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Photos: Je'nine May, Lerato Maduna, Eh!woza, Michael Hammond, Marsha Leitch, Kerrin Begg, Leanne Brady, Karin Schermbrucker/Slingshotmedia for the Neuroscience Institute **Design:** Sean Robertson **Proofreading:** Thania Gopal,

Nobhongo Gxolo

*Some photographs used in the publication were taken prior to the COVID-19 pandemic.

** Acknowledgement: UCT News and @HeroesofGrooteSchuur for articles and images.





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Dean

Lionel Green-Thompson

"Our modus operandi progressively evolved from the traditional hierarchical structure to a flattened structure with the team-based approach... We found that teams respond to adversity with mutual support, and when one member goes off sick, others rally round to fill the gap... For most of us, the SARS-CoV-2 pandemic has provided a unique challenge in our medical careers, and the value of learning from shared experience cannot be understated [sic]." - Mendelson et al, The South African Medical Journal (October 2020)

his series of adapted texts is derived from an article written jointly by clinical and administrative staff describing the modifications at our largest partner hospital (Groote Schuur Hospital). They capture the spirit of a year that has at once revealed our deepest vulnerability, a year that allowed us to engage in adaptation, and then to emerge somewhat stronger because we have allowed ourselves to lean more heavily on each other in newly built teams.

The nature of our Faculty changed dramatically as the pandemic took hold. Students went home and the corridors fell silent. In those early days, I leaned heavily on Professor Carolyn Williamson (Interim Dean 2018–2020). I remain grateful for her work in the Deanery prior to my arrival and in helping me navigate the Faculty processes for those first months. It has been so easy to ask and be answered with respect and honour.

Perhaps, the most important part of this transition has been the Deanery Team.

Professors Elelwani Ramugondo (Deputy Dean: Postgraduate Education) and

Ambroise Wonkam (Deputy Dean: Research) represented the memory of the Faculty and welcomed the new members warmly, and with an insight from which we have grown.

Nave Naidoo (Director: Faculty Operations) has brought an incredible energy to the engagements regarding facilities especially

during the health and safety needs throughout the pandemic. Dr Tracey Naledi (Deputy Dean: Health Services) and Dr Kerrin Begg (Deputy Dean: Undergraduate Education) completed the team in May 2020. Our team has committed to the massive transformative purpose (MTP): *igniting agency for a just and inclusive society based on health equity.*

At the beginning of 2020, Professor Williamson led a team which has ensured that the Bongani Mayosi Legacy Project embedded the memory of this legend in both the space and culture of our Faculty. The library has been renamed the Bongani Mayosi Health Sciences Library. A lecture was delivered in Mayosi's memory for the first time by Professor Jimmy Volmink, one of his colleagues and friends. In the course of 2020, the UCT Council endorsed the Faculty's proposal for a formal eponymous lecture to be established. The first lecture was delivered in January 2021. The legacy of Professor Mayosi is a reflection of health equity delivered through agency.

I was encouraged by the agency of conveners and lecturers which was ignited by the pandemic. This enabled them to carry much of the weight of the adaptation of the academic learning project at both undergraduate and postgraduate levels. I pay tribute to them for their agility in transforming traditional teaching strategies into blended

online contexts to ensure that learning was not compromised. I am grateful for these herculean efforts which ensured timely progression and the graduation of a new generation of health professional graduates for service to the people of our land. In fact, the Faculty graduated a record 65 PhDs in 2020. *Enkosi kakhulu*.

I am deeply humbled to be leading a Faculty which is recognised globally for an ongoing contribution to the advancement of science across the fields of infectious disease, genetics, psychiatry and mental health, social medicine and public health and many more disciplines. This leadership is balanced by an abiding commitment to the people of South Africa through learning and teaching, service and research across diverse locations in the Western Cape, and academic partnerships throughout the country and across the continent.

There has been an elaboration of networks with new collaborations between disciplines, across sectors both at the laboratory and clinical research levels as well as through the provision of diagnostic capacity at the height of the pandemic. *Baie dankie.*

The spirit of social responsiveness has been experienced across the Faculty through community activism and participation.

The story of a Family Medicine registrar on page 53 speaks to the responsive nature of many of our students. Our professional, administrative and support staff (PASS) have worked tirelessly to ensure that staff and students were able to continue to deliver



essential services and return safely to campus. Groups of students volunteered in activities catalysed by the pandemic, in surveillance processes and in clinical contexts.

This review is a celebration of the stories of 2020. It records some of the greatest challenges the year presented, and some of the remarkable responses of social solidarity. It reflects moments of compassion experienced most powerfully at the passing of colleagues, it tells the stories of humbly shared responses and a social justice ethos of which we can be proud.

Perhaps this *Year in Review* helps us renew a promise to nurture the spirit of *ubuntu* in the coming years:

*Umuntu ngumuntu ngabantu -*A person is a person through other people.

Listen with compassion, walk with humility and act with justice

When A/Prof Lionel Green-Thompson stepped into his position as the University of Cape Town's new Dean of the Faculty of Health Sciences, it was exactly a day after the institution announced the immediate suspension of classes in response to the COVID-19 pandemic in March 2020.



Meet the Management Team





EXECUTIVE SECRETARY Mpho Mogotsi



MANAGER: COMMUNICATIONS AND MARKETING Linda Rhoda



MANAGER: FINANCE Zaida Sherry



MANAGER: HR BUSINESS PARTNERING Heidi Starr



DIRECTOR: FACULTY OPERATIONS Nave Naidoo



DEPUTY DEAN: RESEARCH Ambroise Wonkam



MANAGER: OPERATIONS Reece Brooks



DIRECTOR: FHS RESEARCH Yolande Harley



DIRECTOR: CANCER RESEARCH INITIATIVE



MANAGER: ICTS Paul Rossouw





DEANLionel Green-Thompson



MANAGER: ACADEMIC ADMINISTRATION Sandra Munesar



MANAGER: UNDERGRADUATE EDUCATION ADMINISTRATION Carmen Cloete



MANAGER: POSTGRADUATE EDUCATION ADMINISTRATION Adri Winckler



DEPUTY DEAN: HEALTH SERVICESTracey Naledi



DEPUTY DEAN: UNDERGRADUATE EDUCATION Kerrin Begg



DEPUTY DEAN:
POSTGRADUATE
EDUCATION
Elelwani Ramugondo

ECTOR: SEARCH MAL FACILITY t Mohr



OFFICE MANAGER:
STUDENT DEVELOPMENT
AND SUPPORT
Nonkosi Malala

ECTOR: CLINICAL SEARCH CENTRE va Shamley



The Faculty of Health Sciences' leadership team pictured here on Heritage Day (From left, back): Dr Kerrin Begg (Deputy Dean: Undergraduate Education), Nave Naidoo (Director: Faculty Operations), (From left, front): Prof Ambroise Wonkam (Deputy Dean: Research), Dr Tracey Naledi (Deputy Dean: Health Services), Prof Elelwani Ramugondo (Deputy Dean: Postgraduate Education) and A/Prof Lionel Green-Thompson (Dean).



he Deanery of the Faculty of
Health Sciences at the University
of Cape Town (UCT) is growing
into a cohesive unit that is committed
to serving the Faculty in the spirit of
social accountability.

A/Prof Lionel Green-Thompson leads a diverse team that celebrates both long service and new blood, all united in building a faculty of excellence and transformation.

We don't want to train people and make them unlearn who they are. When students come to UCT, they must come out of UCT not having been stripped of their culture and beliefs.

Dr Tracey Naledi



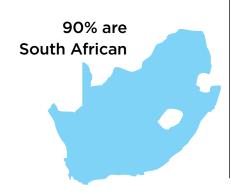
•• As the top research university on the continent, we need to have a very strong focus not only for South Africa but also for the African continent.

Prof Ambroise Wonkam



1534 staff

More than 72% identify as female



1396

South African staff

African - Coloured - Indian - **80** Not declared -

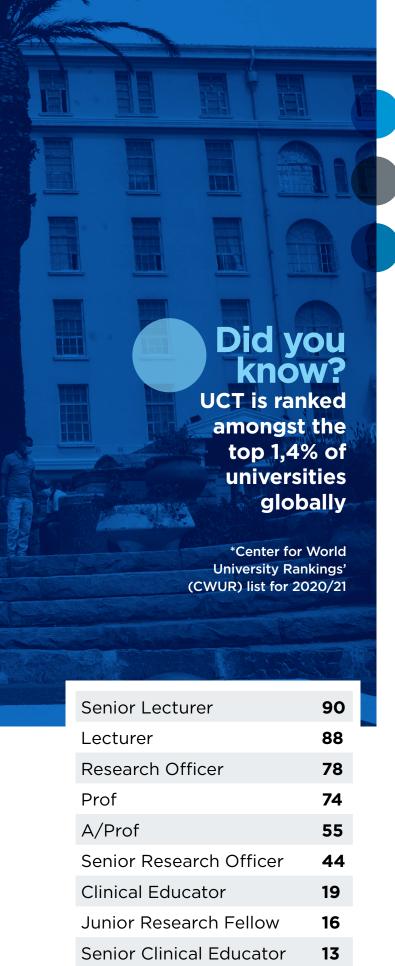
White - **390**

138
International staff

485

Academic staff

1049
PASS staff



Assistant Lecturer

Chief Research Officer

Research Fellow

Joint staff

1000

Western Cape Government (WCG) **73**

National Health Laboratory Service

29

WCG/NHLS Profs

73

WCG/NHLS A/Profs

Largest departments by staff numbers



Medicine 296



Pathology 266



Public Health and Family Medicine 129



Paediatrics and Child Health 119



3

2

Psychiatry and Mental Health 90

Did you know?

FHS is home to two Nobel laureates. **Allan Cormack** shared the Nobel Prize in Physiology or Medicine in 1979 with Godfrey Hounsfield for work that led to the development of the CAT scan.

