

FACULTY OF HEALTH SCIENCES



ANNUAL RESEARCH REPORT





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Report prepared by Prof M. A. Papathanasopoulos and HSRO staff

On behalf of the Faculty of Health Sciences, July 2018

A) EXECUTIVE SUMMARY

The Faculty of Health Sciences is a community of exceptional teachers, innovative researchers, clinicians and students, striving to prepare tomorrow's leaders. Based on the Academic Ranking of World Universities (ARWU) ShanghaiRanking's Global Ranking of Academic Subjects 2017, the Faculty was ranked 51-75 in Public Health, and 101-150 in Clinical Medicine. This is a testament to the exceptional academics and researchers.

The Faculty is made up of seven schools – Anatomical Sciences, Clinical Medicine, Oral Health Sciences, Pathology, Physiology, Public Health and Therapeutic Sciences. Additionally, in 2017 the Faculty housed 24 recognized Research Entities, eight Department of Science and Technology/National Research Foundation South African Research initiative Chairs, three South African Medical Research Council (MRC) Research Units, and four centres of excellence.

In 2017, the Faculty of Health Sciences accomplished a record number of publication outputs and postgraduate completions. The Faculty contributed **585.35 publication units**, a 14.88% increase from 2016. A total of 605 postgraduate students completed qualifications in 2017, including **60 PhD students**, **61 Masters by research**, **275 Masters by coursework and research report**, **56 postgraduate diploma and 153 BHSc Hons**, marking an overall increase of 26.5% from 2016. The NRF rated researchers in the Faculty increased from 85 in 2016 to 88 in 2017, with nine being A-rated scientists. The Faculty of Health Sciences researchers attained a remarkable range of achievement during 2017. To name a few, Professor Glenda Gray was named as one of TIME Magazine's Top 100 most influential people in 2017. Professor Johnny Mahlangu and colleagues published results from a landmark clinical trial that described the use of emicizumab to replace Factor VIII function in hemophilia A, representing a paradigm shift and new standard of care for treatment of hemophilia A patients with inhibitors. Research excellence of numerous staff and postgraduate students was acknowledged through various international and national awards and prizes. A record grant funding amount was awarded to Faculty members.

The approximately 2900 faculty staff members are responsible for undergraduate and postgraduate teaching and training, conducting research, providing clinical patient care as well as informing public health policy and service delivery for South Africa. During 2017, the Faculty staff complement was comprised of Wits staff (310 academic and 323 administrative support), and joint staff with either the Department of Health or the National Health Laboratory Services (approximately 2252, of which 51% (1159) are registrars). Additionally, the Faculty hosted between 30 to 48 postdoctoral fellows.

The Faculty takes great pride in the excellence of its researchers, its research output and postgraduate training. The continued integration of world-class research, education and clinical expertise to address the South African healthcare challenges and contribute to the global knowledge economy ensured the sustainability and growth of the Faculty in 2017.

The Faculty prepared their Strategic Research and Postgraduate strategy 2018-2022, which is included in this review as a separate document.

B) Special achievements of the Faculty of Health Sciences

The Faculty of Health Sciences researchers attained a remarkable range of achievement during 2017.

Professor Glenda Gray was named as one of TIME Magazine's Top 100 most influential people in 2017.

Professor Helen Rees was officially designated as chairperson of the South African Health Products Regulatory Authority (SAHPRA) board by the Minister of Health in October.

Researchers at the **SBIMB** and **Division of Human Genetics**, together with European, USA and Canadian collaborators published the discovery of the genetic mutation that causes the rare skin disease, keratolytic winter erythema (KWE), or 'Oudtshoorn skin', in Afrikaner families.

During the 9th International AIDS Society Conference on HIV Science, **Professor Caroline Tiemessen** and **Dr Avy Violari** reported on a South African child that was diagnosed with HIV-1 at one month, and had been living without antiretroviral drugs (ART) since 2008, effectively in a state of disease remission – a major breakthrough in HIV-1 functional cure.

Professor Johnny Mahlangu and colleagues published results from a landmark clinical trial that described the use of emicizumab to replace Factor VIII function in hemophilia A, representing a paradigm shift and new standard of care for treatment of hemophilia A patients with inhibitors.

Scientists at the Wits/MRC Respiratory and Meningeal Pathogens Research Unit (RMPRU), including Professor Shabir Madhi contributed to the first comprehensive study of the burden of Group B Streptococcus (GBS) worldwide. The findings were published as a supplement of 11 papers in Clinical Infectious Diseases and showed that in 2015, there were at least 319,000 infants <3 months of age with GBS disease, as well as 90,000 deaths and at least 57,000 stillbirths due to GBS 0- highlighting the urgent need for a maternal GBS vaccine.

Professor Caroline Tiemessen, joint Research Professor in the School of Pathology and Head of Cell Biology in the Centre for HIV and STIs in the National Institute for Communicable Diseases, was awarded the 2017 Vice-Chancellor's Research Award.

Professor Lynn Morris, joint Research Professor in the Wits Faculty of Health Sciences and Research Associate at the Centre for the Aids Programme of Research in South Africa (CAPRISA), was awarded the Harry Oppenheimer Fellow-ship Award for her research in the field of HIV vaccinology. For the second year, she was part of a list of 3087 Highly Cited Researchers from all over the world, hailed for their groundbreaking research in their different disciplines.

Professor Wendy Stevens, Head of the Department of Molecular Medicine and Haematology together with collaborating centres in Mozambique and Senegal launched iLEAD, (Innovation: Laboratory Engineered Accelerated Diagnostics), which is an initiative to advance innovation in

medical pathology laboratory systems and diagnostics and funded by the Bill and Melinda Gates Foundation.

Professor Maryna Steyn (Head of School of Anatomical Sciences and Director of the Human Variation and Identification Research Unit) was appointed as a new associate editor of the South African Journal of Science in the field of Archaeology, Anthropology and Palaeontology. Professor Steyn's research focuses on Forensic Anthropology and Bioarchaeology.

Ms Shakira Choonara a PhD Fellow in the School of Public Health was announced Woman of the Year in Healthcare at the Woman of Stature Awards Ceremony held at Emperors Palace, Johannesburg.

Ms Thulile Khanyile, lecturer and PhD Candidate in the Wits HIV Pathogenesis Research Unit, was named as a second runner-up in the category of academic excellence at the South African Youth Awards. The annual awards ceremony is hosted by the National Youth Development Agency in recognition of inspiring young South Africans.

Professor Glenda Gray was elected chair to the board of the Global Alliance for Chronic Diseases(GACD). GACD is a collection of the world's largest public health research funding agencies which fund joint programmes into lifestyle related or chronic diseases such as cardiovascular diseases, diabetes, certain cancers and mental disorders in low- and middle-income countries.

