

---

# **DEPARTMENT OF PAEDIATRICS AND CHILD HEALTH**

## **Annual Report for Tygerberg Hospital and Stellenbosch University 2014**

**HEAD OF DEPARTMENT  
REPORT COMPILED BY**

Professor Mariana Kruger  
Editor: Professor Mariana Kruger  
Authors: Personnel  
Administrative assistance: AE Fourie & S  
Engelbrecht  
Tel: (021) 938-9220/938-4538

# Table of Contents

<b>EXECUTIVE SUMMARY – 2014</b> .....	<b>4</b>
<b>Part 1</b> .....	<b>6</b>
<b>RESOURCES AND OUTPUT</b> .....	<b>6</b>
Human Resources .....	6
Output.....	6
<b>Subspecialist Paediatrics</b> .....	<b>6</b>
Total patient admissions 2014 (Clinicom data).....	6
Bed Occupancy Rate 2014(Clinicom data) .....	6
Neonatology .....	7
Ward G1: Neonatal Unit – Babies born outside TBH .....	7
A9 Paediatric Intensive Care Unit.....	7
A9 Paediatric High Care Unit.....	7
A9 Tracheostomy Unit .....	8
Ward G9 Paediatric Pulmonology and Allergy .....	8
Ward G9 Paediatric Endocrinology .....	9
Ward G10 Gastroenterology .....	9
Ward G10 Infectious Diseases Unit .....	9
Ward G3 Oncology & Haematology .....	10
Ward G3 Rheumatology & Immunology.....	10
Ward G3 Nephrology.....	10
Ward G3 & G10 Cardiology.....	11
OUTPATIENT COMPLEX .....	11
Subspecialist Clinics.....	11
<b>General specialist services</b> .....	<b>12</b>
Total Patient Admissions 2014 (Clinicom data).....	12
Bed Occupancy Rate 2014 (Clinicom data) .....	12
Neonatology .....	12
Ward G2 Neonatal Unit – Babies born in TBH .....	12
Ward J3 Neonatal Unit – Babies born in TBH.....	12
Ward G8 Neonate & Kangaroo-mother Care – Step-down Facility .....	13
Ward G7 General Paediatrics .....	13
Short-stay G Ground: <48-hour Admissions.....	13
General Paediatrics: Emergency & Clinics.....	13
2014 Morbidity & Mortality .....	14
Mortality per Ward .....	17
<b>Infrastructure Development</b> .....	<b>17</b>
<b>Part 2</b> .....	<b>18</b>
<b>Community Outreach Programmes/Community Service and Interaction &amp; Partnerships</b> .....	<b>18</b>
Expert Members.....	18
International .....	19
National .....	19
Regional and District .....	19
Media Exposure .....	19

<b>Part 3</b> .....	<b>22</b>
<b>Teaching &amp; Training</b> .....	<b>22</b>
Training Awards: .....	22
<b>Education-related Activities</b> .....	<b>22</b>
<b>Postgraduate Students</b> .....	<b>22</b>
PhD candidates thesis completed and examined, Stellenbosch University .....	22
Enrolled PhD students.....	22
Successful MPhil Candidates .....	23
Colleges of Medicine of South Africa (CMSA).....	23
<b>Undergraduate Students</b> .....	<b>24</b>
<b>Education-related Activities</b> .....	<b>25</b>
<b>Courses Attended</b> .....	<b>26</b>
<b>Part 4</b> .....	<b>28</b>
<b>Research</b> .....	<b>28</b>
Achievements with regard to Research Activities and Research Outputs .....	28
Publications.....	29
Special Achievements and Highlights.....	40
<b>International visitors &amp; lectures:</b> .....	<b>40</b>
<b>Conferences/Workshops/Training Courses: Participants &amp; Attendees</b> .....	<b>41</b>
<b>Part 5</b> .....	<b>46</b>
<b>CENTRES</b> .....	<b>46</b>
THE CHILDREN'S INFECTIOUS DISEASES CLINICAL RESEARCH UNIT (KID-CRU) .....	46
Director: Prof MF Cotton.....	46
SOUTH2SOUTH PROGRAMME FOR COMPREHENSIVE FAMILY HIV CARE & TREATMENT.....	50
Acting Director: Ms C du Toit .....	50
DESMOND TUTU TB CENTRE (DTTC).....	56
Director: Prof N Beyers .....	56

## **EXECUTIVE SUMMARY – 2014**

The inpatient admissions increased from 16957 admissions in 2013 to 17478 in 2014, with 11410 children admitted to general paediatrics and 6068 for highly specialized paediatric care in the Department of Paediatrics and Child Health, Stellenbosch University in Tygerberg Hospital, serving the East Metropolitan region of the greater Cape Town and the North-Eastern districts of the Western Cape. The average bed occupancy rate (BOR) was 90% for general paediatrics and 86% for highly specialized paediatric services. There were especially increased bed occupancy rates for the critical care beds - 138% and 87% respectively for the neonatal intensive care unit and the paediatric intensive care unit (PICU), as well as general neonatology (>100%). Early neonatal death rate (ENNDR >1000g) remained low as 3.3/1000 live deliveries (ENNDR > 500g – 10/1000). Important mortality causes were still prematurity related complications for neonates (60%), but changed to septicaemia from lower respiratory tract infections for the older children (23.7%). Some form of malnutrition was associated with death in 48% and only 6.5% associated with HIV.

Prof Simon Schaaf was honoured for his lifelong research in paediatric tuberculosis research with the National Order of Mapungubwe. April clinical unit head post on the Stellenbosch University staff establishment was created and Prof Mark Cotton appointed. Prof Ekkehard Zollner received his PhD degree and was promoted to associate professor. An additional paediatric intensivist, Dr Ilse Appel, was appointed, as was the district paediatrician Dr Thandi Wessels. Drs Pierre Goussard and Ronald van Toorn completed their PhDs. Prof C Stefan resigned her position and was appointed deputy president of the South African MRC. Her post was

converted to a paediatric cardiologist post to strengthen the paediatric cardiology services of the Western Cape and Dr Barend Fourie was appointed.

The undergraduate pass rate was 96%, while 8 completed their Masters degree in paediatrics and 5 paediatricians qualified as subspecialists (gastroenterology, pulmonology, infectious diseases and 2 in neonatology). Two staff members completed also obtained their M Phil (Dr Liezl Smit – M Phil Medical Education cum laude; Dr Andrew Redfern – M Phil Neurodevelopment. There are currently 19 enrolled PhD students. There were peer 110 peer reviewed articles and two books published by staff members. Forty one staff members received performance excellence awards (16 from TBH and 25 from SU). Seven staff members have NRF rating with 2 as category A2.

Infrastructure development is in process to especially create a dedicated general paediatric outpatients department, upgrade the neonatology critical care and paediatric cardiology services, which will be the focus areas for 2015-2016.

*Mariana Kruger*

## Part 1

### RESOURCES AND OUTPUT

#### Human Resources

<u>Posts (full-time)</u>	<u>Number</u>	<u>Filled</u>
Professor/Chief Specialists	2	2
Chief Specialist	1	1
Principal Specialists	5	5
Senior Specialists	25+1(5/8)	25+1(5/8)
Senior Registrars	8	8
Registrars	31(4 Supernumeraries)	31(4 Supernumeraries)
Medical Officer	25	25
<b><u>Posts (sessional – hours per week)</u></b>		
Specialist	6 (48 hours)	6 (48 hours)
Number of beds	268	268

<b>Summary of Output</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>General Paediatrics</b>			
Inpatients	11410 (2.67% growth)	11113 (13% growth)	9802 (15% growth)
Outpatients	14872 (11%)	13392 (-5.5% growth)	14178 (12,8% growth)
<b>Subspecialist Paediatrics</b>			
Inpatients	6068 (3.8%)	5844 (10% growth)	5311 (13% growth)
Outpatients	13595 (-3%)	14039 (0.7% growth)	14152 (4,25% growth)

#### Output

#### SUBSPECIALIST PAEDIATRICS

##### Total patient admissions 2014 (Clinicom data)

<b>*A9 NICU</b>	<b>A9 PICU</b>	<b>A9 High Care</b>	<b>Trachea Unit</b>	<b>G1</b>	<b>G3</b>	<b>G10</b>	<b>G9</b>	<b>Total</b>
485	699	305	64	1168	827	1069	1451	<b>6068</b>

\*A9 NICU includes High-care beds, since Clinicom cannot separate data.

##### Bed Occupancy Rate 2014(Clinicom data)

<b>*A9 NICU</b>	<b>A9 PICU</b>	<b>A9 High Care</b>	<b>Trachea Unit</b>	<b>G1</b>	<b>G3</b>	<b>G10</b>	<b>G9</b>	<b>Total</b>
-----------------	----------------	---------------------	---------------------	-----------	-----------	------------	-----------	--------------

135%	87%	62%	77.6%	96%	60%	95%	74%	<b>86%</b>
------	-----	-----	-------	-----	-----	-----	-----	------------

\*A9 NICU includes High-care beds, since Clinicom cannot separate data.

### Neonatology

Staff: Prof J Smith, Drs A Bekker, S Holgate, G Kali, A Madide, JCF du Preez, H Hassan, L Lloyd, 6 Registrars, 7 Medical Officers

#### A9 Intensive Care Unit

Staff: Prof J Smith & Dr G Kali, 2 Registrars, 1 Medical Officer

<b>Beds n=8</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	473*	491	518
Average Hospital Stay in Days	8.1	8.4	5
Average Bed Occupancy %	134%	138%	92%
% Growth	-3.6%	-5.2%	51%
Deaths	88 (18.6%)	91 (18.5%)	85

\*Combined with HC data

#### Ward G1: Neonatal Unit – Babies born outside TBH

Staff: Drs A Bekker & L Lloyd, 1 Registrars, 2 Medical Officers, 1 Intern

<b>Beds n=30</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	1168	1030	1150
Average Hospital Stay in Days	9.2	10.1	9
Average Bed Occupancy %	96%	92%	87%
% Growth	13.4%	-10%	7,4%
Deaths	30	15 (1.4%)	25

#### A9 Paediatric Intensive Care Unit

Staff: Prof R Gie, Drs N Parker, Dr I Appel, 3 Registrars, Medical Officer

<b>Beds n=8</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	711	790	694
Average Hospital Stay in Days	5	4.1	4,86
Average Bed Occupancy %	97.4%	87%	92%
% Growth	-10%	12.2%	34%
Deaths	76 (10.7%)	92 (11,6%)	84 (11,9%)

#### A9 Paediatric High Care Unit

Staff as mentioned above.

(High Care Unit opened May 2012)

<b>Beds n=4</b>	<b>2014</b>	<b>2013</b>
-----------------	-------------	-------------

Admissions	333	275
Average Hospital Stay in Days	3.1	3.7
Average Bed Occupancy %	62%	55.4
Deaths	0	5

### A9 Tracheostomy Unit

Staff as mentioned above:

<b>Beds n=6</b>	<b>2014</b>	<b>2013</b>
Admissions	115	33
Average Bed Occupancy %	77.6%	85%
Deaths	0	1

### Ward G9 Paediatric Pulmonology and Allergy

Staff: Prof R Gie, Drs P Goussard, Dr J Morrison, 2 Registrars, shared Medical Officer in G9

<b>Pulmonology Beds n=10</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions Pulmonology	817	640	656
Average Hospital Stay in Days	5.8	5.90	5,78
Average Bed Occupancy %	89.5%	65%	66,24%
% Growth	27.5%	0%	27%
Deaths	0	5	2
Bronchoscopies	331	285	284

#### Theatre procedures and Other Activities

- Thoracic surgery: 64

### Ward G9 Neurology

Staff: Dr R van Toorn, Dr R Solomons, Dr P Springer, Dr H Saunders (15 hours/week)  
Prof JF Schoeman (4 hours/week), 2 Registrars

<b>Beds n=10</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	339	441	414
Average Hospital Stay in Days	5.9	6	5,7
Referral other wards	300	260	238
Average Bed Occupancy %	60%	77%	75%
% Growth	-9%	6.5%	1%
Deaths	4	2(0.4%)	8 (1.9%)

#### Other Activities

- Paediatric EEG's reported from Worcester hospital: 109
- Paediatric and Neonatal EEG's reported from TBH: 474
- 6 Outreach clinics to Paarl hospital (patients seen): 90
- 5 Outreach clinics Worcester hospital (patients seen): 140
- 2 Transcranial Doppler clinics (patients): 14
- 2 Clinics at Alta du Toit special school (patients seen): 42
- 9 Clinics Paarl School (patients seen): 90
- Autism Diagnostic Observations Schedule (ADOS) (patients): 16



### Ward G9 Paediatric Endocrinology

Staff: Prof E Zöllner, Drs D Abraham (1/8), A Pharboo (1/8) Registrar, and shared Medical Officer for G9

<b>Beds n=5</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Patients admitted	118 Diabetics	94 Diabetics	79 Diabetics
	106 Endocrinology	87 Endocrinology	117 Endocrinology
<i>Admission Total</i>	224	181	196
Average Hospital Stay in Days	7	8	5,5
Average Bed Occupancy %	67%*	74%	56,6%
% Growth	24%	-7.5%	1,5%
Deaths	0	0	0

\*Bed occupancy inaccurate – we have shown that the hospital figures do not tally with our own stats e.g. for August 31 patients were admitted while the hospital only recorded 12.

**Endocrine testing:** 84 patients

### Ward G10 Gastroenterology

Staff: Drs E Nel, Dr S Ströbele, Registrar, and intern

<b>Beds n=9</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	179	295	279
Average Hospital Stay in Days	7	8	18,09
Average Bed Occupancy %	94%	100%	83%
% Growth	-40%	5.7%	-11,9%
Deaths	18 (10%)	2	10 (3.5%)

#### Theatre procedures

- Paediatric Endoscopy: 48
- Adult Endoscopy: 365
- Liver Biopsy: 22

### Ward G10 Infectious Diseases Unit

Staff: Prof MF Cotton, Dr H Rabie (HIV Clinic), Registrar, Shared Medical Officer for G10

<b>Beds n=14</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	243	189	200
Average Hospital Stay in Days	12.5	21	17,3
Average Bed Occupancy %	90%	8	83%
% Growth	28.57%	-5.5%	-11.5%

Deaths	4	1	4
--------	---	---	---

\* Clinicom data combined with gastroenterology

We reviewed 5-10 new referrals per week.

#### HIV service:

- Total children followed up: 311
- New cases initiating and following at TBH: 56 children started at clinic (40 infants <12 months initiated therapy at ward and clinic level)
- Transfers out: 82
- Transfers in: 7
- Patients lost to follow up: 36

#### Ward G3 Oncology & Haematology

Staff: Proff M Kruger, C Stefan (till 30 September 2014); Drs A van Zyl, R Uys, A Khanyamuhunga, 2 Registrars

Beds n=9	2014	2013	2012
New patients	40 Haematology	37 Haematology	42 Haematology
	56 Oncology	46 Oncology	48 Oncology
Admissions	469 (544*)	413	415
Average Hospital Stay in Days	5.25	3.9	5
Average Bed Occupancy %	74.3%	50%	60,16%
% Growth	13.5%(*31.7%)	0%	21%
Deaths in G3	7	7	12
Day patients (G3 outpatients)	1421	1023	1100

\*G3 Ward data: Clinicom data differs from ward statistics; day patients are not captured.

CSF=/ IT chemotherapy = 296 (2014)

Bone marrow aspirations and biopsies = 83 (2014)

#### Ward G3 Rheumatology & Immunology

Staff: Drs M Esser, D Abrahams (2/8); Registrar Shared with G3

Beds n=4 (shared with Nephrology)	2014	2013	2012
Admissions	128	75	57
Average Hospital Stay in days	2	5.6	6.05
Average bed occupancy %	(86%)	49.3%	79.9%
Deaths	0	0	0

#### Ward G3 Nephrology

Staff: Dr C du Buisson, Dr JL Shires – part-time, Registrar, Shared Intern for G3

Beds n=4	2014	2013	2012
Admissions	184	155	126

Average Hospital Stay in days	5	2.3	6
Average bed occupancy %	86%	60%	52%
% Growth	26%	23%	-25%
Deaths	4	1	2
Renal Biopsies*	14	33	24
Acute Dialysis**	20	23	12
Outliers***	286	302	56
Referrals****	392	410	-

\* Done in C4B Theatre under general anaesthesia

\*\* All done in PICU

\*\*\* Most of our patients are not in our ward, due to acute infections and some are neonates, diagnosed antenatally.

\*\*\*\* These are patients seen and only advise needed, not continuous care

### Ward G3 & G10 Cardiology

Cross Platform Staff:

Tygerberg Hospital (TBH): Dr J Lawrenson, 1 Senior Registrar, 2 Registrars

Red Cross War Memorial Children's Hospital (RXH): 2 Consultants, 1 Senior Registrar

<b>Beds n=10 (G3=5, G10=5)</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	194	204	155
Average Hospital Stay in Days	*	*	*
Average Bed Occupancy %	*	*	*
Inpatient Echocardiography	732	700	772
Inpatient Consultations	857	1200	1094
Deaths	0	1	/

\* Clinicom data combined with nephrology and general paediatrics therefore not possible to calculate

### OUTPATIENT COMPLEX

#### Subspecialist Clinics

<b>Clinics</b>	<b>2014 Total</b>	<b>2013 Total</b>	<b>2012 Total</b>
Haematology	262	298	261
Immunology	164	168	176
Oncology	344	334	418
Pulmonology	1156	1354	1399
Gastroenterology	726	744	614
High-risk Babies	1973	1862	1740
Neurology & Developmental paediatrics	2301	2515	2687
Allergy	693	666	654
Premature Follow-up	360	307	284

Nephrology	1345	1333	1343
Cardiology	953	916	937
Bronchopulmonary Dysplasia	21	19	21
Diabetic	633	620	610
Endocrinology	625	610	636
Rheumatology	283	337	280
Infectious diseases	1079	1184	1392
Genetics	391	502	476
Pharmacy prescriptions	286	270	224
<b>Total</b>	<b>13595</b>	<b>14039</b>	<b>14152</b>

### GENERAL SPECIALIST SERVICES

#### Total Patient Admissions 2014 (Clinicom data)

G2	J3	G8	G7	GG Short Stay	Total
2234	951	971	1225	6029	<b>11410</b>

#### Bed Occupancy Rate 2014 (Clinicom data)

G2	J3	G8	G7	GG Short Stay	Total
104%	104%	89%	68%	85%	<b>90%</b>

### Neonatology

#### Ward G2 Neonatal Unit – Babies born in TBH

Staff: Drs M du Preez & AKM Madide, 1 Registrar, 3 Medical Officers, 1 Intern (if available)

Beds n=27	2014	2013	2012
Admissions	2182	2376	2087
Average Hospital Stay in Days	4.6	4.7	5
Average Bed Occupancy	104%	104%	93%
% Growth	-9.2%	+13.8%	9.4%
Deaths	120	71 (2.9%)	71

\* Data from Clinicom

#### Ward J3 Neonatal Unit – Babies born in TBH

Staff: Dr H Hassan, 1 Registrar, 1 Medical Officer, 1 Intern

Ward opened April 2012

Beds n=25	2014	2013
Admissions	951	918
Average Hospital Stay in Days	10	11
Average Bed Occupancy	104%	108%

% Growth	3.6%	n/a
Deaths	0	2 (0.2%)

### Ward G8 Neonate & Kangaroo-mother Care – Step-down Facility

Staff: Dr S Holgate, 1 Registrar, 2 Interns

<b>Beds n=30</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	971	941	783
Average Hospital Stay in Days	10.3	9.9	12
Average bed occupancy %	89.75%	83%	86%
% Growth	3.2%	20%	-7,5%
Deaths	2	0	4

\*Data from Clinicom

### Ward G7 General Paediatrics

Staff: Dr H Finlayson, Prof S Kling, 1 Registrar, 2 Medical Officers, 2 Interns

<b>Beds n=25</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Admissions	1175	1267	1429
Increase in Admissions	-7%	-11%	28%
Average Bed occupancy	89.6%	87.2%	70%*
Average Hospital Stay in Days	3.1	4.4	5,4
Deaths	7 (0.6%)	9 (0.75%)	11 (0,77%)