Aaron Klug was awarded the Nobel Prize in Chemistry in 1982. Starting in the 1950s, he used electron microscopy and structural modelling to study the three-dimensional nature of polio and other viruses.

Director of Faculty Operations

Nave Naidoo

uring my interview for the position as Faculty Director of Operations in January 2020, a question was posed regarding possible disruptions to studies during the forthcoming year. One of my responses was a reference to the COVID-19 pandemic. I did not realise at the time how much of a disruption the pandemic would be to an already well-prepared academic year in the Faculty of Health Sciences.

My first day on campus on the 9th of March 2020 included a whirlwind tour through the dynamics of numerous complex departments, divisions and units all housed within the Faculty. Through these interactions with heads of department and other members of the Faculty community, I started to get an inkling of the nuanced intricacies within the Faculty and the level of support that would be required from the team I was now leading. This new role encompassed a combination of functions that had previously been performed by deputy deans, the primary imperative being to support the Deanery to fulfil its strategic objectives.

The main function of this role was

focused on Strategic Projects, Human Resources and Finance within the Faculty, as well as leading Information and Communication Technology Services (ICTS), Operations, Contracts, Occupational Health and Safety (OHS), and the Business Development Unit. However, as a result of the pandemic, the role evolved into predominantly supporting staff and students through their return and continued operations on-campus, and at off-campus sites.

As a result of the imposed national lockdown, only fourteen days into my new role, Faculty Operations had to prioritise the return of essential workers to the Faculty and other health facilities. During this period, health and safety became the highest priority of the campus as we aligned our protocols with government, and developed policies and procedures for the safe return to work of employees on-site.

In June, the planned return of students to the clinical platform, and staff and students to research sites, saw our Operations Team, led by Reece Brooks, launching a huge drive to support the distribution of Personal Protective Equipment (PPE). Since then, the Operations Team successfully supplied over 2000 students with PPE. In addition, 1290 undergraduate students were monitored daily for COVID-19 symptoms using the Magnitude Gold Platform, while 1262 postgraduate students and staff were given access to campus/facility/ research sites via Faculty-approved permits and also monitored daily for symptoms using the Higher Health application.

The successful implementation of a WhatsApp ChatBot to support undergraduate and postgraduate students during their return to campus by answering generic frequently asked questions also took place. The ChatBot later incorporated an automatic response to staff and students regarding the status of the Letters of Authority (LOA) to return to campus.

To ensure that staff and students could return to a safe environment, we had to comply with revised COVID-19 Occupational Health and Safety Regulations, which entailed risk assessments for each of the buildings and research sites and return to work plans being approved. The core task team including Professor Malcolm Collins (Chairperson of the Faculty Health and Safety Committee), Berenice Arendse (Institute of Infectious Disease and Molecular Medicine Health & Safety and Laboratory Manager), Anita Kruger (Faculty Health and Safety Manager), Reece Brooks (Faculty Operations Manager) and I supported



these processes for the Faculty in ensuring that we were fully compliant with the new regulations, and that the COVID-19 infections on campus were prevented or kept to a minimum.

The additional COVID-19 Task
Teams with their collective wisdom
supported the safe return of staff and
students to campus. These included
the Faculty COVID-19, PG COVID-19,
UG COVID-19 and Research COVID-19
Task Teams, supported by Central via
the COVID-19 Coordinating Committee
and the COVID-19 Occupational Health
and Safety Committee.



t should come as no surprise that the Faculty of Health Sciences has the largest finance team at the University of Cape Town, considering that more than half of the University's research income is earned by the Faculty. Our team consists of three units – Research Finance, Management Accounting

and Procurement, totalling 82 staff members. At the helm of the team is Zaida Sherry (Faculty Finance Manager), supported by Salie Nassiep (Research) and Desireé Esterhuizen (Management Accounting & Procurement).

You may only see the serious accountancy side of finance – and







think that it's just about numbers, reconciling, balancing, spreadsheets, projections, forecasts, deficits, profits, right? And you would have good reason to have this view, we did after all successfully conclude 24 audits in 2020, all whilst working remotely for most of the year!

But, don't be fooled by the numbers,

currencies, multiplications, deductions and recoveries, as behind all the finance jargon, you'll find people. And if you get to know them, you'll soon discover that you're surrounded by assets, not liabilities!

Zaida Sherry

Finance Manager

Investing in people



he Human Resource (HR)
Department is a central
University department. The
HR Client Services Team devolved
to the Faculty of Health Sciences
compromises of seven team members:

six Human Resource Business
Partners (HRBPs) and the Manager:
Human Resource Business Partnering.
This team supports approximately
1600 staff on the University of Cape
Town's (UCT) conditions of service

and another 1000 joint staff on the conditions of service of our partner employers.

The team has been working remotely for most of 2020, returning to campus for certain processes such as the ad hominem promotions process. Since the middle of March 2020, all HR forms are submitted and processed online/electronically while most of the HR processes; including recruitment, performance management and development, position evaluations and employment relations continued online throughout the year. The HRBPs quality assure between 600 and 1000 HR forms for the Dean's approval each month. The transition from hard copy paper to electronic submissions has had its challenges but we have managed to sustain the approval process throughout lockdown.

1600 staff

HR Client services supports 1600 staff on UCT conditions of service

1000 joint staff on the conditions of service of our partner employers



One of the greatest challenges of working remotely, as experienced by all staff, is the impact of getting the work-life balance right. Our advice is to aim for quick wins such as a nomeeting day per week for focused work to improve impact and efficiency, and limiting meetings over lunchtime and after 17h00, where possible.

Pictured here, the full team recently met for the first time since March 2020 when the national lockdown was implemented. This was food for the soul and the first time the team met face-to-face with Feryal Adams, HRBP for Departments of Pathology and Anaesthesia, who started in May 2020.

Heidi Starr

Manager: HR Business Partnering, HR Client Services: Health Sciences Hub



Health Sciences Students' Council

was raised by my grandparents in Bronkhorstspruit, Gauteng.
During my fifth year as a medical student, I served as the Chairperson of the Health Sciences Students' Council (HSSC).

2020 was a path in my journey
I never thought I would go through
- it brought joy, grief, pain, and
success. Being a medical student
during a pandemic was challenging
in providing an opportunity for us to
be a part of the response assisting
in alleviating the burden. We were
also challenged with not being able
to study in an environment that
we were accustomed to, whilst
many were navigating grief at the
same time.

As the HSSC Chairperson, I was instrumental in leading my team and we successfully represented students during a challenging time. Some of our influential achievements were:

- Setting up a satellite office early in January 2020 with the Student Representative Council to assist with the signing of financial aid allowances.
- Creating a Mobile Data Transfer initiative.
- Influencing the development of the Faculty's first WhatsApp ChatBot

to deal with student queries in the Faculty.

- Six of our members completed more than 100 hours of student leadership service.
- We facilitated the creation of an online survey that reviewed online learning after five weeks in the Faculty. This was presented at the Teaching and Learning Committee at UCT.

Our leadership was inspired by other students in the Faculty who took it upon themselves to bring change: the students who collected 67 messages for health workers on Mandela Day, the students who raised funds to transport other students during lockdown, and the students who volunteered in COVID-19 relief efforts. As the young American poet, Amanda Gorman, said: "The new dawn blossoms as we free it. For there is always light if only we are brave enough to see it, if only we are brave enough to be it." We chose to be that light for ourselves and our communities, and I do not think we have ever been more united as a faculty.

Sharon Mogale

Chair of Health Sciences Students' Council

Postgraduate Health Sciences Students' Council

020. Wow, it was a year of the unexpected for students, staff, _ and the entire world, I served as the Chair of the Postgraduate Health Sciences Student Council (PGHSSC) and the student representative of the postgraduate student oversight and advocacy task team. It was a year filled with meetings as we had to plan for the postgraduate community, including local and international students. As a team, we ensured that postgraduate students had everything they needed to complete their degrees. We promoted social justice by ensuring that at each level of Faculty governance, postgraduate students were considered as key players and important stakeholders in decisionmaking. We also dealt with the re-occurring problem of student victimisation by supervisors.

With the unexpected advance of COVID-19, I was involved with the COVID-19 Task Team to ensure a safe return home for all students. We held weekly meetings in the interest of keeping staff and students upto-date with the evolving situation. We also engaged with the Western Cape Department of Health around allowing final year student volunteers to help in combating the pandemic.

This included working in the Emergency Call Centre (fielding calls from the public); contact tracing (tracing the contacts of people who had tested positive, mostly telephonically); screening (administering a questionnaire); and testing (taking throat swabs from Persons Under Investigation while wearing protective gear).

During lockdown, I also worked as a tutor assisting first year MBChB and Health and Rehabilitation Science students. One of my major goals is to train and inspire young South African students to become proud ambassadors for the country and forebearers of health reform. I am aware of the important role South Africa plays in leading many initiatives and innovations that place Africa on the global map, especially the government's improvement of quality of life, youth empowerment and health care of her citizens.

I was grateful to work with the PGHSSC, the Health Sciences Students Council and the Deanery in the Faculty of Health Sciences.

Moses Isiagi

Chair of Postgraduate Health Sciences Students' Council

Transformation and Equity Committee

n 2020, the newly constituted Deanery seized the nettle and launched the Transformation Framework Document on 16th June. In the wake of the launch, each deputy dean presented plans for transformation for their portfolios to the Faculty Deans Management Committee (DMC). Since then, work has begun to action these for roll-out in 2021, which includes a first ever Faculty of Health Sciences transformation survey, sensitisation workshops for Faculty leadership, the introduction of Honours transformation awards toward research costs and the introduction of a stimulus grant award for young investigators.

Other achievements included the opening of a Faculty portal for **Employment Equity representative** applications with substantiative administrative support, the agreement to employ a Transformation Officer in the Faculty, the election of the advisory committee of the Student Liaison and Advocacy Office, the roll-out of the Transferrable Successes Webinar series in the Faculty as a way to share transformative ideas and interventions across departments and divisions, and the application for the first grant to support research in the area of minority LGBTQIA+ physicians in the Faculty as a collaboration with

the Department of Anthropology in the Faculty of Humanities.