Associate Professor Benita Olivier (Associate Professor in the field of musculoskeletal physiotherapy at the Physiotherapy Department, School of Therapeutic Sciences) was selected as a member of the South African Young Academy of Science (SAYAS). The South African Young Academy of Science (SAYAS) is the voice of young scientists in South Africa.

Dr Alisha Wade (Agincourt, School of Public Health) received the Fogarty International Emerging Global Leader Award.

NRF Research Awards 2017: Ms Shakira Choonara received the Next Generation Researchers Excellence Award, and **Dr Tiisetso Lephoto** received Ethe xcellence in Science Engagement Award.

Dr Nontsikelelo Mapukata (School of Clinical Medicine) received the Vice-Chancellor's Transformation Award.

Professor Ames Dhai (Steve Biko Centre for Bioethics) jointly received the Vice-Chancellor's Academic Citizenship Award (shared with Bhekuyise Zungu, from the School of Education).

The Wits eFUNDANATHI Team, comprising Paula Barnard, Janine van der Linde, Lebo Bogoshi and Phiwe Dlamini, received the Vice-Chancellor's Teaching and Learning Team Award. The eFUNDANATHI eLearning Team, based in the School of Therapeutic Sciences, was acknowledged for its pioneering excellent work that has had a major impact on teaching and learning.

C) Performance against the Faculty Research and Postgraduate Plan

During 2017 the FHS continued to produce world class research and achieved its strategic goal of increasing its subsidy earning research and postgraduate output. Approximately 43% of the student population was registered for postgraduate degrees. Because of the complexity of the staff complement, it is difficult to determine the percentage that is research active. The faculty continues to strive to increase the number of research active staff.

Research output

Total units awarded by the Department of Higher Education and Training (DoHET) to the Faculty for the period 2013-2017 are depicted in **Figure 1**. Additionally, **Table 1** reflects the publication units awarded to individual Schools in the Faculty for the period 2013 – 2017. The publication emphasis is on journal articles. There has been a pleasing and consistent increase in publication numbers as well as publication units in the Faculty over the last years, as seen in **Table 2**. Each School has set minimum publication benchmarks per staff member according to ranking/grade, therefore the FHS publication outputs could be increased further as the number of research active staff increases.

The most prolific authors in the Faculty in 2017, as well as citations of Faculty authors over a 10 year period (2007-2017), are included in **Appendix 1 and 2**, respectively. The excellence of research is evident by the quality of publications, as determined by the impact factor of the journals. For example, during 2017 FHS researchers published in the New England Journal of Medicine (IF 72.406) and Science (IF 37.205).

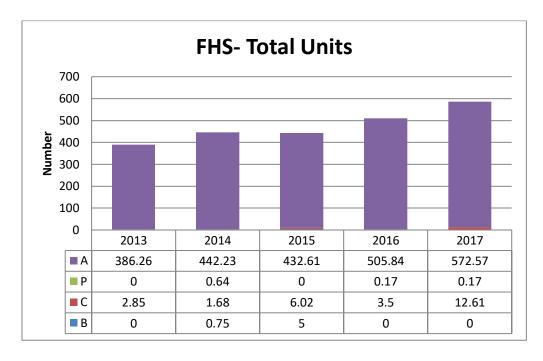


Figure 1: A comparison of the total units awarded to the Faculty of Health Sciences by DoHET for publications submitted for subsidy (2013 – 2017). A= journal articles, B=books, C= chapters and P= conference proceedings.

Table 1: A breakdown of units per School, T&L and HSRO offices, awarded to the Faculty of Health Sciences by DoHET for publications submitted for subsidy (2013 – 2017).

School	2013	2014	2015	2016	2017
SOAS	13.57	11.9	10.06	23.01	27.77
SOCM	142.42	158.4	163.4	190.55	223.03
SOHS	3.00	18.32	12.99	20.68	18.52
SPATH	69.96	63.03	74.66	82.9	85.85
SOP	34.74	37.15	33.2	38.28	36.56
SPH	66.82	93.45	85.4	88.25	106.26
STS	56.40	61.66	60	63.5	70.84
T&L HSRO	1.00	1.39	3.92	2.34	3.74
Total	389.11	443.91	439.71	507.17	585.35

Table 2: The percentage change in DoHET Units obtained in FHS compared to the previous year.

Year	2013	2014	2015	2016	2017
% change	33.4	14.4	-0.37	14.85	15.4

PG student enrolments and completions

The unit allocations for postgraduate students who completed qualifications in 2017 for PhD (D), Masters by dissertation (R), coursework and research report (C), as compared to previous years are shown in **Figure 2**. Moreover, the actual student numbers per school, including D, R, C, Postgraduate Diploma (X) and BHSc Hons (H) with comparative data for 2013 -2017, is shown in **Table 3**. A total of 605 postgraduate students completed qualifications in 2017, including 60 PhD students, 61 Masters by research, 275 Masters by coursework and research report, 56 postgraduate diploma and 153 BHSc Hons, marking an overall increase of 26.5% from 2016.

Figure 3 depicts the total number of postgraduate students enrolled in the Faculty, and the number of postgraduate students graduating in a given year. Trends show an overall increase in the number of enrolled and graduating students over the last 10 years, with a 1.1% increase in enrolled students and 28.7% increase in graduating students in 2017, as compared to 2016.

A preliminary analysis of postgraduate students that completed their degrees in 2017 revealed that 33%, 43%, and 52% of PhD, MSc and MMeds, respectively, completed within the prescribed time. Although part time students were not excluded from this analysis, results indicate that there is scope for improvement to increase throughputs.

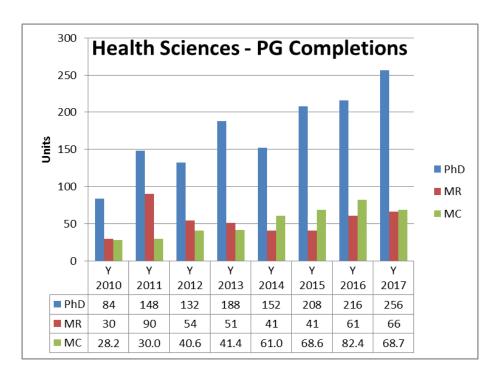


Figure 2: Total units for PhD (D), Masters by dissertation (R), coursework and research report (C) completions for the period 2010-2017 in the Faculty of Health Sciences.

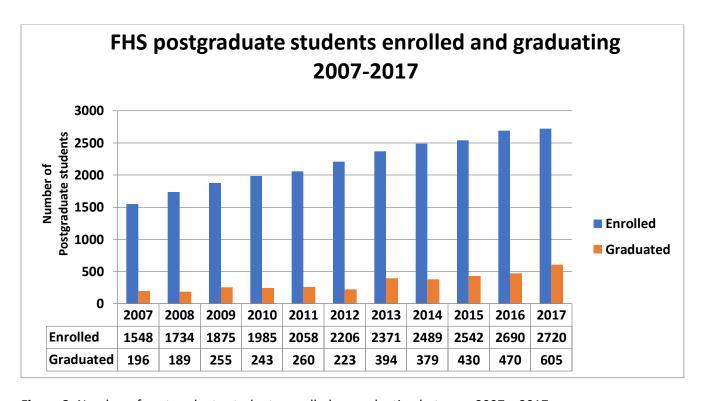


Figure 3: Number of postgraduate students enrolled vs graduating between 2007 – 2017.