\*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

<b>Beds n=24</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Total Admissions to G Ground	6029	4742	4861
% Increase in General Admissions	+8%	-2%	5%
Average Admissions per day	17	13	13
Average Hospital Stay in Days	1.0	1.3	1.0
% Average Bed Occupancy	85%	87%	72%
Deaths	19	17	16
HIV-related Mortality	0	3	0
HIV Exposed	4	2	1

### General Paediatrics: Emergency & Clinics

<b>Clinics</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
OPD 8am-4pm: Emergency &	9446	8626	8946

Routine	462 (Delft)	491 (Delft CHC )	/
Daily average seen	26	24	25
Annual OPD after hours: 4pm-8am & weekend – Emergency	5426	4765	4614
Daily average seen after hours (4pm-8am)	15	13	13
OPD after hours increase: 4pm-8am %	36%	36%	34%
<b>Total</b>	<b>14 872</b>	<b>13 391</b>	<b>13 560</b>

### 2014 Morbidity & Mortality

#### PIIP data from PPIP database (2014)

Total births in TCH (TBH): n = 8008 including Stillbirths

- Perinatal Mortality Rate (PNMR) ( $\geq 500g$ ) = 59.6
- Early Neonatal Death Rate (ENNDR) ( $\geq 500g$ ) = 10.0
- Perinatal Mortality Rate (PNMR) ( $\geq 1000g$ ) = 32.3
- Early Neonatal Death Rate (ENNDR) ( $\geq 1000g$ ) = 3.3

Mortality of babies born in TCH (TBH) per birth weight category: n=90

Birth Weight	% Mortality 2014	% Mortality 2013	% Mortality 2012
$\leq 1000g$	19.7	21.3	29,1
1001 to 1500g	4.2	3.4	3,3
1501 to 1999g	0.6	2.1	2,4
2000 to 2499g	0.3	0.5	1
$\geq 2500g$	0.18	0.1	0,3

Causes of death of babies born in TCH (TBH): n=97

Cause of Death	% of Total 2014	% of Total 2013	% of Total 2012
Prematurity-related Complications	60	53.1 (Immaturity-related)	52,0
Infection-related	15.4	13.1	17,1
Peripartum Hypoxia	3.1	11.5	8,9
Congenital Anomalies	16.9	14.6	17,1
Other	4.6	7.7	0,8

% Deaths of babies referred to TCH per weight category

Birth Weight*	%Mortality 2014 (n=48)	% Mortality 2013 (n = 46)	% Mortality 2012 (n = 74)
<1000g	10.4	28.2	14,5
1000 to 1499g	20.8	30.4	17,7

1500 to 1999g	8.3	6.5	9,7
2000 to 2499	20.8	6.5	11,3
≥2500g	31.2	21.7	46,8

\*Weight categories as a percentage of total deaths (outborn)

Outborn babies mortality according to referral area of origin

<b>Geographic Service Area</b>	<b>2014 (=48)</b>
Metro East	20
Winelands (Paarl area)	16
Overberg (Worcester drainage area)	17
Unknown	5

Geographic distribution of the NICU admissions and death of babies born outside and referred to TCH

<b>Place of Origin (Hospital)</b>	<b>Number deceased 2014</b>
Ander/Other	15
Paarl	11
Helderberg	8
Karl Bremer	6
Worcester	5
Hermanus	2
Khayelitsha	1
Swartland	0
Caledon	0

#### **CHIP MORTALITY for all sub-specialist paediatric wards (2014)**

<b>CHIP Mortality</b>	<b>Total Admissions/ Tally</b>	<b>% Total</b>	<b>Deaths</b>	<b>Hosp. Mortality Rate</b>	<b>Male</b>	<b>Female</b>
*0-28 days	414	5.25	3	1.97	0	3
28 days – 1 year	2742	34.77	64	42.11	36	28
1-5 year	2984	37.84	53	34.87	27	26
5-13 years	1531	19.41	27	17.76	17	10
13-18 years	215	2.73	5	3.29	2	3
<b>Total</b>	<b>7886</b>		<b>152</b>		<b>82</b>	<b>70</b>

\*Please note: Excluding neonatal deaths reported under the PPIP section

<b>Length of Stay</b>	<b>Number</b>	<b>%</b>
<24 hours	51	77.5
1-3 days	38	25
4-7 days	25	16.4
8-14 days	10	6.6
>14 days	23	15.1

<b>Main Causes of Death in Children*</b>	<b>Number</b>	<b>%</b>
Septicaemia, possible serious bacterial infection	36	23.7
CNS conditions	19	12.5
Haematology/Oncology	11	7.2
Acute Diarrhoea	8	5.2
Chronic & severe acute liver disease	8	5.2
ARI	8	5.2
Cardiac	7	4.6
Tuberculosis meningitis	7	4.6
Myocarditis	6	3.9

\*Please note: Other co-morbidities not reflected.

### **REFERRAL PATTERNS**

#### **Referral from Level 1 Hospital inside Cape Town Metropole**

<b>Referring facility</b>	<b>Number</b>	<b>%</b>
Khayelitsha Hospital	22	14.5
Helderberg Hospital	12	7.9
Karl Bremer Hospital	10	6.6
Eerste River Hospital	7	4.60
Somerset Hospital	1	1.92
Total	52	34.2

#### **Referral from Level 1 Hospital outside Cape Town Metropole**

<b>Referring facility</b>	<b>Number</b>
Hermanus Hospital	3
Stellenbosch Hospital	2
Vredendal Hospital	2
Montague Hospital	1
Swartland Hospital	1
Ceres Hospital	1
Westfleur Hospital	1
Total	11 (7.2%)

#### **Referral from Level 2 and private care**

<b>Referring facility</b>	<b>Number</b>
Paarl Hospital	20
Worcester Hospital	7
N1 City	1

#### **Referral from CHC/Clinic inside Metro**

<b>Referring facility</b>	<b>Number</b>
Delft	6



Other	11
Total	17 (11.2%)

<b>HIV - mortality</b>	<b>Number</b>	<b>%</b>
Positive	10	6.5%
Negative	97	63.8%
Exposed	16	10.5%
Not tested (not indicated)	15	9.8%
Unknown	24	15.8%

#### **Mortality according to Weight Category**

<b>Weight Category</b>	<b>Number</b>	<b>%</b>
Normal	75	49.3
UWFA	43	28.3
Kwashiorkor	12	7.9
Marasmus	10	6.6
Unknown	5	3.3
Marasmic Kwashiorkor	3	4.6

#### **Mortality per Ward**

<b>Ward</b>	<b>Number</b>	<b>%</b>
Paediatric Intensive Care Unit/High Care	80	52.63
Acute Care	21	13.82
Gastroenterology	18	11.84
General Paediatrics	9	5.92
Oncology	8	5.26
Neurology	6	3.95
Nephrology	4	2.63
Infectious Diseases	4	2.63
Cardiology	1	0.66
<b>Total</b>	<b>152</b>	

## **Infrastructure Development**

#### **Tygerberg Children's Hospital Trust Contribution to Infrastructure**

<b>DATE</b>	<b>SUPPLIER</b>	<b>EQUIPMENT</b>	<b>AMOUNT</b>
06/03/2014	SSEM Mthembu Medical	2 x CO2 sensor kits for PICU	R 88 386.48

03/04/2014	Shonaquip	Upgrades for Siphokazi Chitilali's buggy wheelchair	R 5 009.45
03/04/2014	LBA Productions	Name badges for doctors	R 1 050.00
11/04/2014	Dr Julie Morrison	Pram	R 1 200.00
19/05/2014	Siyakhanda Medical Services	6 x mini-carts for A9	R 49 977.14
09/06/2014	Siyakhanda Medical Services	8 mini-carts & 2 transportation carts	R 124 044.92
03/07/2014	James Refrigeration & Air Conditioning	Extraction system installed in G ground (To be refunded by DTTC - Liz Walters)	R 16 786.50
03/07/2014	Stelmed CC	Suction Unit and Wall clocks for G ground	R 2 493.74
15/07/2014	Siyakhanda Medical Services	Storage cabinets x 2	R 27 710.39
21/10/2014	Blouberg Landscaping	Revamping of Ithuba Recreational area	R 14 800.00
07/11/2014	Surgical Innovations	ADCV55 Digital Converter for bronchoscope	R 6 815.60
<b>TOTAL</b>			<b>R 338 274.22</b>

## Part 2

### Community Outreach Programmes/Community Service and Interaction & Partnerships

#### Expert Members

Prof Mariana Kruger

- SIOP (International Society of Paediatric Oncology) Continental President for Africa
- Member of the Senate Research Ethics Committee of Stellenbosch University
- Member of the Senate Research Committee of Stellenbosch University
- Member of the Research Committee of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Member of the Provincial Clinical Governance Committee (PCGC)
- Board member of the Medical and Dental Professions Board, HPCSA
- Chairperson of the Curriculum Subcommittee of the Medical and Dental Professions Board, HPCSA
- Member of the Education and Registration Committee, HPCSA

- Member of an Expert Committee of the Medicines Control Council: Clinical Committee
- Elected to the Council of the College of Paediatricians for the triennium 2014-2017

Prof S Kling elected as President of the Council of the College of Paediatricians for the triennium 2014-2017

Prof Mark Cotton was appointed as:

- Consultant to Antimicrobial Resistance Stakeholder Board – National DoH DDG's Office
- Panel Member: National Research Foundation from May 2014 – February 2018.

Dr M Anderson of KIDCRU appointed on the Hepatitis Committee of the AIDS Clinical Trials Group

## **International**

### **Outreach**

- Prof M Kruger - SIOP (International Society of Paediatric Oncology) Continental President for Africa
- Proff M Kruger & PB Hesselning – Childhood cancer Cameroon
- Prof Gie – TB teaching Bangladesh and Uganda
- Prof Schaaf – TB teaching Mozambique & Zambia
- Prof Beyers – POPART Zambia & RSA

## **National**

### **Outreach**

- Prof M Kruger – HPCSA, MCC
- Prof N Beyers – National Department of Health

## **Regional and District**

### **Outreach**

- Worcester – Prof M Kruger, Drs R van Toorn, R Solomons, J Lawrenson, C du Buisson
- Paarl - Dr P Goussard
- Delft - Drs L Smit, R Gioio
- Helderberg – Dr T Wessels; Perinatal – Dr H Hassan
- Eersterivier – Drs H Finalyson, M du Preez
- City of Cape Town - DTTC
- DTTC - skills development in the community
- Karl Bremer Hospital, Haemophilia, Childhood Cancer - Dr A van Zyl; Perinatal – Dr H Hassan

## **Media Exposure**

### **Radio Interviews:**

Prof M Kruger

- RSG - Gesondheid: Invited speaker – Kanker in kinders, 19 March 2014

**Articles:**

**Name of publication:** Cape Times

**Name of article:** Donated prams ease moms' long trek with babies (Dr J Morrison, Prof RP Gie, Dr P Goussard)

**Date:** 13 March 2014

**Name of publication:** Tygerburger

**Name of article:** Shining light for sick children (Tygerberg Children's Hospital Trust)

**Date:** 16 April 2014

**Name of publication:** Weekend Argus

**Name of article:** Tygerberg hospital's miracle man 'retires' (Prof GF Kirsten)

**Date:** 26 April 2014

**Name of publication:** SAMA Insider

**Name of article:** SAMA PhD supplementary scholarships awarded (<sup>1</sup>Dr A Bekker)

**Date:** 1 May 2014

**Name of publication:** The Times

**Name of article:** Tygerberg delivers under pressure (Prof GF Kirsten)

**Date:** 9 May 2014

**Name of publication:** Cape Times

**Name of article:** New plan for babies at risk of HIV (Prof MF Cotton)

**Date:** 5 May 2014

**Name of publication:** Tygerburger

**Name of article:** Sy stryd teen TB erken (<sup>1</sup>Prof HS Schaaf)

**Date:** 7 May 2014

**Name of publication:** Pretoria News

**Name of article:** SA set to host clinical trial for new TB vaccine (Prof MF Cotton)

**Date:** 15 May 2014

**Name of publication:** Star

**Name of article:** Expert gives TB medication alert (<sup>1</sup>Prof HS Schaaf)

**Date:** 2 June 2014

**Name of publication:** Cape Times

**Name of article:** TB expert warns of poor drug choices and dosages (<sup>1</sup>Prof HS Schaaf)

**Date:** 2 June 2014

**Name of publication:** The Times

---

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

**Name of article:** TB Bugs outsmart docs (<sup>1</sup>Prof HS Schaaf)  
**Date:** 2 June 2014

**Name of publication:** News24

**Name of article:** Incorrect medication worsens drug-resistant TB (<sup>1</sup>Prof HS Schaaf)  
**Date:** 5 June 2014

**Name of publication:** Tygerburger

**Name of article:** Veldtog se doel is om TB uit te roei (<sup>1</sup>Prof HS Schaaf)  
**Date:** 18 June 2014

**Name of publication:** Tygerburger

**Name of article:** Stellenbosch University honours TB researchers (<sup>1</sup>Proff N Beyers, RP Gie, HS Schaaf)  
**Date:** 25 June 2014

**Name of publication:** You-Tube by Discovery SA

**Name of article:** Preventing the transfer of TB to new-borns (<sup>1</sup>Dr A Bekker)  
**Date:** 21 August 2014

**Name of publication:** Cape Times

**Name of article:** Tutu thanks staff at children's hospital (Tygerberg Children's Hospital Trust)  
**Date:** 14 November 2014

**Name of publication:** News24

**Name of article:** Tutu pays tribute to Tygerberg Children's Hospital (Tygerberg Children's Hospital Trust)  
**Date:** 14 November 2014

**Name of publication:** Die Burger

**Name of article:** In die oomblik (Tygerberg Children's Hospital Trust)  
**Date:** 15 November 2014

**Name of publication:** Tygerburger

**Name of article:** 'Vyfster'-verblyf (Dr H Hassan)  
**Date:** 26 November 2014

---

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

## Part 3

### Teaching & Training

#### Training Awards:

Dr Adrie Bekker was awarded three PhD scholarships nl: the Discovery Academic Fellowship Award , the SAMA PhD Supplementary Scholarship and the MRC Clinician Research PhD scholarship.

Dr Angela Dramowski was awarded the Discovery Academic Fellowship Award and the MRC Clinician Research PhD scholarship.

Dr Liz Walters was awarded the MRC Clinician Research PhD scholarship.

#### Education-related Activities

##### Postgraduate Students

##### PhD candidates thesis completed and examined, Stellenbosch University

- **Dr P Goussard:** Title: Bronchoscopic assessment and management of children presenting with clinical significant airway obstruction due to tuberculosis. Supervisor: Proff RP Gie
- **Dr R Van Toorn:** Title: Childhood tuberculous meningitis: challenging current management strategies. Supervisors: Proff JF Schoeman, HS Schaaf

##### Enrolled PhD students

- **Dr A Bekker:** Title: Prevention And Treatment Of Perinatal And Infant Tuberculosis In The HIV Era. Supervisors: Proff AC Hesselning, HS Schaaf
- **Dr P Bock:** Title: Impact of a Universal Test and Treat strategy on clinical outcomes amongst HIV - infected adults in South Africa: Supervisor: Prof N Beyers, Dr S Fidler
- **Dr A Dramowski:** Title: Determinants Of Healthcare-Associated Infections Among Hospitalised Children. Supervisors: Proff MF Cotton, A Whitelaw
- **Mr R Dunbar:** How can virtual implementation modelling inform the scale-up of new molecular diagnostic tools for tuberculosis? Supervisors: Prof N Beyers, Mr I Langley
- **Dr UD Feucht:** Title: 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. Supervisors: Proff M Kruger, B Forsythe
- **Dr GTJ Kali:** Title: A comparative study of neuroprotective strategies in neonatal hypoxic ischaemic encephalopathy. Supervisors: Prof J Smith, M Rutherford
- **Dr B Laughton:** Title: The effects of early versus delayed antiretroviral treatment on the short and long term neurodevelopmental outcome of children who are HIV positive. Supervisor: Prof MF Cotton, Prof M Kruger

- **Dr AM Mandalakas:** Title: Development of a novel conceptual framework of childhood tuberculosis within which to study the impact of an IPT program for childhood TB prevention. Supervisors: Proff AC Hesselning, RP Gie
- **Dr F Marx:** Title: Mathematical modelling to project the impact of interventions targeted to previously treated individuals on the trajectory of the tuberculosis epidemic in high tuberculosis prevalence settings Supervisors: Prof N Beyers, Prof T Cohen
- **Ms S-A Meehan:** Title: The contribution of a community based HIV counseling and testing (HCT) initiative in working towards increasing access to HIV counseling and testing in Cape Town, South Africa. Supervisors: Proff N Beyers, R Burger
- **Dr P Naidoo:** Title: Evaluating the Impact of an Xpert® MTB/RIF- based TB Diagnostic Algorithm in a Routine Operational Setting in Cape Town. Supervisors: Prof N Beyers, Dr C Lombard
- **Dr H Rabie:** Title: Pharmacokinetics and therapeutic outcomes of children with tuberculosis/HIV co-infection treated with lopinavir/ritonavir and a rifampicin-containing anti-tuberculosis regimen. Supervisors: Proff MF Cotton, HS Schaaf, RP Gie
- **Dr RS Solomons:** Title: Improving early diagnosis of tuberculous meningitis in children. Supervisors: Proff JF Schoeman, AM van Furth
- **Dr S Thee:** Title: Pharmacokinetics and safety of first- and second-line antituberculosis drugs in children. Supervisors: Proff HS Schaaf, AC Hesselning
- **Dr SS van Wyk:** Title: Development and validation of a prediction model to ESTIMATE an adult's probability of having active pulmonary tuberculosis in a high TB- and HIV burden setting. Supervisors: Proff H-H Lin, Dr M Claassens
- **Dr E Walters:** Title: Novel diagnostic strategies and markers of treatment response for paediatric pulmonary tuberculosis. Supervisors: Proff AC Hesselning, RP Gie
- **Mev M Zunza:** Title: Prolonged Breastfeeding with Antiretroviral Prophylaxis or Commercial Infant Formula Milk and associated health outcomes: A comparative study of a birth cohort of HIV-exposed infants in public health care setting. Supervisors: Prof MF Cotton, Dr MM Esser

## Successful MPhil Candidates

- **Health Science Education, SU**  
Dr L Smit (cum laude)
- **Neurodevelopment, UCT**  
Dr A Redfern

## Colleges of Medicine of South Africa (CMSA)

- **Cert Pulmonology (SA) Paed**  
Dr J Morrison

- **Cert Gastroenterology (SA) Paed**

Dr T Afaa (Ghana)

- **Cert ID(SA) Paed**

Dr LJ Frigati

- **Cert Neonatology(SA)**

Drs JCF du Preez & Dr S O'Ryan

- **CMSA FC Paed Part II**

- Drs M Grantham, Dr V Netshituni, Y Visser & I Webster

- **CMSA FC Paed Part I**

- Drs A Heymans, K Ooppel, C Richardson, L Schoonraad, A Vahed

- **DCH (SA)**

- Drs C Okwundu, C Okquosa, M van Velden

## **MMed(Paed)**

- Dr GP de Bruin: Title: 'Children with Kaposi sarcoma in two Southern African hospitals – clinical presentation, management and outcome'. Supervisor: Prof DC Stefan
- Dr M Wessels: Title: 'Clinical value of a uniform research case definition of tuberculous meningitis'. Supervisor: Dr RS Solomons
- Dr R Lutchman: Title: 'Burkitt's lymphoma – a 15 year review at Tygerberg Hospital, South Africa from 1995-2010.' Supervisor: Prof DC Stefan
- Dr TE Ferreira-van der Watt: Title: 'Clinical characteristics and outcome of children evaluated and treated at Tygerberg Children's Hospital during a measles epidemic'. Supervisor: Dr H Finlayson
- Dr A Thomas: Title: 'The use of unlicensed and off label drugs in Tygerberg Hospital Neonatal Intensive Care Unit'. Supervisor: Prof M Kruger
- Dr MJ de Wet: Title: 'Factors affecting final renal outcome in boys with posterior urethral valves at Tygerberg Hospital'. Supervisor: Dr CJ du Buisson
- Dr I Kruger: Title: 'Paediatric and neonatal admissions to an intensive care unit at a regional hospital in the Western Cape'. Supervisor: Prof M Kruger
- Dr LC Swanson: Title 'Prognostic factors in children with severe acute malnutrition at a tertiary hospital in Cape Town, South Africa' Supervisor: Dr ED Nel