2020 was not without its challenges and controversies, seeing both internal and public debate over allegations of racism and sexism in the Division of Orthopaedics flighted by local media. This was a source of great tribulation for the Transformation and Equity Committee (TEC), and although a Faculty-led divisional review was conducted and outcomes generated, the process also resulted in the resignation of one of the TEC committee members in protest. COVID-19 also had a huge impact on our ability to interact, strategise and implement change not only because of restrictions on movement but also due to staff illness and the loss of staff and students to the pandemic. However, even under these difficult circumstances departments continued with transformation initiatives culminating in the submission of a faculty transformation report to the Office for Inclusivity and Change (OIC) that highlighted both highs and lows across departments. There is still much to be done while celebrating the hard work of dedicated staff and students. None more so than the staff who remain committed to act as Employment Equity representatives in selection committees.

Hopefully, the roll-out of a vaccine



heralds the steady return to normalcy and with it comes a year to make good on the projects and strategies we have put in place in 2020, to meet the June 2021 benchmarks which the Dean has put in place. More importantly, it is an opportunity to commit to changing attitudes and responses to gender-based violence (GBV) and decolonisation of the curriculum. We look forward to a year of robust debate and critique, collaboration and coming together to work towards

the implementation of ideas to effect real change in the lived experience of all staff and students. We appeal to the Faculty community to join us through your participation and contributions to help us achieve our goal of changing our institutional culture.

Associate Professors Zenda Woodman and Marc Hendricks

Co-Chairs of the Transformation and Equity Committee

Department

he COVID-19 pandemic saw our Faculty staff, postdoctoral fellows, and students respond with heartfelt compassion and dedication to working collaboratively. Many research activities were pivoted to address the new questions arising – in the basic sciences, on the clinical platform and in the community – with inspiring results. Our teaching moved innovatively to blended learning – remotely and onsite. On the clinical platform, our colleagues also collaborated across disciplines to treat COVID-19 patients, while still maintaining essential patient care. Here are some of our Departmental highlights:



Anaesthesia and
Perioperative Medicine

Prof Justiaan Swanevelder
Our focus extends into
the rest of the continent.
We collaborate across
Africa on Cardiovascular Anaesthesia,
with colleagues like the
African Perioperative
Research Group. We have
developed our Airway and
Thoracic Fellowship to
grow capacity across
the continent.



Pathology Prof Raj Ramesar

COVID-19 was a major focus for colleagues in 2020. I am deeply appreciative of those who provided support in clinics; trained undertakers to process the remains of COVID-19 patients; did metagenomic sequencing for the diagnosis of central nervous system segulae in COVID-19 patients in the Cape Town Metropole, which was possibly a first for Africa.



Psychiatry and Mental Health

Prof Dan Stein

I am proud that our Department has contributed to key aspects of mental health support, including provision of consultationliason services at Groote Schuur Hospital and Red Cross Childrens' Hospital, as well as ongoing care in the West Metro mental health services. UCT Psychiatry/Psychology was ranked 92nd in the world in 2020, reflecting ongoing growth.



al highlights



Surgery Prof Graham Fieggen

Aside from our deep involvement on the clinical platform treating COVID-19 patients, the main focus of the year was transformation, ending with invigorating diversity and sensitivity workshops which will be cascaded through our department in 2021. The opening of the Neuroscience Institute offered new opportunities to many.



Health and Rehabilitation Sciences

A/Prof Lebogang Ramma

All programmes managed to successfully complete the 2020 academic year and we recorded the most outstanding final year student pass rates. An impressive number of postgraduate students completed their degrees (PG Diplomas, Masters and PhDs).



Human Biology Prof Sharon Prince

A/Prof Sudesh
Sivarasu's laboratory in
Biomedical Engineering
contributed to
addressing COVID-19
challenges with
several innovative
solutions, including a
locally manufactured
ventilator, for which
they received a ViroVent Skills Innovation
Challenge Grant.





Paediatrics and Child Health

Profs Andrew Argent and Rudzani Muloiwa

Our overall response to the COVID-19 pandemic reflected remarkable adaptation and commitment to ongoing optimisation of care for children under difficult circumstances.



Integrative Biomedical Sciences

Prof Edward Sturrock Our COVID-19related work has been incredible: Prof Jonathan Blackburn's group produced native SARS-CoV-2 N and S protein microarrays to quantify and localise antibody responses in more than 300 COVID-19 patients and controls, obtaining clinical sensitivity and specificity of 100% for confirmed seropositive samples.



Medicine Prof Ntobeko Ntusi

We look back with pride and equanimity in how colleagues responded to the COVID-19 pandemic – with substantial commitment and resolve in each pillar of our endeavours: service, training, and research. Clinical service was a key priority in response to the crisis.



Obstetrics and Gynaecology

Prof Lynette Denny We are extremely proud of our achievements during a difficult year, including serving on international bodies. Prof Silke Dyer was nominated to join the **Education Committee** of the International Federation of Fertility Societies. She further participated in the 37th WHO meeting of the Scientific and Technical Advisory Group to the Department of Sexual and Reproductive Health and Research.



Institute of Infectious Disease and Molecular Medicine Prof Valerie Mizrahi

We have much to be proud of. The IDM became the first academic centre to contribute to a national 'surge testing' initiative convened by the South African Medical Research Council (SAMRC) and supported by the Solidarity Fund.



Primary Health Care Directorate

Prof Steve Reid
Our staff was fully
involved in COVID-19
activities, including
clinical support at the
Cape Town International
Conference Centre
(CTICC) field hospital,
the Community Action
Networks, isolation
facilities, and health
promotion in various

communities.



Radiation Medicine

Prof Jeannette Parkes In a challenging year, the Department managed to deliver all scheduled UCT-based teaching, as well as create a brand-new advanced course. All Radiotherapy and Medical Physics classrooms were converted to facilitate remote teaching. including access to the treatment planning computer laboratory.



School of Public Health and Family Medicine

Prof Landon Myer Our work was profoundly impacted and played an important role in understanding and responding to the COVID-19 pandemic. Family Medicine had a central role in training and supporting family physicians, including helping to staff the 'Hospital of Hope' at the Cape Town International Convention Centre.









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Undergraduate Education Deputy Dean

Kerrin Begg

he 2020 undergraduate academic year was dominated by the COVID-19 pandemic, which precipitated the University's decision to suspend classes with effect from 16 March 2020.

Our focus turned to formulating different ways to continue teaching and learning when commencing with Term 2, with the conceptualising of Emergency Remote Teaching (ERT) and Emergency Distance Learning (EDL). Our teachers were required to swiftly navigate their way around a variety of virtual platforms, as well as develop new skills in online delivery of asynchronous lectures, tutorials and seminars. Given how critical the attainment of clinical skills is for professional programmes delivered at the Faculty, we negotiated, in concert with other faculties across the country, with the Department of Higher Education for the safe and expedient return of senior students to the clinical platform, to be able to complete their clinical training and to assist at the clinical interface.

In planning for the return of students in a changing and uncertain context, the Faculty was guided by principles of: social justice and fairness, collective responsibility, agile collaboration, transparency and accountability, commitment to completing the academic year within 2020, commitment to the safety of students, the patients whom they will encounter as well as the health system in which they will learn and serve; and social accountability, where we, as a Health Sciences Faculty, are part of a society that is grappling with the impact the pandemic has on each of us, and an important part of the health system in dealing with the pandemic.

As final year MBChB students returned to campus by mid-May, followed by final year Health and Rehabilitation Sciences students by mid-June, and the staggered return of the remaining clinical students by September, a number of measures were implemented to prepare students and mitigate the risk of transmission of and infection with COVID-19. These included: screening, quarantine, daily monitoring of symptoms, adhering to testing and treatment guidelines in the event of exposure, dedicated University isolation facilities, and the provision of Personal Protective Equipment (PPE). As students were being prepared

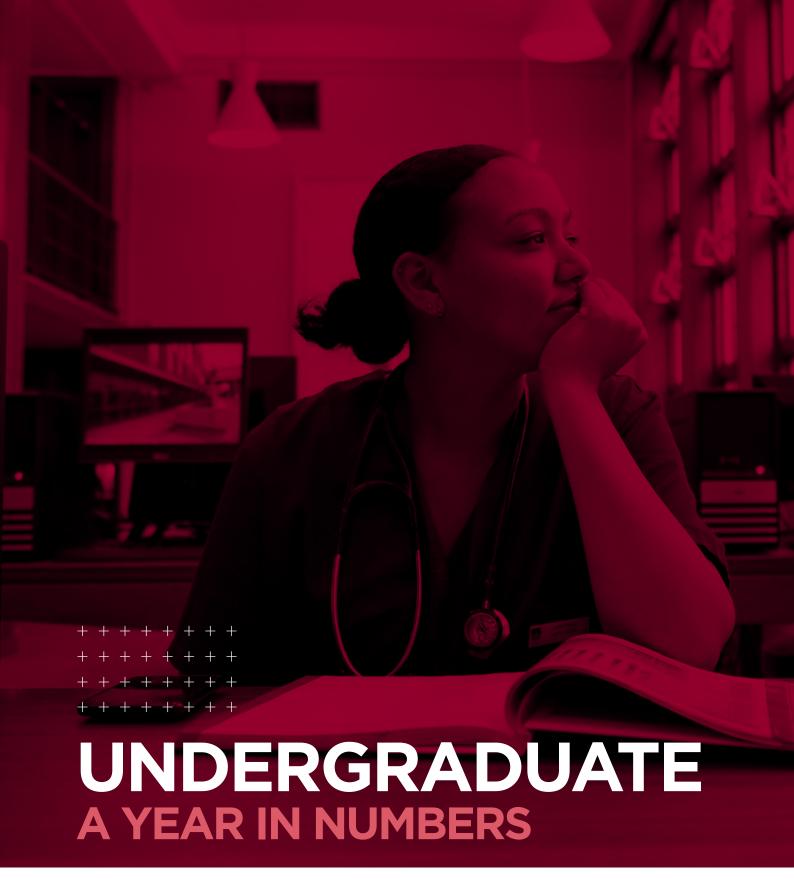


to return to a clinical platform, a clear need was identified, to prepare them more holistically to function as learning professionals within the conditions of the pandemic. An interdisciplinary and interprofessional team of educators prepared a two-week course to facilitate the re-entry of final-year students into clinical learning contexts. The Navigating COVID-19 online course was thus conceived, embracing an integrated approach to learning and building on learning from earlier years of study.

