4 =	38	(48)
Ward G4 (Paediatrics) =	157	(6)
Typist reports =	1698	
Imported data cases =	11324	

## Resources

<b>Posts (full time)</b>	<b>Number</b>	<b>Filled</b>
Professor Principal Specialist	1	1
Specialist	3	3
Registrar	6	6
Medical Officer	2	2
Supernumerary registrar	1	1
Number of beds (usable):	31	

## Theatre procedures

Main theatre =	741	(730)
Cystoscope theatre =	2604	(2 466)
Day theatre =	209	(230)
Shock wave lithotripsy =	26	(58)
Total activity: =	32668	

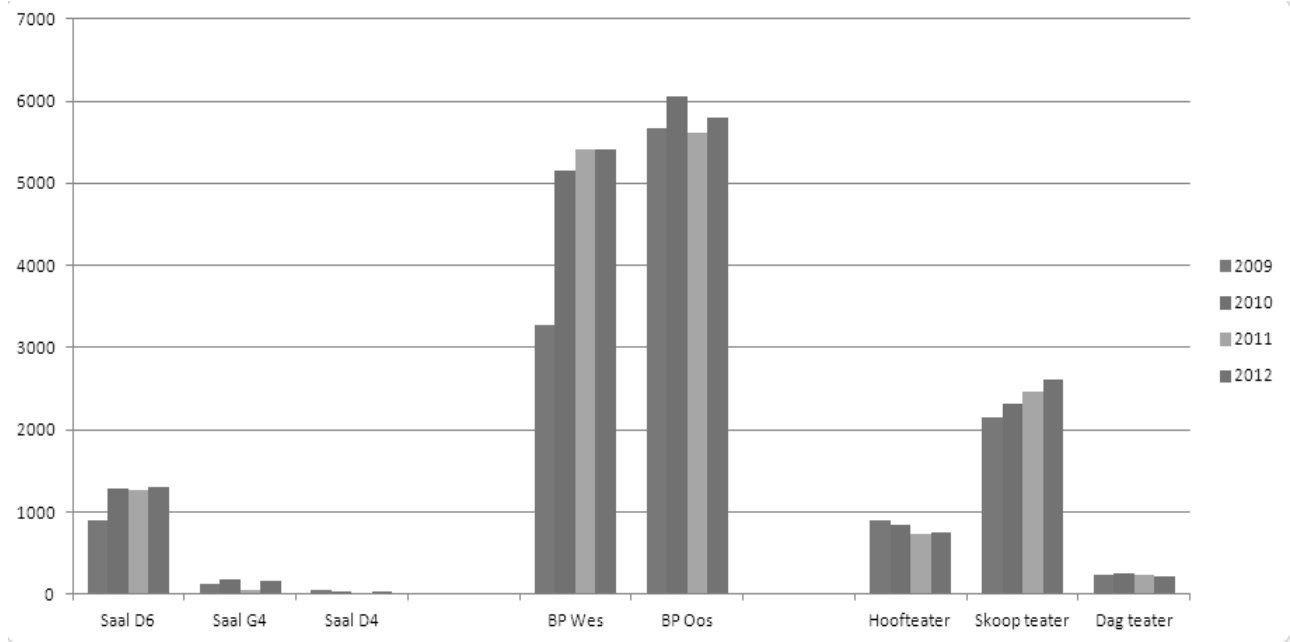
## Output

Outpatients: 2012 (2011)

C6A West =	5406 (5404)
C6A East =	5791 (5605)
Total =	11197 (11009)

## Specialist clinics: 2012 (2011)

Oncology =	1782 (1697)
Andrology =	546 (567)
Structures =	472 (484)
Urodynamics =	268 (329)
Prostate biopsy =	298 (296)



## SURGICAL SCIENCES

	2009	2010	2011	2012
Ward D6	898	1275	1271	1308
Ward G4	127	170	48	157
Ward D4	44	38	6	38
OPD West	3265	5161	5404	5406
OPD East	5661	6048	5605	5791
Main Theatre	890	837	730	741
Scope Theatre	2149	2323	2466	2607
Day Theatre	231	257	230	209

### Comment on

The 31 beds available are too few to serve a total of more than 14 000 outpatients. The theatre time available is in good balance with the available beds, but fall hopelessly short to serve our patient population. The kidney transplant programme is still successful and we work with enthusiasm with our nephrology colleagues. The urgent problem there is that there are too few theatre lists to do sufficient transplants. Almost all the totals are drastically increased compared to 2007 until 2011 that was submitted, with record amounts in ward D6, outpatients and scope theatre. The staff total that does not increase explains the waiting time in clinics and also theatre lists that are booked overcrowded. The descending totals in main theatre is on a low due to more big cases that are being done there and more bigger cases in scope theatre. Waiting lists are on a low with routine surgery that has to wait for 6 months or more and patients that have to often cancel on short notice.

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

New equipment, eg. retractors, C-arm and laparoscopic video unit, is requested for the theatre and this will be received in 2012. A

theatre set for kidney transplant is also approved and will be brought into use early in 2013.

### Community outreach programmes/community service and interaction.

Dr Rajab Kakaire from Uganda spent the year here and gained valuable knowledge, after which he returned to his country in December 2012.

Dr Pedro Fernandes works with a research group from Senegal, Uganda and the USA, and was successful with an application for a NIH Fund. The research focuses on prostate cancer in Africans.

Members of the Department deal with the vasectomy service that is coordinated by the Family Planning unit at the Tygerberg Hospital and the Association for Voluntary Sterilisation of South Africa (AVSSA). This service conducts the majority of vasectomies in the Western Cape.

### Partnerships

National private sector:

**International:** The laparoscopic donor nephrectomy programme that was initiated through the partnership with Prof Alex Bachmann from Basel in Switzerland continues well. The Department Urology is still

the only centre worldwide that does retroperitoneal single gate donor nephrectomy. After we have published cases, (with Basel as co-author) there is still a lot of retroperitoneal single gate simple and partly nephrectomies detected in this literature.

Dr Gernot Bonkat from Basel in Switzerland visits for the year. He is an experienced researcher with a interest in tuberculosis diagnosis. Thanks to him our department is building stronger ties with Prof Van Helden of the centre of tuberculosis research. Applications for funding are send to the Gates foundation and a Swiss fund. Dr Pedro Fernandez is invited for a visit to the unit to gain more information about micro-calorimetry research.

### **Achievements wrt research activities and research outputs:**

Number of publications from the department/division

Textbooks and contributions to textbooks: 3

Magazine articles: 14

Lectures at international congresses: 9

Lectures at national congresses: 20

### **Special achievements**

Prof Heyns was incorporated as Incoming President of the International Urology Association (SIU) during a gala event in Japan. This means that he will manage this body in 2013. This is probably the biggest honour that a South African urologist has ever received.

Dr Fernandez obtained the Rector's prize, which is an exceptional performance.

The Department almost walked away with all the prizes during the biennial South African urology congress at Sun City. Prof Heyns has been appointed as the president of the South African Urology Association. The prizes that were awarded:

1. Dr A van der Merwe – Sanofi-Aventis award for urological excellence and special service in promoting the urology practice in SA.

2. Dr A Zarrabi – Karl Storz award – a golden cystoscope – for post-graduate academical achievements by a young urologist.
3. Dr J Basson – Van Blerk award for an excellent presentation by a clinical assistant.
4. Dr M Els – Bard award for an excellent presentation by a clinical assistant.