## **Undergraduate Students**

96% pass rate



## Education-related Activities

- The Education Committees of the Department comprised as follows:
  - Undergraduate: Prof S Kling (Chairperson)
    - MBChB II: Drs E Malek, R Uys
    - Early rotation: Drs CJ du Buisson (Chairperson), L Frigati, H Hassan, E Zöllner
    - Middle rotation: Drs A Redfern (Chair), A van Zyl, S Ströbele, NM Parker
    - SI: Dr L Smit (Chairperson)
    - Remedial: Drs D Abraham, M Morkel
    - Elective students: Dr H Finlayson, Prof M Kruger
  - Postgraduate: Drs ED Nel (chairperson), Dr S Holgate, G Kali, Prof M Kruger, Dr H Rabie, Prof DC Stefan
  - PhD: Profs M Kruger (Chairperson), N Beyers, MF Cotton, RP Gie, AC Hesselning, HS Schaaf
- All consultants are involved with under- and postgraduate teaching on a daily basis. Additional education activities included:
- External examiners at universities in South Africa:
  - Postgraduate:
    - Prof M Kruger
      - PhD, University of the Free State
      - MPH, University of Kwazulu-Natal
    - Prof N Beyers, PhD, Community Health, Stellenbosch University
    - Prof EWA Zöllner, MMed, University of the Witwatersrand
  - Undergraduate:
    - Profs M Kruger & RP Gie, S Kling, University of the Free State
    - Dr CJ du Buisson, University of Limpopo
    - Drs A Redfern, A van Zyl, University of Cape Town
- Postgraduate external examiners at universities in South Africa:
- Senior registrars in training:
  - Paediatric Pulmonology: Dr J Morrison
  - Neonatology: Drs JCF du Preez, Z Kajee, N Brown and A Maalim (Supernumerary from Kenya)
  - Paediatric Oncology: Dr A Kanyamuhunga (Supernumerary from Rwanda)
  - Paediatric Infectious Diseases: Drs L Frigati, funded by bursary from the Discovery Foundation, B Makongwana (Supernumerary from Eastern Cape)
  - Paediatric Gastroenterology: Dr T Afaa (Supernumerary from Ghana), sponsored by a Nestle Nutrition Institute Fellowship endorsed by the European Society of Paediatric Gastroenterology
- Colleges of Medicine of South Africa (CMSA):
  - Convenors (C)/Moderator (M)/External Examiners (EE):
    - Cert Infectious Diseases: Dr H Rabie (C/EE)
    - Cert Cardiology: Dr J Lawrenson
- South African Research Ethics Training Initiative (SARETI) UKZN, funded by Fogarty International Fogarty International Center (FIC) of the National Institutes

of Health (NIH), grant number 6R25TW001599-13: Prof M Kruger (Co-principal Director)

- Faculty and University Committee Participation:
  - Prof M Kruger:
    - Member of the Senate Research Ethics Committee, Stellenbosch University
    - Member of the Senate Research Committee, Stellenbosch University
    - Member of the Subcommittee C of the Research Committee, Faculty of Medicine and Health Sciences
  - Prof E Zöllner
    - Safety representative on Health and Safety Committee, Faculty of Medicine and Health Sciences

## Courses Attended

NAME	COURSES ATTENDED	DATES	TYPE OF TRAINING	LEV EL	PROVIDER
Consultants					
Abraham, Dr D	Methodological preparation for your PhD Grounded theory	13-17 Jan 2014 20-24 Jan 2014	Course	Adv	ADA Summer School, Stellenbosch
<sup>1</sup> Bekker, Dr A	Tygerberg Hospital Continuity of TB Care VIth International Childhood TB Centre Annual Bioethics Seminar 4 Writing a Successful NIH Grant	29 August 2014 29 Sept-03 Oct 2014 14 Sept 2014 15-16 October 2015	Course	Adv	Tygerberg Hub SU  Centre for Medical Ethics & Law SU Research & Development
Du Buisson, Dr CJ	Introduction to SPSS  Prontak / Predac 2014 Clinical skills course: Dialysis training course for African Fellows	13-17 Jan 2014 15-18 Jul 2014 11-14th of November 2014	Course	Adv	ADA Summer School, Stellenbosch Stellenbosch University Cape Town, South Africa
Du Preez, Dr M	PRONTAK/PREDAC Paediatric and Ultrasound Inspiring ICU 2014	15-18 July 2014 27 November 2014	Workshops	Adv	Stellenbosch University Critical Care Congress - Baxter Theatre Centre
Finlayson, Dr H	Introduction to SPSS	13-17 Jan 2014	Course	Adv	ADA Summer School, Stellenbosch
Holgate, Dr S	Paediatric and Ultrasound Inspiring ICU 2014	27 November 2015	Workshop	Adv	Critical Care Congress - Baxter Theatre Centre
Kruger, Prof M	Certificate course for doctoral supervisors  Takseersentrum/Assessment for Senior Academic Leaders	20-24 Jan 2014  19 & 26 August 2014	Course  Evaluation	Adv  Adv	ADA Summer School, Stellenbosch  The Assessment Toolbox, Bellville

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

	Good Clinical Practice – Refresher Course	03 December 2014	Course	Adv	ERECCA (Enhance Research Ethics Capacity and Compliance in Africa) - an EDCTP funded project, Centre for Medical Ethics & Law, Stellenbosch University
Malek, Dr E	Leadership and innovation in research National DOH Training in Severe Acute Malnutrition Management	22 May 2014 14-16 July 2014	Workshop Course	Adv	Lanzerac Hotel, Stellenbosch Durban, KZN
Malek, Dr E	Leadership and innovation in research	22 May 2014	Workshop	Adv	Lanzerac Hotel, Stellenbosch
Lloyd, Dr L	Syncytial Virus Symposium 2014 Paediatric and Ultrasound Inspiring ICU 2014 Practical Neonatal Cranial Ultrasound	09-13 Nov 2014 26 Nov 2014 1 April-30 November 2014	Workshop Workshop Course	Adv Adv Adv	Spier Hotel Critical Care Congress - Baxter Theatre Centre Stellenbosch University
Nel, Dr E	Post Graduate Course in Paediatric Gastroenterology	2-7 March 2014	Short course	Adv	Stellenbosch University
Parker, Dr N	Introduction to teaching in the Health Professions	21 Feb-10 Oct 2014	Course	Level 8	Stellenbosch University
Redfern, Dr A	Introduction to SPSS	13 - 17 Jan 2014	Course	Adv	ADA Summer School, Stellenbosch
Rabie, Dr H	NetCourseNow 101, Melrose Adv Professionals Training	18-19 Sept 2014	Short Course	Adv	Melrose Training
<sup>1</sup> Schaaf, Prof HS	GCP Refresher Tygerberg Hospital Continuity of TB Care Childhood TB diagnostics: The elephant in the room	1 August 2014 29 August 2014 18 September 2014	Course	Adv	Kidcru, SU Tygerberg Hub URC, facilitated NHLS and University of Pretoria
Springer, Dr P	Early Neurodevelopmental outcome of HIV( Ethics REF: N13/03/028)	01 Mar - 31 Dec 2014	Research		Hope Cape Town Trust
Van Toorn, Dr R	Leadership Developmental for leaders Effective recruitment and selection practises	3-4 July 2014 15 Oct 2014	Course Course		Stellenbosch University
Brown, Dr N	Paediatric and Ultrasound Inspiring ICU	27 November 2014	Workshop	Adv	Critical Care Congress - Baxter Theatre Centre
Maalim, Dr A	Paediatric and Ultrasound Inspiring ICU	27 November 2014	Workshop	Adv	Critical Care Congress - Baxter Theatre Centre
Kajee, Dr Z	Here be lungs Trilogy 2014	21-22 March 2014	Course	Adv	Tygerberg Hospital Pulmonology and Neonatology department

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

Zöllner, Prof EWA	Supervising for Doctoratiness	14 November 2014	Workshop	Adv	Stellenbosch University
<b>REGISTRARS</b>					
Carkeek, Dr K	Here be lungs Trilogy 2014 HFQV/Oscillation Course Rheumatology Evening	21-22 March 2014	Course	Adv	Tygerberg Hospital Pulmonology and Neonatology department
Kesting, Dr S	BLS & NALS	28 & 30 September 2014	Workshop		Cardiocare
Mulambia, Dr Y	BLS & NALS	10-11 February 2014	workshop		Cardiocare
<b>MEDICAL OFFICERS</b>					
Adeniyi, Dr F	NALS	30 September 2015	Workshop		Cardiocare
Beukes, Dr J	BLS & NALS	22-23 September 2014	Workshop		Cardiocare
Koningsbruggen, Dr C	BLS & NALS	29 Sept & 2 October 2014	Workshop		Cardiocare
Evans, Dr K	BLS & NALS	29 Sept & 2 October 2014	Workshop		Cardiocare
Jaffer, Dr S	BLS & NALS	29 Sept & 02 October 2014	Workshop		Cardiocare
Schoonraad, Dr L	BLS & NALS	29-30 September 2014	Workshop		Cardiocare
Xafis, Dr P	BLS & NALS	27-28 September 2014	Workshop		Cardiocare
<b>ADMIN</b>					
Fourie, A	Performance Management	22 August 2014	Course	Adv	Stellenbosch University
Adams, J	Training WRT loading of the marks with Helene Nieuwoudt	01 July 2014	Course		Stellenbosch University
Samuels, N	CROI TBTC Meeting Performance Management Training	3-6 March 2014 17-20 March 2014 08 Apr 2014	Course		Boston Atlanta Durbanville
Olah, H	Street Wise Course	18-19 March 2014	Course		Stellenbosch University

## Part 4 Research

### Achievements with regard to Research Activities and Research Outputs

Proff MF Cotton and AC Hesseling received a NIH grant for the Clinical Trial Unit.

Prof S Kling awarded the best article award for 2013-14 of Current Allergy & Clinical Immunology, the journal of the Allergy Society of South Africa.

Prof M Cotton and team received NIH funding for the period 9 July 2014 to 30 June 2019 for the amount of \$3,194,263 for the project "Latent reservoir characterization and correlations with neurocognitive functioning".

Dr A Bekker received Harry Crossley funding for her PhD study on the Pharmacokinetics of first-line antituberculosis drugs in infants: additional crossover component.

NRF rating – n = 7

- Prof PR Donald A2
- Prof HS Schaaf A2
- Prof MF Cotton B3
- Prof J Smith C2
- Dr R Van Toorn C2
- Dr H Rabie C3
- Dr S Innes Y2

## Publications

### Journal Articles (Subsidised)

1. ACKERMANN C, ANDRONIKOU S, **LAUGHTON B**, KIDD M, **DOBBELS E**, **INNES S**, **VAN TOORN R**, **COTTON M**. White matter signal abnormalities in children with suspected HIV-related neurologic disease on early combination antiretroviral therapy. *Pediatric Infectious Disease Journal* 2014; **33**(8): e207-e212.
2. ANDRONIKOU S, ACKERMANN C, **LAUGHTON B**, **COTTON M**, TOMAZOS N, SPOTTISWOODE B, MAUFF K, PETTIFOR JM. Correlating brain volume and callosal thickness with clinical and laboratory indicators of disease severity in children with HIV-related brain disease. *Childs Nervous System* 2014; **30**: 1549-1557.
3. ANDRONIKOU S, VAN WYK MJ, **GOUSSARD PL**, **GIE RP**. Left Main Bronchus Compression as a Result of Tuberculous Lymphnode Compression of the Right-Sided Airways With Right Lung Volume Loss in Children. *Pediatric Pulmonology* 2014; **49**: 263-268.
4. AYLES H, FLOYD S, **BEYERS N**, GODFREY-FAUSSETT P. Design of pragmatic trials of tuberculosis interventions - authors' reply. *Lancet* 2014; **383**: 214-215.
5. BASTOS ML, HUSSAIN H, WEYER K, GARCIA-GARCIA ML, LEIMANE V, LEUNG CC, NARITA M, PENA J, PONCE-DE-LEON A, SEUNG KJ, SHEAN K, SIFUENTES-OSORNIO J, VAN DER WALT M, VAN DER WERF TS, YEW WW, MENZIES D, ET AL , **SCHAAF HS**. Treatment outcomes of patients with multidrug- and extensive drug-resistant tuberculosis according to drug susceptibility testing to first- and second-line drugs: an individual patient data meta-analysis. *Clinical Infectious Diseases* 2014; **59**(10): 1364-1374.
6. **BEKKER A**, **SCHAAF HS**, SEIFART HI, DRAPER HR, WERELY CJ, **COTTON MF**, **HESELING AC**. Pharmacokinetics of isoniazid in low-birth-weight and premature infants. *Antimicrobial Agents and Chemotherapy* 2014; **58**(4): 2229-2234.
7. **BEKKER A**, **SLOGROVE A**, **SCHAAF HS**, **DU PREEZ K**, **HESELING AC**. Determinants of tuberculosis treatment completion among newborns in a high-burden setting. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(3): 335-340.

8. **BEYERS N.** Nulda Beyers: speaking up for children with tuberculosis. *Lancet* 2014; **383**: 1031.
9. BLOK N, VISSER DH, **SOLOMONS R**, VAN ELSLAND SL, DEN HERTOOG AL, VAN FURTH AM. Lipoarabinomannan enzyme-linked immunosorbent assay for early diagnosis of childhood tuberculous meningitis. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(2): 205-210.
10. **BOCK P, BEYERS N**, FIDLER SJ. Balancing the need to rapidly scale-up and improve clinical outcomes in antiretroviral programmes in developing countries: lessons from an Indian programmatic cohort study. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 2014; **108**(10): 599-600.
11. CHURCHYARD G, MAMETJA LD, MVUSI L, NDJEKA N, **HESELING AC**, REID AJ, BABATUNDE S, PILLAY Y. Tuberculosis control in South Africa: Successes, challenges and recommendations. *SAMJ South African Medical Journal* 2014; **104**(3): 244-248.
12. CORI A, AYLES H, **BEYERS N**, SCHAAP A, FLOYD S, SABAPATHY K, EATON JW, HAUCK K, SMITH P, GRIFFITH S, MOORE A, DONNELL D, VERMUND SH, FIDLER SJ, HAYES R, FRASER C. HPTN 071 (PopART): A Cluster-Randomized Trial of the Population Impact of an HIV Combination Prevention Intervention Including Universal Testing and Treatment: Mathematical Model. *PLoS ONE* 2014; **9**(1): e84511.
13. **COTTON MF**, CASSIM H, PAVIA-RUZ N, GARGES HP, PERGER T, FORD SL, WIRE MB, GIVENS N, ROSS LL, LOU Y, SIEVERS J, CHENG K. Pharmacokinetics, Safety and Antiviral Activity of Fosamprenavir/Ritonavir-containing Regimens in HIV-infected Children Aged 4 Weeks to 2 Years—48-week Study Data. *Pediatric Infectious Disease Journal* 2014; **33**(1): 57-62.
14. **COTTON MF, SLOGROVE A, RABIE H.** Infections in HIV-exposed uninfected children with focus on Sub-Saharan Africa. *Pediatric Infectious Disease Journal* 2014; **33**(10): 1085-1086.
15. DAVIDSON A, WAINWRIGHT L, STONES DK, **KRUGER M**, HENDRICKS M, GEEL J, POOLE J, REYNDERS D, OMAR F, MATHEW R, **STEFAN DC.** Malignancies in South African Children with HIV. *Journal of Pediatric Hematology Oncology* 2014; **36**(2): 111-117.
16. DAVIES M-A, MAY M, BOLTON-MOORE C, CHIMBETETE C, ELEY B, GARONE D, GIDDY J, MOULTRIE H, NDIRANGU J, PHIRI S, **RABIE H**, TECHNANAU K, WOOD R, BOULLE A, EGGER M, KEISER O. Prognosis of Children With HIV-1 Infection Starting Antiretroviral Therapy in Southern Africa. A Collaborative Analysis of Treatment Programs. *Pediatric Infectious Disease Journal* 2014; **33**(6): 608-616.
17. DE KOCK L, SY SKB, ROSENKRANZ B, DIACON AH, PRESCOTT K, HERNANDEZ KR, YU M, DERENDORF H, **DONALD PR.** Pharmacokinetics of *para*-Aminosalicylic acid in HIV-uninfected and HIV-coinfected tuberculosis patients receiving antiretroviral therapy, managed for multidrug-resistant and extensively drug-resistant tuberculosis. *Antimicrobial Agents and Chemotherapy* 2014; **58**(10): 6242-6250.
18. DE WAAL R, KROON SM, **HOLGATE SL**, HORN A, TOOKE LJ, NORMAN J, SMITH P, BLOCKMAN M, **COTTON MF**, MCILLERON H, COHEN K. Nevirapine Concentrations in Preterm and Low Birth Weight HIV-Exposed. *Pediatric Infectious Disease Journal* 2014; **33**(12): 1231-1233.
19. DHANASEKARAN S, JENUM S, STAVRUM R, RITZ C, KENNETH J, VAZ M, DOHERTY TM, GREWAL HMS, **HESELING AC.** Concordant or discordant results by the tuberculin skin test and the quantiferon-TB test in children reflect immune biomarker profiles. *Genes and Immunity* 2014; **15**(5): 265-274.

20. DHANASEKARAN S, JENUM S, STAVRUM R, WIKER HG, KENNETH J, VAZ M, DOHERTY TM, GREWAL HMS, **HESELING AC**. Effect of non-tuberculous Mycobacteria on host biomarkers potentially relevant for tuberculosis management. *PLoS Neglected Tropical Diseases* 2014; **8**(10): e3243.
21. DIACON AH, **DONALD PR**. The early bactericidal activity of antituberculosis drugs. *Expert Review of Anti-Infective Therapy* 2014; **12**(2): 223-237.
22. DIACON AH, VAN DER MERWE L, DEMERS A, VON GROOTE-BIDLINGMAIER F, VENTER A, **DONALD PR**. Time to positivity in liquid culture predicts colony forming unit counts of Mycobacterium tuberculosis in sputum specimens. *Tuberculosis* 2014; **94**: 148-151.
23. DIACON AH, VAN DER MERWE L, DEMERS A-M, VON GROOTE-BIDLINGMAIER F, VENTER A, **DONALD PR**. Pre-treatment mycobacterial sputum load influences individual on-treatment measurements. *Tuberculosis* 2014; **94**: 690-694.
24. DIACON AH, VON GROOTE-BIDLINGMAIER F, **DONALD PR**. Delamanid, a new 6-nitro-2,3-dihydroimidazo[2,1-b]oxazole for the management of tuberculosis resistant to at least isoniazid and rifampicin. *Expert Opinion on Orphan Drugs* 2014; **2**(1): 87-94.
25. **DONALD PR**. The North American contribution to our knowledge of childhood tuberculosis and its epidemiology. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(8): 890-898.
26. DU TOIT E, VAN SCHALKWYK C, **DUNBAR R**, JENNINGS K, YANG B, COETZEE D, **BEYERS N**. Missed Opportunities for Retention in Pre-ART Care in Cape Town, South Africa. *PLoS ONE* 2014; **9**(5): 1-6.
27. ENARSON PM, **GIE RP**, MWANSAMBO C, MAGANGA E, LOMBARD CJ, ENARSON DA, GRAHAM SM. Reducing Deaths from Severe Pneumonia in Children in Malawi by Improving Delivery of Pneumonia Case Management. *PLoS ONE* 2014; **9**(7): e102955.
28. ESPOSITO S, D'AMBROSIO L, TADOLINI M, **SCHAAF HS**, LUNA JC, MARAIS BJ, CENTIS R, DARA M, MATTEELLI A, BLASI F, MIGLIORI GB. ERS/WHO Tuberculosis Consilium assistance with extensively drug-resistant tuberculosis management in a child: case study of compassionate delamanid use. *European Respiratory Journal* 2014; **44**(3): 811-815.
29. FEUCHT UD, MEYER A, **KRUGER M**. Missing HIV prevention opportunities in South African children - A 7-year review. *BMC Public Health* 2014; **14**: 1265.
30. FEUCHT UD, ROSSOUW T, VAN DYK G, FORSYTH BWC, **KRUGER M**. Consequences of Prior Use of Full-dose Ritonavir as Single Protease Inhibitor as Part of Combination Antiretroviral Regimens on the Future Therapy Choices in HIV-1-Infected Children. *Pediatric Infectious Disease Journal* 2014; **33**(2): e53-e59.
31. **FORD N**, **SHUBBER Z**, **JAO J**, **ABRAMS EJ**, **FRIGATI L**, **MOFENSON L**. Safety of Cotrimoxazole in Pregnancy: A Systematic Review and Meta-Analysis. *JAIDS-Journal of Acquired Immune Deficiency Syndromes* 2014; **66**(5): 512-521.
32. FORTUNY C, DUICULESCU D, CHENG K, GARGES HP, **COTTON MF**, TAMANNAI M, FORD SL, WIRE MB, GIVENS N, ROSS LL, LOU Y, PERGER T, SIEVERS J. Pharmacokinetics and 48-week Safety and Antiviral Activity of Fosamprenavir-containing Regimens in HIV-infected 2- to 18-year-old Children. *Pediatric Infectious Disease Journal* 2014; **33**(1): 50-56.
33. FRANCK C, **SEDDON JA**, **HESELING AC**, **SCHAAF HS**, SKINNER D, REYNOLDS L. Assessing the impact of multidrug-resistant tuberculosis in children: an exploratory qualitative study. *BMC Infectious Diseases* 2014; **14**: 426.
34. **FRIGATI L**, **COTTON MF**, **RABIE H**. Antiretroviral therapy for the management of HIV in children. *SAMJ South African Medical Journal* 2014; **104**(12): 898-901.