This was one of many innovations that emerged in terms of our educational responses to COVID-19, which involved rapid adaptations to our teaching and learning practices. Whilst many responses involved curtailing practices, we were able to reflect on some advantages which accrued from some of these changes,

amidst massive disruption, and to recognise the unexpected "gifts" of COVID-19. We noted how these "gifts" emanated from all facets of Health Professions Education (HPE); from educators appreciating the affordances of technology-mediated learning, to students embracing self-directed learning, and transitioning to "service through learning and learning through serving", the emergence of student agency and volunteerism in responding to the pandemic, and the reframing of conceptions of vulnerability and resilience.

In spite of the massive disruption and trauma caused by the COVID-19 and the national lockdowns and restrictions in response to the pandemic, we were relieved to complete the 2020 academic year. It was a time of significant stress, anxiety, and concern, and we are immensely grateful to students, teaching staff and support staff for pulling together and enabling the completion of the academic year by December 2020. We were delighted to be able to host modified Oathtaking ceremonies for graduands on the Faculty campus. This featured multiple smaller ceremonies combined with prize-giving ceremonies that were recorded for posterity as well as for parents, guardians and spectators to watch afterwards. It was a fitting end to a year of significant challenges and evidence of the entire Faculty rising to meet these challenges, embodying and modelling the care and compassion we endeavour to instill in our graduates.



211 registered students

1485

identified as female



identified as male



WATCH #WHYCHOOSEUCT VIDEO



99% of undergrads are South African



In 2020, the Faculty received 20 000 applications for only 435 places in the 5 undergraduate degree programmes.

GRADUATIONS

2020 376

2019

2018

428 459

8 programmes

Number of students in each programme:

MBChB

1330

Nelson Mandela Fidel Castro Programme

47

Occupational Therapy

236

Physiotherapy

193

Speech Language Pathology

147

Audiology

98

Advanced Diploma In Cosmetic

Formulation Science

8

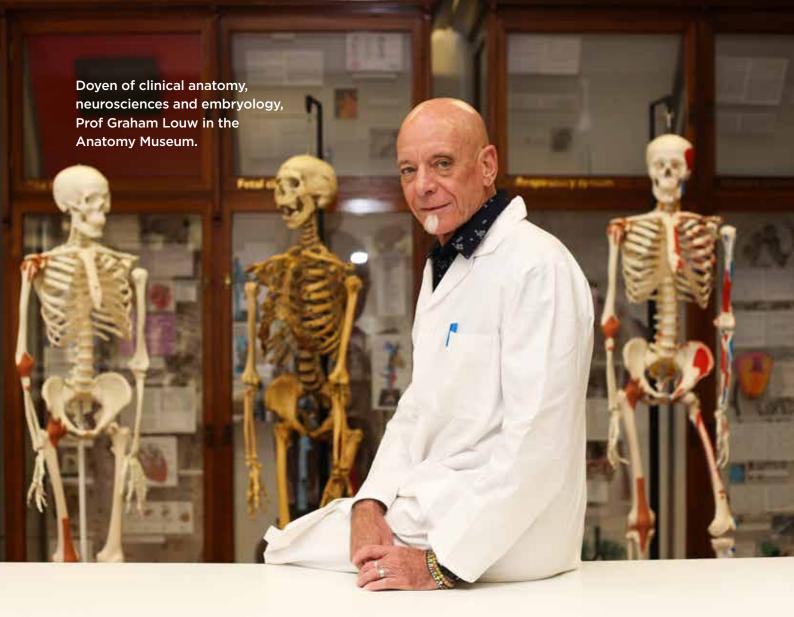
Bachelor of Science in Medicine

4

Higher Certificate in Disability Practice

3





Prof Graham Louw

hangs up his white coat after 31 years of dedicated service

Doyen of clinical anatomy, neurosciences and embryology, Prof Graham Louw retired from the Faculty at the end of December after a career of 31 years.

ere is where you learn to care for your first patient." This is a lesson human anatomist Professor Graham Louw has given some 7 000 medical students over three decades.

And although the setting – the

anatomy dissection hall - may seem paradoxical, it makes perfect sense. It's about dignity and humanity - in life and death.



DISTINGUISHED TEACHERS

Prof Andrew Argent and A/Prof Romy Parker were the recipients of two of the four 2019 UCT Distinguished Teacher Awards.

n a career that spans almost
42 years, Professor Andrew Argent,
the head of Paediatrics and Child
Health at the Red Cross War Memorial
Children's Hospital, remains inspired
by those who manage to achieve
"remarkable things" despite
the countless odds stacked
against them.

CLICK HERE TO
READ THE ARTICLE



"I am incredibly privileged to work with so many children who have an almost unbelievable capacity to keep living life to its fullest despite some extremely difficult illnesses and situations."



fter working as a physiotherapist with specialist expertise in pain and pain management, Associate Professor Romy Parker became a teacher because she wanted to make a difference and extend her impact. Teaching is like "creating ripples in a pond," she says.





"My work in teaching and as a clinician is about helping individuals grow by advancing their ability to access and process information and apply it to improve their knowledge, skills and lives."



Body donor programme

fit and well despite COVID-19

Rigorous COVID-19 health and safety protocols have enabled the Faculty of Health Sciences to maintain its body donor programme, essential to teaching anatomy to students and surgical registrars.

ody donations to the Faculty allow its physiotherapy, occupational therapy, science and medical students, including surgeons from various disciplines, to

experience hands-on dissection and practise new surgical techniques.





Students (From left, back) Shirees Benjamin and Michael Cassar, with (front) Megan Petersen and Jacques Jacobs are members of the team that manages the Faculty's body donor programme.

UCT medical students make a difference on the frontline

Medical students in the Faculty of Health Sciences spent the past few months on the frontline, playing their part in the country's fight against the COVID-19 pandemic.

for students to learn about COVID-19 while working in a pandemic situation and being part of a multidisciplinary response team."



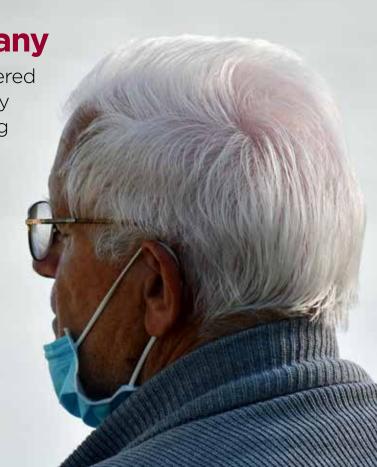


UCT students keep elderly citizens company

The UCT Surgical Society has partnered with Communicare to provide elderly residents with companionship during the national lockdown.

group of medical students from the Faculty of Health Sciences kept elderly citizens company - from a safe distance during the national lockdown. The initiative, known as Adopt a Granny/Grandpa was the work of the student-led UCT Surgical Society (SurgSoc), in partnership with social housing provider, Communicare.





How the stressful crush of

emergency remote teaching

became an all-time career highlight

Dr Chivaugn Gordon, Head of Undergraduate Obstetrics & Gynaecology Education embraced the drastic shift to Emergency Remote Teaching with great *chutzpah*.

edicine wasn't my only career choice – another strong contender was drama, and this served me greatly while working on the patient scenarios. All the wigs and dress-up outfits from every dress-up I have ever hosted came out to help me become a number of simulated patients for three of our courses. Favourites were

Zoya Lockdownikov (an extremely unsubtle Russian spy) and the Duchess of Covidshire in her sequinned hospital gown, who is always on the phone with various prime ministers and presidents."











Dr Chivaugn Gordon was determined for the students to have a "high quality, enjoyable and fun experience, despite not being in the room with their teachers".



Medical students rise to the challenge of COVID-19

he COVID-19 pandemic provided a unique opportunity for more than 100 senior medical students to take on prescribed electives, or 'selectives', and to assist the Western Cape provincial response.



LEFT Students volunteered for shifts at the provincial disaster management call centre; for telephonic case and contact tracing; and for the Screening and Testing Centre or clinical work at Groote Schuur Hospital.

Advocating for better rural health

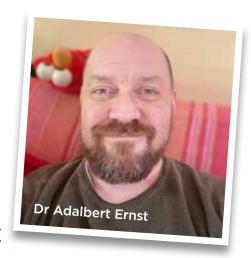
or the past 20 years, the Rural Support Network
has aimed to advocate for better Rural Health
Care development in rural and peri-urban
communities, through the education of future health
care professionals in rural communities.





A quiet (r)evolution:

reimagining the undergraduate anaesthesia curriculum during a pandemic



Finding method amidst the madness is both messy and surprisingly refreshing. A reflection on teaching during a pandemic by Dr Adalbert Ernst, Specialist and Undergraduate Convener for Anaesthesia in the Department of Anaesthesia and Perioperative Medicine.

ow do you teach one of the most practical specialties in medicine online to students who have never been in an operating theatre before? How will they graduate with the skill sets required to be safe and competent clinicians when gaining practical experience is just too risky for all concerned? And how do you ensure that students

remain awake so their future patients will be safely asleep?

One way is to have a small existential crisis about your dual role as clinician and teacher and think so far out of the box that you end up forgetting where the box was in the first place.





n preparation for entry into clinical practice, the Faculty of Health Sciences usually arranges an annual Oath-taking ceremony where exiting students formally pledge their commitment to upholding the strictest standards of professionalism

during their clinical service. Given the challenges of the COVID-19 pandemic in 2020, the Faculty hosted multiple smaller ceremonies for graduands that strictly complied with COVID-19 protocols. This included the annual prize-giving ceremony.

