# HOSPITAL ENGINEERING

## Acting Head of Department

### Dr Kurt Maart

#### Summary of activities

#### Engineering Maintenance



#### Resources

Posts (Full time)	Number	Filled
Engineer	1	1
Control Industrial Technician	1	0
Chief Artisan	2	2
Artisan Foreman	2	2
Artisan	14	1
Handyman	19	2
Tradesman Aid	27	1
Admin Officer	5	4
Driver	1	1
Cleaner	1	1

#### Output:

To provide the CEO and the institution with a Hospital Engineering Service and execute the generic process as Head of the Sub-Directorate: Engineering Support Services as Tygerberg Academic Hospital Complex to ensure compliance with the Occupational Health and Safety Act and all other applicable regulatory acts.

#### Comment on output:

1. Provide the CEO with technical support as advice in engineering matters.
2. Provide an annual maintenance list to prioritise events in assisting frugal PWD budgetary expenditure.
3. Maintain boilers for the delivery of heat energy in the form of saturated processed steam..
4. Sterilisation Plant Equipment
5. Medical Air an Vacuum Plant and Machinery



# HOSPITAL ENGINEERING

6. Air conditioning Plant and Refrigeration Equipment including Mortuary Fridges
7. Mechanical Plant and Equipment.
8. Electrical Plant and Equipment
9. Emergency Power Reticulation Plant.
10. Hospital Complex Buildings and Campus ground
11. Roads and Civil Engineering Structures.
12. Civil Aviation Structures and Flight Path Indicator Lights.
13. Domestic, Fire Mains and Garden Water Reticulation System Ensure and produce the necessary trial reports.

## Human Nutrition

**Head of Division: Prof. René Blaauw**

### Summary of activities

The Division of Human Nutrition consists of three components, namely Service Delivery, Training, and Research:

### Service delivery

Dietetics at Tygerberg Academic 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).

### Training

Dietetics comprises three fields of speciality: clinical nutrition, food-service management and community nutrition.

### 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 specialized nutrition support (including ICU nutrition and other specialized fields). Food safety and a human rights based approach are linked to the focus areas as relevant. The African Micronutrient Research Group (AMRG) renders analytical services, extending across Sub-Saharan Africa.

# HUMAN NUTRITION

## Resources:

Posts (Full time)	Number	Filled
<b>Academic posts:</b>		
Professor	2	1
Associate Professor	1	1
Senior Lecturer	3	3
Lecturer	4	4
Junior Lecturer	1	1
Administrative	3	3
Laboratory technicians*	3	3
Researcher	1	1
<i>NICUS Posts*</i>		
Manager	1	1
Dietitian	1	2
<b>Posts (sessional – how many hours worked per week)</b>		
Part-time posts (5/8)	5	4
Locum posts*	0	0
Full-time equivalents	0	0
<i>NICUS posts*</i>		
Dietitian (3/8)	1	1
<b>Posts in Tygerberg Academic Hospital: Dietetic and other</b>		
Assistant Director	1	1
Chief Dietitian	4	4
<b>Production Dietitian</b>		
Grade I	9	9
Grade II	1	1
Community-service Dietitian	1	1
Contract posts	0	0
Chief Professional Nurse	1	1
Typist	1	1
Food Service Supervisor	1	0
Food Service Aid	5	5

\*Private funds

## Output:

<b>Inpatients</b>	
Once-off visits	3 477
Patients seen > 1 once	13 210
Total visits	449 973
Informal consultations	1 540

# HUMAN NUTRITION

Tube feeds	13 396
Supplementary drinks	12 466
<b>Outpatients</b>	
H&L clinic (new)	174
H&L clinic (follow-ups)	68
On-call (adults)	1 852
On-call (paediatric)	413
HIV clinic (adults)	211
HIV clinic (paediatric)	33
<b>Food Services</b>	
Special diets	157 957
Full diets	269 912
<b>TPN</b>	
New referrals	190
Consultations (medical)	255
Consultations (nursing)	5 542
<b>Nutrition Support: feeds</b>	
New referrals	100
Nursing consultations	1 923
PEG <sup>1</sup> patients (new)	211
PEG <sup>1</sup> patients (follow-up)	1 005
<b>Nutrition Information Centre (NICUS)</b>	
<i>Advisory service</i>	
Correspondence	2 750
Telephonic	321
<i>Educational</i>	
Radio talks	1
Lay publications	32
Talks	4
Training workshops	2
<b>Stikland outreach</b>	
Individual consultations	16
Group activities	95
<b>Community nutrition</b>	
Individual consultations	1 458
Group activities	2 919
Stellenbosch Sport Performance Institute and Campus Health Services	15

<sup>1</sup>Percutaneous endoscopic gastrostomy

## Comment on output:

The above statistics include the service provided by the fourth-year dietetic students (contact with patients).

# HUMAN NUTRITION

## Part 2

### **Faculty of Medicine and Health Sciences Infrastructure development – upgrading, new equipment, etc. (highlights)**

A new food laboratory was equipped to facilitate students' practical experience in food preparation and experimentation.

The African Micronutrient Research Group (AMRG) supported the Food Security Initiative (FSI) in biochemical analysis of nutritional markers for the Community Nutrition Security Project (CNSP) study.

### **Community outreach programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

#### ***The Community Nutrition Security Project (CNSP)***

Data analysis commenced for the CNSP baseline study. Two Master of Nutrition graduates and one Master in Clinical Epidemiology student completed their studies within the overarching CNSP project. Currently, three Master of Nutrition students as well as three PhD (Nutritional Sciences) students are continuing their work 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 order to investigate the implementation of the new RtHB in health-care facilities in the Cape Town Metropole and Cape Winelands districts of the Western Cape. Data was collected in 2012 and the results reported to Department of Health.

#### ***Collaboration with School Health Service***

Fourth year dietetic students work with a School Health team for a period of one week. The students rotate in groups of 3-4 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.

### **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

#### **Private:**

Collaboration with the industry through our Glycaemic Index (GI) Laboratory. GI testing is performed on foods upon request from the industry.

NICUS consultations to industry:

- Updated criteria for the heart mark restaurant programme for the Heart and Stroke Foundation.
- Menu planning for meal packs for babies and toddlers for Organic Kitchen
- Updated emergency food parcels for emergency workers for the City of Cape Town.
- Recipe development for CalCacchio pizzeria.
- Maize consumption of South African population for SASKO.

#### **International:**

Collaboration between Stellenbosch University, the University of Oslo (Norway), Akershus University College (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".

# HUMAN NUTRITION

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

Number of publications from the department/division

- Journal articles (subsidised) : 17
- Journal articles (non-subsidised): 10

Invited reviewer of the following scientific journals:

- Public Health Nutrition journal
- Bio Medical Central
- 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
- South African Journal for Research in Sport, Physical Education and Recreation
- PLOS ONE
- NUTRITION
- African Journal of Psychiatry

## Teaching and Training (under, postgraduate and elective students)

### Undergraduate

- Fourth-year Dietetic students : 32
- Third-year Dietetic students : 27
- Second-year Dietetic students : 22
- First-year Dietetic students: 35

### Elective students

- Norway : 6
- Belgium : 2
- Germany : 1

### Postgraduate

- Master of Nutrition (Research) : 11
- Master of Nutrition (Structured) : 73
- PhD (Nutritional Sciences) : 11

### Master's degrees completed

- Bekker F. *The provision of healthy food in a school tuck shop: Does it influence Bloemfontein primary school learners' perceptions, attitudes and behaviour towards healthy eating?*. MNutrition, 2012. 208 pp. Study Leader: Marais ML. Co-study Leader: Koen N.
- Blanckenberg C. *Determination of the most effective nutritional risk screening tool to predict clinical outcomes in Intensive Care Unit patients*. MNutrition,

2012. 216 pp. Study Leader: Blaauw R. Co-study Leader: Kruger JM.

