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DEPARTMENT OF PAEDIATRICS AND CHILD HEALTH

**Annual Report for
Tygerberg Hospital and
Stellenbosch University 2020**

**HEAD OF DEPARTMENT
REPORT COMPILED BY**

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Table of Contents

Head of Department	1
Professor Mariana Kruger	1
Report compiled by.....	1
Editor: Professor Mariana Kruger.....	1
Administrative assistance: S Engelbrecht & AE Fourie	1
EXECUTIVE SUMMARY – 2020	4
Part 1	Error! Bookmark not defined.
RESOURCES AND OUTPUT	Error! Bookmark not defined.
Infrastructure Development	Error! Bookmark not defined.
Part 2	19
Community Outreach Programmes/Community Service and Interaction & Partnerships.....	19
Expert Members.....	19
Outreach.....	21
Tygerberg Hospital Children’s Trust	Error! Bookmark not defined.
HOPE Cape Town.....	Error! Bookmark not defined.
Hear the TYGER ROAR (Reach out and Read) PROJECT at Tygerberg Hospital	Error! Bookmark not defined.
Media Exposure.....	22
International visitors:	Error! Bookmark not defined.
Part 3	25
Teaching & Training	25
Education-related Activities	25
Postgraduate Students.....	25
Successful PhD Candidates.....	25
Enrolled PhD students.....	26
Successful Masters Candidates	26
• MPhil in Paediatric Neurology	26
Colleges of Medicine of South Africa (CMSA)	27
• Certificate in Paediatric Gastroenterology	27
• FC Paed (SA) Part II	27
• FC Paed (SA) Primary	27
Undergraduate Students	27
Education-related Activities	27
Part 4	28
Achievements and Highlights	28
<i>Appointments</i>	28
<i>Grants/Awards</i>	29
<i>Sabbaticals</i>	30
Conferences Organized	30
Conference Presentations	30
Conferences Attended	31

Courses Organized Error! Bookmark not defined.
Courses Presented **32**
Courses Attended Error! Bookmark not defined.
Publications **32**

EXECUTIVE SUMMARY – 2020

The year was challenged by the COVID-19 pandemic, especially during the initial lockdown. The challenges included the difficulties experienced by essential health care staff with children with no access to child care facilities; COVID-19 infected essential health care staff and fear. Furthermore, the impact on essential health care service delivery to children were difficult as COVID- patients were prioritised, leading to delays in the management of ordinary conditions for example surgical management of hernias, which led to increased morbidity in these children. There was a decrease in both in-patient admissions and ambulatory patient visits due to several lockdowns. This trend was observed world wide and due to a significant reduction in acute respiratory infections, cessation of routine primary care clinics, and decrease in seeking health care due to fears associated with visiting health care centres. This led to late presentations of diseases, especially seen in paediatric oncology. Of concern was the increase in the mortality rate from 2.3/1000 admissions to 4.3/1000 admissions. Both neonatal services and paediatric oncology services remained under pressure with often bed occupancy rates exceeding 100%. Fortunately the paediatric health care team was able to function optimally with good support to each other during the time and with a successful pass rate of all students regardless of the challenges posed by online exams and teaching.

Professor Mariana Kruger

Part 1

RESOURCES AND OUTPUT

Human Resources

<u>Posts (full-time)</u>	<u>Number</u>	<u>Filled</u>
Executive Head of Department/ Chief Specialist	1	1
Head of Clinical Department/ Chief Specialist	1	1
Principal Specialists	5	5
Senior Specialists	25+1(5/8)	25+1(5/8)
Senior Registrars	15 (including 11 Supernumeraries)	14 (including 10 Supernumeraries)
*Registrars	49 (including 16 Supernumeraries)	49 (including 16 Supernumeraries)
Medical Officers	22	25
<u>Posts (sessional – hours per week)</u>		
Specialist	6 (72 hours+16hrs additional for Covid cover)	6 (72 hours)
Number of beds	271	271

Subspecialist Paediatrics	2020	2019	2018
Inpatients	5075	6093	6269 (6.5%)
Outpatients	10329 (-24%)	13679 (-0.1%)	13694 (-0.1%)
Summary of Output General Paediatrics			
Inpatients	7244	9172	10847 (10.5%)
Outpatients	8509 (-30%)	12229 (-0.5%)	12921 (2.2%)

*6 registrars are appointed respectively Worcester (2), Paarl (2), KBH (1), KH (1)

Output

SUBSPECIALIST PAEDIATRICS

Total patient admissions 2020 (Clinicom data)

*A9 NICU	A9 PICU	A9 High Care	Trachea Unit	G1	G3	G9	G10	Total
457	574	/	52	682	1226	1102	982	5075

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

Bed Occupancy Rate 2020(Clinicom data)

*A9	A9	A9	Trachea	G1	G3	G9	G10	Total
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NICU	PICU	High Care	Unit					
77%	67%	/	26%	86%	38%	53%	45%	56%

*A9 NICU includes High-care beds, since Clinicom cannot separate data.
#BOR low due to nursing staff shortages.

Neonatology

Staff: Prof J Smith, A Bekker, Drs S Holgate, G Kali, JCF du Preez, H Hassan, L Van Wyk, L Lloyd; 5 Senior Registrars (4 supernumerary) – Dr M Satardien, Dr I Abrahams, Dr N Dormohammed, Dr L Kombo, 6 Registrars; 7 Medical Officers

A9 Neonatal Intensive Care Unit

Staff: 1 Consultant (on rotation), 2 Registrars, 1 Medical Officer

Beds n=8	2020	2019	2018
Admissions	457	508	510
Average NICU Stay in Days	8	8	8
Average Bed Occupancy %	77%	87%	86%
% Growth	-10%	-0.39%	+10.6%
Deaths	88	96	97 (19%)

- **Referrals from outside TCH** (outborns) (n) = 177 (38.7%)
- **Top 5 referring hospitals:**
 - Karl Bremer Hospital (KBH) – 61 (34.5%)
 - Paarl Hospital (PH) – 26 (14.7%)
 - Helderberg Hospital (HH) – 25 (14.1%)
 - Worcester General Hospital (WGH) – 15 (8.4%)
 - Khayelitsha Day Hospital (KDH) – 8 (4.5%)
- **Referrals for therapeutic hypothermia (TH): total = 92 (20.1% of total admissions)**
 - Inborn babies treated with therapeutic hypothermia (n) = 27 (29.3%)
 - Outborn transfers from referral hospitals (n) = 65 (70.7%)
 - KBH – 28 (43.1%)
 - HH – 15 (23.1%)
 - Delft – 5 (7.7%)
 - Paarl – 4 (6.2%)
 - WGH – 2 (3.1%)
 - KDH – 2 (3.1%)
 - Other – 9 (13.8%)
- General Surgical admissions: 57 (12.5 % of admissions)
- Other surgical (eg neurosurgery, ENT, urology, orthopaedics): 10 (2.2% of admissions)
- Mixed medical/surgical (NEC): 30 (6.6% of admissions)
- Cranial ultrasounds: ±950 (whole service)
- Neonatal echocardiography: ±150 (whole service)

Ward G1: Neonatal Unit – Babies born outside TBH

Staff: 2 Consultants (on rotation), 2 Registrar, 1 Medical Officers, 1 Intern

Beds n=30	2020	2019	2018
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Admissions	682	793	1052
Average Ward Stay in Days	14	13	9
Average Bed Occupancy %	86%	78%	89%
% Growth	-13%	-24.6%	+6.4%
Deaths	20	22	21 (2%)

Highly Specialized Paediatrics

A9 Paediatric Intensive Care Unit

Staff: Prof P Goussard, Drs N Parker, Dr I Appel, 3 Registrars, Medical Officer

Beds n=10	2020	2019	2018
Admissions	574	649	818
Average Hospital Stay in Days	5	6	4
Average Bed Occupancy %	67%	94%	86%
% Growth	-11.5%	-20.6%	+10.3%
Deaths	88	61	65 (7.9%)

A9 Paediatric High Care Unit (Closed during Covid period)

Staff as mentioned above.