THANKSGIVING CEREMONY

In anticipation of the oath-taking ceremonies and deeply mindful of the journey graduands would be undertaking, the Deanery invited a group of traditional representatives of the Khoi people. They are the descendants of the First Nations who occupied the land on which the Faculty is now built and resided in the region around the Liesbeek River. A thanksgiving ceremony was conducted in the guad outside the Barnard Fuller building. Following this process, they used the ash of the *impepho* herb to mark some members of the Faculty leadership. This marking was symbolic of the role of Faculty in healing the nation, and the importance of the graduates who are emerging from our professional courses with a commitment "to serve humanity" - as the oath calls on them to do. This was an important moment and marks the beginning of conversations with the traditional communities about our connectedness and the manner in which we listen to them. The Deanery wishes to express its appreciation to Tariq Jenkins, Chair of A|XARRA Restorative Justice Forum, and to the Khoi and San Unit at the Centre for African Studies (CAS).



WATCH VIDEO OF MESSAGES FROM THE FACULTY'S ALUMNI PLAYED TO STUDENTS AT THE OATH-TAKING CEREMONIES





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- **48** Message from the Deputy Dean Elelwani Ramugondo
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- **52** 5 questions with A/Prof Tinashe Mutsvangwa, biomedical engineer
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- 54 When crisis cultivates collaboration
- **56** Young scientists acknowledged for contribution to Institute's research
- **57** Designing for development
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Postgraduate Education Deputy Dean

Elelwani Ramugondo

he year 2020 will remain etched in the memory of many of us in the Faculty of Health Sciences' (FHS) postgraduate sector as a year of mixed emotions and often paradoxical gifts. There have been many losses, the gravest of which has been losing loved ones to COVID-19. For many, the year started with plans for projects to complete, and exciting places to travel to for scientific conferences. All these plans had to either be placed on hold. or completely re-configured. However, along with all these losses, also came many gifts. Throughout the year, COVID-19 proved itself a disruption at a global scale such that anything that followed in response, if thought through carefully, had a significant positive impact. One such response was the value of collaboration. We saw this immediately once there was compelling evidence for mask-wearing

in mitigating SARS-CoV-2 infection. The availability of such information in real-time required collaboration at both national and global levels, with some of our postgraduate students playing a role in generating evidence and sharing vital and life-saving information with communities through innovative ways.

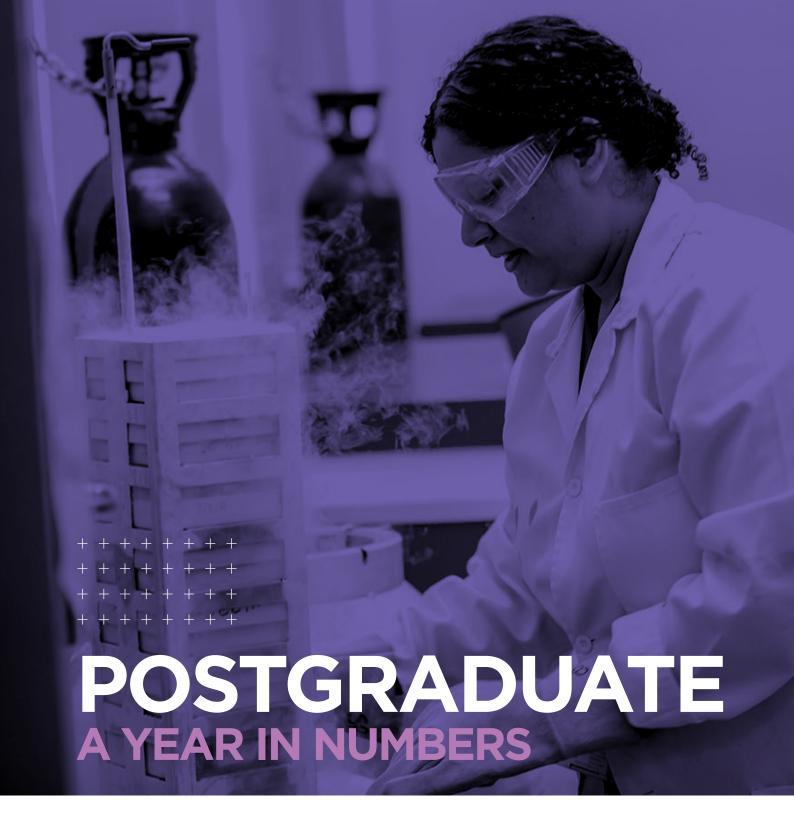
Soon after the national lockdown was declared, the Faculty established a sub-committee of the FHS COVID-19 Task Team focused on postgraduate students and postdoctoral fellows as a proactive step to plan for a safe return to campus. I chaired the sub-committee, which consisted of the following members: Professor Malcolm Collins, Professor Ed Sturrock, Moses Isiagi (Postgraduate Health Sciences Students' Council), Professor Collet Dandara, Professor Sharon Prince, Dr Yolande Harley,

Professor Denver Hendricks, and Professor Ambroise Wonkam, Looking back, I can say without a doubt that this sub-committee marks one of the key aspects of collaborative work that saw us return many of our students to critical research and clinical training, within reasonable time. This level of collaboration also came through in the dedication shown by program conveners across taught postgraduate programs led by Professor Digby Warner, Associate Professor Maylene Shung-King and Associate Professor Theresa Burgess, research postgraduate programs led by Professor Mike Lambert; colleagues in the Postgraduate Administrative Office under Adri Winckler and Sandra Munesar's leadership; colleagues in the Postgraduate Student Development and Support Office under Nonkosi Malala's stewardship, the PGHSSC, and Samantha Louw in the Deanery. It was through this collaboration, that we got to know our students in ways that were not possible before, and came to appreciate the level of complexity. but also exciting possibilities within our postgraduate offerings. Our ability to successfully complete the 2020 academic year, and the outstanding results obtained by our students across all categories of degrees attests to this spirit of collaboration, which we must continue to harness.

The year 2020 was also a year in which a global pandemic coalesced with systemic issues, particularly



racialised global inequality. This nexus dredged up long-standing fissures in our global community, which has continued to nudge us towards a faculty postgraduate education strategy that engages with these issues. The Faculty Postgraduate Executive Committee has taken this challenge on board.



2785

Total number of registered postgrad students

1646 1°

1138

1

identified as female

identified identified as male as trans

Postgrad funding

For the first time in 2020, the Faculty secured funding from the National Health & Welfare Seta (HWSETA) specifically targeted at postgraduate students. Sixteen postgrad students were funded by HWSETA.

POSTGRAD

SINCE 2010:

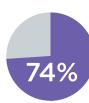
Postgraduate student registrations in the FHS have increased by 97%

PhD registrations have increased by 177%



PG STUDENT'S ORIGIN

2060 out of 2785 are South African











Number of students

PhD 670

Honours 86

Masters 1585

PGDip 384

International affiliate 1

Doctor of medicine 1

Occasional (Med) Postgraduate 58

303 postgraduate programs



PhDs across 69 disciplines/ professions

Number of graduates 2019:

434 graduates 2020: **588** graduates

Honours Masters PhD **PGDip** 70 85 230 203

5 QUESTIONS with A/Prof Tinashe Mutsvangwa, biomedical engineer

/Prof Tinashe Mutsvangwa, an expert in medical imaging in the Faculty's Division of Biomedical Engineering, is working on low-cost solutions for medical imaging and image analysis in low-resource settings. •• The diversity of experience among collaborators always brings depth to research. •9





Family Medicine registrar

makes a difference in Manenberg

r Randall Ortel is the first medical doctor from the Manenberg area, situated on the Cape Flats. Notorious for its high levels of crime and gang-violence, Ortel was called on to employ his "insider perspective" and leadership skills to assist the community to respond more efficiently to the COVID-19 public health emergency.







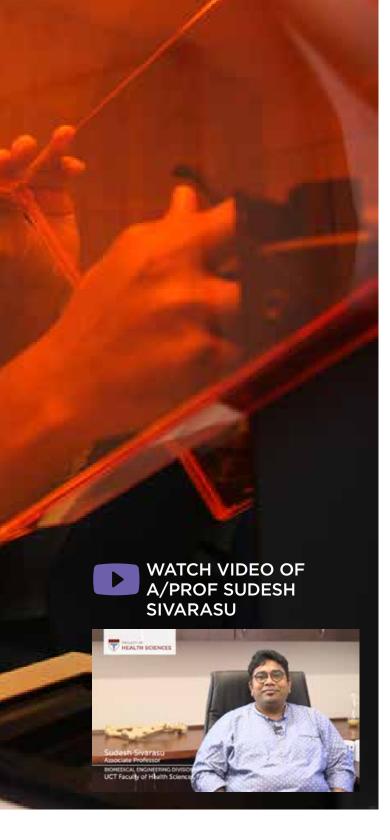




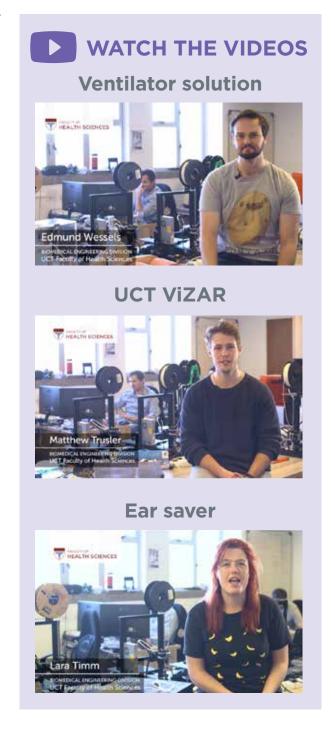
Dr Randall Ortel, with the support of Dr Elma de Vries, a family physician at the Heideveld community health clinic and senior lecturer in the Division of Family Medicine, has been assisting the Manenberg community with COVID-19 screening, testing and health promotion. As a result of cramped living conditions and poor sanitation in the area, community members who have tested positive find it difficult to isolate in the community.