Table 3: Numbers of postgraduate students graduating from each School in the Faculty of Health Sciences for the period 2013 to 2017.

Calendar Instance Year	Program Type	School of Anatomical Sciences	School of Clinical Medicine	School of Oral Health Sciences	School of Pathology	School of Physiology	School of Public Health	School of Therapeutic Sciences
2013	С		74	11	7		39	32
	D	1	10		12	8	5	8
	R	1	5		19	6	0	11
	Χ		1		9		31	25
	Н	6			29	13		25
Total pe	r School	8	90	11	76	27	79	106
2014	С		83	9	2		47	34
	D	1	12		10	3	4	7
	R	5	7	0	13	5	2	9
	Χ		6		3		0	26
	Н	18	10		20	14		25
Total pe	r School	24	128	9	48	22	53	101
2015	С		89	14	9		29	35
	D	6	16	0	14	2	7	7
	R	4	2	0	14	4	0	22
	Χ		22		0		27	18
	Н	14	8		14	17		22
Total pe	r School	24	137	14	51	23	63	104
2016	С		138	15	9		30	40
	D	4	14		13	3	11	9
	R	2	9		15	7	1	27
	Χ		27		7			7
	Н	13	8		24	14		31
Total pe	r School	19	196	15	68	24	42	114
2017	С		152	19	12		46	46
	D	3	13		12	6	8	16
	R	4	2		19	8	1	27
	Χ	12			2		28	14
	Н	24	25		33	19		52
Total pe	r School	43	192	19	78	33	83	155

MRC Units, Research Entities, DST/NRF South African Research Chair Initiative and Centres of Excellence

The FHS proudly hosts three MRC Units, (the Rural Public Health and Health Transition Research Unit (Prof S. Tollman), Development Pathways Research Unit (Prof S. Norris) and the Antiviral Gene Therapy Research Unit (Prof P. Arbuthnot)), 24 research entities, eight DST/NRF South African

Chairs and four Centres of Excellence (COE): DST/NRF COE for Biomedical Tuberculosis Research (Prof B. Kana), COE in Human Development (Prof L. Richter), ANDI COE in Advanced Drug Delivery Technology (Prof V. Pillay) and ANDI COE for Viral Gene therapy (Prof P. Arbuthnot).

Annual Reports for each research entity are submitted to the FRC and reviewed by the FRC Research Entity review committee. Based on the annual reports most of the entities performed exceptionally well with impressive research outputs and student training. It was decided to only have one on one meetings with entity director and their affiliated Heads of Departments and Schools if there were serious issues raised in the annual report. The committee was encouraged that many of the entities addressed most of the comments and recommendations from the previous reviews in their current reports, particularly around succession planning. Several entity directors continued to raise concerns around research post funding, lack of permanent posts, funding for equipment and international post-doctoral fellows, limited space, publications costs and lack of research time. Annual reports for each entity are available upon request.

New Research Entity Applications during 2017

 a. Professor Karen Hoffman from the School of Public Health submitted an application for a new research unit – Priority Cost Effective Lessons for System Strengthening (PRICELESS).
 The application was reviewed and approved by the FRC and URC in 2017.

QQR Review of Entities

The Bone Research Laboratory directed by Professor Ugo Ripamonti and the Brain Function Research Group (directed by Professor Andrea Fuller) underwent a QQR and both were endorsed by the URC for a further 5 years. The Wits/MRC Unit, the Rural Public Health and Health Transition Research Unit Directed by Professor Stephen Tollman underwent a joint Wits/MRC QQR at the end of 2017, with the outcome announced in 2018.

NRF Rated Scientists 2017

The Faculty of Health Sciences had a total of 88 NRF rated researchers during 2017, of which 12 were new (4) or re-rated (8) (see **Appendix 3**). A list of the nine NRF A-rated scientists in the Faculty is shown in **Table 4.** Of the remainder, 32 were B rated, 36 were C rated and 11 were Y rated.

Table 4: List of NRF A-rated scientists in the Faculty of Health Sciences during 2017.

Name	School	A rating	Valid until
Mitchell, D	Physiology	A1	2017
Brouwer DH	Public Health	A2	2022
Feldman, C	Clinical Medicine	A2	2021
Gray, G	Clinical Medicine	A2	2017
Jewkes, RK (JS)	Public Health	A2	2022
Madhi, SA	Pathology	A2	2022
Manderson LH	Public Health	A2	2021
Mathew CGP	Pathology	A2	2021
Morris, L (JS)	Pathology	A2	2021

Contribution of postdoctoral fellows

Over the course of 2017, the FHS hosted between 30 to 48 postdoctoral fellows (**Appendix 4**). Postdoctoral fellows are considered essential to advancing the scholarly mission of their host's research environment. In 2017, they contributed to 80 publications or 2.73% (15.98/585.35) units to the Faculty. This is translated into an expected income of R 8 925 200.00 for the University in 2019.

The Health Sciences Postdoctoral Research and Carnegie PhD Fellows Symposium sponsored by the Carnegie Foundation, Merck, Whitehead Scientific and Thermofisher Scientific took place at the Emoyeni Estate on 6 October, 2017. The event had over 70 academics with Professor Peter Cleaton-Jones, Dr Robin Drennan and Professor Bavesh Kana as guest speakers. A total twenty-one oral presentations were given by sixteen Postdoctoral Research Fellows and five Carnegie PhD Fellows. The symposium provided the Fellows an opportunity to present and discuss their research. It also acted as a channel for exchange of information between the Fellows, guest speakers and attendees.

Health Sciences Research Office (HSRO) short courses, workshops and consultations

The Health Sciences Research Office (HSRO) strives to support postgraduate students at all stages of their research process by offering several short courses and workshops. These initiatives are aimed at assisting postgraduate students to develop their research proposals, analyse research data and finally write-up research findings as research reports, dissertations, theses and publications. Since the quality of supervision has an impact on performance of postgraduate students, the HSRO also runs a supervisor's course. An examiners workshop was also introduced this year to increase the capacity of internal examiners in the Faculty. As shown in Appendix 5, a total of 765 staff/students attended courses and workshops during 2017. Additionally, staff and students attended various statistics (STATISTICA and STATA) courses and workshops, and the monthly data analysis workshops held during 2017. In order to assist students on an individual basis, the HSRO continues to offer 'walk-in' one-on-one statistical consultations to students in the Faculty 4 days per week at the Medical School. The consultations are also offered at the Chris Hani Barangwanath Hospital but by appointment. The consultations have been supported by the School of Public Health which has been providing some of the tutors since the beginning of this activity. Financial support for this initiative is provided by the HSRO. In order to assist postgraduate students on an individual basis with their scientific writing skills, the HSRO offers one-on-one consultations to students and staff in the Faculty. A total of 45 consultations were held since the introduction in June to December 2017.