Beds n=4	2020	2019	2018
Admissions	/	71	209
Average Hospital Stay in Days	/	2	3
Average Bed Occupancy %	/	14%	41%
Growth %	/	-66%	15.4%
Deaths	/	0	2

* Due to nursing staff shortages

A9 Tracheostomy Unit

Staff as mentioned above:

Beds n=6	2020	2019	2018
Admissions	52	64	51
Average Bed Occupancy %	26%	19	56%
Growth %	-18%	25.4%	-53%
Deaths	0	1	2
Decannulation		1	2

Ward G9 Paediatric Pulmonology and Allergy*

Staff: Prof P Goussard, Dr J Morrison, 2 Senior Registrars (Dr L Mfingwana, Dr R Mohammed), 1 Pulmonology Specialist Sessions, Dr D Rhode (8 hrs/week), 2 Registrars, Shared Medical Officer in G9. Allergy (largely outpatients service) *Prof S Kling, *Prof E Zöllner, Dr S Chaya (4hrs per week)

Pulmonology Beds n=10	2020	2019	2018
Admissions Pulmonology	628	1161	995

Average Hospital Stay in Days	5	4.5	5.8
Average Bed Occupancy %	57%	31.8%	65%
% Growth	-45.9%	16.6%	4%
Deaths	1	0	1

**Doctors attached to other services, but responsible for allergy clinics*

Ward G9 Neurology

Staff: Prof R van Toorn, Prof R Solomons, Dr P Springer, 2 Supernumerary Senior Registrar (Dr R Salih, Dr F Essajee), Dr A Thomas(8hrs per week), Dr Y Kooblal(4hrs per week) 2 Registrars

Beds n=10	2020	2019	2018	2017
Admissions	306	474	501	421
Average Hospital Stay in Days	6	7	6	6.0
Referral other wards	700	810	740	680
Average Bed Occupancy %	46%	82%	76%	72%
% Growth	-35%	-5%	19%	10.8%
Deaths	5	6	8	4

Other Activities

- Paediatric EEG from Worcester hospital: 100
- Paediatric and neonatal EEG's from TBH reported by the 2 consultants: 460
- 6 Outreach clinics to Paarl hospital (patients seen): n=80
- 4 Outreach clinics Worcester hospital (patients seen): n=85
- 2 Clinics at Alta du Toit special school (patients seen): n=38

Ward G9 Paediatric Endocrinology

Staff: Prof E Zöllner, Dr M Grantham (25 hrs per week), Registrar, and shared intern for G9

Beds n=5	2020	2019	2018
Patients admitted	109 Diabetics	111 Diabetics	102 Diabetic
	93* Endocrinology	137 Endocrinology	150 Endocrinology
<i>Admission Subtotal</i>	202	248	252
Admissions other wards, day cases	1	6	8
<i>Admissions total</i>	203	254	260
Ward reviews	59	10	14
Average Hospital Stay in Days	7	7	6
Average Bed Occupancy %	74% (not counting outlier)	88% (not counting outliers)	88% (not counting outliers)
% Growth	-14%	none	N/A
Deaths	0	0	0

* Requested to reduce cold admissions during COVID19 pandemic.

No of endocrine tests performed: 76

Ward G10 Gastroenterology

Staff: Prof ED Nel, 2 Senior Registrars, Registrar, and 1 Intern.

Beds n=9	2020	2019	2018
Admissions	23	179	262
Average Hospital Stay in Days	3.57	8,75	7
Average Bed Occupancy %	2%	72%	70%
% Growth	-87%	-31%	+3%
Deaths	0	4	7

Ward G10 Infectious Diseases Unit

Staff: Prof MF Cotton, Prof H Rabie (HIV Clinic), Dr P Rose, 2 Registrars

Beds n=14	2020	2019	2018
Admissions	959	544	374
Average Hospital Stay in Days	5	9	9
Average Bed Occupancy %	45%	76%	77%
% Growth	+76%	+45%	+6%
Deaths	10	3 (chip) 10 (clinicom)	14

G10 Cardiology

Cross Platform Staff:

Tygerberg Hospital (TBH): Prof J Lawrenson, Dr B Fourie, 2 Registrars

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

Beds n=10 (G3=5, G10=5)	2020	2019	2018
Admissions	107	160	159
Average Hospital Stay in Days	*	*	*
Average Bed Occupancy %	*	*	*
Inpatient Echocardiography	1187	1307	923
Inpatient Consultations	1246	1380	945
Growth numbers	-134	384	63
Growth %	-10%	29%	7.1%
Deaths	3	3	2

* Clinicom data combined for gastroenterology, cardiology and infectious diseases

Worcester Clinic: 140

Paarl Clinic: 82

Ward G3 Oncology & Haematology

Staff: Prof M Kruger,* Dr A van Zyl (on PhD study leave), Dr R Uys, 3 Senior Registrars of which 2 Supernumerary (Dr L Schoonraad, Dr K Reddy(until August 2020) and Dr E Elhuni (from February 2020), 2 Registrars

Beds n=9	2020	2019	2018	2017
New patients Haematology	45	45	44	46
New patients Oncology	64	70	70	60
<i>New patients Total</i>	109	115	114	106
Admissions	1011	1054	783	734
% Growth	-4%	** 34.6 %	+6.7%	-3.2%
Average Hospital Stay in Days	3	4	5.25	5.25
Average Bed Occupancy %	102%	127%	123%	120.5%
Total deaths in G3	9	11	12	12
Expected palliative	8	8	8	8
Sepsis/other	1	3	4	*4
Referrals	Haematology 72	Haematology 71	Haematology 70	Haematology 73
G3 Day Patients (Haem/Onco)=	1523	1715	1698	2094
Ward attenders	Haematology: 4 Oncology : 97 Total: 101			
Chemotherapy administrations	2001	2164	2051	2044
Bone marrow aspirations and biopsies	114	107	101	108
Intra-thecal chemotherapy procedures	316	379	309	396

*G3Ward data

** Criteria for admissions changed for intrathecal chemotherapy from day patient to ward admission due to sedation protocol (nursing)

Ward G3 Rheumatology & Immunology

Staff: Dr D Abraham (15 hrs per week), Registrar Shared with G3, Shared Medical Officer for G3

Beds n=4	2020	2019	2018
Admissions & Ward attenders		139	130+94 = 224
Average Hospital Stay in days		3	5
Average bed occupancy %		30%	36%
% Growth		9%	25%
Deaths		0	0

Ward G3 Nephrology

Staff: Dr CJ du Buisson, Dr JL Shires – part-time, 1 Supernumerary Senior Registrar (Dr P Mashanga), Registrar and intern shared with haematology & Immunology

Beds n=5	2020	2019	2018
Admissions	113	151	138
Average Hospital Stay in days	6	4.2	5
Average bed occupancy %	30%	35%***	41%***
% Growth	-25%	9%	15%
Deaths	0	0	1
Renal Biopsies*	15	14	22
Acute Dialysis**	7	8	16
Renal patients outside of G3***	96(-23%)	126(-55%)	276(-28%)
Referrals****	267	455	431

* Done in C4B Theatre under general anaesthesia

** All done in PICU and NICU. We received 14 referrals and dialysed only 7 patients that was refused due to severe multiorgan failure and dialysis would not have improved the outcome. Most passed away soon after referral.

*** Patients were admitted in less numbers in other wards. We actively tried to keep patients at referral hospital and did daily telephonic consultation. This is due to space within G3 and other paediatric wards as well as COVID pandemic. Patients from referral hospitals was then seen at outpatients after discharge. We had 24 patients in neonatal wards, 26 in general wards, 8 patients in G4 and 18 patients in G10 and managed 30 patients in outside hospital with telephonic interaction with clinicians in various hospitals.

**** These are patients on which only advise needed in the acute phase, not continuous care and referred to outpatient service for further treatment.

OUTPATIENT COMPLEX

Subspecialist Clinics

	2020	2019	2018
Clinics	Total	Total	Total
Haematology	229	404	306
Immunology	143	167	169
Oncology	329	499	484

G3 OPD patients seen at C3A (lockdown)	486		
Pulmonology	738	1270	1194
Gastroenterology	423	628	635
High-risk Babies	1295	1877	2018
Neurology & Developmental paediatrics	1505	2309	2375
Allergy	288	593	566
Premature Follow-up	64	158	210
Nephrology*	1143	1417	1547
Cardiology	907	1140	1099
Diabetic	502	765	742
Endocrinology	369	647	685
Rheumatology	306	398	359
Infectious diseases			
TB	417 (C3A)	(710 C3A)	**752
HIV			473
Genetics	344	433	468
Pharmacy prescriptions	1045	264	153
Total	10533	13679	13694

*Centre for Referral for Congenital Anomalies of the Kidney and Urinary Tract.