35. **FRIGATI L**, VAN DER MERWE JP, HARVEY J, **RABIE H**, THERON GB, **COTTON MF**. A retrospective review of group B streptococcal infection in the Mero East area of the Western Cape province: 2010 to 2011. *Southern African Journal of Epidemiology and Infection* 2014; **29**: 33-36.
36. **GARCIA-PRATS AJ**, **DONALD PR**, **SCHAAF HS**. In reply: Acquired drug-resistance during inadequate therapy in a young child with tuberculosis. *Pediatric Infectious Disease Journal* 2014; **33**(11): 1205-1206.
37. **GARCIA-PRATS AJ**, **ROSE PC**, **HESELING AC**, **SCHAAF HS**. Linezolid for the treatment of drug-resistant tuberculosis in children: A review and recommendations. *Tuberculosis* 2014; **94**: 93-104.
38. **GARCIA-PRATS AJ**, WILLEMSE M, SEIFART HI, JORDAAN AM, WERELY CJ, **DONALD PR**, **SCHAAF HS**. Acquired drug resistance during inadequate therapy in a young child with tuberculosis. *Pediatric Infectious Disease Journal* 2014; **33**(8): 883-885.
39. **GARCIA-PRATS AJ**, **ZIMRI K**, **MRAMBA Z**, **SCHAAF HS**, **HESELING AC**. Children exposed to multidrug-resistant tuberculosis at a homebased day care centre: a contact investigation. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(11): 1292-1298.
40. **GOUSSARD PL**, **GIE RP**. The role of bronchoscopy in the diagnosis and management of pediatric pulmonary tuberculosis. *Expert Review of Respiratory Medicine* 2014; **8**(1): 101-109.
41. GRAHAM SM, **DONALD PR**. Death and disability: the outcomes of tuberculous meningitis. *Lancet Infectious Diseases* 2014; **14**(10): 902-904.
42. GRAY DM, WORKMAN L, LOMBARD CJ, JENNINGS T, **INNES S**, GROBBELAAR CJ, **COTTON MF**, ZAR HJ. Isoniazid preventive therapy in HIV-infected children on antiretroviral therapy: a pilot study. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(3): 322-327.
43. HAYES R, AYLES H, **BEYERS N**, SABAPATHY K, FLOYD S, SHANAUBE K, BOCK P, GRIFFITH S, MOORE A, WATSON-JONES D, FRASER C, VERMUND SH, FIDLER SJ, HORN L. HPTN 071 (PopART): Rationale and design of a cluster-randomised trial of the population impact of an HIV combination prevention intervention including universal testing and treatment – a study protocol for a cluster randomised trial. *Trials* 2014; **15**: 57.
44. HENDRICKS H, **KIRSTEN GF**, VOSS M, CONRADIE H. Is continuous positive airway pressure a feasible treatment modality for neonates with respiratory distress syndrome in a rural district hospital?. *Journal of Tropical Pediatrics* 2014; **60**(5): 348-351.
45. **INNES S**, LAZARUS E, OTWOMBE K, LIBERTY A, GERMANUS R, **VAN RENSBURG AJ**, GROBBELAAR N, HURTER T, ELEY B, VIOLARI A, **COTTON MF**. Early severe HIV disease precedes early antiretroviral therapy in infants: Are we too late?. *Journal of the International Aids Society* 2014; **17**: 18914.
46. IRVING B, **GOUSSARD PL**, ANDRONIKOU S, **GIE RP**, DOUGLAS T, TODD-POKROPEK A, TAYLOR P. Computer assisted detection of abnormal airway variation in CT scans related to Paediatric Tuberculosis. *Medical Image Analysis* 2014; **18**: 963-976.
47. JENUM S, GREWAL HMS, HOKEY DA, KENNETH J, VAZ M, DOHERTY TM, JAHNSEN F, **HESELING AC**. The frequencies of IFN $\gamma$ +IL2+TNF $\alpha$ + PPD-specific CD4+CD45RO+ T-cells correlate with the magnitude of the QuantiFERON $\text{®}$  gold in-tube response in a prospective study of healthy Indian adolescents. *PLoS ONE* 2014; **9**(7): e101224.
48. JENUM S, SELVAM S, MAHELAI D, JESURAJ N, CARDENAS V, KENNETH J, **HESELING AC**, DOHERTY TM, VAZ M, GREWAL HMS. Influence of Age and Nutritional Status on the



- Performance of the Tuberculin Skin Test and QuantiFERON®-TB Gold In-Tube in Young Children Evaluated for Tuberculosis in Southern India. *Pediatric Infectious Disease Journal* 2014; **33**(10): e260-e269.
49. KAPLAN R, CALDWELL J, BEKKER L-G, JENNINGS K, LOMBARD CJ, ENARSON DA, WOOD R, **BEYERS N**. Integration of TB and ART services fails to improve TB treatment outcomes: Comparison of ART/TB primary healthcare services in Cape Town, South Africa. *SAMJ South African Medical Journal* 2014; **104**(3): 204-209.
  50. KAUFMANN SHE, **COTTON MF**, EISELE B, GENGENBACHER M, GRODE L, **HESELING AC**, WALZL G. The BCG replacement vaccine VPM1002: from drawing board to clinical trial. *Expert Review of Vaccines* 2014; **13**(5): 619-630.
  51. KHANDELWAL D, GUPTA N, MUKHERJEE A, LODHA R, SINGH V, GREWAL HMS, BHATNAGAR S, SINGH S, KABRA SK, **HESELING AC**. Vitamin D levels in Indian children with intrathoracic tuberculosis. *Indian Journal of Medical Research* 2014; **140**(4): 531-537.
  52. KIBLEUR Y, BROCHART H, **SCHAAF HS**, DIACON AH, **DONALD PR**. Dose regimen of Para-Aminosalicylic Acid Gastro-Resistant Formulation (PAS-GR) in multidrug-resistant Tuberculosis. *Clinical Drug Investigation* 2014; **34**: 269-276.
  53. KIDZERU EB, **HESELING AC**, PASSMORE J-A, MYER L, GAMIELDIEN H, TCHAKOUTE CT, GRAY CM, SODORA DL, JASPAN HB. In-utero exposure to maternal HIV infection alters T-cell immune responses to vaccination in HIV-uninfected infants. *Aids* 2014; **28**(10): 1421-1430.
  54. **KLING S**. Danger at the Frontier: Social Media and Ethics. *Current Allergy & Clinical Immunology* 2014; **27**(3): 196-199.
  55. **KLING S**. Ethics and Allergy Practice. *Current Allergy & Clinical Immunology* 2014; **27**(4): 268-270.
  56. **KLING S**. Is it OK to accept gifts from my patient?. *Current Allergy & Clinical Immunology* 2014; **27**(4): 318-321.
  57. **KRUGER M**, HENDRICKS M, DAVIDSON A, **STEFAN DC**, VAN EYSSEN AL, **UYS R**, **VAN ZYL A**, **HESELING PB**. Childhood Cancer in Africa. *Pediatric Blood & Cancer* 2014; **61**: 587-592.
  58. **KRUGER M**, REYNDERS D, OMAR F, SCHOEMAN J, WEDI O, HARVEY J. Retinoblastoma Outcome at a Single Institution in South Africa. *SAMJ South African Medical Journal* 2014; **104**: 859-863.
  59. **KRUGER M**, **STEFAN DC**, **UYS P**, **VAN ZYL A**, **HESELING PB**, HENDRICKS M, DAVIDSON A, VAN EYSSEN AL. Childhood Cancer in Africa (Letter to the Editor). *Pediatric Blood & Cancer* 2014; **61**: 1525.
  60. KUMAR RS, KUMAR AMV, **CLAASSENS M**, BANUREKHA VV, SEKAR G, VENKATESAN P, SWAMINATHAN S. Are we justified in treating for multidrug-resistant tuberculosis based on positive follow-up smear results?. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(4): 449-453.
  61. LANGERAK NG, DU TOIT J, BURGER M, **COTTON M**, **SPRINGER PE**, **LAUGHTON B**. Spastic diplegia in children with HIV encephalopathy: first description of gait and physical status. *Developmental Medicine and Child Neurology* 2014; **56**(7): 686-694.
  62. LINDSEY JC, HUGHES MD, VIOLARI A, ESHLEMAN SH, ABRAMS EJ, BWAKURA-DANGAREMBIZI M, BARLOW-MOSHA L, KAMTHUNZI P, SAMBO PM, **COTTON MF**, MOULTRIE H, KHADSE S, SCHIMANA W, BOBAT R, ZIMMER B, PETZOLD E, MOFENSON LM, JEAN-PHILIPPE P, PALUMBO P. Predictors of virologic and clinical response to nevirapine versus lopinavir/ritonavir-based antiretroviral therapy in young children

- with and without prior nevirapine exposure for the prevention of mother-to-child HIV transmission. *Pediatric Infectious Disease Journal* 2014; **33**(8): 846-854.
63. LODHA R, MUKHERJEE A, SINGH V, SINGH S, FRIIS H, FAURHOLT-JEPSEN D, BHATNAGAR S, SAINI S, KABRA SK, GREWAL HMS, **HESELING AC**. Effect of micronutrient supplementation on treatment outcomes in children with intrathoracic tuberculosis: a randomized controlled trial. *American Journal of Clinical Nutrition* 2014; **100**(5): 1287-1297.
  64. MARAIS BJ, **SCHAAF HS**, GRAHAM SM. Child health and tuberculosis. *Lancet* 2014; **2**(4): 254-256.
  65. MARAIS BJ, **SCHAAF HS**. Tuberculosis in Children. *Cold Spring Harbor Perspectives in Medicine* 2014; **4**(9): a017855.
  66. MARX FM, **DUNBAR R**, ENARSON DA, WILLIAMS G, WARREN RM, VAN DER SPUIY GD, VAN HELDEN PD, **BEYERS N**. The temporal dynamics of relapse and reinfection tuberculosis after successful treatment: a retrospective cohort study. *Clinical Infectious Diseases* 2014; **58**(12): 1676-1683.
  67. **MEEHAN S-A, NAIDOO P, CLAASSENS M, LOMBARD CJ, BEYERS N**. Characteristics of clients who access mobile compared to clinic HIV counselling and testing services: a matched study from Cape Town, South Africa. *BMC Health Services Research* 2014; **14**(1): 658.
  68. **MORKEL G, BEKKER A, MARAIS BJ, KIRSTEN GF, VAN WYK J, DRAMOWSKI A**. Bloodstream infections and antimicrobial resistance patterns in a South African neonatal intensive care unit. *Paediatrics and International Child Health* 2014; **34**(2): 108-114.
  69. MUKHERJEE A, SAINI S, KABRA SK, GUPTA N, SINGH V, SINGH S, BHATNAGAR S, SAINI D, GREWAL HMS, LODHA R, **HESELING AC**. Effect of micronutrient deficiency on QuantiFERON-TB Gold In-Tube test and tuberculin skin test in diagnosis of childhood intrathoracic tuberculosis. *European Journal of Clinical Nutrition* 2014; **68**(1): 38-42.
  70. NAIDOO P, DU TOIT E, **DUNBAR R, LOMBARD CJ, CALDWELL J, DETJEN AK, BERTEL SQUIRE S, ENARSON DA, BEYERS N**. A Comparison of Multidrug-Resistant Tuberculosis Treatment Commencement Times in MDRTBPlus Line Probe Assay and XpertH MTB/RIF-Based Algorithms in a Routine Operational Setting in Cape Town. *PLoS ONE* 2014; **9**(7): e103328.
  71. NARANBHAI V, KIM S, FLETCHER H, **COTTON MF, VIOLARI A, MITCHELL C, NACHMAN S, MCSHERRY G, MCSHERRY G, HILL A, MADHI S**. The association between the ratio of monocytes: lymphocytes at age 3 months and risk of tuberculosis (TB) in the first two years of life. *BMC Medicine* 2014; **12**: 120.
  72. NDEBELE P, WASSENAAR D, BENATAR S, FLEISCHER T, **KRUGER M, ADEBAMOWO C, KASS N, HYDER AA, MESLIN EM**. Research Ethics Capacity Building in Sub-Saharan Africa: A Review of NIH Fogarty-Funded Programs 2000–2012. *Journal of Empirical Research on Human Research Ethics* 2014; **9**(2): 24-40.
  73. OKWUNDU CI, UTHMAN OA, **SMITH J**. Transcutaneous screening for hyperbilirubinemia in neonates (Protocol). *Cochrane Database of Systematic Reviews* 2014; **4**: 1-8.
  74. PITCHER R, LOMBARD C, **COTTON M, BENINGFIELD S, ZAR HJ**. Clinical and immunological correlates of chest X-ray abnormalities in HIV-infected South African children with limited access to anti-retroviral therapy. *Pediatric Pulmonology* 2014; **49**: 581-588.

75. REICHMAN B, **SCHAAF HS**, PONTALI E, MIGLIORI GB. A new paradigm for multidrug-resistant tuberculosis?. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(8): 884.
76. REIKIE BA, ADAMS RCM, LELIGDOWICZ A, HO K, NAIDOO S, RUCK CE, DE BEER C, PREISER W, **COTTON MF**, SPEERT DP, **ESSER M**, KOLLMANN TR. Altered Innate Immune Development in HIV-Exposed Uninfected Infants. *JAIDS-Journal of Acquired Immune Deficiency Syndromes* 2014; **66**(3): 245-255.
77. ROHNER E, VALERI F, MASKEW M, PROZESKY HW, **RABIE H**, GARONE D, DICKINSON D, CHIMBETETE C, LUMANO-MULENGA P, SIKAZWE I, WYSS N, CLOUGH-GORR K, EGGER M, CHI BH, BOHLIUS J. Incidence rate of Kaposi Sarcoma in HIV-infected patients on antiretroviral therapy in Southern Africa: A prospective multicohort study. *JAIDS-Journal of Acquired Immune Deficiency Syndromes* 2014; **67**(5): 547-554.
78. SATTAR S, VAN SCHALKWYK C, **CLAASSENS M**, **DUNBAR R**, **FLOYD S**, ENARSON DA, GODFREY-FAUSSETT P. Symptom reporting among prevalent tuberculosis cases who smoke, are HIV-positive or have hyperglycaemia. *\*\*MISSING JOURNAL\*\** 2014; **4**(4): 222-225.
79. **SCHAAF HS**, **GARCIA-PRATS AJ**, **HESELING AC**, **SEDDON JA**. Managing multidrug-resistant tuberculosis in children: review of recent developments. *Current Opinion in Infectious Diseases* 2014; **27**: 211-219.
80. **SCHAAF HS**, **HESELING AC**, RAUTENBACH C, **SEDDON JA**. Trends in childhood drug-resistant tuberculosis in South Africa: a window into the wider epidemic?. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(7): 770-773.
81. **SEDDON JA**, **GARCIA-PRATS AJ**, KAMPMANN B, **SCHAAF HS**, **HESELING AC**. Toxicity and Tolerability of Fluoroquinolonebased Preventive Therapy for Childhood Contacts of Multidrug-resistant Tuberculosis. *Pediatric Infectious Disease Journal* 2014; **33**(10): 1098-1099.
82. **SEDDON JA**, **HESELING AC**, GODFREY-FAUSSETT P, **SCHAAF HS**. High treatment success in children treated for multidrug-resistant tuberculosis: an observational cohort study. *Thorax* 2014; **69**: 471-477.
83. **SEDDON JA**, PADAYACHEE T, DU PLESSIS AM, **GOUSSARD P**, **SCHAAF HS**, LOMBARD C, **GIE R**. Teaching chest X-ray reading for child tuberculosis suspects. *International Journal of Tuberculosis and Lung Disease* 2014; **18**(7): 763-769.
84. SHAH SK, PERSAUD D, WENDLER DS, TAYLOR HA, GAY H, **KRUGER M**, GRADY C. Research into a functional cure for HIV in neonates: the need for ethical foresight. *Lancet Infectious Diseases* 2014; **14**(9): 893-898.
85. SIMANI OE, IZU A, VIOLARI A, **COTTON MF**, VAN NIEKERK N, ADRIAN P, MADHI SA. Effect of HIV-1 exposure and antiretroviral treatment strategies in HIV-infected children on immunogenicity of vaccines during infancy. *Aids* 2014; **28**: 531-541.
86. SIMBIRI K, BIDDLE J, KINYERA T, WERE PA, TENGE C, KAWIRA E, MASALU N, SUMBA PO, LAWLER-HEAVNER J, **STEFAN DC**, BUONAGURO FM, ROBINSON D, NEWTON R, HARFORD J, BHATIA K, MBULAITEYE SM. Burkitt Lymphoma Research in East Africa: Highlights from the 9th African Organization for Research and Training in Cancer Conference held in Durban, South Africa in 2013. *Infectious Agents and Cancer* 2014; **9**: 32.
87. **SOLOMONS R**, VISSER DH, FRIEDRICH SO, DIACON AH, HOEK KGP, MARAIS BJ, **SCHOEMAN JF**, VAN FURTH AM. Improved diagnosis of childhood tuberculous meningitis using more than one nucleic acid amplification test. *International Journal of Tuberculosis and Lung Disease* 2014; **19**(1): 74-80.