- Bredenhann HM. *A study to Establish a Simple, Reliable and Economical Method of Evaluating Food and Nutritional Intake of Male Mineworkers Resideing in a Single Accommodation Residence on a Platinum Mine in the North West Province*. Mnutrition, 2012. 110 pp. Study Leader: Marais ML. Co-study Leader: Kassier S.
- Craucamp EA. *Do registered South African dietitians require standardised ethics update courses to comply with CPD requirements for ethics points?*. MNutrition, 2012. 69 pp. Study Leader: Harmse B. Co-study Leader: Koornhof HE.
- Esau N. *Adaptation of the Renalsmart web-based application for the dietary management of patients with diabetic nephropathy*. MNutrition, 2012. 208 pp. Study Leader: Herselman MG. Co-study Leader: Koen N.
- Gründlingh H. *Evaluation of the implementation of the nutritional supplementation programmes for pregnant women within the Cape Town Metropolitan Area*. MNutrition, 2012. 121 pp. Study Leader: Herselman MG. Co-study Leader: Iversen PO.
- Huxham L. *Feeding problems and current dietary practices in children with autism spectrum disorder in England*. Mnutrition, 2012. 136 pp. Study Leader: Marais ML. Co-study Leader: Van Niekerk E.
- Lee TT. *Double blinded, placebo-controlled, randomised prospective intervention trial; to investigate the effectiveness of Bioslim in weight-loss and the influence of branding and advertising on the placebo response*. MNutrition, 2012. 93 pp. Study Leader: Steinman H. Co-study Leader: Labuschagne IL.
- Nel M. *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)*. Mnutrition, 2012. 170 pp. Study Leader: Marais ML. Co-study leader: Potgieter S.
- Pietersen L. *Coenzyme Q10 for Statin-Induced Myopathy: A Systematic Review*. MNutrition, 2012. 146 pp. Study Leader: Herselman MG. Co-study Leader: van Zyl E.
- Van der merwe M. *Comparison of infant feeding practices in two health sub-districts with different Baby Friendly status in Mpumalanga province*. MNutrition,

# HUMAN NUTRITION

2012. 139 pp. Study Leader: du Plessis LM. Co-study Leader: Jooste H.

- Viljoen E. *A Systematic Review of the effect and safety of Ginger in the treatment of pregnancy-associated nausea and vomiting*. MNutrition, 2012. 160 pp. Study Leader: Visser J. Co-study Leader: Koen N.
- Weidemann A. *The role of fructose restriction in addition to dietary modifications for weight loss and lifestyle improvement, on fertility outcome and other markers of metabolic syndrome (MS), in obese women with polycystic ovarian syndrome (PCOS)*. MNutrition, 2012. 132 pp. Study Leader: Siebert TI. Co-study Leader: Blaauw R.

## PhD degree completed

- Naude CE. *Heavy Alcohol Use in Adolescents: Potential Influences on Nutritional Status*. PhD, 2012. 267 pp. Promoter: Senekal M. Co-promoter: Carey PD.

## Special achievements

Service to committees

- Member of the organizing committee for the Clinical Supervision Course
- Quality Assurance Committee
- South African Society for Parenteral and Enteral Nutrition (SASPEN) President & Council
- Critical Care Congress Organizing & Scientific Committee
- Co-Regional Editor for the International Journal of Applied and Basic Nutritional Sciences (NUTRITION)
- Editorial Assistant for the South African Journal of Clinical Nutrition
- Member of the National Working group to review the South African Pediatric Based Dietary Guidelines
- Member of the Provincial Technical Working Group: Infant and Child Nutrition. (This is an advisory sub-committee 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/NGO's & CBO's)

- 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
- Member of the Provincial Technical Working Group: Neonate, Infant and Young Child Nutrition
- 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

- Blaauw R; Blanckenberg C & Nel DG. Inadequate nutrition during the first few days correlates with increased length of ICU stay: A Prospective Descriptive study.

# HUMAN NUTRITION

34<sup>th</sup> ESPEN Congress, 3-6 September 2012, Barcelona, Spain

- Blaauw R; Blanckenberg C & Nel DG. The effect of nutritional status on outcome in critically ill patients – does Body Mass Index indicate anything? 34<sup>th</sup> ESPEN Congress, 3-6 September 2012, Barcelona, Spain.
- Du Plessis L.M, Pereira C. Commitment and capacity for breastfeeding in South Africa. International Society for Research in Human Milk and Lactation (ISRHML) congress, 27 Sept – 1 Oct 2012, Trieste, Italy.
- Du Plessis LM. Rapporteur for the session: Ready to Use Foods – when not? World Public Health Nutrition Congress, 27-30 May 2012, Rio de Janeiro, Brazil.
- Dhansay MA. Discussion and Debate: How to Improve Micronutrient Status. World Nutrition Rio 2012 Conference, 27 – 30 April 2012, Rio de Janeiro, Brazil.
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- Naude CE, Senekal M, Laubscher R, Carey PD, Fein G. Vitamin D status and calcium intake in treatment-naïve 12-16 year old adolescents with alcohol use disorders in Cape Town, South Africa. World Nutrition Rio 2012, 27 - 30 April 2012, Rio de Janeiro, Brazil.
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## National presentations

- Visser J. Wound Healing – New Frontiers. Combined Congress (CCSSA, SATS, SASPEN, TSSA), 29 August-2 September 2012, Sun City, South Africa.
- Visser J. D-lightful Vitamin D. Division of Human Nutrition annual CNE (Continued Nutrition Education), 31 May-1 June 2012, CPUT, South Africa.
- Lombard L, Du Plessis LM, Visser J. Body composition of rheumatoid arthritis patients and aspects of diet and nutritional supplements. Nutrition Congress Africa, 1- 4 October 2012, Bloemfontein, South Africa.
- MJ Lombard, HE Koornhof, MH McLachlan; on behalf of the CNSP Research team. 2012. Community Nutrition Security Project (CNSP): Rationale, Methodology and basic population description. Nutrition Congress Africa, 1- 4 October 2012, Bloemfontein, South Africa.
- McLachlan MH, Hamann R, Sayers V, Drimie S and Kelly C. 2012. "Fostering Innovation for Sustainable Food Security: The Southern Africa Food Lab." Conference on Strategies to overcome poverty and inequality: Towards Carnegie 111, September 2-5, Cape Town, South Africa.
- Lombard MJ, Koornhof HE, McLachlan MH; on behalf of the CNSP Research team. 2012. Community Nutrition Security Project (CNSP): Rationale, Methodology and Basic Population Description, Nutrition Congress, 1- 4 October 2012, Bloemfontein, South Africa.
- Drimie S and McLachlan M. 2012. Rethinking Food Security for the 21<sup>st</sup> Century: Implications for dietitians and nutritionists. Division of Human Nutrition annual CNE (Continued Nutrition Education), 31 May-1 June 2012, CPUT, South Africa.
- Drimie, S (2012) "Food security – general concepts and implications for the Nutrition Practitioner", Division of Human Nutrition annual CNE (Continued Nutrition Education), 31 May-1 June 2012, CPUT, South Africa.
- Drimie, S and Haysom, G (2012) 'Region-based Food Security, Agriculture & Sustainability: Imagining a new paradigm', presentation to Masters Module - Theory, practice and experience. Food Security & Democratic governance in the South African context,



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Arts Building, 2 July 2012, Stellenbosch, South Africa.