**Patients seen in GGround due to limited number to be seen in C3A

GENERAL SPECIALIST SERVICES

Total Patient Admissions 2020 (Clinicom data)

GG Short Stay	G2	G7	G8	J3	Total
3208	1039	932	1099	966	7244

Bed Occupancy Rate 2020 (Clinicom data)

GG Short Stay	G2	G7	G8	J3	Total
35%	93%	48%	90%	91%	71%

Neonatology

Ward G2 Neonatal Unit – Babies born in TBH

Staff: 2 Consultants (on rotation), 1 Registrar, 3 Medical Officers, 1 Intern (if available)

Beds n=27	2020	2019	2018
Admissions	1039	1551	2072
Average Ward Stay in Days	10	7	4
Average Bed Occupancy	93%	97%	94%
% Growth	-33%	-25.1%	-3.2%
Deaths	40	22	71 (3.4%)

Ward J3 Neonatal Unit – Babies born in TBH

Staff: 1 Consultant (on rotation), 1 Registrar, 1 Medical Officer, 1 Intern

Beds n=25	2020	2019	2018
Admissions	966	941	992
Average Ward Stay in Days	10	11	10
Average Bed Occupancy	91%	111%	108%
% Growth	+2.6%	-5.1%	+9.3%
Deaths	26	11	3 (0.3%)

Ward G8 Low Care Neonates & Kangaroo-mother Care – Step-down Facility

Staff: 1 Consultant (on rotation), 1 Medical Officer, 2 Interns

Beds n=30	2020	2019	2018
Admissions	1099	955	1169
Average Ward Stay in Days	9	11	8
Average bed occupancy %	90%	91%	90%
% Growth	-15%	-18.3%	+9.2%
Deaths	2	5	4 (3.2%)

Postnatal wards (J5, J2, C2A)

Staff: 1 intern from neonatal pool

±6500 clinical contacts/year (based on estimated 25 patients/day on weekdays)

Short-stay G Ground: <48-hour Admissions

Staff: Prof S Schaaf, Drs E Malek, L Smit, A Redfern, 2 Registrars, (1 Emergency Medicine Registrar), 2 Medical Officers, 2 Interns

Beds n=24	2020	2019	2018
Admissions	3208	4720	5306
Average Hospital Stay in Days	1	1,2	1
Average Bed Occupancy %	35%	65,7%	79%
% Growth	-32%	-11%	16%
Average Admissions per day	8.7	13	/
Deaths	14	11	11

Ward G7 General Paediatrics

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

Beds n=25	2020	2019	2018
Admissions	932	1005	1308
Admissions to HCU		380	441
Average Hospital Stay in Days	6	7	6
Average Bed occupancy	48%	75%	78%

Increase in Admissions	-7.2	-23%	+15%
Deaths	6	9	15

*Clinicom data

General Paediatrics: Emergency & Clinics

EC attendances	2020	2019	2018
Daytime attendances (8am-4pm)	3330	7923 GG total (day) 1978 OPD 5945 Emergency (day)	8 282 (GG total)
After hours attendances (4pm-8 am)	2833	4306	4639
Daily average seen	17	33	33
Daily average seen after hours (4pm-8am)	8	12	13
EC attendance after hours %	46%	42%	36%
Total EC attendances	6163	12229	12 921
Increase	-50%	-5%	+2%

General Paediatric OPD

	2020	2019	2018
General Paeds OPD	New: 137 Follow up: 787	New: 138 Follow up: 1426	/
Dr Redfern NDC	New: 17 Follow up: 85	New: 53 Follow up: 155	
Prof Schaaf TB	78	101	/
DTTC study patients	133	474	/
G7 follow ups	22	47	/
Total OPD seen (Excluding DTTC)	1127	1918	/
% change	-36%	/	

2020 Morbidity & Mortality

PPIP data from PPIP database 2020

Total inborn births in TCH (TBH): = 8134
(Stillbirths = 433) (Total live births = 7701)

Inborn mortality rates at TCH:

- Perinatal Mortality Rate (PNMR) ($\geq 500\text{g}$) = 62.9
- Perinatal Mortality Rate (PNMR) ($\geq 1000\text{g}$) = 37.3
- Early Neonatal Death Rate (ENNDR) ($\geq 500\text{g}$) = 10.3
- Early Neonatal Death Rate (ENNDR) ($\geq 1000\text{g}$) = 5.6
- Late Neonatal Death Rate (LNNDR) ($\geq 500\text{g}$) = 4.4
- Late Neonatal Death Rate (LNNDR) ($\geq 1000\text{g}$) = 2.1

Inborn Survival Rate for babies born alive at TCH:

- Survival Rate ($\geq 500\text{-}999\text{g}$) = 75.4%
- Survival Rate ($\geq 500\text{g}$) = 98.5%
- Survival Rate ($\geq 1000\text{g}$) = 99.2%

Inborn mortality of babies born alive per birth weight category:

Total inborn neonatal deaths on PPIP = 113

Birth Weight	% Mortality 2020	% Mortality 2019	% Mortality 2018
< 1000g	24.5	24.7	22.1
1000 to 1499g	4.9	5.3	3.6
1500 to 1999g	2.2	1.6	1.6
2000 to 2499g	0.4	1.1	0.4
$\geq 2500\text{g}$	0.2	0.2	0.3

Mortality % calculated for each weight category as: number of deaths per number of live births in that weight category for 2019

% Deaths of babies referred to TCH per weight category:

Total neonatal deaths in babies referred to TCH = 45

Birth Weight	% Mortality 2020 (n= 45)	% Mortality 2019 (n= 48)	% Mortality 2018 (n= 45)
<1000g	4 (8.8%)	4	11.1% (5/45)
1000 to 1499g	12 (26.7%)	14	22.2% (10/45)
1500 to 1999g	8 (17.8)	7	2.2% (1/45)
2000 to 2499	2 (4.4%)	5	13.3% (6/45)
$\geq 2500\text{g}$	19 (42.2%)	16	28.9% (13/45)
Wt not recorded	0 (0%)	2	22.2% (10/45)

% calculated as the number of referred (outborn) deaths in each weight category out of all the referred (outborn) neonatal deaths (all weight categories).

Outborn babies mortality (total numbers) according to referral area of origin:

Geographic Service Area	2020 (n= 45)	2019 (n= 48)	2018 (n= 45)
Metro East	14	18	17
Winelands (Paarl area)	11	9	15
Overberg (Worcester drainage area)	10	7	6
Helderberg	6	6	5
Khayelitsha	2	7	2

Unknown	2	1	
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CHPIP MORTALITY for all sub-specialist paediatric wards (2020)

Table 1: All deaths per ward and age as on Clinicom excluding children >29 days of age dying in the neonatal deaths

Ward	Total	0-7 days	8-28 days	29 days - 11months	12 -59 months	>5-years
PICU	64	0	7	22	19	16
GG	14	1	0	8	5	0
G3	8	0	0	1	3	4
G10	3	0	0	3	0	0
G7	3	1	0	1	1	0
G9	1	0	0	0	1	0
Total	116	2	7	53	33	21

Median duration of stay at death 4 days IQR 1 – 14) [mean 11 days]

*Excludes children that died in neonatal service

Table 2: Audited deaths per age and firm as per Child PIP

Ward	0 - 7 days	8 - 28 days	28 days - 1 Year	1 - 5 years	5 - 13 years	13 – 18 Years	Total
A9 PICU	0	7	22	19	15	1	64
Neonatology*	0	0	17	0	0	0	17
GG	1	0	8	5	0	0	14
Oncology	0	0	1	3	4	0	8
Gastroenterology	0	0	1	4	0	1	6
G7 Gen inpatients	1	0	1	1	0	0	3
Infectious Diseases	0	0	3	0	0	0	3
Pulmonology	0	0	0	1	0	0	1
Total	2	7	53	33	19	2	116
Girls	1	3	23	17	12	0	56
Boys	1	4	30	16	7	2	60

* infants older than 28 days of age died in neonatal service (only 3 audited deaths)

Table 3: Length of stay as per Child PIP

Length of stay	Number	Percent
1-3 Days	30	25.8%
> 14 Days	29	25%
< 24 Hours	29	25%
8-14 Days	13	11%
4-7 Days	14	12%
DOA	1	0.8%

Table 4:

Main Cause Of Death	Number	%
Septicaemia, possible serious bacterial infection	27	23
Pneumonia, ARI	13	11
Other Nervous System (specify)	11	9
Other diagnosis (specify)	7	6
Other Respiratory System (specify)	7	6
Tumours	6	5
Other Circulatory System (specify)	6	5
Other Digestive System (specify)	5	4
Heart failure, Pulmonary Oedema	5	4
Hospital-acquired infection	5	4
Cardiomyopathy	4	3
Cirrhosis, Portal Hypertension, Liver Failure, Hepatitis	4	3
TB: Miliary, other extra-pulmonary	3	2.5
Acute diarrhoea, hypovolaemic shock	2	1.7
Acute renal failure	1	0.8
Congenital Heart Disease	1	0.8
Hypoglycaemia	1	0.8
Ill-defined/Unknown cause of mortality	1	0.8
Leukaemias	1	0.8
Non-accidental injury, Abuse-related, Neglect	1	0.8
Other Endocr, Nutritional, Metabol. (specify)	1	0.8
Other Poisoning (specify)	1	0.8
Other possible serious infection (specify)	1	0.8
Paraffin	1	0.8
Pneumothorax, Pyothorax, Pleural effusion	1	0.8