The Central Postgraduate Affairs Office of the University provided funding for two writing retreats in 2017. Both writing retreats were held at various venues at the Phillip V. Tobias Health Sciences Building. Each retreat was 4 days long (Monday to Thursday), starting at 8.00am and ending at 4.30pm on each day. The first writing retreat, 3 to 6 July 2017, was attended by 18 PhD students, and the second writing retreat, 2 to 5 October 2017, was attended by a total of 38 students, 26 Masters and 12 PhDs. The Health Sciences Research Office held two emergent researchers writing retreats in 2017 funded by DHET Research Development Grant. The retreats were aimed at an early career academic without a PhD or within 8 years of completion of PhD degree. Their purpose was to provide protected time for emergent researchers to complete the writing up of a thesis or an article for publication to build their CV. The first retreat was held at Emoyeni Estates on 3, 5, 7 April 2017 and had six attendees. The second retreat was held at Foxwood House on 11-13 April 2017 and had twelve attendees. Professor Aimee Stewart facilitated both retreats.

D) Self-assessment of Schools' and research entities' contributions

The breakdown of the units across publication types and Schools from 2013-2017 is depicted in **Figure 4**. The School of Clinical Medicine recorded the highest number of units, followed by Public Health and Pathology. All Schools had an increase in publication units from 2016, with the exception of the School of Physiology. Each School submits an annual report to the Faculty. The full reports are available upon request.

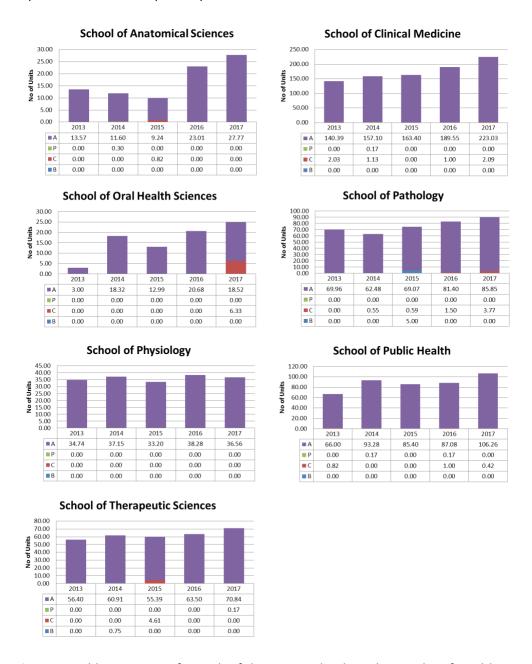


Figure 4: Publication units for each of the seven schools in the Faculty of Health Sciences for the period 2013-2017.

The contribution of each School to postgraduate throughput is outlined in **Table 3**. The School of Clinical Medicine graduated the highest number of Masters by coursework and research (predominantly MMeds), while the School of Therapeutic Sciences recorded the most PhD and Masters by research graduations.

E) Financial reporting

Research Funding

The Faculty of Health Sciences received approximately **ZAR 2.1 billion** in external income for research and development aid work purposes during 2017. This was comprised of R 120 651 153 administered through the University, and approximately 2 billion administered through the Wits Health Consortium. The FHS budget received from the FRC was R 12 159 938, of which R 11 262 948 was allocated towards RINC payouts (R 8 384 748 for publications and R 2 878 200 for postgraduate throughputs; R 9000.00 per Unit). The WHC dividend allocated to the FRC for strategic projects was 5.0 million in 2017.

How the FRC and WHC dividend budget was utilized

The RINC component of the FRC budget was allocated to all authors and postgraduate supervisors. The remainder, R 900 923 was allocated to FRC capped posts. There was a shortfall towards the FRC capped posts, which were re-allocated within the Faculty. **Table 5** shows the breakdown of the remainder WHC dividend that was used to support strategic projects in the Faculty for 2017. The remainder funds of R 1 194 650,28 are committed and will be fully spent in 2018. Recipients of the start-up funds and seed funding are shown in **Appendix 6 and 7**, respectively. Details of successful recipients of funding for minor equipment, writing retreats, travel and publication incentives can be provided upon request.

Table 5: Wits Health Consortium dividend breakdown for 2017.

Activity	Budget allocated	Actual Spend
FRC individual grants	R 550 000,00	R 550 000,00
Minor equipment grant	R 400 000,00	R 436 801,30
Start-up funds for new staff	R 300 000,00	R 293 850,00
Seed funding for new projects	R 500 000,00	R 459 500,00
Staff writing retreats	R 120 000,00	R 116 889,20
Multidisciplinary Collaborative incentive grants	R 1 000 000,00	R 1 000 000,00
Prestigious research lectures, communications	R 140 000,00	R 137 036,97
Statistics upgrade	R 90 000,00	R 79 800,50
Biostatistics assistance	R 130 000,00	R 84 480,00
Emergent researcher travel awards	R 300 000,00	R 296 300,00
Research Africa Renewal	R 150 000,00	R 131 541,75
Scientific/grant writing support	R 700 000,00	R 169 150,00
Miscellaneous (data capturer's, research awards breakfast, etc)	R 620 000,00	R 50 000,00
TOTAL	R 5 000 000,00	R 3 805 349,72

F) Challenges

There are several ongoing major concerns that impact on progress and optimal functioning of all emergent researchers, research active staff and related structures/systems in the Faculty of Health Sciences.

Financial sustainability

The proportion of funding that the URC allocates to the Faculty of Health Sciences FRC is decreasing annually. The annual dividend received from the WHC is also uncertain. This funding provides critical core support to emergent researchers to initiate new research projects. Funding also provides a level of stability to the largely grant funded research entities. Additionally, publication costs are becoming prohibitively expensive, and Increasingly our researchers cannot cover these costs.