88. **SOLOMONS R, WESSELS M**, VISSER DH, **DONALD PR**, MARAIS BJ, **SCHOEMAN JF**, VAN FURTH AM. Uniform research case definition criteria differentiate tuberculous and bacterial meningitis in children. . *Clinical Infectious Diseases* 2014; **59**(11): 1574-1578.
89. **SOLOMONS RS**, VAN ELSLAND SL, VISSER DH, HOEK KGP, MARAIS BJ, **SCHOEMAN JF**, VAN FURTH AM. Commercial nucleic acid amplification tests in tuberculous meningitis - a meta-analysis. *Diagnostic Microbiology and Infectious Disease* 2014; **78**(2014): 398-403.
90. **STEFAN DC, LUTCHMAN R**. Burkitt lymphoma: epidemiological features and survival in a South African centre. *Infectious Agents and Cancer* 2014; **9**: 19.
91. **STEFAN DC**, STONES DK, **VAN ZYL A, UYS R**. The cost of nephroblastoma treatment in South Africa: A very cost-effective investment with guidelines for the rest of Africa. *South African Journal of Child Health* 2014; **8**(4): 128-132.
92. **STEFAN DC**. Effect of HIV infection on the outcome of cancer therapy in children. *Lancet Oncology* 2014; **15**: e562-567.
93. STONES DK, **DE BRUIN G**, ESTERHUIZEN TM, **STEFAN DC**. Childhood cancer survival rates in two South African units. *SAMJ South African Medical Journal* 2014; **104**(7): 501-504.
94. SY SKB, **INNES S**, DERENDORF H, **COTTON MF**, ROSENKRANZ B. Estimation of intracellular concentration of Stavudine Triphosphate in HIV-infected children given a reduced dose of 0.5 milligrams per kilogram twice daily. *Antimicrobial Agents and Chemotherapy* 2014; **58**(2): 1084-1091.
95. TECHNAU K, SCHOMAKER M, KUHN L, MOULTRIE H, COOVADIA A, ELEY B, **RABIE H**, WOOD R, COX H, VIZCAYA LS, MUCHIRI E, DAVIES M-A. Virologic Response in Children Treated With Abacavir compared With Stavudine-based Antiretroviral Treatment. A South African Multi-Cohort Analysis. *Pediatric Infectious Disease Journal* 2014; **33**(6): 617-622.
96. THEE S, GARCIA-PRATS AJ, MCILLERON H, WIESNER L, CASTEL S, NORMAN J, DRAPER HR, **VAN DER MERWE P-L, HESSELING AC, SCHAAF HS**. Pharmacokinetics of ofloxacin and levofloxacin for prevention and treatment of multidrug-resistant tuberculosis in children. *Antimicrobial Agents and Chemotherapy* 2014; **58**(5): 2948-2951.
97. **VAN NIEKERK E, AUTRAN CA, NEL DG, KIRSTEN GF, BLAAUW R, BODE L**. Human Milk Oligosaccharides Differ between HIV-Infected and HIV-Uninfected Mothers and Are Related to Necrotizing Enterocolitis Incidence in Their Preterm Very-Low-Birth-Weight Infants 1–3. *Journal of Nutrition* 2014; **144**(8): 1227-1233.
98. VAN NIEKERK E, BLAAUW R, **KIRSTEN GF**. The role of human milk oligosaccharides in preventing necrotising enterocolitis and human immunodeficiency virus transmission. *South African Journal of Clinical Nutrition* 2014; **27**(2): 51-55.
99. VAN NIEKERK E, **KIRSTEN GF**, NEL DG, BLAAUW R. Probiotics, feeding tolerance, and growth: A comparison between HIV-exposed and unexposed very low birth weight infants. *Nutrition* 2014; **30**(6): 645-653.
100. **VAN TOORN R, SCHAAF HS**, LAUBSCHER JA, VAN ELSLAND SL, **DONALD PR, Schoeman JF**. Short Intensified Treatment in Children with Drug-susceptible Tuberculous Meningitis. *Pediatric Infectious Disease Journal* 2014; **33**(3): 248-252.
101. **VAN TOORN R, SCHAAF HS, Schoeman JF**. In reply: Short Intensified Treatment in Children with Drug-susceptible Tuberculous Meningitis. *Pediatric Infectious Disease Journal* 2014; **33**(9): 993-994.
102. **VAN TOORN R, SCHAAF HS, SOLOMONS R**, LAUBSCHER JA, **Schoeman JF**. The value of transcranial Doppler imaging in children with tuberculous meningitis. *Childs Nervous System* 2014; **30**(10): 1711-1716.

103. **VAN TOORN R, SOLOMONS R.** Update on the diagnosis and management of tuberculous meningitis in children. *Seminars in Pediatric Neurology* 2014; **21**(1): 12-18.
104. VON BIBRA M, ROSENKRANZ B, PRETORIUS E, **RABIE H, EDSON C, LENKER U, COTTON M, KLINKER H.** Are lopinavir and efavirenz serum concentrations in HIV-infected children in the therapeutic range in clinical practice?. *Paediatrics and International Child Health* 2014; **34**(2): 138-141.
105. **WALTERS E, DUVENHAGE J, DRAPER HR, HESSELING AC, VAN WYK SS, COTTON MF, RABIE H.** Severe manifestations of extrapulmonary tuberculosis in HIV-infected children initiating antiretroviral therapy before 2 years of age. *Archives of Disease in Childhood* 2014; **99**(11): 998-1003.
106. **WALTERS E, GOUSSARD PL, BOSCH C, HESSELING AC, GIE RP.** GeneXpert MTB/RIF on bronchoalveolar lavage samples in children with suspected complicated intrathoracic tuberculosis: A pilot study. *Pediatric Pulmonology* 2014; **49**(11): 1133-1137.
107. WILLIAMS JR, SPRUMONT D, HIRTLE M, ADEBAMOWO C, BRAUNSCHWEIGER P, BULL S, BURRI C, CZARKOWSKI M, TE FAN C, FRANCK C, GEFENAS E, GEISSBUHLER A, KLINGMANN I, KOUYATÉ B, KRAEHENBHUL J-P, **KRUGER M, MOODLEY K, NTOUMI F, NYIRENDA T, PYM A, SILVERMAN H, TENORIO .** Consensus standards for introductory e-learning courses in human participants research ethics. *Journal of Medical Ethics* 2014; **40**(6): 426-428.
108. **ZÖLLNER EW, LOMBARD CJ, GALAL U, HOUGH S, IRUSEN E, WEINBERG E.** Screening for hypothalamic-pituitary-ad renal axis suppression (HPAS) in asthmatic children is not possible when employing clinical and biochemical parameters. *Current Allergy & Clinical Immunology* 2014; **27**(3): 236-237.
109. **ZÖLLNER EW.** Effects of corticosteroids on adrenal function in children with asthma. *Current Allergy & Clinical Immunology* 2014; **27**(4): 189-192.
110. ZVADA ZP, DENTI P, **DONALD PR, SCHAAF HS, THEE S, SEDDON JA, SEIFART HI, SMITH PJ, MCILLERON H, SIMONSSON USH.** Population pharmacokinetics of rifampicin, pyrazinamide and isoniazid in children with tuberculosis: in silico evaluation of currently recommended doses. *Journal of Antimicrobial Chemotherapy* 2014; **69**(5): 1339-1349.

#### **Journal Articles (Non-subsidised)**

1. **BEKKER A, GOUSSARD PL, GIE RP, ANDRONIKOU S.** Congenital anterior mediastinal teratoma causing severe airway compression in a neonate. *BMC Case Reports* 2013; 26 September: 201205.
2. **BRAND S, DRAPER HR, ENARSON DA, BEYERS N, CLAASSENS M.** Factors influencing increased expertise for a sustainable workforce at a research centre in South Africa. *Public Health Action* 2014; **4**(4): 276-280.
3. **DRAMOWSKI A, FRIGATI L, RABIE H, COTTON MF.** Malaria in Children Prevention and Management. *Infectious Disorders - Drug Targets* 2013; **13**: 303-311.
4. **GOUSSARD PL, ANDRONIKOU S, SEMAKULA-KATENDE NS, GIE RP.** Calcification and airway stenosis in a child with chondrodysplasia calcificans punctate. doi:10.1136/bcr-2014-205087 . *BMJ Case Reports* 2014; **22 September**: 205087.
5. **GOUSSARD PL, GIE RP, ANDRONIKOU S, FOURIE PB.** A correctable cause of lung collapse in an adolescent with severe scoliosis causing compression of the bronchial tree. . *BMJ Case Reports* 2013; **15 November**: 202017.

6. **GOUSSARD PL, GIE RP, ANDRONIKOU S, MORRISON J.** Organic foreign body causing lung collapse and bronchopleural fistula with empyema. doi:10.1136/bcr-2014-204633 . *BMJ Case Reports* 2014; **4 April**: 204633.
7. **GOUSSARD PL, GIE RP, JANSON J, SCHUBERT PT.** Intratracheal inflammatory myofibroblastic tumour mimicking severe acute asthma. *BMC Case Reports* 2013; **4 July**: 010232.
8. **GOUSSARD PL, GIE RP, RABIE H, ANDRONIKOU S.** Nocardia pneumonia in an HIV-infected neonate presenting as acute necrotising pneumonia. *BMC Case Reports* 2013; **31 July**: 010479.
9. **GOUSSARD PL.** The radiological evaluation of childhood tuberculosis. *Paediatric Focus* 2014; **5(1)**: 6-8.
10. HEUNIS JC, KIGOZI NG, VAN DER MERWE S, CHIKOBVU P, **BEYERS N.** Sex-related trends in non-conversion of new smear-positive tuberculosis patients in the Free State, South Africa. *Public Health Action* 2014; **4(1)**: 66-71.
11. KAGUTHI G, NDUBA V, NYOKABI J, ONCHIRI F, **GIE RP, BORGDORFF MW.** Chest Radiographs for Pediatric TB Diagnosis: Interrater Agreement and Utility. *Interdisciplinary Perspectives on Infectious Diseases* 2014; **291841**: 1-8.
12. KASS N, CHURCHYARD G, AYLES H, **BEYERS N, GODFREY-FAUSSETT P, CHAISSON RE.** Applying Ethical Principles to International Community-Based Research: A Case Study from the Consortium to Respond Effectively to the AIDS-TB Epidemic (CREATE). *IRB Ethics and Human Research* 2014; **36(3)**: 1-8.
13. MASON S, MOUTLOATSE GP, VAN FURTH AM, **SOLOMONS R, VAN REENEN M, REINECKE C, KOEKEMOER G.** KEMREP: A New Qualitative Method for the Assessment of an Analyst's Ability to Generate a Metabolomics Data Matrix by Gas Chromatography–Mass Spectrometry. *Current Metabolomics* 2014; **2(1)**: 15-26.
14. MORSHEIMER MM, **DRAMOWSKI A, RABIE H, COTTON MF.** Paediatric ART outcomes in a decentralised model of care in Cape Town, South Africa. *South African Journal of HIV Medicine* 2014; **15(4)**: 148-153.
15. **NAIDOO P, WILLS C, ENARSON DA, BEYERS N.** How do we measure the success of operational research?. *Public Health Action* 2014; **4(2)**: 74.
16. PICKEN SC, WILLIAMS S, HARVEY J, **ESSER M.** The routine paediatric human immunodeficiency virus visit as an intervention opportunity for failed maternal care, and use of point-of-care CD4 testing as an adjunct in determining antiretroviral therapy eligibility. *South African Journal of Infectious Diseases* 2014; **29**: 70-74.
17. ROHNER E, VALERI F, MASKEW M, PROZESKY HW, **RABIE H, GARONE D, DICKINSON D, CHIMBETETE C, LUNA-FINEMAN S, SIKAZWE I, WYSS N, CLOUGH-GORR KM, EGGER M, CHI BH, BOHLIUS J.** Incidence Rate of Kaposi Sarcoma in HIV-Infected Patients on Antiretroviral Therapy in Southern Africa: A Prospective Multicohort Study. *Journal of Acquired Immune Deficiency Syndrome* 2014; **67(5)**: 547-554.
18. **SCHAAF HS.** Multi-drug resistant tuberculosis in children. *Paediatric Focus* 2014; **5(1)**: 8-10.
19. **SEDDON JA, GODFREY-FAUSSETT P, HESSELING AC, SCHAAF HS, ENARSON DA.** Preventive therapy for children following contact with a tuberculosis source case: cause for debate in a high-burden setting?. *Southern African Journal of Infectious Diseases* 2014; **29(3)**: 120-124.
20. **STEFAN DC, KRUGER M.** Incidence of childhood cancer in Namibia: the need for registries in Africa. *Pan African Medical Journal* 2014; **17**: 191.

21. **STEFAN DC.** Childhood cancer in Africa: Past, Present, and Future. *Journal of African Cancer* 2014; **6**(3): 127-128.
22. VISSER JH, **UYS R, VAN ZYL A, STEFAN DC.** Nephroblastoma - A 25-year review of a South African unit. *Journal of Medicine and Life* 2014; **7**(3): 445-449.

### Books

1. **M KRUGER, P NDEBELE, L HORN,** Editors: *Research Ethics in Africa. A Resource for Research Ethics Committees.* Sun Media Publishers, July 2014: 206 pp.
2. **GIE RP, BEYERS N.** *Getting Started in Clinical Research: Guidance for junior researchers.* Sun Media, Stellenbosch 2014:155 pp.

### Chapters in Books

1. BALAGADDE-KAMBUGU J, OREM J, **STEFAN DC.** HIV and malignancy in children. In *Pediatric Hematology-Oncology in Countries with Limited Resources*, Springer, New York, USA, 2014: 377-391.
2. CHI PC, HORN L, **KRUGER M.** Risk-benefit Assessment. In *Research Ethics in Africa: A Resource for Research Ethics committees*, SUN PRESS, Stellenbosch, South Africa, 2014: 63-70.
3. **COTTON MF, KROON SM, RABIE H.** HIV in pregnancy: diagnostic and therapeutic implications for the newborn. In *ERS - Monograph - Pulmonary complication of HIV*, European Respiratory Society, Sheffield, United Kingdom, 2014: 71-83.
4. **COTTON MF, SCHAAF HS, RABIE H, MARAIS BJ.** Tuberculosis. In *Coovadia's Paediatrics & Child Health*, Oxford University Press, Goodwood, South Africa, 2014: 354-378.
5. **GIE RP.** Respiratory disorders. In *Coovadia's Paediatrics and Child Health*, Oxford University Press, Goodwood, South Africa, 2014: 537-563.
6. **KRUGER M, BARSDORF N.** Ancillary care in Research. In *Research Ethics in Africa: A Resource for Research Ethics committees*, SUN PRESS, Stellenbosch, South Africa, 2014: 153-156.
7. **KRUGER M, HORN L.** Introduction. In *Research Ethics in Africa*, Sun Media Publishers, Stellenbosch, South Africa, 2014: 1-2.
8. **KRUGER M.** Children as research participants. In *Research Ethics in Africa: A Resource for Research Ethics committees*, Sun Media Publishers, Stellenbosch, South Africa, 2014: 91-98.
9. **KRUGER M, KLING S.** Ethical issues in Paediatrics. In *Coovadia's Paediatrics and Child Health*, Oxford University Press, Goodwood, South Africa, 2014: 795-800.
10. **KRUGER M.** Neoplastic disorders. In *Coovadia's Paediatrics and Child Health*, Oxford University Press, Goodwood, South Africa, 2014: 468-482.
11. MURGUIA-PENICHE T, **KIRSTEN GF.** Meeting the challenge of providing neonatal nutritional care to very or extremely low birth weight infants in low-resource settings. In *Nutritional Care of Preterm Infants – Scientific basis and practical guidelines*, Karger, Basel, Switzerland, 2014: 278-296.
12. NDEBELE P, MWALUKO G, **KRUGER M, OUWE O, OUKEM-BOYER M, ZIMBA M.** History of Research Ethics Review in Africa. In *Research Ethics in Africa*, Sun Media Publishers, Stellenbosch, South Africa, 2014: 3-10.
13. **NEL ED, COOKE ML, GODDARD EA.** Gastrointestinal disorders. In *Coovadia's Paediatrics and Child Health*, Oxford University Press, Goodwood, South Africa, 2014: 510-536.

14. **SCHOEMAN JF, VAN TOORN R.** Tuberculosis. In *Central Nervous System Infections in Childhood*, Mac Keith Press, London, United Kingdom, 2014: 202-218.
15. **STEFAN DC.** Childhood Cancer in Low-income and middle-income countries in the twenty-first century. In *Pediatric Hematology-Oncology in Countries with Limited Resources*, Springer, New York, USA, 2014: 1-5.
16. **STEFAN DC.** Clinical trials. In *Handbook for Cancer Research in Africa*, World Health Organization Regional office for Africa, Republic of Congo, Congo, 2014: 117-127.
17. **STEFAN DC.** Developing and maintaining effective North-South, South-South and South-South-North partnerships. In *Handbook for Cancer Research in Africa*, World Health Organization regional office for Africa, Republic of Congo, Congo, 2014: 15-22.
18. **STEFAN DC.** Malignancies in children with HIV infection. In *Cancers in People with HIV and AIDS*, Springer, Bethesda, USA, 2014: 349-357.

## Special Achievements and Highlights

Prof Simon Schaaf received the National Order of Mapungubwe from President Jacob Zuma on 27 April for his excellent contribution in the field of medical sciences, specifically his ground-breaking focus on drug-resistant tuberculosis.

Proff Nulda Beyers, Robert P Gie and H Simon Schaaf appointed as Distinguished Professors at Stellenbosch University from 1 July 2014 for 5 year period.

Prof Mark Cotton was appointed as Head of Clinical Services: Paediatric Infectious Diseases.

Dr Ekkehard Zöllner was promoted to Associate Professor in August 2014.

Performance awards for exceptional service:

- TBH = 16
- US = 25 (including DTTC = 11; Kidcru = 7; S2S = 3)

## International visitors & lectures:

1. Stephanie Williamson, Deputy Director of Redevelopment, Great Ormond Street Hospital for Children NHS Foundation Trust, London: 11 March 2014
2. Prof Lars Bode – Associate Professor in Pediatrics - Division of Neonatology and Division of Pediatric Gastroenterology, Hepatology and Nutrition, University of California, San Diego – Lecture: Human milk oligosaccharides: Every baby needs a sugar mama: 26 March 2014
3. Prof Mary Rutherford – Professor in Perinatal Imaging, Imperial College of Science, Technology and Medicine, Hammersmith Campus, London – Lecture: MR imaging of the fetal brain: 2 April 2014
4. Prof.dr. A. Marceline van Furth & Dr Martijn van der Kuip, Pediatric Infectious Diseases and Immunology, VU Medical Center, Amsterdam: 3 July 2014 & 8 October 2014
5. Prof Sara Browne, Associate Professor of Clinical Medicine, Department of Medicine, Division of Infectious Diseases, University of California, San Diego; San



- Diego, California - Lecture: Medication Adherence in the 21st Century: 23 July 2014
6. Professor Michael Boivin, Associate Professor, Neurology, Michigan State University – Lecture: Neurodevelopmental interventions and assessments with African children with HIV: 23 July 2014
  7. Prof W Bitter: Department of Medical Microbiology and Infection control, VU University Medical Centre, Amsterdam: 8 October 2014

## **Conferences/Workshops/Training Courses: Participants & Attendees**

### **International**

Prof M Kruger

1. World Federation of Hemophilia GAP/MASAC Education Symposium, Kempton Park, 6-7 November 2014.  
Invited speaker – Ethical issues in haemophilia care: Resource allocation – Kruger M
2. 46th SIOP Congress of the International Society of Paediatric Oncology (SIOP): October 22-25, 2014, Toronto, Canada  
Poster presentation: RB1 mutations in South African children with retinoblastoma: Kruger M, Wainwright RD, De la Rey M, Van Rensburg EJ.
3. SAPA & SAAPS Growing Child Health in Africa Congress, CTICC, Cape Town, 10-14 September 2014  
Session Chair - Kruger M  
Invited speaker – National LCH data SIOP – Kruger M  
Invited speaker - The ethics of resource allocation for Rare Diseases - Kruger M  
Oral presentation - Off label drug use in paediatrics - our ethical responsibility - Kruger M
4. 17<sup>th</sup> World Congress of Basic & Clinical Pharmacology, Cape Town, 13-18 July 2014  
Poster presentation:  
Unlicensed and Off-Label Drug Use in the Neonatal Intensive Care Unit (NICU) of Tygerberg Hospital. Thomas A, Kruger M  
Unlicensed and Off-Label Drug Use In Paediatric Ambulatory Clinics In Africa. Ramoroka S, Makiwane MM, Rosenkranz B, Kruger M  
Oral presentation  
Unlicensed and off Label Drug Use in Highly Specialised Paediatric Wards. Kooblal Y, Kruger M
5. Seventh EDCTP Forum, Berlin, Germany, 30 June -2 July 2014. Oral presentation: Research ethics in Africa: A resource for research ethics committees. L Horn & M Kruger.
6. 11<sup>th</sup> Continental Meeting of the International Society of Paediatric Oncology in Africa: Dar Es Salaam, Tanzania, 23-25 April 2014.  
Opening & Keynote address  
Ethics and Evidence Based Medicine, especially in the context of rare diseases. Kruger M.  
Oral presentation:

Unlicensed and off label drug use in children in a large central hospital in South Africa. Y Kooblal, Kruger M.