Table 5:

Weight Category	Number	%
Normal	56	48
UWFA	30	25
M-K (Marasmic-Kwashiorkor)	10	8.6
Unknown	10	8.6
Marasmus	5	4
Kwashiorkor	4	3
OWFA	1	0.8

Table 6: Death by HIV status

HIV status	Number
Negative	80
Exposed	13
Infected	13
Not tested (not indicated)	5
Unknown	3
No results	2
Total:	116

Part 2

Community Outreach Programmes/Community Service and Interaction & Partnerships

Expert Members

Prof M Kruger

- Expert Haematology/Oncology Member for the Council for Medical Schemes on Prescribed Minimum Benefits since 2019.
- Member of the Central Clinical Committee of the South African Health Products Regulatory Authority (SAHPRA) until December 2019
- Clinical medicines evaluator of the Advisory Clinical Committee of the South African Health Products Regulatory Authority (SAHPRA): 01/08/2019-present
- South African Medical Research Council Bioethics Advisory Panel (BAP): August 2020-present
- Member of the Council of the College of Paediatricians for the triennium 2020–2023
- Member of the Professional Practice Committee Meeting of the Health Professions Council of South Africa (HPCSA) from 01/11/2020-present.
- Member of the Senate Research Ethics Committee of Stellenbosch University
- Member of the Health Research Ethics Executive Committee of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Member of the Centre for Medical Ethics and Law (CMEL) Governing Board of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Member of the Postgraduate Research Committee of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Trustee of the Tygerberg Hospital Children’s Trust

Prof S Kling

- Immediate Past President, Council of College of Paediatricians
- Allergy Society of South Africa (ALLSA)
 - Member of Executive Committee since 1998
 - Chairman, Research Subcommittee (2011 to date)
- Ethics accreditor, CPD Committee, Faculty of Medicine and Health Sciences.
- Vice-chair, Undergraduate Research Ethics Committee since 2015
- Member of the Health Research Ethics Executive Committee of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Member, Clinical Ethics Committee Tygerberg Hospital (2002 – 2004 and 2009 to current).
- Member, Dean’s Advisory Committee on Environmental Sustainability

Prof AC Hesselning

- NRF SARChi Chair in Paediatric Tuberculosis.
- Associate editor: International Journal against Tuberculosis and Lung Diseases, since 2009
- Site PI, CDC TBTC Network, Site 33, Stellenbosch University, since 2009
- Chair, Tuberculosis Scientific Committee, IMPAACT network, since 2011
- Co-chair: Pediatric Interest Group, TBTC network, since 2010
- Consultant: TB Alliance, Pediatric TB Unitaid program, since 2013
- Co-chair: PhD Committee, Department of Paediatrics and Child Health, Stellenbosch University, since 2015
- Member, Research committee (subcommittee C), Faculty of Medicine and Health Sciences, Stellenbosch University, since 2016

- South African TB Think Tank, TB Prevention Task force core member, since 2017
- Consortium Chair: South African Gates TB Demonstration and Scale-up, since 2018

Prof MF Cotton

- President of World Society of Pediatric Infectious Diseases from 2019-2021.
- Member of the Clinical Guideline Development Group (GDG) to support the update of the World Health Organization Consolidated Guidelines on the use of antiretroviral drugs for treating and preventing HIV infection
- WHO HIV/TB Task Force Advisor

Prof P Goussard

- Health Research Ethics Committee, Faculty of Medicine and Health Sciences
- Member of the South African Thoracic Society Editorial Board
- International Advisory Board of the International Congress on Pediatric Pulmonology
- Co-Chair of the Here Be Lungs Conference Organising Committee
- Chair of the Tygerberg Hospital Children's Trust

Prof HS Schaaf

- Board of Directors and Chairperson of Adult and Child Lung Health section, The Union (International Union Against Tuberculosis and Lung Disease)
- Expert on ATS/CDC committee for new TB guidelines
- MDR-TB Review Board Western Cape
- Member of the Subcommittee C of the Research Committee, Faculty of Medicine and Health Sciences

Dr B Fourie

- Safety representative on Health and Safety Committee, Faculty of Medicine and Health Sciences

Prof A Bekker

- International Maternal Pediatric Adolescent AIDS Clinical Trials Network (IMPAACT) P1106 vice-chair
- CDC: Tuberculosis Trials Consortium (TBTC) Tuberculosis and Pregnancy Working Group – membership
- Health Research Ethics Committee, Faculty of Medicine and Health Sciences
- Paediatric HIV advisory Board for ViiV
- Collaborating with GARDP/DNDi on a NeoAMR global neonatal sepsis study

Prof J Lawrenson

- Ethics and Guidelines committee – SA Heart Association
- Member of the Provincial Clinical Governance Committee (PCGC)

Dr S Holgate

- Member of Committee for Non-Invasive Ventilation in Paediatrics and Neonates

Dr G Kali

- Neonatal Encephalopathy with Suspected Hypoxic Ischemic Encephalopathy (NESHIE) study local PI
- United South African Neonatal Association executive committee member - vice president 2019-2021

Prof R van Toorn

- PANDA executive committee member –treasurer
- Member of the Committee for Postgraduate Teaching of the Faculty of Medicine and Health Sciences, Stellenbosch University

Dr CJ du Buisson

- South African Renal Society Executive Committee

Dr E Malek

- Chair of the Provincial Clinical Governance Committee (PCGC) Paediatrics, Newborn and Child Health
- Member of the Provincial 1st 1000 Days Executive Committee
- Member of the Provincial Perinatal technical task team

Dr R Uys

- Chair of the Governing Body of TBH school

Dr T Wessels

- Member of the Provincial Clinical Governance Committee (PCGC) Paediatrics, Newborn and Child Health
- Member of the Provincial Perinatal technical task team

Dr H Hassan

- Member of the Provincial Perinatal technical task team

Dr PS Springer

- Member of the Governing Body of TBH school

Prof R Solomons

- PANDA executive committee member
- Member of the MBChB Programme Committee and Middle Clinical Rotation Chair of the Faculty of Medicine and Health Sciences, Stellenbosch University
- Trustee of the Tygerberg Hospital Children's Trust

Prof A Dramowski

- National neonatal sepsis task force
- SASPID committee member
- Undergraduate Research Ethics committee member
- Associate editor BMC Antimicrobial Resistance and Infection Control
- Centre for Evidence-Based Healthcare governing board member

Dr A Redfern

- Member, steering committee, Paediatric Emergency Care Society of South Africa (PECSA)
- Member, National Executive Committee, EMSSA
- Member, National Executive Committee, South African Paediatric Association

Dr H Finlayson

- Chairperson, Tygerberg Antimicrobial Stewardship Committee
- Member, South African Antibiotic Stewardship Programme (SAASP) Working Group.
- Member, Ministerial Advisory Committee on Antimicrobial Stewardship.
- SASPID representative on the FIDSSA Expert Review Committee, and member of the National Neonatal Sepsis Working Group.

Outreach

Regional and District

- Worcester – Profs R van Toorn, R Solomons, J Lawrenson, B Fourie & Dr C du Buisson
- Paarl – Profs P Goussard, H Rabie, R van Toorn, R Solomons, Lawrenson and Dr B Fourie. HIV outreach: Dr Frigati/Rose
- George – Prof J Lawrenson, Dr B Fourie
- East London - Prof J Lawrenson, Dr B Fourie
- Delft - Drs L Smit, R Gioio (HIV outreach)
- Helderberg – Dr T Wessels; Perinatal – Dr H Hassan, Dr Frigati/Rose, (HIV outreach)
- Khayelitsha district hospital – Prof H Rabie, Dr P Rose

- Eersterivier – Drs H Finlayson (HIV outreach), JCF du Preez
- Ikwezi clinic HIV outreach
- Bishop Lavis clinic, HIV outreach
- Grabouw CHC HIV outreach
- Kraaifontein CHC HIV outreach
- Scottsdene – MDR TB outreach clinic – Prof Schaaf, Dr Rose
- Town 2 Khayelitsha – MDR TB outreach clinic – Prof Schaaf, Dr Rose
- 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, Prof S Kling (General Paediatrics) and Dr H Finlayson (Antibiotic Stewardship), Neonatal – Neonatal team
- George – Dr B Fourie, Prof J Lawrenson
- East London – Prof J Lawrenson
- Brooklyn Chest Hospital – Prof HS Schaaf, Dr H Finlayson
- Paarl School for Children with Cerebral Palsy, Brackenfell---Dr Cilla Springer
- Western Cape Education Department outreach meeting for autism spectrum disorder, Chere Botha Centre, Bellville – Dr Cilla Springer
- Neurodevelopmental clinic - HOPE doctors and occupational therapist have been assisting once a week in a voluntary basis.
- Alta du Toit School for Learners with Special Educational Needs, Kuils River---Prof R Solomons
- Dora Nginza Hospital neonatal unit (IPC and antibiotic stewardship) – Prof A Dramowski