Shortage of staff in key support posts

a. Human Research Ethics Committee (HREC)

The office that supports the HREC is understaffed and is struggling to meet the needs of the University and the Faculty. They have to process applications for all clinical trials conducted in our affiliated hospitals, and postgraduate students. The Faculty has approximately 2700 registered postgraduate students. All postgraduate students must apply for either human ethics, a human ethics waiver or animal ethics. The shortage of staff has resulted in considerable time delays, which increases the time postgraduate students are registered, which has implications for the subsidy received. Additionally, Faculty researchers had lost large grant funding due to delays in getting ethics. The hard work of the HREC and the HREC chairs is gratefully acknowledged.

b. Postgraduate Office

Shortage of staff in the postgraduate office in 2016/7 has placed a huge burden on the Faculty Registrar, the Assistant Dean: Research and Postgraduate Support and the remaining administrative staff of the postgraduate office. Despite the lack of staff, postgraduate registrations and completions increased in 2017. The hard work of the Faculty Registrar and the Postgraduate Office Administrative staff in keeping the Postgraduate Office functional over this period is gratefully acknowledged. In addition, the Graduate Studies Committee, the EXCO of this committee, all MSc and PhD assessors and supervisors and the various internal examiners must be thanked for the role they all play in keeping the quality of our postgraduate students so high and for the huge number of additional hours they spend on tasks associated with postgraduate throughput in the Faculty.

Infrastructure issues

a. School of Oral Health Sciences

The staff in the School of Oral Health Sciences work under extremely difficult circumstances. Aside from the heavy clinical burden placed on the staff, they work in an environment with crumbling infrastructure. The School requires a new building. Despite these challenges, the School members remain committed to research.

b. Central Animal Services (CAS) in the FHS

The CAS is a University Core Facility, providing research support to predominantly the Faculty of Health Sciences and the Faculty of Science. These facilities require major upgrades and maintenance.

Service commitments versus research time

The joint staff in the Faculty are employed by the Department of Health in the Schools of Clinical Medicine and Oral Health Sciences, or the National Health Laboratory Services in the School of Pathology. Joint staff are allocated a percentage of their time to devote to research, but in reality this is not happening. This is attributed to several reasons such as the huge clinical and teaching burden placed on individuals, leaving little to no time for research. Despite these challenges, there are several examples of successful research clinicians who have been major contributors to the international standing of the Faculty.

G) Other important information

Health Sciences Research Office (HSRO)

Remit of the HSRO: The aim of the HSRO is to operationalise the strategic goals of the Faculty. The strategic research and postgraduate goals centre around increased outputs of publications, increased quality of publications (ISI journals) increased throughput and quality of postgraduate students and support (financial where possible, strategic collaborations and courses) for all researchers.

Faculty Research Committee (FRC) and Task Groups

The FRC met every two months during 2017 under the Chairmanship of Professor M Papathanasopoulos. Minutes of the meetings can be provided upon request.

Reports from Task Groups

The Chairman of the FRC Committee extends her gratitude to the Chairmen of the Task Groups and their committee members for the hard work undertaken on behalf of the Faculty in 2016.

In 2016, the Task Groups and their Chairpersons were as follows:

Research Entities: **Prof Lynne Schepartz**

Individual Research Grants: Professor J.M Pettifor

Conference Travel: **Professor T Coetzer**Faculty Research Prize: **Professor T Coetzer**

Faculty Research Budget: Professor M Papathanasopoulos

FRC Equipment: **Professor M Papathanasopoulos**

FRC Research Entity Forum: Professor M Papathanasopoulos

FHS Biennial Research Day

The Chair for the 2018 Biennial Wits University Faculty of Health Sciences Research Day (RD) and Postgraduate Expo (PE) was selected during 2017 – Dr Mark Killick.

Prestigious Research lectures (PRL)

In 2017, the Faculty of Health Sciences Research Office hosted two successful Prestigious Research Lectures. The 15th Prestigious Research Lecture entitled, "**Practice changing advances in the treatment of breast and colorectal cancer**" was presented in June 2017 by Professor Paul Ruff (Chief Specialist, Professor and Head of the Division of Medical Oncology at Wits) and Dr Georgia Demetriou (Senior Consultant in the Division of Medical Oncology and Head Medical Teaching Unit at Wits). **Dr Graham Cohen** (Mary Potter Oncology Centre) acted as the commentator for the evening.

The 16th Prestigious Research Lecture entitled "Wits and vaccines: The impact and potential of vaccines for the African region" took place in November 2017 and was presented by Professors Helen Rees (Executive Director of the Wits Reproductive Health and HIV Institute) and Shabir Madhi (Director of the Wits MRC Respiratory and Meningeal Pathogens Research Unit). Dr Yogan Pillay (Deputy Director-General at the South African National Department of Health) acted as the commentator.

Research Awards Breakfast

On the 2nd of August, the Dean, Professor Martin Veller and the Assistant Dean: Research and Postgraduate Support, Professor Maria Papathanasopoulos hosted the annual Health Sciences Research Awards Breakfast. Ms Thulile Khanyile, an emergent researcher in the HIV Pathogenesis Research Unit in the School of Pathology was the co-host. The Breakfast was held at the Four Seasons Hotel, The Westcliff to honour outstanding achievements by the researchers, Research Entities, Departments and Schools within the Faculty over the last year. Professor Zeblon Vilakazi, DVC: Research and Postgraduate Affairs was our distinguished Guest Speaker. Professor Vilakazi commended the researchers in the Faculty for their outstanding achievements. The event was closed by the Dean, Professor Martin Veller who congratulated the researchers and motivated them to continue doing exceptionally well and reaching greater heights. The Faculty salutes its exceptional researchers, and is very proud of their continued successes.

The Carnegie-WITS Alumni Diaspora Programme

The Wits Alumni Diaspora Programme has since 2010 created collaborative research networks between Health Sciences Alumni worldwide and their peers at Wits. Since 2013, the programme has grown into a comprehensive collaborative network with funding from the Carnegie Corporation of New York. In 2017, the Programme received a further 3-year grant and hosted six diaspora alumni and enabled three faculty researchers to engage with global alumni at their institutions abroad. A detailed report can be provided upon request. Details of visits are shown in **Appendix 8.**

Research Bulletin

The Research Bulletin is circulated monthly to postgraduate students and staff members. It features a selection of courses, workshops, events, funding and biostatistical consultations information available for staff and postgraduate students in the Faculty.

The Health Sciences Research Newsletter

The Health Sciences Research Newsletter continued to share with the University's academic community the accomplishments of our Faculty. The newsletter features news, events, research publications/articles and occasionally profiles on researchers in the Faculty. The newsletter has been streamlined to provide content links within the editorial, mitigating the need for a long email. Readers are still able to download the full PDF should they wish to peruse the entire document.

Postgraduate Information Booklet

The Postgraduate Information Booklet outlines an overview of all important information for postgraduate students. Such information includes the registration process, submission of protocols, examination process, graduation process etc. The postgraduate information booklet is generally made available to postgraduate students at the beginning of the year during registration. The booklet is also available on the website.

Appendix 1: List of top publishing authors for the Faculty of Health Sciences, 2017.