Prof MF Cotton

1. Appointed themed discussion leader at CROI 2014 in Boston, MA, USA; Tentative Themed Discussion Topic: Response to Early ART Initiation in Infants
2. ICID Conference: April 5, 2014, CTICC. Oral presentation: Health Outcomes in HIV-exposed Uninfected Children
3. SAGOG Conference: May 20, 2014 – Trilogy 9: HIV. Oral presentation: Treat infants to cure

Dr ED Nel

1. 20-21 Jan 2014: PANCOF preconference course on Paediatric Gastrointestinal Endoscopy, Calabar, Nigeria. Dr E D Nel invited to present the course and act as "International Resource Person"
2. Third ESPGAHN Goes Africa Post Graduate Course in Paediatric Gastroenterology hosted at the FMHS, March 2014

Prof DC Stefan

1. Organised and presented at the Cancer Registration Workshop: Childhood cancer registration in Africa, 21-22 April 2014, Dar Es Salaam, Tanzania

Dr NM Parker

1. On the organizing committee and faculty of Critical Care Congress, 26-30 November 2014, Cape Town

<sup>1</sup>Prof HS Schaaf

1. Plenary speaker at the 51st Annual Convention of the Philippine Pediatric Society" on Global burden of paediatric tuberculosis. Also presented lunch time symposium on Multidrug-resistant tuberculosis in children attended by 1500 paediatricians.
2. 51st Annual Convention of Philippine Pediatric Society, 6-9 April 2014, Manila, Philippines  
Invited Plenary speaker: Global burden of paediatric tuberculosis  
Invited speaker: Multidrug-resistant tuberculosis in children.
3. TB in children – an update. 5th Botswana International HIV Conference. 20-23 August 2014, Gaborone, Botswana (Keynote speaker).
4. Diagnostic issues in childhood tuberculosis. Paediatric ID Workshop, SAPA & SAAPS Congress, 10-13 September 2014, CTICC, Cape Town, South Africa

<sup>11</sup>Dr A Bekker

1. 45th Union Conference, Barcelona, Spain, 28 October – 1 November 2014 (funded by SU Scientific Travel Fund)  
Presentation: Maternal and infant outcomes from a study in Cape Town, South Africa

Prof PR Donald

2. All India Institute of Medical Sciences conference on Childhood Tuberculosis, 15-16 November 2014  
Invited speaker and participant; delivered the keynote opening address: The epidemiology and natural history of tuberculosis with the emphasis on children and a second lecture: Management principles and primary regimen.

Dr E Malek

---

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

1. World Association for Infant Mental Health Conference, Edinburgh, Scotland, 14-18 June 2014

Dr R Uys

1. World Foundation of Haemophilia International Congress, Melbourne, Australia, 11-15 May 2014

Dr A Kanyamuhunga

1. Haemophilia Academy, Edinburgh, Scotland, 27-31 October 2014

Dr G Kali

1. 10<sup>th</sup> International Congress on Tropical Paediatrics, Nairobi, Kenya, 24-27 August 2014

Invited to present at pre-congress neonatal symposium on:

- a) CPAP: Physiological basis for use in neonatal practice, pros and cons.
- b) Therapeutic Hypothermia in asphyxiated newborn infant: appropriate application, pros and cons

2. 29<sup>th</sup> International Workshop on Surfactant Replacement, Valencia, Spain, 29 May - 1 June 2014

SAPA presentations by other members of department:

Prof MF Cotton Update of Kawasaki Disease

- Controversies in the management of HIV infection during the neonatal period

Dr R Solomons What's new in therapy for tuberculous sclerosis

Dr A Bekker Maternal and infant tuberculosis

Prof RP Gie Developments in childhood TB for the practicing clinician

Dr R van Toorn Update on TB meningitis

Prof J Smith Panel Discussion: Newborn screening in South Africa: what are the priorities

Panel Discussion: Infant Male Circumcision: Cultural identity: the children's act and the impact of HIV/AIDS

Dr J Lawrenson Special problems in general paediatric: when is it cardiac?

Prof S Kling Update on childhood asthma

Dr Y Visser Nephroblastoma - A 25-year review of a South African unit

Dr Y Kooblal Unlicensed and off label drug use in children in a large central hospital in South Africa

Dr F vd Westhuizen The identification of risk factors for adverse clinical outcome in patients aged three months to five years, admitted to Worcester Provincial Hospital with acute gastroenteritis

Dr L van Dyk Familial-environmental risk factors in South African children with ADHD: A case-control study

## National

Prof M Kruger

1. Paediatric Brain Tumour Workshop, Red Cross Children's War Memorial Hospital, Cape Town, 29-30 November 2014

Session Chair - Kruger M

Invited speaker – The big debate: In paediatric brain tumours, improved quality of life in fewer survivors is preferable to higher overall survival rates regardless of quality of life - Kruger M (For), D Reynders (Against) (Ethics)

2. 2nd Metabolic Disorder Symposium, University of Pretoria, 28-29 November 2014

Invited speaker – Management of families with a child with an unknown diagnosis – Kruger M (Ethics)

3. 18<sup>th</sup> Annual Paediatric Anaesthesia Congress of South Africa, Cape Town, 6-8 November 2014

Invited speaker – Off label and unregistered drug use in paediatrics – our ethical responsibility- Kruger M

4. Here by Lungs Trilogy Conference, Lanzerac Hotel, Stellenbosch, 22-23 March 2014  
Welcoming address - Kruger M  
Invited speaker – Off label drug use in paediatrics - our ethical responsibility – Kruger M

Proff Johan Smith, Robert Gie and Dr Pierre Goussard

1. Organised the Here be Lungs Conference which was held from 21-22 March 2014 at the Lanzerac Hotel and were attended by four international and numerous national experts on childhood lung disease.

Proff M Kruger & J Smith

Organised our annual Academic Day of Excellence which was held on 19 November 2014 at the Faculty of Medicine and Health Sciences. Speakers from the department included:

Prof Mariana Kruger - Welcoming

Prof Sharon Kling - Ethics: Can we afford to treat orphan diseases?

Prof Mariana Kruger - Inherited cancer risk: Retinoblastoma

Dr Pierre Goussard - What does the child, PIG and ABC (A) have in common?

Dr Cilla Springer - The curious incidence of a rare disorder

Dr Christel du Buisson - Picking at bones

Prof Ekkehard Zöllner - Ambiguous genitalia

Prof MF Cotton

1. Co-chair the symposium "Paediatric/Adolescent HIV" together at the 16<sup>th</sup> ICID, Cape Town, April 2014
2. ICID Conference: April 5, 2014, CTICC. Oral presentation: Health Outcomes in HIV-exposed Uninfected Children
3. SAGOG Conference: May 20, 2014 – Trilogy 9: HIV. Oral presentation: Treat infants to cure

<sup>11</sup>Prof HS Schaaf

1. Organised Paediatric TB Symposium at the 4<sup>th</sup> South African TB conference, Durban, 10-13 June 2014

Speakers included:

Prof Anneke C Hesselink: Pharmacokinetics of second-line anti-TB drugs for children

Dr Liz Walters: Diagnostics in childhood tuberculosis (excluding immunological diagnosis)

Prof H Simon Schaaf: Preventive therapy for tuberculosis in children (both drug-susceptible and drug-resistant TB)

2. Diagnostic issues in childhood tuberculosis. Paediatric ID Workshop, SAPA & SAAPS Congress, 10-13 September 2014, CTICC, Cape Town, South Africa

---

<sup>1</sup> Also affiliated with Desmond Tutu TB Centre

3. Progress and challenges in diagnosis of tuberculosis in children. Childhood TB: The elephant in the room. Workshop USAID/NDOH/Univ Pretoria. 18 September 2014, CSIR, Pretoria, South Africa

Dr E Malek

1. Priorities in Perinatal Care Conference, Cape Town, March 2014
2. SAPA Conference, 10-15 September 2014
3. National Child Health Priorities Conference, Bloemfontein, 3-5 December 2014

Dr A van Zyl

4. SACCSG ( South African Childhood Cancer Study Group) & SAPA 13 Sept 2014, CTICC, Cape Town
5. MASAC, Johannesburg, 6 - 7 November 2014

Dr R Uys

1. SACCSG(South African Childhood Cancer Study Group & SAPA 13 September 2014 CTICC, Cape Town

Dr A Kanyamuhunga, Dr V Netshituni

2. Paediatric Brain Tumour Workshop ,UCT, 29-30 September 2014
3. WBMT (Worldwide Network for Bone Marrow Transplantation) , Cape Town, 14-16 November 2014

Dr A Kanyamuhunga

1. Immunology School, Durban, 06-09 August 2014

## **Regional**

Dr A van Zyl, Dr R Uys, Dr V Netshituni

1. Bioethics, University of Stellenbosch, 24 October 2014

**Part 5**  
**CENTRES**

**THE CHILDREN'S INFECTIOUS DISEASES CLINICAL RESEARCH UNIT (KID-CRU)**

**Director: Prof MF Cotton**

<u>Posts (full-time)</u>	<u>Number</u>	<u>Filled</u>
Director	1	1
Deputy Director	1	1
Neurodevelopmental Paediatrician	1	1
Paediatrician	1	1
Medical Officers	10	9
Pharmacists	3	3
Pharmacist assistant	1	1
Social Worker	1	1
Project Managers	4	4
Manager, Logistics & HR	1	1
Admin Officers	2	2
PA & Assistant Project manager	1	1
Cleaners	2	2
Data manager	1	1
Data Entry Officers	3	3
Drivers	3	3
Study Coordinators	2	1
Counsellors	12	12
Registered Nurses	8	8
Staff Nurses	8	8
Testers	2	2

**Outpatient Facility**

Number of active studies: 18  
 Number of patients on study: 979  
 Number of study visits: 3917

<b>Date</b>	<b>Name</b>	<b>Meetings/Conferences</b>	<b>Place</b>
3 – 6 March	Prof Cotton – Principal Investigator	CROI 2014 <ul style="list-style-type: none"> <li>Themed Discussion Leader: Discussion Topic: Response to Early ART Initiation in Infants</li> </ul>	Boston, USA
17 – 19 March	Prof Cotton	TBTC Meeting Chairman: Breakout Session IV: Design of Clinical Trials and Epidemiology	Atlanta, USA
2 – 5 April	Prof Cotton	16th International Congress on Infectious Diseases <ul style="list-style-type: none"> <li>Member of Local Organising Committee</li> <li>Speaker: "Health Outcomes in HIV-exposed Uninfected Children"</li> </ul>	Cape Town, SA
20 May	Prof Cotton	SAGOG Conference <ul style="list-style-type: none"> <li>Trilogy 9: HIV - Title: Treat infants to cure</li> </ul>	Cape Town, SA
16 – 20 June	Prof Cotton	IMPAACT Annual Meeting - Member of the primary therapy study group	Washington DC, USA
23 – 27 June	Prof Cotton	Annual AIDS Clinical Trials Group Network Meeting	Washington DC, USA
30 June	Prof Cotton	Prestigious Research Lecture Series – University of Witwatersrand <ul style="list-style-type: none"> <li>Commentator: Topic of presentation and discussion: "Are the bugs winning the war?"</li> </ul>	Pretoria, SA
18 – 19 July	Prof Cotton	6th International Workshop on HIV Pediatrics <ul style="list-style-type: none"> <li>Member of international organizing committee</li> <li>Chair to session: Management of Pediatric HIV</li> </ul>	Melbourne, Australia
21 – 25 July	Prof Cotton	IAS Conference – 5th International workshop on Pediatric HIV <ul style="list-style-type: none"> <li>Speaker - Session title: Smooth Transitions: From Paediatric to Adolescent Care for Perinatally-infected Children</li> <li>Panellist: Press conference on "Dual challenges: drug resistant TB and HIV coinfection"</li> <li>Chairman of PHTI Stakeholder briefing on 21 July at IAS, Melbourne</li> </ul>	Melbourne, Australia
30 August	Prof Cotton	The South African Medical Association Conference	Durban, SA

		<ul style="list-style-type: none"> <li>• Speaker - Session 3: Reduction in Child Mortality, on “<b>Child Mortality</b>”</li> </ul>	
10 – 14 September	Prof Cotton	South African Paediatric Association and South African Association of Paediatric Surgeons Biennial Congress <ul style="list-style-type: none"> <li>• Chair of Scientific Session: Infectious Diseases</li> <li>• Speaker: Update on Kawasaki Disease</li> <li>• Speaker: Controversies in the management of HIV infection during the Neonatal period</li> </ul>	Cape Town, SA
19 – 21 October	Prof Cotton	11 <sup>th</sup> Vaccinology Scientific Congress	Kwa-Zulu Natal, SA
28 October – 1 November	Prof Cotton	45th Union World Conference	Barcelona, Spain
9 – 13 November	Prof Cotton	RSV Conference <ul style="list-style-type: none"> <li>• Member of Local Organizing Committee</li> </ul>	Cape Town, SA
7 – 8 December	Prof Cotton	PADO2 – WHO Meeting	Geneva, Switzerland
9 – 12 December	Prof Cotton	HIV DART Conference Talk: The Continuum of ARV Use from PMTCT to Treatment in Infants	Miami, Florida
15 – 17 December	Prof Cotton	PENTA 2014 Meeting	Paris, France

## Community Advisory Board activities

### January 2014—No meeting due to school holidays

1. Review of CAB SOP
2. Roles and responsibilities of members
3. Confidentiality statements review
4. Elections
5. Discussion on new IMPAACT budget review and how it will impact CABs
6. Talk: “Trough intracellular concentration of D4T triphosphate compared to children on low dose Stavudine” repeat training by Dr Steve Innes
7. Choreography routine by adolescents from the lighthouse church
8. Handing out of collected gifts to children in wards G7, G9 and G10 by older adolescents and facilitators
9. Role plays based on “ Auntie Stella- teenagers talk about sex
10. Training from IMPAACT CAB glossary-abbreviations
11. Update by Prof Cotton on cure study and the Mississippi baby
12. Role play: TOPIC: MY church says condoms are wrong
13. Spring day competition



## **ADULTS:**

1. Assessment of training needs for the retreat
2. Follow-up discussion of Stavudine study by Dr Steve Innes
3. Discussion on IMPAACT budget review, way forward for RCAB and ICAB
4. Overview of the activities for the year, challenges addressed
5. P1077 option B+ training facilitated by Jean Louw
6. Dialogue with Annie Lennox
7. ACTG coordinators visit to FAMCRU – both adults and adolescents present
8. Discussion on structure of ACTG
9. Visit by Victoria Beckham
10. Follow up training on Stavudine study by Sr Zuki (assistant to Dr Innes)
11. Training on new adolescent study presented by Anita Janse Van Rensburg
12. Review of CAB SOP
13. Visit by NIH officials attended by CABs from FAMCRU, TASK, Delft and Karl Bremer Hospital
14. Presentation on establishment of the CAB and its roles in the community by Marie Theunissen and Jackie Jacobs

## **Partnerships**

1. National: Guideline Committees, EDL consultations
2. NGO: HOPE South Africa
3. International: IMPAACT, ACTG & PENTA

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

1. 5 elective students from UK
2. 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 2014 presentations

## **Awards and Accomplishments**

1. Staff awarded with long service awards certificates (5 – 18 year employment service).
2. Staff Rector's Awards for General Performance: Mr K Smith, Mr G Fourie, Ms H Petersen, Ms M Reid and Ms J Coetzee
3. Joan Coetzee - elected to serve on ACTG committee ( ACTG PDisc)
4. Celebrity Visit: Victoria Beckham – 24 February 2014

## **Publications**

See list of Publications, p. 29-40

## **SOUTH2SOUTH PROGRAMME FOR COMPREHENSIVE FAMILY HIV CARE & TREATMENT**

**Acting Director: Ms C du Toit**

### ***Summary of activities:***

In October 2012 the South to South Programme (hereafter S2S) secured funding through PEPFAR/USAID under Cooperative Agreement No. AID-674-A-12-00031; HIV-Innovations for Improved Patient Outcomes in South Africa. This cooperative agreement ends on 30 September 2017.

For the above mentioned agreement S2S's strategic goal is to develop and institutionalise capacity-building programmes to support the South African Government's health priorities and to improve HIV/TB health outcomes of priority populations: pregnant women, infants, children, adolescents and those who are co-infected by HIV/TB by providing individual-level, organisational-level and systems and policy-level capacity building to health workers and relevant stakeholders; as well as conducting programme evaluation and improvement science research to document evidence-based capacity-building activities.

S2S provided individual level capacity building that is aimed strengthening the Department of Health HIV/TB programmes and overall staff capacity. In 2014 S2S facilitated 6 Paediatric HIV and TB short courses for nurses and doctors working in primary health care. This course was attended by 72 clinicians, representing 8 of the South African Provinces. Facilitators for this course are drawn from a number of departments within the Faculty of Medicine and Health Sciences and include Prof S Schaaf (Dept. Paediatrics), Dr J Maritz (Virology), Dr I McLachlan (Medicine & Health Sciences, Dermatology), Dr A Redfern (Medicine & Health Sciences, Neurodevelopment), Dr Susan Purchase (Hope), Dr G van Zyl (Virology) and G Essack (Medicine & Health Sciences, Paediatric ART).

S2S assisted the Department of Nursing to train the Certificate in Management of ART course. We trained the 4<sup>th</sup> year MBCHB students in quality improvement during their Doctors as Change Agents module and sponsored the end of module celebration.

The National department of Health was supported through 2 initiatives. The first was a national symposium to support the standardization of Integrated Management of Childhood Illnesses (IMCI) within the undergraduate nursing curriculum. This symposium was attended by 45 nurse educators representing 30 nurse training institutions in all 9 provinces. Secondly we assisted with the roll out of National Paediatric HIV stationary through training provincial trainers in the use of the stationary in 2 provinces.

In-service training for government staff was further supported through training in the provinces (Western Cape, Northern Cape and Eastern Cape) on paediatric ART, Prevention of mother to child transmission of HIV and infant feeding. S2S collaborated with an Eastern Cape NGO, Beyond Zero, to adapt and facilitate our Paediatric ART training material locally in the Eastern Cape. We assisted PATA with the revision of a toolkit

for Community Care Workers in Southern Africa, receiving an acknowledgement as co-developers in the document.

S2S provided organizational capacity building that is aimed strengthening the Department of Health HIV/TB programmes, quality improvement/quality assurance systems and overall staff capacity. S2S currently facilitates the elimination of mother-to-child transmission (eMTCT) Quality Improvement Collaborative focusing on the prevention of mother to child transmission (PMTCT) programme. During the end of the year in 2014, S2S also started planning and Integrated Management of Childhood Illness support programme for the Department of Health. A summary of highlights is provided below:

1. eMTCT Quality Improvement Collaborative
  - a. S2S has been facilitating the elimination of mother-to-child transmission (eMTCT) Quality Improvement Collaborative (QIC) in 3 provinces (Eastern Cape, Northern Cape and Western Cape), (Amathole, Cape Winelands and Pixley ka Seme) and 8 sub-districts.
  - b. A key highlight during 2014, include the expansion of sites for the eMTCT QIC. S2S managed to scale up implementation of the S2S eMTCT QIC from an initial 16 pilot sites to 51 full implementation sites between January-March 2014.
  - c. The following impact indicators were supported during the action periods:
    - i. 1) Antenatal 1st visit before 20 weeks rate
    - ii. 2) Antenatal client HIV re-test rate
    - iii. (3) ART initiation rate
    - iv. (4) Mother 6 day postnatal visit rate
    - v. 6 weeks PCR testing rate.
  - d. Other key outputs from the collaboration are listed below:
    - i. 413 health workers reached through Quality Improvement (QI) Coaching
    - ii. 125 health workers were reached through Learning Sessions
    - iii. 15 quality improvement training modules were designed and compiled
2. Initiation of planning for a District Integrated Management of Childhood Illness Support Project
  - a. During 2014, planning began for a new Integrated Management of Childhood Illnesses (IMCI) Support model. A literature search was done, National policies and programmes investigated and discussions held with the National Department of Health (NDoH) IMCI co-ordinators
  - b. An introductory visit was conducted in one District
3. S2S staff attended Paediatric and Prevention of mother-to-child (PMTCT) Technical working groups. Attendance by S2S to these technical working groups allowed S2s to advocate for quality improvement in maternal and child health and support paediatric and adolescent HIV care in South Africa at a national and provincial level.