Media Exposure

TV/Radio Interviews:

- Prof Anneke Hesselning, Radio Sonder Grense (RSG) in celebration of World TB Day, 3 March 2020 at 13:00 - <http://www.radio-south-africa.co.za/rsg>
- Prof Adrie Bekker, Talks @ Stellenbosch University, PETITE study searches for best treatment options for newborns exposed to HIV, 1 December 2020- <https://anchor.fm/stellenbosch-university/episodes/PETITE-study-searches-for-best-treatment-options-for-newborns-exposed-to-HIV-en6qvs>

Articles:

Name of publication: Stellenbosch University Website

Name of article: Prof Peter Hesselning awarded for lifetime of service

Link: <http://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=7060>

Date: 28 January 2020

Name of publication: Cape Argus Early

Name of article: Childhood Cancer Day Observed (Prof M Kruger)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_10-16Feb20.pdf

Date: 17 February 2020

Name of publication: Division for Research Development (DRD) Newsletter

Name of article: Prof Peter Hesselning awarded for lifetime of service
Link: <http://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=7060>
Date: March 2020

Name of publication: Spotlight

Name of article: Don't take BCG vaccine away from kids who need it for TB, say experts (Prof Mark Cotton, Professor Simon Schaaf and Dr Anneke Hesselning)
Link: <HTTPS://WWW.SPOTLIGHTNSP.CO.ZA/2020/04/28/COVID-19-DONT-TAKE-BCG-VACCINE-AWAY-FROM-KIDS-WHO-NEED-IT-FOR-TB-EXPERTS-SAY/>
Date: 28 April 2020

Name of publication: Health24 Website

Name of article: Keep TB vaccine for babies, implore experts (Prof Mark Cotton, Professor Simon Schaaf and Prof James Seddon)
Link: https://www.news24.com/health24/Medical/Infectious-diseases/Coronavirus/keep-tb-vaccine-for-babies-implore-experts-20200428?_sp=afd6f335-fa85-4320-91ba-b16bc48f0e62.1591597580961
Date: 28 April 2020

Name of publication: Stellenbosch University Website

Name of article: Fogarty grant will help put spotlight on TB meningitis in children (Dr Karen du Preez)
Link: <http://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=7560>
Date: 7 August 2020

Name of publication: Smile 90.4 FM Website

Name of article: Snorkel Masks Now Protecting Western Cape Health Workers (Dr Lizelle van Wyk and Prof Pierre Goussard)
Link: <https://smile904.fm/snorkel-masks-now-protecting-western-cape-health-workers/>
Date: 23 August 2020

Name of publication: The Skills Portal

Name of article: Doctors find new creative PPE shortage solution (Dr Lizelle van Wyk and Prof Pierre Goussard)
Link: <https://www.skillsportal.co.za/content/doctors-find-new-creative-ppe-shortage-solution>
Date: 25 August 2020

Name of publication: TygerBurger DeGrendel

Name of article: Covid-toep ontwikkel (Dr Lizelle van Wyk and Prof Pierre Goussard)
Link: http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_31Aug-6Sept2020.pdf
Date: 26 August 2020

Name of publication: People's Post Landsdownse, Retreat, Athlone

Name of article: Snorkel masks to the rescue (Dr Lizelle van Wyk and Prof Pierre Goussard)
Link: http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_31Aug-6Sept2020.pdf
Date: 1 September 2020

Name of publication: IOL

Name of article: Toddler fights rare tumours (Paediatric Oncology ward at Tygerberg Hospital)

Link:

Date: 12 September 2020

Name of publication: Stellenbosch University Website

Name of article: US maak jongste groep uitgelese professors bekend (Profs Mark Cotton, Anneke Hesseling and Simon Schaaf)

Link: <http://www.sun.ac.za/afrikaans/Lists/news/DispForm.aspx?ID=7676>

Date: 16 October 2020

Name of publication: Matiemedia

Name of article: SU honours new distinguished professors (Profs Mark Cotton, Anneke Hesseling and Simon Schaaf)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_19-25October2020.pdf

Date: 25 October 2020

Name of publication: VIVUS

Name of article: Fogarty Grant Will Help Put Spotlight On TB Meningitis In Children (Dr Karen du Preez)

Link: <http://www0.sun.ac.za/vivus/vivus-oct-2020/general/fogarty-grant-will-help-put-spotlight-on-tb-meningitis-in-children.html>

Date: October 2020

Name of publication: Stellenbosch University Website

Name of article: Kliniese proewe beveel korter behandelingsperiode aan vir kinders met minder ernstige TB (Prof Anneke Hesseling)

Link: <http://www.sun.ac.za/afrikaans/Lists/news/DispForm.aspx?ID=7705>

Date: 29 October 2020

Name of publication: Saturday Dispatch

Name of article: Stellenbosch TB Trial Show Children Cured Much Sooner (Prof Anneke Hesseling)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_26October-1November2020.pdf

Date: 31 October 2020

Name of publication:

Name of article: Stellenbosch TB trial shows children can be cured much sooner (Prof Anneke Hesseling)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_26October-1November2020.pdf

Date: 31 October 2020

Name of publication: Cape Times

Name of article: Maties scientists inch closer to major tuberculosis breakthrough (Prof Anneke Hesseling)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_2-8November2020.pdf

Date: 2 November 2020

Name of publication: The Star

Name of article: Breakthrough in TB treatment for children (Prof Anneke Hesselning)

Link:

http://www.sun.ac.za/english/faculty/healthsciences/Documents/Media%20Review/2020/MediaReview_2-8November2020.pdf

Date: 4 November 2020

Name of publication: TygerBurger Kuilsriver, Eersterivier, Elsiesrivier, Ravensmead

Name of article: November Is Prematurity Awareness Month (Neonatal Wards at Tygerberg Hospital)

Link: <https://www.gate5.co.za/read/22883/qv/89440649/148977402/73979/p>

Date: 25 November 2020

Name of publication: Stellenbosch University Website

Name of article: PETITE study searches for best treatment options for newborns exposed to HIV (Prof Adrie Bekker)

Link: <https://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=7848>

Date: 26 November 2020

Name of publication: VIVUS

Name of article: Distinguished FMHS Academics Honoured With Chancellor's Award (Prof Mariana Kruger)

Link: <http://www0.sun.ac.za/vivus/vivus-4-dec-2020/general/distinguished-fmhs-academics-honoured-with-chancellor-and-rsquo-award.html>

Date: December 2020

Name of publication: Stellenbosch University Website

Name of article: Ontvangers van US se Kanselierstoekennings (Prof Mariana Kruger)

Link: <http://www.sun.ac.za/afrikaans/Lists/news/DispForm.aspx?ID=7851>

Date: 17December 2020

Part 3

Teaching & Training

Education-related Activities

Postgraduate Students

Successful PhD Candidates

- **Dr K du Preez:** Title: Complementary surveillance strategies and interventions to inform a tuberculosis care cascade for children. Supervisors: Proff AC Hesselning, HS Schaaf and Dr P Naidoo

- **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
- **Prof 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 P Springer:** Neurodevelopmental Outcome of the HIV exposed but uninfected Infant and evaluation of a developmental screening tool. Supervisors: Prof Mariana Kruger, Prof Christopher Molteno