Authors	School	No. of papers
Choonara YE	Therapeutic Sciences	27
Kumar P	Therapeutic Sciences	22
Du Toit LC	Therapeutic Sciences	21
Norris SA	Clinical Medicine	20
Pillay V	Therapeutic Sciences	18
Madhi SA	Pathology	16
Churchyard GJ	Public Health	16
Kahn K	Public Health	16
Gray GE	Clinical Medicine	15
Morris L	Pathology	15
Manger P	Anatomical Science	15
Feldman C	Clinical Medicine	14
Norton GR	Physiology	14
Raal F	Clinical Medicine	13
Cohen C	Pathology	11
Martinson N	Clinical Medicine	11
Woodiwiss AJ	Physiology	16
Mahlangu J	Pathology	10
Delany-Moretiwe AS	Clinical Medicine	10
Chirwa T	Public Health	10
Fuller	Physiology	9
Tollman SM	Public Health	8
Pettifor JM	Clinical Medicine	7
Hofman KJ	Public Health	7
Stevens WS	Pathology	7
Cherry C	Physiology	6
Von Gottberg AM	Pathology	5
Omar T	Pathology	5

Appendix 2: Most cited publications in the FHS based on the ISI Web of Knowledge and Scopus in a 10-year period (2007 –2017).

Authors	Title	Year	Source title	Cited by	Document type
Nair H., Nokes D.J., Gessner B.D., Dherani M., Madhi S.A., Singleton R.J., O'Brien K.L., Roca A., Wright P.F., Bruce N., Chandran A., Theodoratou E., Sutanto A., Sedyaningsih E.R., Ngama M., Munywoki P.K., Kartasasmita C., Simões E.A., Rudan I., Weber M.W., Campbell H.	Global burden of acute lower respiratory infections due to respiratory syncytial virus in young children: a systematic review and meta-analysis	2010	The Lancet	1124	Article
Douillard JY., Oliner K.S., Siena S., Tabernero J., Burkes R., Barugel M., Humblet Y., Bodoky G., Cunningham D., Jassem J., Rivera F., Kocákova I., Ruff P., Błasińska-Morawiec M., Šmakal M., Canon J.L., Rother M., Williams R., Rong A., Wiezorek J., Sidhu R., Patterson S.D.	Panitumumab- FOLFOX4 treatment and RAS mutations in colorectal cancer	2013	New England Journal of Medicine	895	Article
Violari A., Cotton M.F., Gibb D.M., Babiker A.G., Steyn J., Madhi S.A., Jean-Philippe P., McIntyre J.A.	Early antiretroviral therapy and mortality among HIV- infected infants	2008	New England Journal of Medicine	776	Article
Fitzmaurice C., Dicker D., Pain A., Hamavid H., Moradi-Lakeh M., MacIntyre M.F., Allen C., Hansen G., Woodbrook R., Wolfe C., Hamadeh R.R., Moore A., Werdecker A., Gessner B.D., Te Ao B., McMahon B., Karimkhani C., Yu C., Cooke G.S., Schwebel D.C., Carpenter D.O., Pereira D.M., Nash D., Kazi D.S., De Leo D., Plass D., Ukwaja K.N., Thurston G.D., Yun Jin K., Simard E.P., Mills E., Park EK., Catalá-López F., DeVeber G., Gotay C., Khan G., Hosgood H.D., III, Santos I.S., Leasher J.L., Singh J., Leigh J., Jonas J.B., Sanabria J., Beardsley J., Jacobsen K.H., Takahashi K., Franklin R.C., Ronfani L., Montico M., Naldi L., Tonelli M., Geleijnse J., Petzold M., Shrime M.G., Younis M., et al.	The Global Burden of Cancer 2013	2015	JAMA Oncology	719	Article

Sabatine M.S., Giugliano R.P., Wiviott S.D., Raal F.J. , Blom D.J., Robinson J., Ballantyne C.M., Somaratne R., Legg J., Wasserman S.M., Scott R., Koren M.J., Stein E.A.	Efficacy and safety of evolocumab in reducing lipids and cardiovascular events	2015	New England Journal of Medicine	683	Article
GBD 2015 Mortality and Causes of Death Collaborators, Chisumpa V.H. , et al.	Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015	2016	The Lancet	544	Article
Giuliano A.R., Palefsky J.M., Goldstone S., Moreira Jr. E.D., Penny M.E., Aranda C., Vardas E ., Moi H., Jessen H., Hillman R., Chang YH., Ferris D., Rouleau D., Bryan J., Marshall J.B., Vuocolo S., Barr E., Radley D., Haupt R.M., Guris D.	Efficacy of quadrivalent HPV vaccine against HPV infection and disease in males	2011	New England Journal of Medicine	544	Article
Finnerup N.B., Attal N., Haroutounian S., McNicol E., Baron R., Dworkin R.H., Gilron I., Haanp�� M., Hansson P., Jensen T.S., Kamerman P.R., Lund K., Moore A., Raja S.N., Rice A.S.C., Rowbotham M., Sena E., Siddall P., Smith B.H., Wallace M.	Pharmacotherapy for neuropathic pain in adults: A systematic review and meta- analysis	2015	The Lancet Neurology	533	Article
Diacon A.H., Pym A., Grobusch M. , Patientia R., Rustomjee R., Page-Shipp L., Pistorius C., Krause R., Bogoshi M., Churchyard G., Venter A., Allen J., Palomino J.C., De Marez T., Van Heeswijk R.P.G., Lounis N., Meyvisch P., Verbeeck J., Parys W., De Beule K., Andries K., Mc Neeley D.F.	The diarylquinoline TMC207 for multidrug-resistant tuberculosis	2009	New England Journal of Medicine	498	Article
Srivastava A., Brewer A.K., Mauser- Bunschoten E.P., Key N.S., Kitchen S., Llinas A., Ludlam C.A., Mahlangu J.N. , Mulder K., Poon M.C., Street A.	Guidelines for the management of hemophilia	2013	Haemophilia	477	Article

GBD 2013 DALYs and HALE Collaborators, Petzold M. , et al.	Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990-2013: Quantifying the epidemiological transition	2015	The Lancet	473	Article
Sawyer S.M., Afifi R.A., Bearinger L.H., Blakemore SJ., Dick B., Ezeh A.C., Patton G.C.	Adolescence: A foundation for future health	2012	The Lancet	462	Article
GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, Chisumpa V.H. , et al.	Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015	2016	The Lancet	397	Article
Havlir D.V., Kendall M.A., Ive P., Kumwenda J., Swindells S., Qasba S.S., Luetkemeyer A.F., Hogg E., Rooney J.F., Wu X., Hosseinipour M.C., Lalloo U., Veloso V.G., Some F.F., Kumarasamy N., Padayatchi N., Santos B.R., Reid S., Hakim J., Mohapi L., Mugyenyi P., Sanchez J., Lama J.R., Pape J.W., Sanchez A., Asmelash A., Moko E., Sawe F., Andersen J., Sanne I.	Timing of antiretroviral therapy for HIV-1 infection and tuberculosis	2011	New England Journal of Medicine	347	Article