One way of viewing a crisis is as an opportunity to pursue and contribute to a better future. For A/Prof Sudesh Sivarasu and his team of biomedical engineers in the Medical Devices Laboratory (MDL), based in the Division of Biomedical Engineering, COVID-19 has brought just that: the opportunity to serve the greater good through collaboration and sharing of knowledge.



n response to the unfolding coronavirus crisis, Sivarasu and his team have worked on a variety of biomedical devices, including a face shield, a protective booth for health workers, a unique ventilator solution, novel reusable N95 equivalent masks, and many others.



Sivarasu has also been selected as one of the University's 2030 Future Leaders programme, a group of up-and-coming researchers that are considered leaders in their fields.



Young scientists acknowledged for contribution

to Institute's research

he Institute of Infectious Disease and Molecular Medicine (IDM) hosted the annual IDM Postgraduate Student Publication Competition - an initiative of the Institute Transformation Committee. Adjudicated independently, the

competition saw applications spanning the broad range of research conducted at this trans-faculty, postgraduate research institute.



















The winners of the competition were announced at an online event held on 27 November 2020.

Designing for development



eferring to himself as "an avid student of the College of Google and the University of YouTube", Dr Muzzammil Ismail, a Public Health Registrar in the School of Public Health and Family Medicine, is the designer of the award-winning

Western Cape Department of Health COVID-19 Public Facing Dashboard, which recently surpassed 2 million views.



Communicating science

he proliferation of fake news and misinformation during the COVID-19 pandemic has highlighted the importance of science communication. The Faculty offers a Science and Communication course for all Honours students on the Bachelor of Science Honours Joint programme, convened by Dr Sharief

Hendricks and Dr Nancy Laguette, from the Division of Exercise Science and Sports Medicine (ESSM). In this course, students learn how to write, illustrate and communicate science more effectively.









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Health Services Deputy Dean

Tracey Naledi

ithin the Faculty of Health Sciences' (FHS) Health Services portfolio, the past year was dominated by the SARS-COV-2 pandemic. This was a time of hardship, pain, suffering and death. Who can erase the images of long lines of people queuing for food; or the patient dying alone in hospital without the loving touch of their closest family; or the family left devastated by the death of multiple family members? COVID-19 has served as a harsh reminder of the deep inequities that exist in our country, and the fragility that this brings. It has also been a reminder of the privilege we have to offer care and compassion in a time of need.

Compassion, care, collaboration, partnership and innovation have been the cornerstone of all that we have done in 2020. We congratulate our partners in the Western Cape Government:Health (WCG:H) and the National Health Laboratory Service

(NHLS) for exemplary, innovative, agile service delivery that has seen our province deal decisively with the challenges presented by this pandemic. I commend our staff at the FHS for showing the value of our contributions to these partnerships through our academic leadership and innovation.

The Faculty's staff have supported National. Provincial and Local government with rapid evidence and guidance for decision-making in many facets of the response. Our contributions ranged from public health, prevention, clinical care, mental health, palliative care, pathology, virology, community health and health systems development and so much more. Our colleagues in the School of Public Health and Family Medicine have supported an impressive contact tracing process and further strengthening of WCG:H information systems that made almost real-time information available to decisionmakers and to the general public, for them to ignite their own agency for health and wellbeing during this pandemic.

Community rehabilitation workers trained by our Department of Health and Rehabilitation Sciences have been doing phenomenal work in strengthening self-management and community support at a time that health services has not been accessible to many, particularly those living with disabilities.

The conversion of the Cape Town International Conference Centre into an 862-bed field hospital dubbed the 'Hospital of Hope' in record time by our colleagues in Family Medicine, **Emergency Medicine and other** departments was really an incredible achievement. We look forward to the reflections from that experience and the gems that this will provide for further health systems strengthening. We applaud the NHLS, which rapidly scaled up its efforts despite testing shortages and massive logistical challenges, supported by our team in the Division of Medical Virology. who developed and implemented an extraction-free polymerase chain reaction (PCR) approach. We celebrate the partnership between NHLS, Groote Schuur Hospital and the University of Cape Town's FHS that described the new SARS-CoV-2 variant (501Y.V2 or B.1.351) in the Western Cape which has largely been responsible for the second wave of infections.

Under the most trying professional and personal circumstances, we



celebrate, honour and applaud all our staff who are actively working to ignite agency for an inclusive and just society built on health equity. The prolific writer and human rights activist, Arundhati Roy writes: "Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next." Let us rise to this challenge.

Siyabonga, camagu, re a leboga, baie dankie, thank you!

Production of safe, affordable bottle spacers ramped up

UCT alumni have designed a rig to increase production of the bottle spacers that administer metred medication dosages to patients struggling to breathe.

/ ith lung and respiratory
health front-of-mind during
the COVID-19 pandemic,
the Faculty of Health Sciences' team
of biomedical engineering alumni
have designed a rig to ramp up safe

production of the bottle spacers that administer metred dosages of medicine to asthmatics and those with shortness of breath.





The Afrispacer team (from left) Charles Harris (seated), Gokul Nair, Lara Timm, Roopam Dey, Giancarlo Beukes.

Community rehabilitation workers advocating for disability inclusion during lockdown

t the beginning of the national lockdown related to the COVID-19 pandemic, community rehabilitation workers were invited to participate in a four-week writing circle about their experiences of disability inclusion

as frontline workers. This was an opportunity to highlight their efforts as well as their invaluable knowledge of community needs.



'Not all disabilities are visible'

A special edition of South African Health Review (SAHR), released to coincide with the International Day of Persons with Disability, features the work of three contributing editors from the Faculty.

he Health Systems Trust and Inclusive Practices Africa, a research group affiliated to the Faculty of Health Sciences, released the findings of its latest research in the *SAHR*, timed to highlight the International Day of Persons with Disability on 3 December.



UCT Profs Harsha Kathard (left) and Roshan Galvaan, two of the three UCT co-editors of the 23rd edition of the *South African Health Review*.



Keeping mothers in mind: COVID and beyond



regnant women and new mothers have been particularly vulnerable, as they struggle to take care of themselves and their new-born babies with limited access to resources during the national lockdown. During 2020, the Perinatal Mental Health Project (PMHP) has been supporting maternal mental health care in low-income communities.





Building partnerships

UCT's Faculty of Health Sciences and the Western Cape Department of Health have signed a bilateral agreement for training and collaboration.

his agreement governs the relationship between the two in relation to their shared mandate of education, research and service.









Anaesthesia & Perioperative Medicine

tackles COVID challenges and high-risk procedures head-on

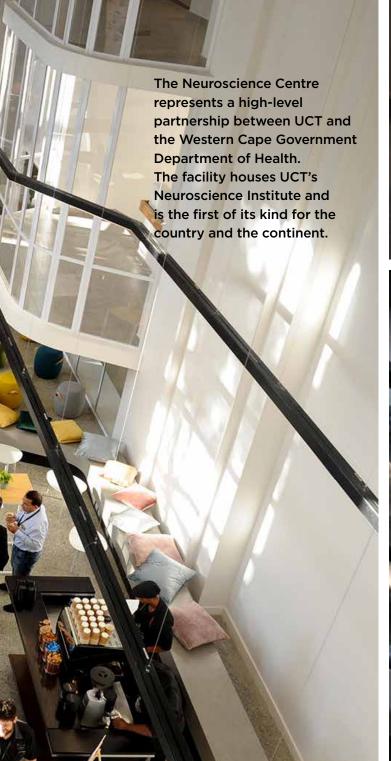
rom March to September, the
COVID Anaesthesia and Airway
Team managed more than 500
COVID cases, of which approximately
half were intubations and transfers
of critically ill patients to ICU, where
more than a third of cases required
surgery. Above and beyond service
to the patients and hospital, the
greatest success was the phenomenal
collaboration, cooperation and
integration of practitioners across
professions, disciplines and divisions
who typically have little interaction.





'Africanised' neuroscience

The world-class Neuroscience Centre at Groote Schuur Hospital was established to address South Africa's high burden of disease in mental and neurological disorders.







he launch of the University of Cape Town's (UCT) multidisciplinary Neuroscience Centre, established to execute inter- and cross-disciplinary research and fast-track novel treatment options for neurological disorders, is an

important step towards "Africanising" the vital discipline of neuroscience in South Africa.



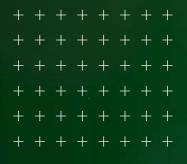


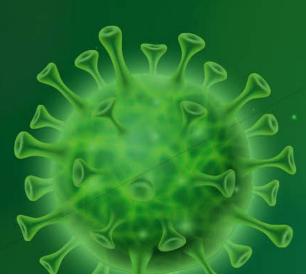


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COVID-19 A YEAR IN NUMBERS





PERSONAL PROTECTIVE EQUIPMENT

lssued to 2054 STUDENTS



Cloth masks 4108



masks **114 800**



Surgical gloves 6211



Plastic aprons **6186**



Visors 1236



Sanitisers **2054**



KN95 masks **1250**

FHS ISSUED CLOTH MASKS TO 200 STAFF MEMBERS AND PROVIDED FULL PPE PACKS TO 29 CLINICAL STAFF.

SCREENING SYMPTOM MONITORING



1290 undergrad students had symptoms monitored daily using the Magnitude Gold Platform.

1262 postgrad students and staff used the Higher Health App to monitor their symptoms daily.

INTUBATIONS

From March to September, the COVID Anaesthesia and Airway Team managed more than 500 COVID cases, of which around half were intubations and transfers of critically ill patients to ICU, and more than a third of cases required surgery.

HOSPITAL OF HOPE



Built in weeks

Cape Town International
Convention Centre (CTICC)
was repurposed into an
862-bed field hospital.
The facility was officially
opened by the president of
South Africa, the minister
of health and the premier
of the Western Cape on
Friday, 5 June 2020 and
received its first patients
from other acute hospitals
on Monday, 8 June 2020.