- Dhansay MA. The Role and Uses of different Growth Standards. Division of Human Nutrition annual CNE (Continued Nutrition Education), 31 May-1 June 2012, CPUT, South Africa.
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- Du Plessis LM and Adams R: Health Promoting Schools master class. Nutrition Congress Africa, 1- 4 October 2012, Bloemfontein, South Africa.
- Blaauw R; Blanckenberg C & Nel DG. The value of serum albumin as an outcome predictor in critically ill patients. Nutrition Congress Africa, 1-4 October 2012, Bloemfontein, South Africa.
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- Blanckenberg C, Kruger J-M, Nel DG & Blaauw R. Can existing nutritional risk screening tools predict clinical outcomes in ICU patients? Nutrition Congress Africa, 1-4 October 2012, Bloemfontein, South Africa.
- Blaauw R. Nutrition and Inflammation – A deadly combination. SASPEN Congress, 29 – 31 August 2012, Sun City, South Africa.
- Visser M; Nel DG, Blaauw R. A survey assessing the implementation of the new Road to Health Booklet in Primary Health Care Facilities in the Western Cape Province: Phase 1. 56<sup>th</sup> Annual Academic Day, Faculty of Medicine and Health Sciences, 15-16 August 2012.
- Naude CE, Carey PD, Laubscher R, Fein G, Senekal M. Vitamin D status and calcium intake in 12-16 year-olds with alcohol use disorders in Cape Town. Nutrition Congress Africa 2012, 1 – 4 October 2012, Bloemfontein, South Africa.
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- Potgieter S. Vitamin D in athletes, a problem in sunny South Africa, Nutrition

Congress Africa 2012, 1 – 4 October 2012, Bloemfontein, South Africa.

- Du Plessis LM. New developments in Community Nutrition. The first thousand days of life. Continuing Nutrition Education. Division of Human Nutrition annual CNE (Continued Nutrition Education), 31 May-1 June 2012, CPUT, South Africa.

## National / International poster presentations

- Schoonees A, Visser J, Musekiwa A, Volmink J. Pycnogenol® (extract of French maritime pine bark) for the treatment of chronic disorders: a Cochrane review. Nutrition Congress Africa, 1 – 4 October 2012, Bloemfontein, South Africa.
- Bekker, F. Marais ML, Koen N, Nel DG. Children's perceptions, attitudes and behavior towards healthy eating – the influence of a nutritionally regulated tuck shop. Nutrition Congress Africa, 01- 04 October. Bloemfontein, South Africa.
- Goosen C, Lombard MJ, Smith E, Koornhof HE, McLachlan M. 2012. Experiences of Field Workers Employed by the Community Nutrition Security Research Project of Stellenbosch University. Nutrition Congress Africa, 1 – 4 October 2012, Bloemfontein, South Africa.
- Roos J, Lombard MJ, McLachlan M. 2012. Food availability and accessibility at spaza shops in a low-income community in Worcester, Western Cape. Nutrition Congress Africa, 1 – 4 October 2012, Bloemfontein, South Africa.
- Balogun TA, Lombard MJ, McLachlan M. 2012. Is nutrient consumption of young children in a rural town in the Western Cape adequate? Nutrition Congress Africa, 1 – 4 October 2012, Bloemfontein, South Africa.
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- Blaauw R; Blanckenberg C & Nel DG. Inadequate nutrition during the first few days correlates with increased length of ICU stay: A Prospective Descriptive study. Clinical Nutrition Supplement 2012; 7 (Suppl 1): 35

## Discussion papers

- NICUS report. Updated criteria for the heart mark restaurant programme. Heart and Stroke Foundation South Africa. February 2012
- NICUS report: menu planning for meal packs for babies and toddlers. Marcus Linder, Organic Kitchen. 2012
- Vink, N, McLachlan, M. 2012. Rural development, agriculture and food security for South Africa. Unpublished Report prepared for the National Planning Commission.
- Harris, J and Drimie, S (2012) "Toward an Integrated Approach for Addressing Malnutrition in Zambia: A Literature Review and Institutional Analysis", IFPRI Discussion Paper 01200 August 2012, Poverty Health and Nutrition Division.

- Schoeman S, van Stuijvenberg M, Lombard C and Dhansay M. Frequent consumption of liver protects against vitamin A deficiency in a socio-economically deprived community: Time to reappraise the vitamin A supplementation policy for South Africa's diverse population. MRC Technical Report, Parow. March 2012.

## MRC Policy Brief

- Schoeman SE, Van Stuijvenberg ME, Dhansay MA. Is prophylactic vitamin A supplementation justified in areas where liver is frequently eaten? February 2012.

## Other presentation / workshops

- McLachlan, M. Master class on Food Security (with Scott Drimie): Nutrition Congress Africa, 01-04 October 2012, Bloemfontein.
- McLachlan, M. "Food Security: What is it and what can major food producers and marketing agents contribute?" Presentation to Executive managers and staff at ZZ2, Limpopo, 7 December 2012.
- Potgieter S. Nutrition for track and field athletes, Coaches level II course, Western Province Athletics
- Van Wyk L. Type 1 Diabetes Mellitus in Children. Sugar and Health Symposium, Witbank and Port Elizabeth.
- MacIntyre N. Advanced Nutrition feedback from attendance of course in Germany, Johannesburg and Pretoria

## Journal Articles (subsidised)

- Ackerberg TS, Labuschagne IL, Lombard MJ. The use of prebiotics and probiotics in infant formula. *South African Family Practice (Geneeskunde: The Medicine Journal)* 2012; 54(4) : 321-323.
- Booysen N, Lake J, Webb J, Van Niekerk E, Schübl C. The knowledge, attitudes and perceptions of healthcare students and professionals regarding the interdisciplinary health worker team at Stelenbosch University and Tygerberg Academic Hospital. *South African Journal of Clinical Nutrition* 2012; 25(4) : 192-196.
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- Innes S, Cotton MF, Haubrich R, Conradie MM, Van Niekerk M, Edson C, Rabie H, Jain S, Sun X, Zöllner EW, Hough FS, Browne SH. High prevalence of lipoatrophy in pre-pubertal South African children on antiretroviral therapy: a cross-sectional study. *BMC PEDIATRICS* 2012; 12 : 1-19.
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  - Schaaf HS, Cilliers K, Willemse M, Labadarios D, Kidd M, Donald PR. Nutritional status and its response to treatment of children, with and without HIV infection, hospitalized for the management of tuberculosis. *Paediatrics and International Child Health* 2012; 32(2) : 74-81.
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  - Labuschagne IL, Lombard MJ, Van Niekerk E. Basic nutrition and additional requirements for children who are diagnosed with attention-deficit hyperactivity disorder. *Professional Nursing Today* 2012; 16(6) : 16-18.
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## Research Reports

- Schoeman SE, Van Stuijvenberg ME, Dhansay MA. *Is prophylactic vitamin A supplementation justified in areas where liver is frequently eaten?*. 2012: 2 pp.
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## Head of Department Fatima Peters

### Summary of activities

- The 7<sup>th</sup> Metro Occupational Therapy in Health (MOTH) Forum meeting was held on the 16<sup>th</sup> November 2012. The theme of this year's forum meeting was "Everyday Occupational Therapy Practise" ..... Show and Tell. The topics presented at the forum, provided insight and knowledge of assessment and treatment strategies that could enhance patient care, which is in keeping with the values of the DOH to ensure efficient and effective service delivery.
- The 19<sup>th</sup> National Occupational Therapy forum was convened in Klerksdorp North West Province by Mrs F Peters who is the current chairperson. The National Occupational Therapy Forum plays an imperative role in aligning Occupational Therapy practise in Public Service with relevant policies, plans and legislature.
- The Tygerberg Hospital Occupational Therapy Department continues to participate in activities to improve service delivery, or steer and lead initiatives in the Metro district region as well as within Tygerberg Hospital by:
  - Initiating and convening a Grade R learner school readiness programme.
  - Ensuring more Occupational Therapists were trained in advanced seating for children diagnosed with cerebral palsy and adults with severe deformities to ensure their best posture – hereby eliminating further social and medical complications. This has directly resulted in a decreased treatment waiting time in keeping with the health plan requirements.
- The Work Assessment unit at Tygerberg provided support to community



occupational therapists w.r.t. disability screening thus an increase in return to work statistics have been noted and fewer patients are referred to the Work Assessment Unit.