Nair H., Brooks W.A., Katz M., Roca A., Berkley J.A., Madhi S.A. , Simmerman J.M., Gordon A., Sato M., Howie S., Krishnan A., Ope M., Lindblade K.A., Carosone-Link P., Lucero M., Ochieng W., Kamimoto L., Dueger E., Bhat N., Vong S., Theodoratou E., Chittaganpitch M., Chimah O., Balmaseda A., Buchy P., Harris E., Evans V., Katayose M., Gaur B., O'Callaghan-Gordo C., Goswami D., Arvelo W., Venter M., Briese T., Tokarz R., Widdowson MA., Mounts A.W., Breiman R.F., Feikin D.R., Klugman K.P., Olsen S.J., Gessner B.D., Wright P.F., Rudan I., Broor S., Simões E.A., Campbell H.	Global burden of respiratory infections due to seasonal influenza in young children: A systematic review and meta-analysis	2011	The Lancet	305	Article
GBD 2015 Risk Factors Collaborators, Chisumpa V.H., et al.	Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015	2016	The Lancet	299	Article
Doria-Rose N.A., Schramm C.A., Gorman J., Moore P.L. , Bhiman J.N., DeKosky B.J., Ernandes M.J., Georgiev I.S., Kim H.J., Pancera M., Staupe R.P., Altae-Tran H.R., Bailer R.T., Crooks E.T., Cupo A., Druz A., Garrett N.J., Hoi K.H., Kong R., Louder M.K., Longo N.S., McKee K., Nonyane M., O'Dell S., Roark R.S., Rudicell R.S., Schmidt S.D., Sheward D.J., Soto C., Wibmer C.K., Yang Y., Zhang Z., Mullikin J.C., Binley J.M., Sanders R.W., Wilson I.A., Moore J.P., Ward A.B., Georgiou G., Williamson C., Karim S.S.A., Morris L., Kwong P.D., Shapiro L., Mascola J.R.	Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies	2014	Nature	284	Article

GBD 2015 DALYs and HALE Collaborators, Chisumpa V.H. , et al.	Global, regional, and national disability-adjusted life-years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE), 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015	2016	The Lancet	249	Article
Sliwa K., Blauwet L., Tibazarwa K., Libhaber E., Smedema JP., Becker A., McMurray J., Yamac H., Labidi S., Struhman I., Hilfiker-Kleiner D.	Evaluation of bromocriptine in the treatment of acute severe peripartum cardiomyopathy: A proof-of-concept pilot study	2010	Circulation	235	Article

Appendix 3: Faculty of Health Sciences new NRF Ratings and re-ratings, effective from the 1st January 2017.

Title	Name	Initials	Surname	School	Rating	Status
Professor	Rachel	RK	Jewkes	MRC - Public Health	A1	Rerated
Professor	Derk	DH	Brouwer	Public Health	A2	New rating
Professor	Shabir	SA	Madhi	Pathology - Respiratory & Meningeal Pathogens Research Unit	A2	Rerated
Professor	Ugo	U	Ripamonti	Physiology - Bone Research Laboratory	B1	Rerated
Professor	Paul	Р	Ruff	Clinical Medicine	B2	New rating
Dr	Avy	А	Violari	Clinical Medicine - PHRU	B2	New rating
Professor	Patrick	PH	Dessein	Clinical Medicine - Internal Medicine	В3	Rerated
Professor	Deborah	DK	Glencross	Pathology - Molecular Medicine & Haematology	В3	Rerated
Professor	Lesley	LE	Scott	Pathology - Molecular Medicine & Haematology	C1	Rerated
Professor	Nigel	NJ	Crowther	Pathology - Chemical Pathology	C2	Rerated
Dr	Anthony	AM	Smith	Pathology	C2	Rerated
Professor	Benita	В	Olivier	Therapeutic Sciences - Physiotherapy	Y2	New rating

Appendix 4: List of postdoctoral fellows in the Faculty of Health Sciences during 2017.

Surname, First name	Discipline	Sponsor
Adeyemi, Dr Samson	Pharmacy	School
Akilo, Dr Olufemi	Pharmacy	NRF
Baillie, Dr Vicky	Respiratory & Meningeal Pathogens Research Unit	RMPRU
Bell, Dr Trevor Graham	HVDRP, Internal medicine	HOST
Bhoola, Dr Nimisha Harshadrai	HVDRP, Internal medicine	HOST
Bocast, Dr Brooke	Public Health	HOST
Brandenburg, Dr Jean-Tristan	SBIMB	NRF & HOST
Camina Ceballos, Dr Francisco Yago	SBIMB	NRF & HOST
Chikowore, Dr Tinashe	Human Genetics	NRF
Cohen, Dr Emmanuel	DPHRU	NRF
Dhar, Dr Nisha	RMPRU	CLF
Ditse, Dr Zanele	NICD	Hillel Friedland
Fana, Dr Thamuxolo	Centre for Health Policy	Host
Govender, Dr Mershen	Therapeutic	NRF
Gunter, Dr Sule	Physiology	NRF
Indermun, Dr Sunaina	Therapeutic Sciences	NRF
Kaddumukasa, Dr Martha	WRIM	NRF
Kaiser, Dr Maria	WRIM	
Kandhavelu, Dr Jeyalakshmi	Clinical Medicine	NRF
Khan, Dr Amber	Clinical Medicine	NRF
Kwatra, Dr Gaurav	Respiratory & Meningeal Pathogens Research Unit	RMPRU
Lamont, Dr Kim	Clinical Medicine	NRF
Loubser, Dr Alistair Shayne	Pathology	NRF
Makina, Dr Sithembile Olga	SBIMB	NRF
Marimani, Dr Musa Donald	Pathology	NRF
Moodley, Dr Kiashanee	Internal Medicine	HOST
Nweke, Dr Emmanuel	Surgery	HOST& MRC
Olwagen, Dr Courtney	Respiratory & Meningeal Pathogens Research Unit	RMPRU
Omar, Dr Aadilah	Clinical Medicine	NRF
Phantshwa, Dr Monwabisi	Pharmacy	host
Pradeep, Dr Priyamvada	Therapeutic Sciences	NRF
Pretorius, Dr Susanna	Centre for Exercise Science and Sports Medicine	SELF-FUNDED
Ruthven, Dr Jessica Sharon	Public Health	SELF-FUNDED
Sengupta, Dr Dhriti	SBIMB	WHC
Snelling, Dr Edward Peter	Physiology	CLF
Subramanian, Dr Kumar	Internal Medicine	host
van de Ven, Dr Tanja	Physiology	URC & BFRG
van den Berg, Dr Fiona	Antiviral Gene Therapy Research Unit	SAMRC
Wose Kinge, Dr Constance	Clinical Medicine	DST/NRF

Appendix 5: Faculty of Health Sciences Research Office courses and workshops offered to staff and postgraduate students during 2017.