Enrolled PhD students

- **Mr G Mbah Afungchwi:** Title: Advocacy for childhood cancer in Cameroon: improving early diagnosis and referrals to life-saving care. Supervisor: Prof M Kruger, Prof PB Hesselning (*Thesis submitted and examined, October/December 2020*)
- **Dr JCF du Preez:** Title: The Baby Book Project. Dosing with Words. Can nursery rhyme reading by mothers, during hospital stay, enhance neurodevelopment and maternal-infant interaction in premature infants? Supervisors: Profs J Smith, P Cooper, L Murray
- **Dr GTJ Kali:** Title: A comparative study of neuroprotective strategies in neonatal hypoxic ischaemic encephalopathy. Supervisors: Prof J Smith, Dr M Rutherford (*Thesis submitted and examined, October/December 2020*)
- **Dr Y Kooblal:** Title: The relationship of body composition on nutritional and immunological status in childhood tuberculosis. Supervisors: Prof Ronald van Toorn, Dr Martijn van der Kuip and prof Marceline Tutu van Furth
- **Dr M Osman:** Title: TB-associated mortality in South Africa: longitudinal trends and the impact of health system interventions. Prof AC Hesselning and Dr P Naidoo
- **Prof L Pepeta:** Title: Novel medical and percutaneous modalities in the management of a patent ductus arteriosus in middle income and low income countries. Supervisors: Prof M Kruger, Dr HN Ntsinjana
- **Dr P Rose:** Title: Determinants of liver disease in HIV-infected children in the era of early antiretroviral therapy. Supervisors: Profs SV Innes, ED Nel
- **Me J Schoeman:** Title: Nutritional status of children at cancer diagnosis and during treatment, with a focus on the association with their clinical outcome . Supervisors: Profs M Kruger, Elena J. Ladas and Paul Rogers.
- **Dr J van Heerden:** Title: Neuroblastoma In Low And Middle Income Countries. Supervisors: Prof M Kruger (*Thesis submitted and examined, October/December 2020*)
- **Dr L van Wyk:** Title: Non-invasive cardiac output monitoring in preterm infants . Supervisors: Prof Johan Smith, Dr John Lawrenson and Prof Willem-Pieter de Boeck
- **Dr A van Zyl:** Title: Long-term follow-up and care of childhood cancer survivors in South Africa. : Supervisors: Profs M Kruger and P Rogers
- **Mr DT Wademan:** Title: Chronic conditions and care: Intergenerational experiences of living with HIV, TB, and diabetes in South Africa. Supervisors: Dr G Hoddinott

Successful Masters Candidates

- **MPhil in Paediatric Neurology**
 - Dr Thembi Katangwe

- **MMed(Paed)**
 - Dr Ruth Aryao
 - Dr Justina Itana
 - Dr Lydia Mapala
 - Dr Muhamed Ebrahim
 - Dr Grace Musiime
 - Dr Luvina Nuckchedee Dookhony
 - Dr Nightingale Sekgabo
 - Dr Magriet van Niekerk
 - Dr Leigh-Ann Woodpottle

Colleges of Medicine of South Africa (CMSA)

- **Certificate in Paediatric Gastroenterology**
 - Dr Utpol Chowdhury
- **Certificate in Paediatric Oncology**
 - Dr Leilah Schoonraad
- **FC Paed (SA) Part II**
 - Dr Ruth Aryo
 - Dr Justina Itana
 - Dr Lydia Mapala
 - Dr Grace Musiime
 - Dr Lorraine Ndjoze
 - Dr Mekelaye Nghaamwa
 - Dr Prishani Ramsunder
 - Dr Sandra Sebitosi-Van Jaarsveld
 - Dr Lee-Ann Wood-Pottle
- **FC Paed (SA) Primary**
 - Drs Jameel Busgeeth
 - Dr Genevieve Theron

Undergraduate Students

99% pass rate (2019 = 94%)

Education-related Activities

All consultants are involved with under- and postgraduate teaching and supervision on a daily basis. Additional education activities includes:

- Education Committees of the Department:
 - Undergraduate: Dr Noor Parker (Chairperson)
 - MBChB II: Dr Thandi Wessels (Chair), Sister Liesl Yzelle
 - Early rotation: Dr Liezl Smit (Chair), Prof Helena Rabie, Dr Haseena Hassan, Dr Marlene Morkel, Dr Yajna Kooblal, Sr Liesl Yzelle
 - Middle rotation: Dr Christelle Du Buisson (Chair), Dr Cilla Springer, Prof Ekkehard Zollner, Dr Ronelle Uys

- Neonatology: Dr Miemie Du Preez, Dr Sandi Holgate
- SI: Dr Barend Fourie (Chair), Dr Ilse Appel, Dr Penny Rose/Dr Lisa Frigati, Dr Lizelle van Wyk, Dr Lindo Radebe, Dr Julie Morrison, Dr Marlene Morkel
- Remedial: Dr M Morkel, Sr L Yzelle
- Elective students: Dr Muneera Satardien, Prof M Kruger
- Postgraduate: Dr Gugu Kali (Chair), Prof Ronald van Toorn, Dr Sandi Holgate, Prof Ettienne Nel, Dr Noor Parker, Prof Pierre Goussard & registrar representative
- PhD: Proff Mariana Kruger (Chairperson), Adrie Bekker, Angela Dramowski, Pierre Goussard, Anneke Hesseling, Gugu Kali, Etienne Nel, Ronald van Toorn, Marieke van derZalm
- Senior registrars in training:
 - Neonatology: Drs A van Eck (sponsored by MediClinic South Africa), I Abrahams, NM Dormohamed (Supernumerary from Kenya), L Kombo (Supernumerary from Kenya), M Satardien
 - Paediatric Oncology: Drs E Elhuni (Supernumerary from Libya), K Reddy (Discovery Subspecialist Award), L Schoonraad
 - Paediatric Pulmonology: Drs AR Gie, L Mfingwana, R Mohammed (Supernumerary from Sudan)
 - Paediatric Neurology: Drs F Essajee (Supernumerary from Kenya), R Salih (Supernumerary from Sudan), M van Niekerk
 - Paediatric Nephrology: Dr P Mashanga (Supernumerary from Zambia)
 - Paediatric Gastroenterology: Dr U Chowdhury, sponsored by a Nestle Nutrition Institute Fellowship endorsed by the European Society of Paediatric Gastroenterology (Supernumerary from Bangladesh/Botswana)

Part 4

Achievements and Highlights

Appointments

Prof Cilla Springer - promoted to associate professor from 1 June 2020

Prof Amy Slogrove - promoted to associate professor from 1 June 2020

Prof Peter Bock - promoted to associate professor from 1 March 2020

Professors Mark Cotton, Anneke Hesseling and Simon Schaaf - reappointed as distinguished professors.

Prof Mariana Kruger

- Elected to the Council of the College of Paediatricians for the triennium 2020 – 2023
- Appointed as a member of the Professional Practice Committee of the HPCSA from November 2020.

Prof Adrie Bekker

- Received an invitation from the WHO to become a member of the pediatric antiretroviral working group (PAWG) for a 2 year term (2021–2023). Her contribution will be around the optimization of antiretrovirals in neonates exposed to and infected with HIV.

Grants/Awards

Prof M Kruger

- Stellenbosch University Chancellor's Medal 2020 for sustained excellence in research, in innovation, in learning and teaching, in social impact or in professional service (or more than one of these areas).
- As Co-PI of the South African Research Ethics Training Initiative (SARETI) UKZN (PhD Programme), funded by Fogarty International Center (FIC) of the National Institutes of Health (NIH), grant number 1D43TW011240-01A1 - US\$ 1,224,614.00 started January 2020.
- As PI has received a grant of R1 793 280.18 from MSD (PTY) LTD for the clinical study: An Open-Label, Multicenter Phase 2 Basket Study to Evaluate the Antitumor Activity and Safety of Lenvatinib in Children, Adolescents, and Young Adults with Relapsed or Refractory Solid Malignancies.

Dr Miemie du Preez

- Received the HB & MJ Thom award to the value of R80 000 in January 2020 for overseas visit relating to her PhD studies entitled: "The Baby Book Project."

Prof Angela Dramowski

- Received the African Academy of Sciences (The AAS) the GC Africa Round 6 - Data Science Approaches to Improve Maternal, Neonatal and Child Health in Africa Award for her researched titled: 'Modelling the mortality impact of treatment regimens for antimicrobial-resistant neonatal bloodstream infections in 7 African countries' - Total value over 24 months is USD\$ 99,899.00 (R 1 848 743.03 on 29 April 2020).

Dr Penny Rose

- Towards her PhD research: Stellenbosch University Strategic equipment fund to purchase a Fibroscan 630 Expert device (R2 380 000.00). Collaboration between Department of Paediatrics and Child Health and the Divisions of Radiology, Virology, Infectious Diseases, Gastroenterology and Surgical Gastroenterology.

Prof Amy Slogrove

- Awarded an NIH R61/R33 award as co-PI with Prof Mary-Ann Davies at UCT for a project called CHERISH (Children HIV Exposed Uninfected Research to Inform Survival and Health). This is a 5-year \$2.3million project to establish novel epidemiological methods for evaluation of long-term outcomes in children who are HIV exposed uninfected in the Western Cape with co-investigators Prof Mark Cotton, Prof Mark Tomlinson, Dr Moleen Dzikiti and collaborators from UCT and Harvard. [This might already be included by the RGMO]

Ms Kopano Dube

- Under supervision of Prof Amy Slogrove, received the International AIDS Society (IAS), Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) Growing the Leaders of Tomorrow Fellowship Programme for the research project entitled "DECIPHER Phase 2: Birth Outcomes & Neonatal Morbidity & Mortality" has been approved for funding of a total amount of US \$70,000.00. The funds are set to be used over the period of 1 October 2020 to 30 September 2022

Dr Penny Rose

- Awarded the SAMRC Clinician Researcher Programme scholarship for her PhD research titled: "Determinants of liver disease in HIV-infected children in the era of early antiretroviral therapy".