- A Hypoxic Ischemic Encephalopathy (HIE) clinic was started with other disciplines to improve care of babies with HIE.
- The Occupational Therapy Department continues with :
  - The Fibromyalgia support group (for patients and carers)
  - An Early intervention clinic for premature infants identified at the high risk clinic.
  - The Paediatric Interest group to improve service delivery with regard to assessment and treatment protocols and stream lining referral pathways.
- Members of the Occupational Therapy Department have presented a number of issues impacting on service delivery namely:
  - "Occupational Therapy intervention for flexor tendon injuries" to all orthopaedic doctors at Tygerberg Hospital.
  - "Using the pressure garment glove in the treatment of patients with spastic hands" at the MOTH Forum.
  - "Perceptual deficits – The Occupational Therapy assessment and treatment of

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patients with neurological conditions" to speech therapist in the private sector.

- "Exploring perceptions of parents and Occupational Therapists on the utilisation of the Occupational Therapy service at certain paediatric outpatient units in the Western Cape" at the MOTH Forum.
- "The role of Occupational Therapy Technicians and the operational challenges they experience" at MOTH Forum.
- "The role and overall service delivery of South African therapists in Paediatrics" to visiting American students.
- "The role of Occupational Therapy in Paediatric Oncology/Haematology" at the Paediatric Oncology/Haematology Workshop.
- "The role of Occupational Therapy in the Burns Unit" to Nursing Staff from all over the Metro district area.
- Major barriers to service delivery:
- Patients are referred to Occupational Therapy too late. We still get referrals 2 hours before discharge especially for mobility assistive devices.
- Too few Occupational Therapists for the amount of patients in Tygerberg Hospital. Especially in 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 care is difficult due to them also being overburdened and under-resourced, especially DHS.
- This results in too large an outpatient load which makes seeing inpatients earlier very difficult. Evidence indicates that early Occupational Therapy intervention is best to prevent or reduce long term negative impacts 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:

Posts (Full time)	Number	Filled
Head of Department	1	1
Occupational Therapy Supervisor	4	4
Occupational Therapy Clinicians	8	8
Occupational Therapy Community Service	2	2
Occupational Therapy Technicians	5	5

## Output: (exclude November and December)

- Surgery (Amputation, Burns, Hands, Orthopaedics, Plastics, Internal Medicine, Pressure Garments, Rheumatology, Lymphoedema) 6 563
- Neurology and Neurosurgery 1 500
- **Paediatrics**  
(November and December data not available) 1 861
- Psychiatry:
  - Adult 1 269
  - Child and Adolescent Unit 1 442
- Work Assessment 1 071
- Total: 13 706**
- Total 2011 15 469

## Comment on output:

- Although sub areas (such as Burns, Internal Medicine and Child Psychiatry) show an increase in statistics from 2011, the overall statistics of all areas of Occupational Therapy reflect a decrease in statistics. There are a number of possible reasons namely:

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- November and December statistics are not available from Clinicom.
- Clinicom statistics for certain months reflect inaccurately by more than 50-80 patients.
- The lymphoedema service was temporarily stopped from October 2012 to December 2012 due to human resource shortages.
- Outpatients are now referred to community Occupational Therapists for basic seating.
- Certain patients formerly attending follow-up visits at Tygerberg Hospital are now getting treatment in their communities in line with the 2010/2020 Health Plan.
- Due to the nature of services rendered in Paediatrics, Neurosurgery and Neurology areas of Occupational Therapy, it often requires two staff members to attend to one patient together, especially with regard to transfers, specialised seating and certain splinting.
- The paediatric supervising occupational therapist was on 8 week study leave to complete her post graduate studies.

## Part 2

### Faculty of Health Sciences

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

- Occupational Therapy Department received 10 wheelchairs donated by Taiwan.
- A sewing machine was acquired for Hands area.
- Bosch Foam Curver (valued at R5 500.00) was acquired to cut foam cushions -to customise seating of each patient using a wheelchair.
- Standardized Valpar Work Sample was approved, but not yet received.
- A table tennis board, rowing machine and 2 x exercise bicycles were acquired from funds donated to the Burns Unit from Sanlam. The equipment is used by

both the Physiotherapist and Occupational Therapist.

#### Community outreach

##### programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa

- Ms Z Vallie chairperson of the OT Marketing Committee has used significant calendar dates to market the OT profession and create awareness and support at institutional and community level of people experiencing and diagnosed with: Stress (Mental Health Day-10 October 2012) and HIV/AIDS ( International World Aids Day- 1 December 2012)-  
The awareness and support focused on the impact that HIV/AIDS have on the lifestyles of people and their functioning.  
Information material was also designed for people with disability (3 December 2012) to promote an understanding and acceptance of people with disabilities and to empower them with their rights.

#### Partnerships

- **National:**  
National Occupational Therapy Forum.
- 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 has been strengthened and this created strong referral pathways to assist work assessments clients back into the workforce (placement statistics have

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increased from 6.4% in 2011 to 8.9% in 2012).

- A journal club was started in collaboration with the Lecturer, Mrs De Klerk from the Occupational Therapy Department of the University of Stellenbosch and Ms L Melton, Occupational Therapist, Tygerberg Hospital. The purpose was to explore and use current evidence to improve therapists knowledge, skill and ultimately improve service delivery for patients treated in the Hands area. This include rheumatic hands. This will have obvious positive outcomes for students trained in the area.

## **International:**

**None.**

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

- The Work Assessment Unit is waiting for approval from Tygerberg Hospital Ethics Board to start a second study for clients with the potential to be part of a supported employment project.
- The Work Assessment Unit continues its involvement with the Rheumatology Department study to evaluate change in occupational performance of working clients, liaising with employers, making recommendations and providing feedback.
- Mrs E Laminette, Chief of Paediatric area, was involved in research work that involved:
  - "Inclusive education" – a study done by a Belgium student, and
  - "Autism and Occupational Therapy intervention" – a study done by an Occupational Therapy masters student.
- Occupational therapists working in the Hands area continue to assist with the development of standard treatment and assessments for patients with distal radius fractures- A study lead by Dr Thiaart.

## **Teaching and Training (under, 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.
- Continuous supervision of 3rd and 4th 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 Germany.
- Some staff have attended courses in line with their development plan and for HPCSA requirements.
- A Unit Manager completed her Masters at Stellenbosch University.



# PHYSIOTHERAPY

## Head of Department

Ms Anne-Marie Swart

### Summary of activities

The “package of care” that is delivered by TBH

#### Physiotherapy:

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. Physiotherapy procedures cannot be easily allocated according to 1°, 2° or 3°

levels of care - all patients are assessed and managed according to their needs. Outcomes are based on the resources available and the patient's medical plan as determined by their 1°, 2° or 3° status.