Another of S2S's strategic objectives is to conduct programme evaluation and improvement science research to develop an evidence-based for capacity building activities in the area of HIV/TB health outcomes of priority populations. The following is a list of programme evaluation and improvement science studies conducted during the year 2014:

1. Training needs assessment of frontline primary health workers (PHC) workers, facility managers, medical doctors, professional nurses, pharmacy assistants, facility-based counsellors, and community health workers (2014-2016).
2. An evaluation of two Quality Improvement Learning Collaborative programmes that aim to improve HIV/TB primary health care services to maternal, infant, child, and adolescent populations (South to South Programme evaluation (2013 - 2017). The 2014 programme evaluation is in progress.
3. A case study of the drivers and barriers of implementation of Baby Friendly Hospital Initiative (BFHI) in a rural hospital in South Africa
4. Knowledge and skills of Home Based carers on TB and HIV care and support at Cyferskuil Community Health Centre, Northwest Province, South Africa. Write-up of study is in progress.
5. Exploring perceptions of partnerships in a Health Systems Strengthening Programme: A Moretele sub-district study. Data Collection in progress.
6. Programme evaluation of a capacity building intervention for the reduction in HIV mother-to-child transmission (Moretele Programme Evaluation).

S2S's programmatic goals are aligned with Stellenbosch University's strategic priorities i.e. research, training, community interaction and collaboration with African universities.

### **Resources:**

All positions are funded 100% by PEPFAR/USAID funds through Cooperative Agreement No. AID-674-A-12-00031; HIV-Innovations for Improved Patient Outcomes in South Africa.

<b>Posts (Full time)</b>	<b>Number</b>	<b>Filled</b>
Principal Investigator (10% FTE)	1	Y
Clinical Programme Director	1	N-1
Operations Director	1	Y
Programme Manager: Health Programmes	1	Y
Programme Manager: Learning Support	1	Y
Programme Manager: Strategic Information	1	Y
Administrative Assistant	1	Y
Travel and Logistics Coordinator	1	Y
Financial Officer	1	Y
Programme Coordinator	2	Y
Programme Data Manager	1	Y
Data Capturer	1	Y
M&E Officer	1	Y
Strategic Information Officer	1	Y
Research Assistant	2	Y
Paediatric Clinical Advisor	1	Y
PMTCT Clinical Advisor	3	Y-1 N-2
HIV/TB Nurse Advisor	4	Y
Nurse Advisor Training	2	Y-1 N-1
Training Designer	2	N-2

APS Advisor	3	Y
Pharmacy Advisor	1	Y

### **New equipment:**

- 30 Dell Latitude E7440 Laptops
- 1 Epson 1410WI Interactive Data Projector
- 1 Interactive Whiteboard

### **Partnerships:**

#### **1. South African Government:**

S2S have ethical approval from the provincial government structures to conduct research:

- Western Cape Department of Health: Cape Winelands District
- Northern Cape Department of Health: Pixley-ka-Seme District
- Eastern Cape Department of Health: Amathole District

S2S have established representation at the following forums of the National Department of Health:

- NDoH Paediatric and Adolescent Technical Working Group
- NDoH PMTCT Technical Working Group
- NDoH PMTCT Steering Committee
- NDoH Human Resources Directorate (Regional Training Centres)
- NDoH Nutrition Directorate

#### **2. Non-governmental organizations:**

S2S is a USAID provincial specialist partner forming part of the broader NGO network of PEPFAR support to the South African Government to improve HIV/TB health outcomes. S2S works closely with the following organisations:

- ANOVA Health Institute: USAID district implementing partner in the Cape Winelands District, Western Cape Province.
- Health Systems Trust: USAID district implementing partner in the Pixley-ka-Seme District, Northern Cape Province.
- IYDSA: USAID district implementing partner in the Amathole District, Eastern Cape Province.
- ITECH: Specialist training support partner to the NDoH Human Resources Directorate and Regional Training Centres.
- Keth'Impilo: Training collaboration on paediatric and adolescent HIV/TB.
- Broadreach: Training collaboration and technical assistance on paediatric and adolescent HIV/TB and eMTCT.
- 20 000+ UKZN: Quality improvement partner organisation.
- Aurum institute: Co-support of the NDoH PMTCT Steering Committee on quality improvement.
- WRHI: Co-support of the NDoH PMTCT Steering Committee on quality improvement.
- Institute for Healthcare Improvement: Providing technical assistance and training to S2S staff in quality improvement methods.

- Paediatric Aids Treatment Africa (PATA): PATA uses the S2S Paediatric HIV/TB Toolkit for training events.
- Numerous other NGOs and training institutions utilise S2S training material.

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

### **Conference Presentations:**

Chirowodza, A & SJ Van der Walt (2014). Measuring quality improvement interventions and context for a health system strengthening programme in three provinces in South Africa: a reflection on measures and outcomes. Oral presentation presented at the Third Global Symposium on Health Systems Research, 30 September-3 October 2014, Cape Town.

Geiger, J., Green, B. & Brittin, K. (2014). Field testing of breastfeeding training. Oral presentation presented at the South Africa Association of Health Educationalists, 26-28 June, Cape Town.

Green, B., Geiger, J. & Brittin, K. (2014). Facilitating Feedback on content and training activities during the pilot of a training course. University of Stellenbosch Academic Day, 13 August 2014, Cape Town.

Van der Walt, K & Chirowodza A. (2014). Early summative evaluation of a quality improvement learning collaborative aiming to reduce mother-to-child-transmission of HIV in South Africa. Poster presentation presented at the Third Global Symposium on Health Systems Research, 30 September-3 October 2014, Cape Town.

### **Teaching and training:**

The S2S Programme does not offer under and postgraduate training to students. Currently the focus of the program is on in-service training of public healthcare workers through educational outreach. The table below is a summary of S2S staff and their current postgraduate studies.

<b>S2S Staff Member</b>	<b>Degree Course</b>	<b>Institution</b>
Katherine Brittin	M in Public Health	University of Cape Town
Admire Chirowodza	PhD in Counselling Psychology	University of KwaZulu-Natal
Justin Engelbrecht	MPhil in Health Systems Research	University of Stellenbosch
Justine Geiger	MPhil in Health Professions Education	University of Stellenbosch
Beryl Green	MPhil in Health Professions Education	University of Stellenbosch
Christalien Husselmann	MSc Clinical Epidemiology	University of Stellenbosch
Irma Kruger	MSc in Clinical Epidemiology	University of Stellenbosch
Carmen Louw	MPhil in Monitoring and Evaluation	University of Stellenbosch
Puni Mamdoo	MMed in Public Health	University of Stellenbosch



## DESMOND TUTU TB CENTRE (DTTC)

Director: Prof N Beyers

### All Travel/Congress/Conference/workshop/training (attended or presented)

Name of conference/workshop/training attended or presented:	Name of person Attended/presented ?	Funded & presented:	Venue & Date
African Doctoral Academy – Summer School	Graeme Hoddinott, Lario Viljoen, Hlengani Mathema, Lesley-Ann Erasmus-Claassen, and Kelly Abrahams, Nomtha Mandla and Sue-Ann Meehan; Attended courses in qualitative research design and the use of ATLAS.ti software for qualitative analysis.	Presented: Max Bergman, Lauren Wildschut, and Susanne Friese.	Stellenbosch 13 & 24 January 2014
Partner MER Workshop, Pretoria	Ms Margaret van Niekerk	Funded & presented: CDC Pretoria	CDC Pretoria office 21 January 2014
Sexual Reproductive Health Training for PN's	P Heneke, N Magwaca, N Konza	Presented: Comficator Consulting	Comficator training venue February, ongoing for 5 weeks every Monday.
Sexual Reproductive Health Training for EN's	C Jantjies, M Nonabe, P Stephane, M Visser	Presented: Comficator Consulting	Comficator training venue February, ongoing for 5 weeks, 2 days per week
HPTN 071 (PopART) (stigma ancillary) Annual Workshop	PopART Staff	Funded: NIMH	Misty Waves Hotel, Hermanus 1-3 February



			2014
HPTN 071 (PopART) 2 <sup>nd</sup> Annual Workshop	PopART Staff	Funded: NIH	Arabella Hotel & Spa, Kleinmond, Cape Town 3-7 February 2014
	Liz Walters Attended	Funded: MRC; Presented:	Stellenbosch University Business School 6-7 February 2014
GCP refresher	Anneke Hesseling and Boniswa Bavuma; Attended	Funded: NA; Presented: Marijke Geldenhuis	CAB Conference Centre Brackenfell 13 February 2014
Email correspondence course	Sharon Mbaba; Attended	Funded: Stellenbosch University; Presented: IT	Stellenbosch University Faculty of Medicine and Health Science 19 February 2014
Grant Writing Workshop	Joel Steingo; Attended	Funded: Kid-Care; Presented: Stellenbosch Institute for Advanced Study	Stellenbosch University Main Campus 24 February 2014
Business and report writing workshop	Leandie September	Funded: COMAPP(CDC); Presented: DEAL	DEAL training venue 27-28 February 2014
GCP Training	Lucy Luphondo , Lumka Mafa and Wayne Green; Attended	Funded: Kid-Care; Presented: Creed	CAB Conference Centre, Brackenfell 5-6 March 2014
Research Overview Workshop	Debbie Myburgh; Attended	Funded: Kid-Care; Presented: Stellenbosch University Faculty of	Stellenbosch University 11 March 2014

		Medicine and Health Sciences Research & Development Unit	
Basic Life Support and Advanced Life Support Training - paediatric resuscitation training for paediatric clinical trial staff	Penny Rose; Presented	Funded: n/a; Presented: Penny Rose	Stellenbosch University Faculty of Medicine and Health Sciences 19, 24, 28 March 2014
Defensive Driving Workshop	Thabang Kakudi	Funded: COMAPP; Presented: Kilarney training centre	Kilarney 7 March 2014
Implementing a Results-based M & E System	Zamikhaya Ndiki	Funded: COMAPP; Presented: Southern Hemisphere	Southern Hemisphere – Cape Town 11-13 March 2014
Families Matter! Program Training of Facilitators	P Dlodlo, N Hlekani, S Mqondiso, Z Ndiki, S Ndoda	Funded: CDC; Presented: CDC	Pretoria 17–21 March 2014
Team building - COMAPP	The COMAPP team, 48 people	Funded: COMAPP; Presented: Willem Conradie	The Lord Charles 28 March 2014
Definitions of the new indicators	Ms Margaret van Niekerk	Funded & presented: CDC Pretoria	CDC Pretoria office 3 April 2014
Reporting for PEPFAR's Semi Annual Program Results (SAPR) and Implementation of PEPFAR's Monitoring, Evaluation and Reporting (MER)	Margaret van Niekerk	Funded: CDC/PEPFAR; Presented: CDC Pretoria Office and CDC Atlanta Office	Premier Hotel in Johannesburg 3 April 2014
Microsoft Powerpoint 2010 Basic	Z Ndiki	Funded: University of Stellenbosch	Tygerberg Campus / GERGA 8 April 2014
GCP Refresher	Z Ndiki and S Meehan	Funded: COMAPP; Presented: CREDE	CAB conference centre in Brackenfell 9 April 2014
Plus Programme	Cindy Harley, Delphine Adams, Lisl Martin, Mercia Kuhn,	Presented: Lorinda Nel	Stellenbosch Feb-Dec 2014

	Leandie September		
Building Effective Relationships	Bulelwa Mangcunyana	Presented: Stellenbosch	STIAS 8-9 May 2014
Effective Writing Skills	Rochelle Petersen	Presented: Stellenbosch	Language Centre Stellenbosch 8-9 May 2014
Mentor Training	Elize Nel	Presented: Stellenbosch	STIAS 8-9 May 2014
Sexual & Reproductive Health for FMP Facilitators	FMP Facilitators	Funded: CDC/PEPFAR; Presented: CDC Pretoria	St Georges Hotel, Pretoria 20-23 May 2014
PIMA CD4 Test Training	COMAPP Management & Nurses	Funded: Alere Pharmaceuticals; Presented: Alere Pharmaceuticals: Training division	Alere Premises, Ndabeni 21-22 May 2014
Training of Managers & M/E officers for FMP	Margaret van Niekerk, Zamikhaya Ndiki	Funded: CDC/PEPFAR; Presented: CDC Pretoria	St Georges Hotel, Pretoria 28 & 29 May 2014
Sustainable rural Health Research day	Prof Nulda Beyers	Funded & presented: Ukwanda Rural Clinic	Ukwanda Rural Clinic School, Worcester 29 May 2014
National Certificate in Business Administration Services	Leandi September	Funded: Stellenbosch University; Presented: Siyathembana	Main Campus Stellenbosch 15-16 April, 20-21 May, 17-18 June
HSRC Roundtable Debate New molecular diagnostic tests for TB: Do patients benefit?		Funded: TREAT TB; Presented: Dr Pren Naidoo	HSRC, Cape Town 2 June 2014
HPTN Annual Meeting-jointly with IMPAACT	Vikesh Naidoo, Mark Theart, Nomtha Mandla, Bliia Yang, Anelet James, Nozi Makola, Peter Bock	Funded & presented: HPTN	Washington 13-20 June 2014
Introduction to Infectious Disease Modelling and its Applications	Mr Rory Dunbar	Funded: POPART NIH (pending Academic Fund approval);	London School of Hygiene and Tropical

		Presented: Biostats Core - London School of Hygiene and Tropical Medicine	Medicine 16-27 June 2014
PopART Data Meeting	Prof Nulda Beyers	Funded & presented: HPTN PopART	London 1-3 July 2014
GCP Refresher	M Visser	Funded & presented: CREDE	CAB conference centre in Brackenfell 4 July 2014
SOP training on consent, confidentiality and guardianship	Paediatric Clinical and Support Staff	Funded & presented: Frieda Verheye-Dua	Teaching Block, Tygerberg Campus 9 July 2014
FDA Audit Feedback session	CRS Clinical and Support Staff	Funded & presented: Frieda Verheye-Dua	Teaching Block, Tygerberg Campus 10 July 2014
CD 4 Count Training	26 COMAPP Staff members	Funded & presented: S Meehan, Felicity Nelsen	The HUB 14 July 2014
Dangerous Goods Training	Anel Botha, Primrose Puling, and Adelaide Carelse (PK Team)	Funded & presented: Flight Safety Training SA	Cape Town International Airport 14 & 15 July 2014
Finance post-award training, NIH	Grayson Lamore	Funded & presented: NIH	London, UK 14-16 July 2014
Management Development leadership program	M van Niekerk	Funded & presented: Willem Conradie	HUB Tygerberg Campus 15-16 July 2014
National HCT Campaign revitalisation Meeting	P Heneke, A Sampson	Funded & presented: National Health Department	The Lakes Hotel, Benoni 15-17 July 2014
Genedrive research training (3 days)	Treatment Response Team	Presented: Epistem & the Liverpool School of Hygiene and Tropical	Tygerberg Hospital 15-18 July 2014

		Medicine	
ACTG Adult walk-through training provided by DTTC IMPAACT CRS coordinator	TASK Applied Sciences	Presented: Frieda Verheye-Dua (Kelly Dooley,co-PI for the study also present)	TASK, Brooklyn Chest Hospital 18 July 2014
Best practice for effective recruitment and selection	Debbie Myburgh and Karen du Preez	Presented: Jane Moors, Outerbox Thinking	Feathers Lodge, Bellville 21 July 2014
Effective Recruitment skills Training	M van Niekerk, L September, Z Ndiki, Elize Nel, David Nkani	Funded & presented: Jane Moore	Feather Lodge 21 July 2014
Project Management for the Research team	Debbie Myburgh	Presented: Research Development and Support Division	Tygerberg Campus, Education block 23-24 July 2014
FMP Exchange meeting - CDC	M van Niekerk, Z Ndiki	Funded & presented: CDC	St Georges Hotel – JHB 22-24 July 2014
Training on Safety in the Study Communities.	All Intervention & Population Cohort Field Staff in the 9 study sites.	Funded: PopArt; Presented: Quinton Adams	PopART Site offices 28, 29, 30 &31 July 2014
Health Research Ethics application information session	Frieda Verheye-Dua	Presented: Research Development and Support Division	Tygerberg campus 29 July 2014
Management Leadership Development Programme (MLDP) – Opening day	Karen du Preez, Sharon Mbaba, M van Niekerk	Presented: Willem Conradie	SU Tygerberg Campus 29 July 2014
GCP Refresher	Karen du Preez, Elizabeth Viljoen, Anel Botha, Frieda Verheye-Dua	Presented: PPD	Kid-Cru 31 July 2014
National investment - CDC	M van Niekerk	Funded & presented: CDC	St Georges Hotel – JHB 30-31 July 2014
Introduction to Clinical Pharmacology	Joretha Arendse, Frieda Verheye-Dua, Marieke van der Zalm and Tony Garcia-Prats	Presented: DAIDS LMS online tutorial	SU Tygerberg Campus August 2014

DAIDS Clinical Quality Management Plan Training	Joretha Arendse and Corné Bosch	Presented: DAIDS LMS online tutorial	SU Tygerberg Campus August 2014
GCP Refresher	Danite Bester	Presented: PPD	Kid-Cru 1 August 2104
Emotional Intelligence	Nadia Nel	Funded & presented: HPTN PopART/Deal training	Kolping Guesthouse 4-5 August 2014
Contracts Management Training	Grayson Lamore	Presented: SU Facilitator	SU Main Campus 5 August 2014
Counselling Training	25 COMAPP Staff members	Funded & presented: Welmoet Bok	HUB, Tygerberg campus 5-6 August 2014
National Health Research Database training	Frieda Verheye-Dua, Karen Du Preez	Funded & presented: Charlene Roderick (DOH)	SU Tygerberg Campus 6 August 2014
Demo training & fitting of the V-flex N-95 Respirator Mask	Paediatric Clinical & Support Teams	Presented: Minette Tucker	Teaching Block, Tygerberg Campus 8 August 2014
Office Administration	Nadia Nel	Funded & presented: HPTN PopART/Deal training	Kolping Guesthouse 11-15 August 2014
Psycho-social Support Training	Sharon Mbaba; Daphne van Ster	Presented: SU facilitator	Tygerberg Hub 13 August 2014
Mentor training	Debbie Myburgh, Melvina Stollie	Presented: Dr Allan Stellenbosch Mentoring and Coaching Centre.	Devon Valley Hotel, Stellenbosch 14-15 August 2014
Wellness Training on Trauma Related Stress.	Charisse Pedro, Eliud Nkuna & David Nkani.	Funded: DTTC ; Presented: Maureen Kennedy	The Hub, Tygerberg Campus 14 August 2014

SOP on Infection Control and Hand Washing	Paediatric Clinical & Support Teams	Presented: Frieda Verheye-Dua	Teaching Block, Tygerberg Campus 15 August 2014
Kid-care project dissemination meeting	Karen du Preez	Funded & presented : Karen du Preez obo URC	Training room 3, Khayelitsha District Hospital 15 August 2014
Safety training for the Community	22 COMAPP staff members	Funded & presented: Quinton Adams	The HUB 15 August 2014
Plus Program	Cindy Harley and Delphine Adams		Stellenbosch 15 & 16 July 2014 and 19 & 20 August 2014 and 16 & 17 September 2014
TOT couple Counselling and TOT Promotion	M van Niekerk, P Heneke	Funded & presented: CDC	Holiday Inn Rosebank 18-22 August 2014
Follow up Mentoring Training	Elize Nel, Charisse Pedro		Devon Valley 22 August 2014
MLDP Management & Leadership	Karen du Preez and Sharon Mbaba	Funded & presented: Funded DTTC; SU facilitator	Tygerberg Campus 22 August 2014
MLDP: Financial Management and Procurement	Karen du Preez and Sharon Mbaba	Funded: DTTC; Presented : Suzanne Schoeman	SU Tygerberg Campus 22 August 2014
Tygerberg Hospital Continuity of TB Care	Karen Du Preez , Anneke Hesseling,	Funded: Dept of Community Health; Presented: Karen Du Preez, Adrie Bekker	Tygerberg Hub 29 August 2014
SAPO Training & Leadership	Treatment Response Team	Funded & presented: SAPO	Red Cross Children's Hospital September 2014