This is a 2-year scholarship of R500,000 per year. She will present her research proposal at the MRC Early Career Scientist Convention (ECSC) running from 26-27 October 2020.

Dr Suzanne Kerswill

- Invited by the SE Pediatric Environmental Health Specialty Unit of Emory University to participate in the 16th annual Break the Cycle of Children's Environmental Health Disparities training program. Her MMed research proposal, reviewing the outcomes of malnourished children on the nutritional therapeutic programme, supervised by Prof Nel and Thandi Wessels, was accepted into this programme. The programme is based at Emory University in the US, and is aimed at providing research support and mentorship to projects in keeping with this theme. These projects are then ultimately presented at an annual conference and put forward for possible publication.

Profs Mark Cotton, Anneke Hesseling and Simon Schaaf

- Received the 2020 Research Output Awards for SU researchers who made the biggest contribution to accredited publications (based on audited publication statistics of the 2018-output year) and doctoral graduates (December 2019/March 2020 graduations).

NRF ratings:

- **Dr Barbara Laughton** received a C1 status

Sabbaticals

Dr Heather Finlayson - 15 January 2020 to 15 October 2020

Dr Finlayson dedicated her time to study for a Masters in Business Administration fulltime at University of Stellenbosch Business School and writing of an article.

Dr Barend Fourie - 1-30 November 2020

Dr Fourie completed the The Royal Brompton Hospital cardiac MRI online theory model.

Dr Sandi Holgate – 1 July – 30 September 2020.

Dr Holgate focussed on her PhD research proposal and article write-up for publication.

Prof Johan Smith - 1 October 2019 to 31 March 2020

Prof Smith as supervisor assisted with the completion of the PhD of Drs Gugu Kali and L van Wyk; completion of research and writing of several research articles, including towards the MMed(Paed) degree of Dr M van Niekerk and revision of the Tygerberg Neonatal Clinical Guide book as well as the Tyberberg Neonatal Ventilation Guide book

Dr Liezl Smit - 1 November 2020 to 31 January 2021

Dr Smit dedicated her time to complete her protocol and ethics review towards enrolling for a PhD in Medical Education at Stellenbosch University. The title of her research is: 'Learning where it matters.' She completed data analysis and article write up of her collaborative research entitled: 'Healthcare worker illness and absence in a Paediatric Department during the COVID-19 pandemic'.

Conferences Organized

Profs Pierre Goussard & Johan Smith

- Here Be Lungs, Protea Hotel, Stellenbosch, 5-6 March 2020

Conference Presentations

Prof Mariana Kruger

- Here be Lungs Conference, Protea Hotel, Stellenbosch, 5-6 March 2020- Welcoming address.
- One Retinoblastoma World 2020 Virtual Congress, 3-4 October 2020
- International Webinars

- International Network for Cancer Treatment and Research (INCTR), Good Clinical Practice Alliance, Europe and the Strategic Initiative for Developing Capacity in Ethical Review - Research and Treatment of Paediatric Cancers During Covid-19: Global Perspectives, 17 November 2020, 15:30-17:30 UK - Invited panellist
- Ethics and Practice Committee, Faculty of Pharmaceutical Medicine, Royal Colleges of Physicians. London webinar on Paediatrics and Public Health Emergencies: 'Special populations in PHEs - paediatrics', 15th July 2020, 16:00-17:00 - Invited panellist; <https://www.fpm.org.uk/events/special-populations-in-phes-i-paediatrics/>
- Preparedness Planning for Clinical Research During Public Health Emergencies (PREP), 21 May 2020, 14:00-15:00 - Invited Speaker: Lessons Learned from COVID-19 in Paediatric Research and Public Health

Prof Pierre Goussard

- ERS Paediatric Bronchoscopy, Naples, Italy, 23-25 March 2020 (Invited speaker)
- Interventional bronchoscopy in children including foreign body extraction
- Egyptian Congress of Pediatric Pulmonology Virtual meeting 13 – 16 October 2020. Invited speaker - The role of bronchoscopy in the pre-school wheezing infant (13 October 2020) and Neonatal bronchoscopy (14 October 2020)
- 8th Virtual Congress of the European Academy Of Paediatric Societies – EAPS, A Joint Scientific and Educational Event of EAP, ESPNIC and ESPR, 16-19 October 2020 Invited Societies Session: Tricks and pitfalls of paediatric respiratory disease management – ERS Session chair - The role of bronchoscopy in asthma diagnosis and management (18 October 2020)

Conferences Attended

Prof Mariana Kruger

- 52nd SIOP Virtual Congress of the International Society of Paediatric Oncology (SIOP): October 14-17, 2020.
 - Poster presentation collaborations:
 - Late effects of childhood cancer and -treatment in a South African cohort – Van Zyl A
 - The prevalence of vitamin deficiencies in children diagnosed with cancer in two paediatric oncology units in South Africa – Schoeman J
 - Outcome of 2 cohorts with nephroblastoma treated with 2 SIOP protocols in a South African paediatric oncology unit – Reddy K
 - Age at diagnosis as prognostic factor in South African children with neuroblastoma – Van Heerden J
- One Retinoblastoma World 2020 Virtual Congress, 3-4 October 2020
- International Webinars
 - National Biopharma Mission. Ethics in Clinical Research Webinar – 4: Ethical Perspectives in Planning and Conducting Clinical Trials for Cell and Gene Therapies, 5 November 2020 6.30 - 8.30 AM EST
 - National Biopharma Mission. Ethics in Clinical Research Webinar – 1:: Scientific and Ethical Standards of Clinical Trials in Public Health Emergencies, 24 September 2020 12:30 PM - 2:30 PM SAST
 - Health Care 4 All. 13th Global Summit of Bioethics Committees - WHO National ethics committees regional update: key issues raised by COVID-19, 11 September 2020, 13:00-15:30 CET
 - PHEPREN and The Global Health Network, An Epidemic of Research: publication ethics during a public health emergency, 29 June 2020 01:00 PM (London)

- Globethics.net International Online Conference, #BuildingNewBridgesTogether Conference, 25 June 2020, 15:00-18:00 CET
- Globethics.net International Online Pre-Conference: #BuildingNewBridgesTogether – Track 4: Ethics and Skills for a Responsible Global Citizenship, 22 June 2020, 15:00-18:00 CET
- Virtual Histiocyte Society Speaker Series: June, 11 June 2020, 11:00 am Eastern Time (US)
- IPA-UNICEF-WHO Spectrum of COVID 19 children- What we know for now, 29 May 2020, 15:00 GMT/UTC
- Ethics and COVID19, Ethics of childbirth, child and maternal health during COVID19, 26 May 2020, 12:00 EST
- AFREhealth COVID-19 Webinar, "COVID-19 Outbreak in Africa: What You Need to Know and How to Stay Safe", 6 May 2020, 16:00 EAT
- Pediatric Clinical Research in Response to Public Health Emergencies, Multi-Regional Clinical Trials Center of Brigham and Women's Hospital and Harvard Promoting Global Clinical Research in Children, Workgroup #3, 30 April 2020, 14:00 UTC
- Exploring Priority Setting In The Covid-19 Pandemic, 7 April 2020, 15:00 CET
- A Nuffield Council on Bioethics webinar, Ethics in the research response to COVID-19, 3 April 2020, 12.00 (BST)
- Scientific Symposium on COVID-19: Perspective from Africa, 31 March 2020, 15:00 EAT

Courses Presented

Prof Mariana Kruger

- Pre-doctoral Short Course - Quantitative research methods, Division of Human Nutrition, Faculty of Medicine and Health Sciences, Stellenbosch University, 12 February 2020

Publications

Journal Articles (subsidised)