FHS STUDENT VOLUNTEERS

More than 100 medical students in 5th and 6th years volunteered to assist with case and contact tracing, screening and testing and clinical work.

POSTGRADUATE

623 postgraduate students

who left campus during March 2020 and level 5 of the national lockdown returned to campus to continue with critical research lab work, or clinical training.

COVID IN THE WESTERN CAPE

FIRST WAVE

Peak number of cases in a single day 2243 cases diagnosed Peak 7 day moving average 1701 cases

SECOND WAVE

Peak number of cases in a single day was on 28 December 5511 cases diagnosed* Peak 7 day moving average 3210 cases

*high, due to weekend and public holidays when fewer tests were done.

DURATIONFIRST WAVE - 14 weeks



*above 75 admissions per day and return to this level

NUMBER OF TESTS COMPLETED

- ► As of 3 March 2021, **1,337,016 tests conducted** in the Western Cape.
- Number of hospitalisations 43,307 patients have been admitted
- Number of health workers infected 8608 health worker infections
- Number of deaths first wave vs second wave **3552 deaths** in wave 1; **6444 deaths** in wave 2

ICU BEDS AT GROOTE SCHUUR

At the peak of the first wave, the number of ICU beds increased from 25 to 63 (double the amount available in the entire Nelson Mandela Bay Metro). In the second wave, more than 100 beds (including those that offered high-flow nasal oxygen).



BEHIND THE MASK:

OVERHEARD DURING LOCKDOWN

"I have witnessed true vulnerability amongst senior colleagues who have shown their human side when they felt overwhelmed. I think this is such an important lesson for all individuals who work within our health sector – to realise that we are all human and vulnerable. Healthcare workers are often seen as superheroes and we are used to just soldiering on. Hopefully, the lessons learnt from this pandemic will teach us to be kinder and more compassionate to ourselves and our colleagues."

Dr Natacha Berkowitz, Public Health Medicine registrar and the City of Cape Town's Public Health lead on the COVID-19 outbreak in the Cape Metro

systems of knowledge are languages, and like all languages, they are living entities – as such, order often emerges out of chaos. Our courses have essentially evolved into new species fit for a new environment, and, for now, they are not just surviving, but even thriving. 99

Dr Adalbert Ernst, Anaesthesia and Perioperative Medicine

"The nurses were initially afraid to test patients. It was a totally new experience for them, but we spent two solid weeks on training and it paid off. It is one of the few tents that are nurse-driven, but they have been empowered. They did, and continue to do, an amazing job."

Dr Katya Evans, Emergency Medicine Specialist, Mitchells Plain District Hospital



"I cannot over-emphasise how much these video calls mean to patients... I consistently have seen sad and forlorn patients lying in their beds and as soon as the video call gets made, it is like they are a new person. I have never seen such huge smiles!"

Dr Nabeela Amien, Family Medicine Registrar

The Community Action
Networks (CANs) have
powerfully demonstrated the
value of public participation
in health, and in particular
the power of informal
networks and collective
action in community
health systems in times
of unprecedented crisis.

Eleanor Whyle and Dr Leanne Brady, Health Policy and Systems Division, School of Public Health and Family Medicine



"If you have seen death on the scale that we have seen it, it changes your life completely. There is no way any of us will walk away from this and think our lives will go back to normal. You treat a patient one day and they seem to be doing well and you get to work the next day and the patient is gone. It's crazy and it messes with your mind, so you have to debrief, and when you find a bit of good in what you're doing, it motivates you to keep going. It's actually an honour and a privilege to be a public servant because at this time we are able to do something while the rest of the country is still figuring out if it's real. As a team, we've grown together so much. We are not a physio department, we are a physio family."

Groote Schuur Physiotherapy Department @HeroesofGrooteSchuur

WATCH THE VIDEO
GROOTE SCHUUR HOSPITAL
JOINS THE JERUSALEMA
CHALLENGE



"We jumped from using just one ton of oxygen a day to ten tons of oxygen per day during the COVID-19 peak. The pandemic quadrupled our gas costs. But we were fortunate to be able to provide what was needed and save many patients' lives."

Denton Smith, Head of Engineering @HeroesofGrooteSchuur

"Talking, and sharing our feelings, is the only way we cope. Having people ask you how you feel, even on days that you feel like you can't go on anymore, helps. And also I believe, when you love your job – even though you feel like your mind, your body and your soul are just exhausted – you still come through because you know your patients need you. We can't save

bring a smile to the families of those we save."

everybody, but at least we can

Zintathu Chayichayi, Emergency Unit Nurse @HeroesofGrooteSchuur

5 minutes

with Prof Mary-Ann Davies: Director of the Centre for Infectious Disease Epidemiology and Research

rof Mary-Ann Davies has been extensively involved in epidemiologic analyses of COVID-19 in the Western Cape and leading the surveillance strategy in the province to guide our response. She has served on technical working groups for the Ministerial Advisory Committee and supported provincial planning for outbreak preparedness as well as vaccine rollout. We asked her a few questions.

66 I think the highlight for me has been the collaboration and innovation across traditional disciplinary and hierarchical boundaries, and commitment to grappling with complex questions in order to find the best ways to mitigate the devastating impact of COVID-19 on both individuals and the population. \$99







CRITICAL CARE

r Shrikant Peters, Public Health Medicine Specialist in the Faculty of Health Sciences and Medical Manager of Theatre Services, Critical Care and Anaesthetics at Groote Schuur Hospital provides an insider perspective into the juggling act of managing critical care services through a public health emergency.



66 The greatest positive outcome of this pandemic is the amount of teamwork, and the appreciation of systems thinking in Medicine that it has engendered. 99

Volunteers push back against pandemic with multi-pronged partnership

sense of solidarity propelled communities into new partnerships, to contribute to the fight against the COVID-19 pandemic. Volunteers at the University of Cape Town (UCT) are no exception. Tapping into their expertise and deep experience by working together, they have committed to supporting the national effort, says the Institute of Infectious Disease and Molecular Medicine (IDM) director Professor Valerie Mizrahi.

A massive collaborative effort between multi-sector volunteers from

the IDM at UCT in partnership with the South African Medical Research Council (SAMRC) and National Health Laboratory Service (NHLS) has yielded a tag-team effort to test patient samples for SARS-CoV-2. This development is part of a multi-centre "surge testing" initiative convened by the SAMRC which involves the IDM and other academic centres across South Africa.





Family Medicine registrars experience new

'Hospital of Hope'



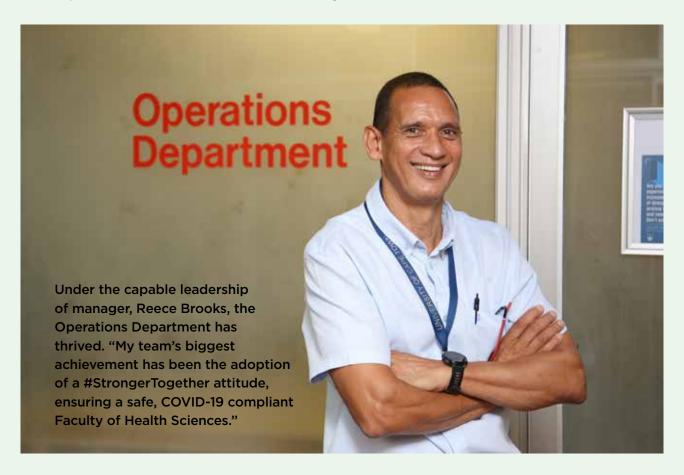
ust a few months ago, Drs
Abhaya Karki and Nabeela Amien,
two senior family medicine
registrars from the Faculty, could not
have imagined being part of a team
that would set up a field hospital
from scratch - from preparing beds
to welcoming the first patients and

leading one of the multidisciplinary teams who look after acutely ill COVID-19 patients. The duo have described it as 'the experience of a lifetime'.



MANAGING THE ENGINE ROOM: OPERATIONS TEAM

The Operations Department has been juggling many balls at once by rendering essential services to the Faculty during the last year. From ordering, controlling and issuing personal protective equipment (PPE), to ensuring health and safety compliance with COVID-protocols, to outsourcing cleaning services, to arranging transport, to event and venue logistics and much more.



- 66 What a team! Mr Brooks set a good example of being the person that, despite his job title, does not care how big or small the job is, he steps in and helps. I think this motivated some of our colleagues to step up and be exactly that. We have come together and managed to overcome a great amount of challenges thrown our way. In this Department, you are not just an employee number, but a person who belongs. 99
 - Carin Liebenberg, Acting Space Co-ordinator



Anita Kruger, Health and Safety Manager: "I have learnt that when everyone is in the same boat, people's strengths and weaknesses are highlighted. That as humans, we can find easier, cheaper and more productive ways in which to do some, if not all our work."

nita Kruger has been at the forefront of health and safety initiatives on campus. Despite the mountain of work facing her, she is proud of leading the way and setting the standard for COVID-19 compliance for the rest of the University.

Kruger has written, provided input and reviewed all COVID-19 safety protocols for the University. She remained at work throughout the lockdown to ensure that essential services such as the decanting of liquid nitrogen, hazardous and other waste disposal, daily building and site inspections continued. Kruger has also been responsible for the provision of health and safety support to the Faculty, reviewing all COVID-19 related documentation such as risk assessments, return to work plans, conducting physical internal audits and writing of reports for each department to ensure COVID-19 compliance.

The drivers have provided 55 years of collective service to the Faculty. (Left to right)
Moegamat Faizel Jardine (Acting FHS Transport Supervisor) with the team of drivers Owen
Lengisi, Mark Vollenhoven, Nomathamsanga Bukulu, Reuben Smith, Nthuthuzelo Ngqaba (front).



Carin Liebenberg, Acting Space Co-ordinator

vercoming immense personal and professional obstacles, 2020 has offered Carin Liebenberg a chance to show her mettle.