Clinical services provided by TBH Physiotherapy Department:

- Inpatient service to all wards of TBH (excl private, J1 & J3 wards)
- 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 e.g. shoulder replacements
- Specialist outpatient clinics: Hands clinic, CF (Craniofacial), HIE (Hypoxic Ischaemic Encephalopathy) clinic

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 & 5/8	4 & 5/8
Physiotherapists Grade 1 & 2	13	13
Community Service Physiotherapist	1	1

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## Additional Financial Resources for financial year 2012-2013:

Overtime: budget of R 160 000 increased to R 188 000 after motivation

Consumables: R 20 000 allocated

## Output:

January to December 2012 statistics totalled **47 855** patient attendances (Inpatients and OPD) by TBH physiotherapy staff and students – and an additional **2 783** attendances from weekend duty. GRAND TOTAL = **50 638**.

### Attendances per clinical area:

Surgical Inpatients	19 846
Amputations OPD	73
Orthopaedic Inpatients	7 444
Orthopaedic OPD (incl Hands)	2 109
General Medicine Inpatients	8 813
Adult Neurology OPD	242
Respiratory OPD	1
Paediatric Inpatients	4 998
Paediatric Neurology OPD (incl CF & HIE)	309

### Comment on output:

The total attendances for 2012 (**50 638**) have increased by 9 % when compared to the totals for 2011 (**46 422**).

The increase in attendances is most probably due to changes in and around Tygerberg Hospital creating a higher demand on the physiotherapy department:

- Since the implementation of the level 2 and 3 wards, there has been a continued increase in physiotherapy referrals and the complexity of cases.
- High turnover of patients and quick discharges due to a high demand for beds cause an increased demand on physiotherapy services.
- The additional beds opened in TBH (J1, J3 & PACU) caused an increased demand on physiotherapy services. Although services were not rendered in the actual wards J1 & J3, the patients were transferred to wards with existing physiotherapy services to facilitate treatment.

The fluctuations in total attendances per month can be explained by the differences in the number of physiotherapy students on clinical rotation for that particular month - with a marked decrease in attendances noted during the November – January period every year.

### Some Concerns:

- There is still a significant discrepancy between the Clinicom captured statistics and the departmental manual captured statistics in terms of attendances and the statistics according to clinical area.
- Clinical service delivery continues to be negatively affected by: Last minute/late referrals delaying the onset of treatment and discharge planning

# PHYSIOTHERAPY

Frequent interruption in the supply / availability of mobility assistive devices causing delays in service delivery

Inappropriate referrals e.g. sputum induction

Unfavourable therapy environment in the Physiotherapy OPD areas due to continued problems with the hydrotherapy pool and the departmental air-conditioning system as well as the shortage of general assistants and the absence of a dedicated housekeeper.

- The role of Physiotherapy and Nursing with regards to responsibility for routine mobilization of patients remains unclear and places a higher demand on physiotherapy services.

## Part 2

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

- A security gate was installed at the entrance of the department which has made a significant improvement to safety during and after working hours
- Capital equipment approved for purchase:
  - 2 x electrical treatment plinths
  - 2 x stationary exercise bicycles
  - 10 x intermittent positive pressure breathing machines
- Current equipment:
  - 5 x therapy wedges ordered in 2011 received
  - Donation of 13 walking frames received

### Community outreach

**programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa**

### Partnerships

#### National:

Private:

TBH has an agreement in place with a private physiotherapist that delivers clinical services to the private ward D4.

#### International:

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

Number of publications from the department/division

Text books and contributions to text books

Participation in research activities:

- One physiotherapist is assisting an orthopaedic surgeon with measurements for his research project – assessing the outcome of patients with clavicle fractures that were managed surgically in TBH
- All staff members completed questionnaires for a post graduate physiotherapy student conducting research about the emotional intelligence of undergraduate physiotherapy students.

# PHYSIOTHERAPY

## Teaching and Training (under, postgraduate and elective students)

### Undergraduate 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 2012	
University	Number of Students
SU II	56
SU III	40
SU IV	84
SU OMT MSc	5
UWC II	37
UWC III	16
UWC IV	20
Elective placements	3 SA + 1 international

- Total undergraduate physiotherapy final clinical exams conducted in TBH:  
 III + IV year = 77  
 II year = 56 + 37 = 93  
 Physiotherapy staff were involved in patient selection for evaluation tests and co-ordinated all logistical arrangements
- Scheduled student activities initiated by SU Physiotherapy Department continue to increase. TBH Physiotherapy Department has instituted control measures to monitor activities and have taken over the selection of appropriate

patients and co-ordination of logistical arrangements. These activities entail:

- Ward demonstrations/discussions
- Technique tests
- Block tests & exams
- Ward visits with a facilitator for students that are part of the academic support program
- Ward visits with a facilitator for second year students – this is part of a program to introduce students to clinical practice in the year before they start their clinical blocks
- 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
- 2 Open Days for Scholars interested in studying Physiotherapy were held
- A Kinetic Handling lecture and demonstration was given to CPUT Radiography students.

### Special achievements and other highlights not covered by this template

- Revision of all physiotherapy job descriptions and performance plans
- HRD: All physiotherapists attended at least 1 WCG course or had special leave to attend a private course/seminar
- Staff Wellness: the department conducted a successful Physiotherapy Back Week

## PHYSIOTHERAPY

- Representation on committees/portfolios outside Physiotherapy Department:
- Occupational Health & Safety Committee – involvement with OH&S Risk Assessments and Ergonomics Subcommittee
- Transformation Committee – representative appointed as Vice Chairperson
- Mobility Assistive Devices Committee
- Clinicom Committee
- PACS RIS (Digital Imaging of X-rays & CT scans)
- Best Care Always Meeting
- Participation in TBH initiatives: TBH Open Day & Rheumatology Open Day
- Participation in National Core Standards Audit (NCS) processes
- Participation in preparation for Enterprise Content Management (ECM)

## 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 out-patients.

### 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
<b>Speech Therapy &amp; Audiology Clinic</b>		
Assistant-Director	1	1
Speech Therapists:		
Senior Speech-Language Therapist	3	3
Chief Speech-Language Therapist	1	1
<b>Audiologists:</b>		
Senior Audiologist	3	3
Chief Audiologist	1	1
<b>Cochlear Implant Unit:</b>		
Chief Audiologist	3	3
Chief Audiologist 5/8	1	1
<b>Posts (sessional )</b>		
Senior Audiologist (30 hours)	1	1

### Output:

#### Outpatient visits:

Audiology: 7 587  
Speech therapy: 3 029

#### Inpatient treatments:

Audiology: 576  
Speech therapy: 1 359

# SPEECH THERAPY & AUDIOLOGY

## Total:

Audiology: 8 163

Speech therapy: 4 388

## Assistive devices issued:

771 state-issued hearing aids/staat-uitgereikte gehoorapparate

11 state-funded cochlear implants/kogleêre implantings deur staat bevonds

105 Speech valves

## Comment on output:

- Due to the lack of posts at other levels of care, our department services a large number of out-patients from within our catchment area. Therefore, out-patient statistics far exceed in-patient 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.
- In-patient statistics for Audiology have increased with the re-implementation of our Neonatal Hearing Screening program. This program has also contributed to an increase in paediatric out-patients requiring re-screening or diagnostic assessments.
- Overall, there has been a significant increase in patient contacts, despite staff numbers remaining unchanged.