Protocol Training on the PopART Population Cohort for the new staff.	Bongani Sani, Thembela Masuku, Jennifer Witbooi & Mzwanele Lawrence	Funded: PopArt; Presented: Charisse Pedro & Nomtha Mandla	.Room F330, Fissan Building 2 & 3 September 2014
Paediatric TB diagnostics	Liz Walters	Funded & presented: Liz Walters, DTC	Khayelitsha District Hospital 5 September 2014
Performance Management Workshop	Karen du Preez	Funded & presented: SU facilitator	Feathers Lodge 9 September 2014
Leading Teams that work and work well together at SAPA congress	Liz Walters, Megan Palmer, Marieke van der Zalm, Ingrid rowan, Daphne Leukes	Funded & presented: Funded DTC and presented Simon Hurry	Red Cross Children's Hospital 10 September 2014
Protocol Writing Workshop	Louvina van der Laan	Funded & presented: SU facilitator	SU Tygerberg Campus 16 17 & 18 September 2014
Childhood TB diagnostics: The elephant in the room	Karen du Preez,	Funded & presented: URC, facilitated NHLS and University of Pretoria	CSIR Pretoria 18 September 2014
Global Health Trials Workshop: National Skills Sharing Workshop	Frieda Verheye-Dua, Ingrid Rowan and Lienki du Plessis	Funded & presented: Funded SU & UCT and presented Global Health Trials	Groote Schuur Hospital, UCT 19 September 2014
TOT training on HIV rapid test.	14 Research Nurses of the Population Cohort	Presented: Kerry Nel	Room 3015 Clinical building 19 September 2014
Dangerous Goods Training	Corné Bosch	Funded & presented: Flight Safety Training SA	Cape Town International Airport 22-23



			September 2014
Foundation for Innovative New Diagnostics Training on a new TB diagnostic method using stool samples and Xpert	Treatment Response Team	Presented: FIND (Pamela Nabeta, Claudia Denkinger) and Rutgers University (Priya Banada)	DTTC 29-30 September 2014
Writing a Successful NIH Grant	Marieke van der Zalm	Funded & presented: SU Research & Development	15-16 October 2014
GCP	Anneline Scholtz	Attended/Presented: Attended	Crede 22 - 23 October 2014
MDLP: Operational Management	Karen du Preez, Sharon Mbaba	Funded & presented: SU	Stellenbosch 24 October 2014
Treatment for prevention conference (R4P):	Nomtha Mandla, Dewald Van Deventer, Blija Yang, Nulda Beyers, Maninie Molatseli	Funded: PopART; Presented: Various presenters on HIV prevention research	Cape Town International Convention Centre 30 October 2014
Mentoring Training Follow up.	Debbie Myburgh, Sharon Mbaba, Gwynneth Hendricks, Nomtha Mandla	Funded & presented: SU, Dr Allen	Devon Valley Hotel 31 October 2014
45 <sup>th</sup> Union Conference	Anneke Hesseling, Liz Walters, Karen du Preez	Funded & presented: The Union	Barcelona, Spain 28 October – 1 November 2014
ICAN	Zingiwe Mramba	Funded & presented: WHO	Harare, Zimbabwe 3-5 November 2014
Positive, Change, Gender, HIV and Disability	Lumka Mafu	Funded & presented: DTTC	Stellenbosch Main Campus 4-6 November 2014
Positive Leadership, Positive Change: Building leadership skills with regards to	Rochelle Petersen; Attended		Katjiepiering Restaurant Conference

Transformation, Gender, Disability and HIV in Higher Education”			facility, Botanical Garden, Stellenbosch 4 – 6 November 2014
MDLP: Generational Acumen	Karen du Preez, Sharon Mbaba	Funded & presented: SU	Stellenbosch 7 November 2014
CDC – Point of Care Testing : Quality Control Workshop	Ms Margaret van Niekerk; Attended	Funded: CDC; Presented: CDC in partnership with NHLS & NCID	Pretoria 13 November 2014
FMP Facilitators	J Galada, S Mqondiso, A Lingani, P Matshanga; Attended	Funded: CDC; Presented: CDC	Pretoria 10-14 November 2014
PLUS Program	Delphine Adams & Cindy Harley; Attended		7 & 8 Oct 2014 18 & 19 Nov 2014 and 9 & 10 Dec 2014 : Stellenbosch
MDLP: Operational Management	Karen du Preez, Sharon Mbaba	Funded & presented: SU	Stellenbosch 24 October 2014
Mentoring Training Follow up.	Debbie Myburgh, Sharon Mbaba, Gwynneth Hendricks	Funded & presented: SU, Dr Allen	Devon Valley Hotel 31 October 2014
ICAN	Zingiwe Mramba	Funded & presented: WHO	Harare, Zimbabwe 3-5 November 2014
Positive, Change, Gender, HIV and Disability	Lumka Mafu	Funded & presented: DTIC	Stellenbosch Main Campus 4-6 November 2014
MDLP: Generational Acumen	Karen du Preez, Sharon Mbaba	Funded & presented: SU	Stellenbosch 7 November 2014
Media Skills for research Scientists	Gwynneth Hendricks	Funded & presented: SU	The Lanzerac Hotel & Spa,

		Research & Development	Stellenbosch 1 December 2014
Media Skills Workshop	Gwynneth Hendricks	Funded & presented: SU Research & Development	The Lanzerac Hotel & Spa, Stellenbosch 1 December 2014
PLUS Program	Leandie September; Attended	Funded: University of Stellenbosch; Presented: Siyathembana	Stellenbosch February 2014 – Ongoing
Dispensing Course	P Heneke, A Sampson, N Magwaca; Attended	Funded: CDC; Presented: Pharmacy Education International	Plumstead July 2014 – Ongoing
20th International AIDS Conference	Sue-Ann Meehan	Funded & presented	Melbourne Australia, 20- 25 July 2014

### **Visitors:**

<b>Visitors name:</b>	<b>Organisation:</b>	<b>Purpose of visit:</b>	<b>DTIC person visited:</b>	<b>Date of visit:</b>
Charles Wells and Larry Geitner	Otsuka Pharmaceuticals	site visit for upcoming clinical trial	Anneke Hesseling and the PK Team	January 2014
Cherise Scott	Paediatric program director, TB Alliance Unitaids project	Development opportunities and looking at new drugs	Anneke Hesseling and paediatric team leaders	29 January 2014
Dr Nils Dalairé (Assistant Secretary for Global Affairs U.S. Department of Health and Human Services) & Dr Nancy Knight (CDC-SA Country Director)	US Government & CDC South Africa	showcase the Prevention work carried-out in South Africa that is funded by CDC Atlanta	COMAPP	7 February 2014
Ayana Moore and Tanette Headen	FHI 360	Initial Assessment visit	PopART Population and Intervention-Nomtha	7-12 February 2014

			Mandla, Bli Yang and PopART team	
Sian Floyd	London School of Health Tropical Medicine	Data Management	PopART Population and Intervention-Nomtha Mandla, Bli Yang and PopART team	10-14 February 2014
Phyllis Costanza, Tom Hall and Maya Ziswiler	UBS Optimus Foundation	South African funded site visit and presenting the current community-based activities and platform of Kid-Care.	Karen du Preez	17 February 2014
Dr Mary Glenshaw, the new Project Officer and Ms Michelle Smith, the financial officer	CDC Pretoria office	The aim of the visit was for formal introductions and to provide Dr Gleshaw with a theoretical and practical overview of the project and discuss budget related matters.	COMAPP Management	6 March 2014
Steve Smith, Gray Handley, Peter Kim	DAIDS/NIAID	Explore interest from SUN in an NIH-funded regional TB Research network	Tony Garcia-Prats (representing Anneke Hesselings)	18 March 2014
Hilda Maringa	CDC Pretoria	Support visit to Families matter! program	Sue-Ann Meehan, Margaret van Niekerk, Zamikhaya Ndiki & FMP team	12 May 2014
Ms Evelyn Mhlope, Ms Hyla van den Berg	URC	Kid-care team (Dr Karen du Preez)	Study close out visit	10 July 2014
Kelly Dooley	John Hopkins University, US	DTTC	Research study & presentation	15 July 2014

	Medicine			
Emma Mosely	Quintiles	PK team	Refresher training in preparation for Otsuka 232 study start up	23 July 2014
Hilda Maringa	CDC	Quarterly Activity Visit	COMAPP Sites	29 July 2014
Corey Best and Jamar Robinson	Otsuka	MDR PK team	First dose for 232 study and study oversight	12 August 2014
Emma Mosely, Annelie Rust	Quintiles	MDR PK team	Site monitoring for 232 study	12 August 2014
Emma Mosely	Quintiles	MDR PK team	Site monitoring for 232 study	21 August 2014, 25-August 2014
Eileen Pouliot DAIDS CTU program officer and 3 other DAIDS representatives	DAIDS, NIAIDS	DTTC, (CRS) at Brooklyn Chest PK Unit	Site monitoring for the PK Unit	22 August 2014
Dr. Liz Harausz	Case Western Reserve University (USA)	Anneke Hesseling	Work on WHO evidence synthesis for MDR-TB in children	25 August 2014 through 5 October 2014
Amanda Mnabisa	PPD	BCH PK unit, IMPAACT CRS	site Initiation monitoring, IMPAACT	3-4 September 2014
Dr James Hargreaves	LSHTM	HPTN 071a/PopART Stigma Study	Graeme Hoddinott/Hlen gani Mathema	10-12 September 2014
Yaw Agyei	HIV Prevention Trials Network (HPTN) Laboratory Centers (LC) QA/QC Coordinators Johns Hopkins School of Medicine Department of Pathology Laboratory Information Systems Training		PopART Laboratory Personnel	12-17 September 2014
Devasena	DAIDS	Anneke	site visit and	26 September

Gnanashanmugan		Hesseling	discuss diagnostics	2014
Priya Banada	Rutgers University, New Jersey	Liz Walters	Diagnostic studies	29-30 September 2014
Matthew Wipperman, Christy Beneri, Irina Ureshenko, Robbie Flick	Stony Brook, TB Alliance, University Colorado respectively	PK Unit, BCH & the Diagnostic team	learn more about Paediatric TB, MDR-TB and TB diagnostics	between 22 September – 10 October 2014
Chris Egerton-Warburton and Kate Antrobus	Global Health Investment Fund	Diagnostic Team & Coné Bosch	Very keen to understand the research process	9 October 2014
Dr Virginia Bond	Zambart	HPTN 071 (PopART) Social Science Workshop	Graeme Hoddinott	13-17 October 2014
Emma Mosely; Anle Nel	Otsuka	MDR-PK Unit, BCH	Monitoring	20 - 21 October 2014
Ayana Moore	FHI 360	HPTN 071/PopART PC Site Assessment visit	Nomtha Mandla	21-23 October 2014
Ms Shari Krishnaratne	LSHTM	HPTN 071a/PopART Stigma Study	Hlengani Mathema	24-26 October 2014
Richard Hayes, Sian Floyd	LSHTM	HPTN 071/PopART Population Cohort (PC) Vendor Kickoff meeting at Spier	Nulda Beyers and PopART PC team	17–19 November 2014
Ayana Moore	FHI 360	HPTN 071 Vendor Kickoff Meeting at Spier	Nulda Beyers and PopART PC team	17, 18, 19 November 2014
Helen Ayles , Ab Schaarp and Nkantya	Zambart	HPTN 071/PopART Population Cohort (PC) Vendor Kickoff meeting at Spier	Nulda Beyers and PopART PC team	17–19 November 2014
Sarah Fidler	Imperial college	HPTN 071/PopART Population Cohort	Nulda Beyers and PopART PC team	17–19 November 2014

		(PC)Vendor Kickoff meeting at Spier		
Emma Mosely; Anle Nel (Quintiles)	Quintiles	MDR-PK Unit, BCH	Pre-monitoring visit	17–21 November 2014
Emma Mosely; Anle Nel (Quintiles) & Jamar Robinson; Corey Best (Otsuka)	Quintiles & Otsuka	MDR-PK Unit	Monitoring visit	4–5 December 2014

**Infrastructure development (new equipment/ upgrading to your office or programme):**

PK unit upgraded. Painting of walls done. Cracked windows replaced etc. This done over a 3 week period during March

DTTC Refurbishment-July-September 2014

Brooklyn Chest Hospital

- Garden established
- Branding attached to exterior structure
- Incubator for storing Investigational Products (IP)
- New furniture for patient recreation room

Tygerberg Hospital:

- Established a cough room in GGr for the safe collection of respiratory samples from children. Supported by NRF and the Tygerberg Children's Hospital Trust

**Special Events:**

**January 2014:**

Initiation (Start) of PopART Population cohort on 15 Jan 2014.

**February 2014:**

PK team building afternoon held at the end of February 2014.

**March 2014:**

Dr Karen du Preez was invited as a guest speaker at the World TB Day Activities hosted by the Cape Winelands District.

Topic: Let's talk paediatric TB (joint presentation with Dr Andre Burger)

Date: 25 March 2014.

Venue: Ukwanda Rural medical school, Worcester

**Mandela day: 18 July 2014:**

On Mandela Day, 18 July, the paediatric team visited Fikilela between 10h00 and 12h00. The visit included indoor and outdoor activities. Age-appropriate educational toys and healthy snacks for the children were donated. Fikilela will remain our outreach organisation of choice in future. The nature of their work as a safe-house for young children does not allow us to create a media hype or publishing of photographs of the children.

Afterwards the team joined in the "Blanket Drive" initiative by DTTC which resulted in a useful donation to the PK Unit at Brooklyn Chest Hospital. Marlene Kotze was invited to do the handover to Dr Marianne Willemse on Wednesday, 30 July.

**DTTC Dissemination meeting:**

**Date:** 12 December 2014

**Venue:** Klein Joostenberg

**Newly enrolled students for Degrees: (only students which have been newly enrolled during the quarterly report months)**

Adelaide Carelse – enrolled for Post Graduate Diploma Nursing Education which commenced in February.

Ms Nomakula Konza  
Primary Health Care for Professional Nurses  
Cape Peninsula Technicon, Bellville

***Students graduated:***

Louvina van der Laan, MPHil Clinical Pharmacology, University of Cape Town  
IB Johnson-PGD-Primary Health Care, Stellenbosch University  
E Johnson- PGD-Primary Health Care, Stellenbosch University

***Funding/Grants awarded:***

**Name of person:** Adrie Bekker

**Funding Body:** TB Alliance

**Name of study:** Infant PK Study

**Date:** March 2014

**Name of person:** Liz Walters

**Funding Body:** MRC Clinician Researcher PHD Scholarship

**Name of study:** Innovative strategies to improve the diagnosis of intrathoracic TB in children

**Date:** March 2014

**Name of person:** Prof A Hesseling and Prof Simon Schaaf in collaboration with South African and international colleagues

**Funding/Grant body:** British BMRC/Welcome Trust of approximately SAR 40 million and collateral funding has been awarded by the South African MRC SHIP programme.

**Name of study:** Paediatric team at the Desmond Tutu TB Centre (DTTC), Dept Paediatrics and Child Health- implementation of community-based trial to prevent MDR-TB in children, the trial, TB-CHAMP.



Lienkie du Plessis  
 Harry Crossley  
 Clinical characteristics and referral outcomes of children admitted with hospital  
 diagnosed TB at district level hospital  
 October 2014

Anneke Hesseling  
 SA MRC  
 Collaborative Centre  
 21 October 2014

Liz Walters  
 Scientific Travel Fund, Stellenbosch University  
 Funded to travel to/attend the 45<sup>th</sup> Union Conference, Barcelona  
 28 October–1 November 2014

Anneke Hesseling  
 SA NRF  
 SARCHi Chair  
 November 2014

**Promotions/Achievements/Awards:**

- COMAPP was selected as one of the PEPFAR Projects to be filmed in the CDC/PEPFAR Success story edition. The filming was carried-out over 2-days. They filmed the Nurses on CD4 PIMA training, the Etafeni outreach team and the FMP site. Date: 22<sup>nd</sup> & 23<sup>rd</sup> May 2014
- Rectors award for 2013 performance: 11 staff members
- Zingiwe Mramba awarded second place for her poster at the ICAN conference in Zimbabwe 3-5 November 2014.
- Klassina Zimri’s article, “The role of the Research Nurse” article has been short listed by the Global Health network team, and has been sent to the panel of judges who will consider the shortlisted entries and will choose the winners at a teleconference, to take place on 16 December 2014.

**Publications**

See list of Publications, p. 29-40

**Non-Peer review publications/media events/ radio, newspapers:**

<b>Name of publication/event (e.g. newspaper, radio):</b>	<b>Name of study/person:</b>	<b>Name of article:</b>	<b>Date:</b>
Cape Talk; John Maytham Show	Nulda Beyers	Prof Nulda Beyers comments on TB	20 March 2014
The Lancet, <u>Volume</u>	Nulda Beyers	Nulda Beyers	22 March 2014

383, Issue 9922, Page 1031,		speaking up for children with tuberculosis	
RSG; Montor	Nulda Beyers	Prof Nulda Beyers praat oor tuberkulose	24 March 2014
Mail & Guardian	Nulda Beyers	Collective will can curb TB epidemic	28 March 2014
<a href="http://www.healio.com/infectious-disease/respiratory-infections/news/online">www.healio.com/infectious-disease/respiratory-infections/news/online</a>	Florian Marx	TB-relapse-occurs-sooner-after-treatment-than-reinfection	7 April 2014
United States/africapunch.com	Nulda Beyers	<u>South Africa: Better TB Treatment for Babies?</u>	15 April 2014
The New Age	DTTC	Study to treat TB in babies	14 May 2014
<a href="http://www.health24.com/Medical/Tuberculosis/News/New-treatment-for-babies-with-TB-20140513">http://www.health24.com/Medical/Tuberculosis/News/New-treatment-for-babies-with-TB-20140513</a>	DTTC	Better treatment for babies with TB	14 May 2014
<a href="http://allafrica.com/stories/201405150742.html">http://allafrica.com/stories/201405150742.html</a>	DTTC	<u>South Africa: Research Could Point to Better Treatment for Babies With TB – Desmond Tutu TB Centre</u>	16 May 2014
John Maytham Show Cape Talk	Prof Nulda Beyers	<u>Tuberculosis</u>	18 June 2014
Tygerburger (Brackenfell)	Prof Nulda Beyers	Closing the gap to tackle TB	16 July 2014, p2
<a href="http://www.allAfrica.com/South Africa">www.allAfrica.com South Africa</a>	PopART	SA-The Gape to Tackle TB	August 2014
Cape Times	PopART	Research will see home HIV testing offered	7 August 2014
<a href="http://www.health24.com/Medical/HIV-AIDS/News/Bringing-HIV-testing-and-prevention-to-the-people-20140807">www.health24.com/Medical/HIV-AIDS/News/Bringing-HIV-testing-and-prevention-to-the-people-20140807</a>	PopART	Bringing HIV testing and prevention to the people	7 August 2014
<a href="http://www.allAfrica.com/South Africa">www.allAfrica.com South Africa</a>	COMAPP	South Africa: Helping Pre-Teens to Cope With Life's Pressures	11 August 2014

Cape Times Live	COMAPP	Caregivers in the Cape Town community of Nyanga have completed an innovative course intended to help them support children in their preteen years and lower the rate of teenage pregnancy	11 August 2014
Radio 2000	COMAPP / Margaret van Niekerk	Families Matter! Program - interview	12 August 2014
www.Health24.co.za	PopART	The Clever Dick campaign kicks off in the Cape	1 September 2014
www.timeslive.co.za	PopART	Boost for male circumcision	1 September 2014
www.timeslive.co.za	Childhood	New hope for TB Kids	2 September 2014
The times	Childhood	New hope for TB Kids	2 September 2014
The Times	Anneke Hesseling	New hope for TB kids	2 September 2014
The Daily voice	PopART	Time to be a clever dick	2 September 2014
Tygerburger (Milnerton)		Promoting safe circumcision	3 September 2014
PocketMedia® Solutions,	COMAPP	Z-CARD® - a Medical Male Circumcision (MMC) education tool for communities	28 October 2014
CNS	Anneke Hesseling	Stepping up development of child-friendly TB drugs	1 November 2014
Tyger Burger Newspaper	COMAPP, Kraaifontein Site, Living Hope	Bringing new hope to residents	12 November 2014
Health24.com	DTTC	Tutu pays tribute to Tygerberg Children	14 November 2014
Cape Times	DTTC & Tygerberg	Tutu thanks staff at children's hospital	14 November 2014
TB Alliance Film Documentary: Challenges of TB in children:	DTTC paediatric team	Challenges of TB in children	1-4 December 2014