Title of Course/Workshop	Total Number of Attendees
FAHS1595 Research Methodology Course	80
Writing research proposal: scientific writing	34
principles and Wits requirements	
Introduction to research and research	42
proposal	
Introduction, research question and	27
objectives	
Critical appraisal of literature	31
Research integrity: an overview	29
Ethical clearance of research proposal	31
Outcome measures – validity and reliability	33
Overview of qualitative research	30
Funding for research and postgraduate	23
students	
Variables, sample size, data collection and	37
descriptive statistics	
Inferential statistics and use of statistical	26
programmes (Practical session)	
Qualitative Research Methods	53
Scientific Writing Skills	76
How to prepare a power point presentation	61
How to prepare a poster presentation	39
Supervisors Course	62
Examiners Workshop	51
Total	765

Appendix 6: List of recipients of Start-up funding for new staff members in the Faculty of Health Sciences for 2017.

Awardees	Position	Department	Proposed Study	Award
Ali, Dr Stuart	AWI-Gen Project Manager and Researcher	Sydney Brenner	Understanding the genetic basis of treatment outcome for hypertension in African populations by developing a single molecule DNA sequencing platform for cytochrome P450 genes.	29,500
Basson, Dr Adriaan	Lecturer/resea rcher	HIV Pathogenesis Research Unit	Genotypic and phenotypic antiretroviral drug susceptibility of HIV-1 in patients failing salvage (3rd-line) therapy.	30,000
Calvey, Dr Tanya	Lecturer	Anatomy	The Specific Neuroanatomical Features of Nyaope Addiction.	30,000
Kunene, Siyabonga	Lecturer	Physiotherapy	to explore anterior knee pain (AKP) and design a comprehensive rehabilitation programme (transdisciplinary approach) and the framework of its implementation for runners in poor resourced peri-urban communities in Ekurhuleni, Gauteng.	30,000
Lembede, Dr Busisani	Lecturer	Physiology	The potential of orally administered zingerone to protect and programme for protection against high-fructose, high-cholesterol diet-induced metabolic derangements in rats	30,000
Peterson, Dr Vernice	Lecturer	Physiology	Therapeutic effects on insulin resistance-induced heart failure in animal models of hypertension	29,500
Small, Dr Candice	Lecturer	Anatomy	Sex and ancestry estimation of South African crania using 3D-ID.	28,000
Tumba, Nancy	Lecturer	HIV Pathogenesis Research Unit	Molecular Characterization and Immunogenicity of an HIV-1 subtype C founder Consensus viral envelope SOSIP.664 Trimer	30,000
Van Stormbroek, Kirsty	Lecturer	Occupational Therapy	The compliance of hand injury patients: a therapist perspective	26,850
Wadley, Dr Antonia	Lecturer	Physiology	Investigating the pathophysiology of pain in HIV-associated sensory neuropathy (HIV-SN).	30,000
TOTAL				R 293,850

Appendix 7: List of recipients of Seed funding for new projects in the Faculty of Health Sciences for 2017.

Name	School	Title of project	Amount awarded
		The Effect of a Short Nap following Sleep Disruption on Pain Sensitivity and cardiometabolic risk in Young Heathy	
Dr Stella Iacovides	Physiology	Individuals	R 50 000
		The prediction of synergy in essential oil combinations used	
Mrs Stephanie De Rapper	Therapeutic Sciences	in the treatment of respiratory infections through experimental design and chemometric modeling.	R 50 000
Dr Gavin Owen	Pathology	Fine Mapping the Epitope: Defining the conformational dynamics and structure of the protective HIV-1 Env-CD4 complex epitopes	R 50 000
Dr Nadia Carstens	Pathology	Developing focused genetic diagnostic approaches for developmental delay in South Africa	R 50 000
Dr Aijaz Ahmad	Pathology	Identification of secreted and surface immunodominant antigens of pathogenic non-albicans Candida species, for their detection in clinical samples	R 50 000
Dr Tanya Calvey	Anatomical Sciences	The specific neuroanatomical features of nyaope addiction	R 50 000
Dr Mark Killick	Pathology	Immunogenicity testing of HIV-1 envelope glycoprotein vaccine complexes (Env-2dCD4S60C) in Chinese Origin rhesus macaques	R 50 000
Dr Candice Small	Anatomical Sciences	Sex and ancestry estimation of South African crania using 3D-ID	R 39 500
Dr Busisani Lembede	Physiology	The potential of orally administered Zingerone to protect and to programme for protection against high-fructose high-cholesterol diet-induced metabolic derangements in rats	R 20 000
	Therapeutic	Functionalized Carbon Nanotube System for Targeting the Inflammatory	
Dr Pradeep Kumar	Sciences	Biomarkers in Ischemic Stroke Total	R 50 000 R 459 500

Appendix 8: List of Alumni Diaspora fellows visiting Wits FHS during 2017.

Alumni Diaspora Fellow	Affiliations	Wits Host	Visit Date
Dr Michele Verdonck	Senior Lecturer at the University of the Sunshine Coast in Queensland, Australia	Associate Professor Benita Olivier, Department of Physiotherapy, School of Therapeutic Sciences	January 2017
Dr Roshni Khatri	Senior Lecturer in Occupational Therapy, University of Northampton, United Kingdom	Associate Professor Daleen Casteleijn, Department of Occupational Therapy, School of Therapeutic Sciences	March 2017
Professor Roy Zent (Professor Ambra Pozzi)	Vice Chair of Research in the Department of Medicine, Vanderbilt University School of Medicine, United States	Emeritus Professor Beverley Kramer, School of Anatomical Sciences	June 2017
Dr Neil Gordon	Chief Executive Officer, INTERVENT, United States	Professor Demitri Constantinou, Centre for Exercise Science and Sports Medicine, School of Therapeutic Sciences	September 2017
Professor Kokila Lakhoo	Honorary Senior Lecturer in paediatric surgery, University of Oxford, United Kingdom	Professor Jerome Loveland, Paediatric Surgery, School of Clinical Medicine	October/November 2017
Dr Michael Belfort	Chair of the Department of Obstetrics and Gynecology at Baylor College of Medicine and Obstetrician and Gynaecologist-in-Chief of Texas Children's Hospital, United States	Dr Salome Maswime, Obstetrics and Gynaecology, School of Clinical Medicine	November 2017

Return staff visits

Staff Member		Alumni Diaspora Fellow	Institution visited	Visit dates
Associate	Professor	Dr Roshni Khatri	University of	9-18 July 2017
Daleen Casteleijn			Northampton, United	
			Kingdom	
Ms Olinda Silaule		Dr Roshni Khatri	University of	9-18 July 2017
			Northampton, United	
			Kingdom	
Associate	Professor	Dr Michele Verdonck	University of the	2-12 October 2017
Benita Olivier			Sunshine Coast, Australia	