## Part 2

### Faculty of Health Sciences

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

- Our department acquired a new high-frequency screening tympanometer for more accurate identification of middle ear pathology in 0-9 month old babies.
- The Department of Paediatrics assisted us in securing funding for the purchase of a screening Automated Auditory Brainstem Testing unit. This device will allow us to adjust our Neonatal Hearing Screening Protocol and improve coverage of infants screened before discharge.

- Our patient reception area was renovated and this has improved the flow of patient admissions and processing.

## Community outreach

### programmes/community services and interaction. Please focus on initiatives in 2012, especially w.r.t. MDG and projects in Africa.

Our department supports the Macassar Day Hospital with ongoing Education and training workshops, and “Screening Clinics” in the absence of a Speech therapist or Audiologist in that area.

## Partnerships

The Cochlear Implant Unit provides ongoing support and training to Cochlear implant satellite clinics in East London, Port Elizabeth and Windhoek.

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

- Kerr G, Tuomi S & Müller A. Costs involved in using a cochlear implant in South Africa. *South African Journal of Communication Disorders*. 2012, 59:16 – 26.
- One staff member completed her Masters Degree in Early Communication Intervention, and one staff member is currently busy with her Masters Degree in Public Health.

## Teaching and Training (under, postgraduate and elective students)

- All staff members were involved in weekly clinical supervision of Speech therapy and Audiology undergraduate students from University of Stellenbosch and University of Cape Town. 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.
- The HPCSA Additional Training in the Specialised field of Cochlear Implants

## SPEECH THERAPY & AUDIOLOGY

short course was again presented by the Tygerberg Hospital-University Stellenbosch Cochlear Implant Unit in association with the Department of Speech Language and Hearing Therapy. The course was presented from September - October 2012.

- Our department provides ongoing Clinical Audiology lectures to 5<sup>th</sup> 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 & Audiology.
- All staff members were involved in formal and informal in-service training to TBH staff.



# 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 Rhoode	
Mrs M Arendse	
Mrs H Rudman	
Mrs M Parker	Accountant
Mrs M de Jager	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 39 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 65 members at different working points rendered 5275 hours of service in total. During the school holidays 35 junior volunteers worked 547 hours. The following areas were served:

- Ward visits and wards duty
- Children's Wards
- Hairdressing service: Hair care for 1120 patients.
- Shop trolley to wards, clinics and pharmacy.
- Gene Louw Building, Radiotherapy Department: catering service and hair wash for patients.
- Christmas project: 495 gifts were handed out in the children's wards including patients in the Gene Louw Building, psychiatric wards and the Burns Unit.
- Gift/Tuck-shop
- Catering service on ground floor, theatres and pharmacy; free refreshments are provided to six-year medical students during examinations.
- Uniform shop for nursing and other personnel in the Peninsula and rural districts.
- Weekend service: Gift and tuck-shop.
- Assistance at CSSD and the Milk Kitchen.

# VOLUNTARY AID SERVICE

## 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	R32 000.00
Food parcel	R110 000.00
<b>TOTAL</b>	<b>R142 000.00</b>

## Special projects

Some of the donations made to the hospital:

<b>Department of Occupational Therapy:</b>	
• Transport money and sandwiches for work evaluation patients	R7 900.00
• Prize for best Occupational Therapy student	R500.00
Transport daily out of office to Transit Lounge and other patients	R15 645.00
Tea, coffee and sandwiches to patients: Transit Lounge	R1 100.00
CEO's Office: Plants – hiring fee per year	R6 436.60
Laundry: Hairdressing service towels	R1 555.55
D-Ground and D-Lower Ground toiletries and underwear for patients	R1 438.00
Christmas Project	R1 346.04
Tea and sandwiches to sixth-year medical students	R1 574.40
Donation Open Day Tygerberg Hospital	R500.00
Curtains C2A East	R8 861.00
(Balance of R100 000.00 donation) Overnight facility for outpatients Protea Court	R63 000.00
Curtains Ward C2A East: One room and railing	R480.00
Donation Fibromyalgia Group	R800.00
Curtains Ward D3: 2 x 6 bed rooms	R4 374.00
Donation Ms Majjet "16 days of activism against violence towards woman and children	R366.89
C3B Curtains for Examination Room; C2A East 4 x fans family planning and 1 x vertical blind	R4 253.56
Ward D7 Curtains for examination room and kitchen	R2 985.50
Track Suits Adult Psychiatric Patients (½ of donation)	R1 519.72
<b>Total amount paid out for Special Projects</b>	<b>R124 636.26</b>
<b>Total amount spent on Need Alleviation</b>	<b>R142 000.00</b>
<b>Total amount spent on Hospital Projects</b>	<b>R266 636.26</b>

# VOLUNTARY AID SERVICE

## **Fundraising and donations**

The Voluntary Aid Service depends on donations and fundraising projects to raise funds.

The constitution of Voluntary Aid Service determines that 75% of the annual net profit to Tygerberg Hospital must be used to improve the health, welfare and comfort of the patients.

## **Summary**

The dedicated work done by the members of the Voluntary Aid Service is appreciated by the patients and staff. Volunteers offer their services with love and interest in the well-being of patients.

The Voluntary Aid Service is thankful towards the CEO and his staff, the Deputy Director : Nursing and her staff for the friendly cooperation and support received throughout the past year.