1. ABULFATHI AA, ASSAWASUWANNAKIT P, DONALD PR, DIACON AH, REUTER H, SVENSSON EM. Probability of mycobactericidal activity of para-aminosalicylic acid with novel dosing regimens. *EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY* 2020; **76**(11):1557-1565.
2. ABULFATHI AA, DONALD PR, ADAMS KT, SVENSSON EM, DIACON AH, REUTER H. The pharmacokinetics of para-aminosalicylic acid and its relationship to efficacy and intolerance. *BRITISH JOURNAL OF CLINICAL PHARMACOLOGY* 2020; **86**(11):2123-2132.
3. ACKERMANN C, ANDRONIKOU S, SALEH MG, KIDD M, COTTON MF, MEINTJES EM, LAUGHTON B. Diffusion tensor imaging point to ongoing functional impairment in HIV-infected children at age 5, undetectable using standard neurodevelopmental assessments. *AIDS Research and Therapy* 2020; **17**:20, 15 pages.
4. ADAMS KT, DONALD PR, ABULFATHI AA, DIACON AH, STANDER MA, REUTER H. Pharmacokinetics of Para-Aminosalicylic Acid and Its 2 Major Metabolites:A Potential Relationship to the Development of Gastrointestinal Intolerance. *JOURNAL OF CLINICAL PHARMACOLOGY* 2020; **60**4(4):489-494.
5. AFUNGCHWI GM, HESSELING PB, KOUYA F, ENOW SA, KRUGER M. The outcome and cost of a capacity-building training programme on the early recognition and referral of childhood cancer for healthcare workers in North-West Cameroon. *Nursing Open* 2020; **7**:2029-2038.
6. AHMED S, MVALO T, AKECH S, AGWEYU A, BAKER K, BAR-ZEEV N, CAMPBELL H, CHECKLEY W, CHISTI MJ, COLBOURN T, CUNNINGHAM S, DUKE T, HESSELING AC, SEDDON JA, ET AL ET.

- Protecting children in low-income and middle-income countries from COVID-19. *BMJ Global Health* 2020; **5**:e002844, 3 pages.
7. ALLWOOD BW, VAN DER ZALM MM, AMARAL AFS, BYRNE A, DATTA S, EGERE U, EVANS CA, EVANS D, GRAY DM, HODDINOTT G, IVANOVA O, JONES R, MAKANDA G, MARX FM, MEGHJI J, MPAGAMA S, PASIPANODYA JG, RACHOW A, SCHOEMAN I, SHAW JA, STEK C, VAN KAMPEN S, VON DELFT D, WAL. Post-tuberculosis lung health: perspectives from the First International Symposium. *International Journal of Tuberculosis and Lung Disease* 2020; **24**(8):820-828.
 8. AMENYOGBE N, DIMITRIU P, CHO P, RUCK CE, FORTUNO ES, CAI B, ALIMENTI A, CÔTE HCF, MAAN EJ, SLOGROVE AL, ESSER MM, MARCHANT A, ET AL ET. Innate Immune Responses and gut microbiomes distinguish HIV-Exposed from HIV-Unexposed children in a population-specific manner. *JOURNAL OF IMMUNOLOGY* 2020; **205**:2618-2628.
 9. BEKKEN GK, RITZ C, SELVAM S, JESURAJ N, HESSELING AC, DOHERTY M, GREWAL HMS, VAZ M, JENUM S. Identification of subclinical tuberculosis in household contacts using exposure scores and contact investigations. *BMC Infectious Diseases* 2020; **20**:96, 11 pages.
 10. BEKKER A, DECLOEDT EH, SLADE G, COTTON MF, RABIE H, CRESSEY TR. Single Dose Abacavir Pharmacokinetics and Safety in Neonates Exposed to Human Immunodeficiency Virus (HIV) . *Clinical Infectious Diseases* 2020; **00**(0):1-3.
 11. BOIVIN M, CHERNOFF M, FAIRLIE L, LAUGHTON B, ZIMMER B, JOYCE C, BARLOW-BARLOW L, BWAKURA-DANGAREMBIZI M, VHEMBO T, RATSWANA M, KAMTHUNZI P, MCCARTHY K, DU PLESSIS J, COTTON MF, ET AL ET. African Multi-Site 2-Year Neuropsychological Study of School-Age Children Perinatally Infected, Exposed, and Unexposed to Human Immunodeficiency Virus. *Clinical Infectious Diseases* 2020; **71**(7):e105-e114.
 12. BOYLES TH, LYNEN L, SEDDON JA. Decision-making in the diagnosis of tuberculous meningitis. *Wellcome Open Research* 2020; **5**:11, 14 pages.
 13. BRUCE-BRAND C, REYES-MUGICA M, VAN ZYL A, SCHUBERT P. Cystic partially differentiated nephroblastoma-like lesion following neo-adjuvant chemotherapy for nephroblastoma: A case report and review of the literature. *Human Pathology: Case Reports* 2020; **20**:200368, 5 pages.
 14. BRUGMAN J, SOLOMONS RS, LOMBARD CJ, REDFERN A, DU PLESSIS A. Risk-stratification of children presenting to ambulatory paediatrics with first-onset seizures: should we order an urgent CT brain? . *JOURNAL OF TROPICAL PEDIATRICS* 2020; **66**(3):299-314.
 15. BULABULA ANH, DRAMOWSKI A, MEHTAR S. Antibiotic use in pregnancy: knowledge, attitudes and practices among pregnant women in Cape Town, South Africa. *Journal of Antimicrobial Chemotherapy* 2020; **75**:473-481.
 16. BULABULA ANH, DRAMOWSKI A, MEHTAR S. Transmission of multidrug-resistant Gram-negative bacteria from colonized mothers to their infants: a systematic review and meta-analysis. *Journal of Hospital Infection* 2020; **104**:57-67.
 17. CARBOO JA, ASARE H, NEL EDLR, RICCI C, LOMBARD M, DOLMAN RC. Treatment outcomes and determinants of mortality in children aged 0-59 months diagnosed with complicated severe acute malnutrition in two referral hospitals in Ghana. *Vulnerable Children and Youth Studies* 2020; **15**(4):329-343.
 18. CARRERAS-ABAD C, ESPIAU M, LOPEZ-SEGUER L, MARTIN-BEGUÉ N, MARTIN-NALDA A, MELENDO-PÉREZ S, MENDOZA-PALOMAR N, SOLER-PALACIN P, SCHAAF HS, SORIANO-ARANDES A. Adverse events associated with new injectable-free multidrug-resistant tuberculosis drug regimens. *ARCHIVOS DE BRONCONEUMOLOGIA* 2020; **56**(12):823-825.
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- survival in the Collaborative Wilms Tumour Africa Project. *Pediatric Blood & Cancer* 2020; **67**:e28383, 5 pages.
20. COTTON MF, RABIE H. HIV outbreak in children in Pakistan: localised or more widespread?. *LANCET Infectious Diseases* 2020; **20**:269-270.
 21. COX V, MCKENNA L, ACQUAH R, REUTER A, WASSERMAN S, VAMBE D, USTERO P, UDWADIA Z, TRIVINO-DURAN L, TOMMASI M, SKRAHINA A, SEDDON JA, HUGHES JA, ET AL AL. Clinical perspectives on treatment of rifampicin-resistant/multidrug-resistant TB. *International Journal of Tuberculosis and Lung Disease* 2020; **24**(11):1134-1144.
 22. DAVIS AG, DONOVAN J, BREMER M, VAN TOORN R, SCHOEMAN JF, DADABHOY A, LAI RP, CRESSWELL FV, BOULWARE DR, WILKINSON RJ, THUONG NTT, THWAITES GE, BAHR NC. Host directed therapies for tuberculous meningitis. *Wellcome Open Research* 2020; **5**:292, 14 pages.
 23. DIPPENAAR A, DE VOS M, MARX FM, ADROUB SA, VAN HELDEN PD, PAIN A, SAMPSON SL, WARREN RM. Whole genome sequencing provides additional insights into recurrent tuberculosis classified as endogenous reactivation by IS6110 DNA fingerprinting. *Infection, Genetics and Evolution* 2019; **75**:103948.
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34. ENGELBREGHT A, WIESNER L, NORMAN J, RABIE H, DECLOEDT EH. Pediatric Antiretroviral Therapeutic Drug Monitoring: A Five and a Half Year Experience from a South African Tertiary Hospital. *JOURNAL OF TROPICAL PEDIATRICS* 2020; **66**(4):385-394.
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36. ESSAJEE FTN, SOLOMONS RS, GOUSSARD P, VAN TOORN R. Child with tuberculous meningitis and COVID-19 coinfection complicated by extensive cerebral sinus venous thrombosis. *BMJ Case Reports* 2020; **13**:e238597, 3 pages.
37. FABIAN ID, ABDALLAH E, ABDULLAHI SU, ABDULQADER RA, BOUBACAR SA, ADEMOLA-POPOOLA DS, ADIO A, AFSHAR AR, AGGARWAL P, AGHAJI AE, AHMAD A, AKIB MNR, KRUGER M, ET AL ET. Global retinoblastoma presentation and analysis by national income level. *JAMA Oncology* 2020; **6**(5):685-695.
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