# INPATIENT STATISTICS

## Inpatient statistics per ward 2012

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	76.4	76.4	311	290	21	316	235	71	2	8	5 733	5 734	18.1
A1 Surgical/ICU	14	11	91.9	91.9	659	51	608	654	1	36	0	617	3 762	3 762	5.8
A10 Metab	10	10	50.8	53.6	471	421	50	479	416	0	33	30	2 409	2 426	5.1
A2 Thoracic Surg High Care	14	14	97.9	97.9	756	346	410	763	487	4	2	270	3 339	3 340	4.4
A2 Thoracic Surg ICU	31	31	70.4	70.4	504	39	465	511	77	28	0	406	3 360	3 360	6.6
A3H Orthopaedics	31	31	86.5	86.5	1 669	1 473	196	1 669	1 510	1	30	128	9 124	9 139	5.5
A3W Orthopaedics	31	31	85.9	85.9	952	793	159	958	805	8	8	137	9 074	9 078	9.5
A4E Neuro Surg + Thoracic Surg	18	18	58.9	58.9	746	270	476	744	543	50	7	144	6 228	6 232	8.4
A4W Neuro Surg High Care	12	12	123.3	123.3	1 051	580	471	1 057	625	25	4	403	7 565	7 567	7.2
A4W Neuro Surg ICU	7	7	21.3	21.3	259	54	205	257	1	56	0	200	873	873	3.4
A5E Respiratory ICU	13	13	91.2	91.2	343	72	271	344	6	90	0	248	2 177	2 177	6.3
A5W Internal Meds High Care	16	16	79.9	79.9	848	22	826	848	210	68	3	567	3 539	3 541	4.2
A6 Cardiology High Care	8	8	78.9	78.9	1 542	770	572	1 340	964	15	18	343	4 298	4 307	3.2
A6 Cardiology ICU	6	6	75.9	75.9	894	609	285	893	268	46	8	571	2 066	2 070	2.3
A7 Renal High Care	4	4	86.5	86.5	385	342	43	389	339	9	19	22	1 761	1 771	4.6
A7 Renal ICU	28	28	3.3	3.3	12	7	5	12	2	0	0	10	45	45	3.8
A8 Internal Medicine	27	27	88.7	88.7	1 250	17	1 233	1 259	981	161	0	117	8 467	8 467	6.7
A8W Dermatology + Neurology	8	8	64.7	64.7	741	389	352	756	619	21	26	90	5 948	5 961	7.9
A9 Neonatal ICU	4	4	128.3	128.3	470	230	240	470	19	93	0	358	3 500	3 500	7.4
A9 Paediatric High Care	10	10	44.7	44.7	104	3	101	102	5	1	0	96	277	277	2.7
A9 Paediatric ICU	6	6	89.6	89.6	636	245	391	639	21	77	0	541	3 055	3 055	4.8
A9 Paediatric Trachea	15	15	49.6	49.6	38	17	21	39	17	3	3	16	1 365	1 367	35.6
B5E Day Surgery	0	0	22.9	22.9	2 408	2 380	28	2 408	32	0	2 305	71	18	1 171	0.5
C1D Resus	23	23	113.0	113.0	1 014	764	250	1 016	40	146	7	823	1 538	1 542	1.5
C1D Trauma + Surgery	12	12	158.8	158.8	6 063	5 902	161	6 098	3 115	108	380	2 495	12 267	12 457	2.0
C2A East	19	19	61.5	61.5	509	262	247	499	198	3	1	297	2 057	2 058	4.1
C2A Labour Ward	4	4	155.9	155.9	9 300	7 081	2 219	9 308	305	257	79	8 667	10 059	10 059	1.1
C2A Labour Ward High Care	22	22	81.4	81.4	473	91	382	474	5	9	0	460	1 110	1 110	2.3
D Ground - Psychiatry	22	22	77.5	77.5	281	93	188	279	240	0	1	38	5 816	5 817	20.8
D1 Vascular Surgery	30	30	85.9	85.9	1 185	513	672	1 187	693	32	4	458	6 445	6 447	5.4
D10 Internal Medicine	31	31	90.0	90.0	1 432	19	1 413	1 438	1 126	161	3	148	9 206	9 208	6.4
D2 Abdominal Surgery	25	25	77.1	77.1	1 807	730	1 077	1 814	1 125	57	28	604	8 141	8 155	4.5
D3 Plastic/Reconstructive Surg	29	29	54.5	54.5	1 178	1 039	139	1 183	1 062	2	26	93	4 632	4 645	3.9
D4 Private + Cardiology	31	31	52.8	52.8	1 153	761	392	1 161	909	20	57	175	5 188	5 217	4.5
D5 Abdom +Head/Neck and Breast	32	32	77.2	77.2	1 447	595	852	1 458	1 038	43	2	375	8 161	8 162	5.6

# INPATIENT STATISTICS

D6 Urology	32	70.6	70.6	1 205	889	316	1 215	1 089	26	25	75	7 695	7 708	6.3
D7 Ophthalmology	28	67.7	67.7	2 630	2 548	82	2 644	2 370	0	171	103	7 307	7 393	2.8
D8 Internal Medicine	29	84.1	84.1	1 156	562	594	1 167	955	77	50	85	8 007	8 032	6.9
D9 Internal Medicine	20	85.5	88.5	1 317	14	1 303	1 328	1 060	157	0	111	8 752	8 752	6.6
DLG Psychiatry (GLG)	20	87.1	87.1	295	226	69	299	158	0	0	141	5 942	5 942	19.9
F1 Medical Emergency	6	147.4	147.4	8 664	8 310	354	8 660	2 616	366	491	5 167	9 806	10 052	1.2
F1 Medical Emergency High Care	34	46.9	46.9	982	740	242	982	60	215	2	705	958	959	1.0
F2M Obstetrics Antenatal	0	70.8	70.8	3 177	1 505	1 672	3 191	1 373	0	53	1 765	8 185	8 212	2.6
F3 Isolation	32	0.0	0.0	1	0	1	1	0	0	0	1	1	1	1.0
F4 Orthopaedics	24	80.8	80.8	897	752	145	894	793	10	12	79	8 808	8 814	9.9
FCR Gynaecology	0	75.1	75.1	1 662	1 291	371	1 675	1 455	35	40	145	6 127	6 147	3.7
G1 Kangaroo Ward	30	0.0	0.0	6	5	1	6	1	0	0	5	5	5	0.8
G1 Neonatal Medicine	30	89.9	89.9	1 048	470	578	1 041	694	26	5	316	9 199	9 202	8.8
G10 Paediatric Medicine	27	70.3	70.3	1 340	249	1 091	1 345	1 111	8	0	226	7 188	7 188	5.3
G2 Neonatal Medicine	18	101.2	101.2	1 928	1 873	55	1 931	423	72	20	1 416	9 119	9 129	4.7
G3 Paediatric Oncology	27	55.0	55.0	661	531	130	659	535	12	74	38	3 340	3 377	5.1
G4 Paediatric Surgery	19	80.2	80.2	1 676	1 330	346	1 684	1 476	4	67	137	7 255	7 289	4.3
G5 Ear, Nose & Throat	25	66.9	66.9	1 244	1 164	80	1 251	1 142	7	33	69	4 315	4 332	3.5
G6LM Paediatric Orthopaedics	23	78.1	78.1	1 043	992	51	1 046	949	0	62	35	6 626	6 657	6.4
G7 Paed Infectious Diseases	30	76.3	76.3	576	253	323	577	493	11	14	59	5 979	5 986	10.4
G8 Neonatology / KMC	30	84.6	84.6	714	11	703	709	624	4	1	80	8 655	8 656	12.2
G9 Paed Internal Medicine	24	66.0	66.0	1 213	799	414	1 215	991	11	78	135	6 710	6 749	5.6
GG Paediatric Emergency	21	67.7	67.7	4 543	4 529	14	4 542	2 596	13	372	1 561	5 186	5 372	1.2
H1X Radiation Oncology	26	74.9	74.9	631	579	52	644	578	41	5	20	5 364	5 367	8.3
H2X Radiation Oncology	28	70.1	70.1	730	681	49	740	680	40	3	17	6 211	6 213	8.4
J1 Medical / Surgical	27	79.4	79.4	1 195	1 66	1 029	1 182	785	34	4	359	6 199	6 201	5.2
J2M Obstetrics Post Natal	25	80.3	80.3	3 238	591	2 647	3 239	2 604	0	19	616	7 481	7 491	2.3
J3 Neonatology	33	81.7	81.7	641	5	636	618	538	1	2	77	5 695	5 696	9.2
J4 Gynaecology	0	60.1	60.1	2 221	1 565	656	2 229	1 926	6	30	267	6 743	6 758	3.0
J5B Obst Post Neonatal	23	0.0	0.0	123	119	4	122	109	0	2	11	479	480	3.9
J5M Obstetrics Post Natal	29	67.7	67.7	4 326	248	4 078	4 327	4 060	0	208	59	5 206	5 310	1.2
J6 Orthopaedics	31	83.9	83.9	831	687	144	836	620	8	4	204	8 295	8 297	9.9
J7 Trauma Surgery	2	80.6	80.6	1 326	662	664	1 327	1 109	18	3	177	8 517	8 519	6.4
JT West (PACU)	16	21.8	21.8	104	10	94	103	1	1	0	101	106	108	1.0
<b>Report Total:</b>	<b>1 384</b>	<b>74.0</b>	<b>74.1</b>	<b>96 035</b>	<b>61 626</b>	<b>34 409</b>	<b>96 251</b>	<b>54 013</b>	<b>2 924</b>	<b>4 906</b>	<b>34 408</b>	<b>368 086</b>	<b>370 539</b>	<b>6.0</b>

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**Western Cape  
Government**