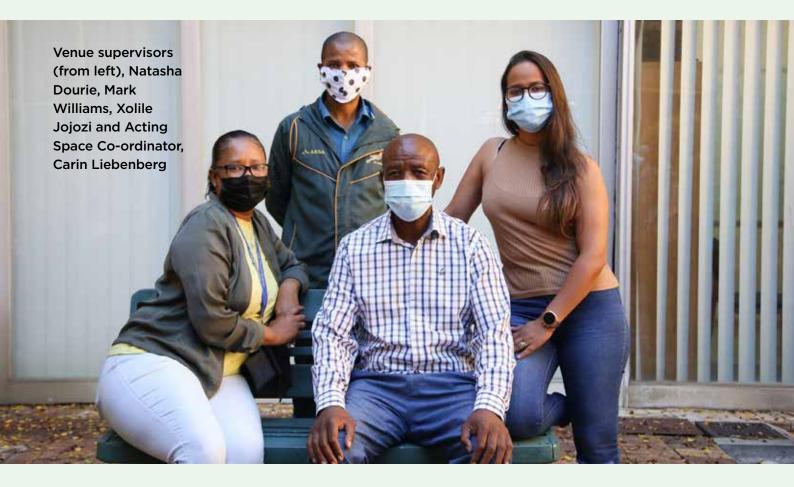
"I have been given an opportunity, unintentionally, to showcase my proficiency and competencies in doing work outside of my scope. This pandemic forced me to perform outside of my key performance areas due to the change in operational requirements. This allowed me to step-up and fill gaps to provide services to the Faculty and in turn to be seen and discovered as a gem that no-one knew existed. I have surprised myself too and looking

back, seeing all the growth that occurred, personally and professionally, within 2020 is amazing. As the saying goes, diamonds are formed under pressure."

2020 has also presented valuable life lessons for Liebenberg.

"What 2020 taught me was that we are not in this world for ourselves. What you do as an individual has an impact on the community and nation (whether it is practicing hygiene, being compassionate or just doing your job).

"My life matters to the world, how I live it, what I give and take – all that matters – and we have to be conscious about it because the repercussions may be irreparable."





Faizel Jardine, Acting Transport Supervisor

ardine and his team of six drivers are responsible for transporting staff and students to clinical sites all over Cape Town and performing ad hoc duties. This work continued during the national lockdown as medical students and staff worked as essential workers at health facilities.

Jardine says working during the lockdown was an extremely scary and uncertain period for the drivers but they managed to get through it by speaking to each other and "leaning" on each other during the tough times.

"This experience has taught us so much especially about how vulnerable we all are, and about showing compassion towards the next person. We have also learnt about being extra careful and vigilant in order to keep safe."

Despite the fear and anxiety, it is apparent that this is a very close-knit team, who enjoy having a laugh together and supporting each other even under the toughest circumstances. As Jardine says, "We faced the music and we sang along to the tune."

INFORMATION AND COMMUNICATION TECHNOLOGY SERVICES (ICTS)

mployees in the Faculty of Health
Sciences abruptly shifted to
working from home when the
national lockdown was announced
in March. For ICTS, this precipitated
a chaotic rush to allocate, set up and
distribute 50 laptops to staff and
postgraduate students in just four days

before the lockdown came into effect. Paul Rossouw and his team of three were faced with the unenviable task of virtually assisting staff and students to get tech-savvy, manage connectivity, learn new skills and of course, learn the most used phrase of 2020, "You're on mute!"



From left: Bazise Baba (IT Administrator), Paul Rossouw (Faculty IT Support Manager), Marlon Phillips (IT Consultant), Not pictured: Lee Deane (Off-site IT Consultant).



Team work. Collaboration. Learning and adapting. Building resilience. And showing vulnerability. These are some of the key lessons emerging from public health experts working at the cutting edge of the pandemic in the Division of Public Health Medicine, led by Prof Leslie London.

ur staff have been deeply involved across the spectrum - organising the epidemic response teams, coordinating and carrying out contact tracing, managing surveillance and producing health intelligence for decision-making, modelling the epidemic, developing evidence-based guidelines, providing technical support

for work across the health sector and with other sectors ranging from prisons to private industry to cope with epidemic. And on top of all that, managing under- and post-graduate teaching in this new environment," said Professor Leslie London.







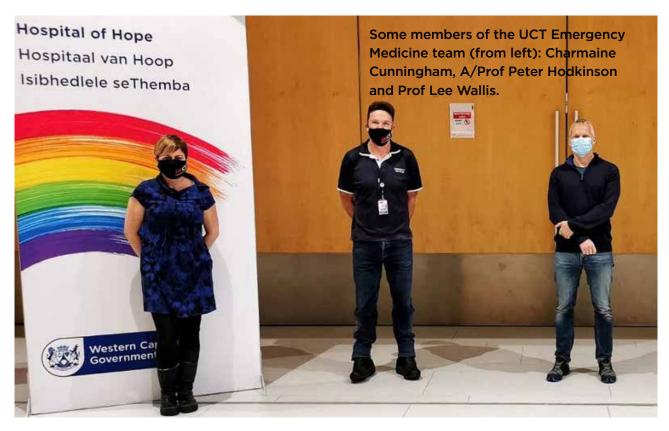
High-flow nasal cannula 'valuable' alternative to ventilation

he use of high-flow nasal cannula (HFNC) oxygen therapy has proven to be a low-resource alternative to mechanical ventilation in 'selected patients' with severe COVID-19 pneumonia, according to

the Faculty of Health Sciences' A/Prof Greg Calligaro.



LESSONS IN COLLABORATION FOR COVID-19 HEALTHCARE WORKERS



ealthcare workers at the forefront of the COVID-19 pandemic, including members of the Faculty of Health Sciences' Division of Emergency Medicine, have experienced

unprecedented levels of collaboration in their efforts to care for patients.





Emergency medicine team

rises above the challenges

tightly knit team of emergency medicine specialists have overcome multiple challenges and set up a dynamic system to cope with the wave of COVID-19 patients at the busy Mitchells Plain

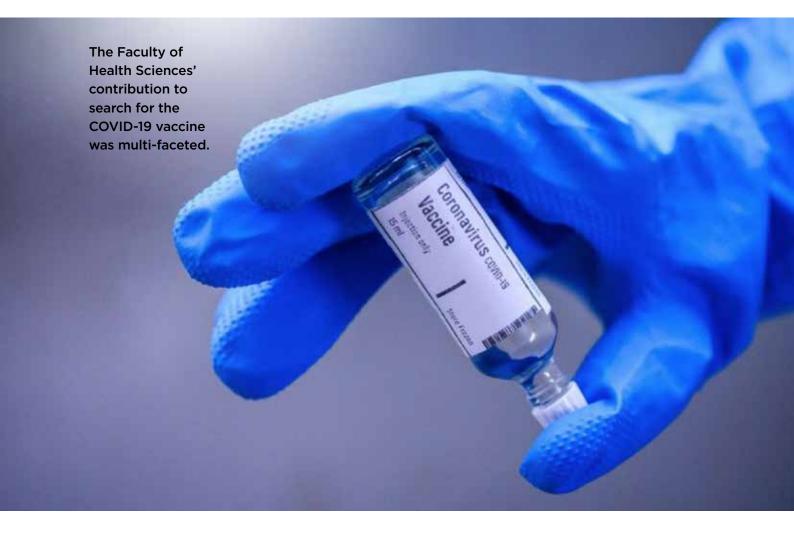
District Hospital and the Heideveld Emergency Centre in Cape Town.

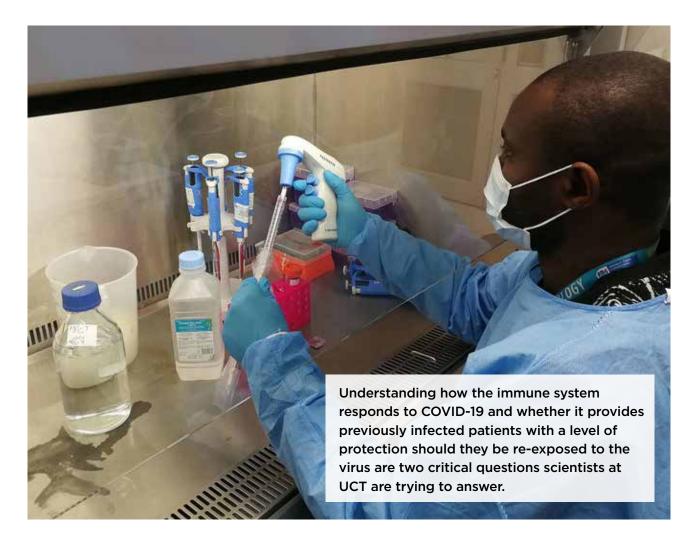


Searching for a COVID-19 vaccine: UCT joins hunt

outh Africa joined global counterparts in the search for a COVID-19 vaccine and the University of Cape Town lent a hand, participating in three international trials in the country, alongside several other universities. With SA being one of the countries with trials underway, joining forces

to tackle the pandemic and highlight Africa's scientific leadership is crucial. Addressing this sentiment researchers from the Health Sciences and Science Faculty published a paper describing an African perspective on global approaches to the fight against the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).





Studying the immune system's response to COVID-19

The COVID-19 pandemic has directly affected more than 700 000 South Africans, and each patient experienced the virus differently – many paid the ultimate price. While the infection rate in the country has slowed down, pressing questions remain: How long does immunity last? What accounts for the differences in the disease's severity?

he number of patients who have reportedly been reinfected with COVID-19 has grown.
Therefore, understanding how the immune system responds to the virus, and whether it provides previously infected patients with a level of

protection should they be re-exposed to the virus are two critical questions scientists at the Faculty of Health Sciences are trying to answer.



New, rare syndrome puts children at risk

aculty of Health Sciences' research
duo Dr Kate Webb, a Crick African
Network Research Fellow and
consultant paediatric rheumatologist
in the Department of Paediatrics and
Child Health and Prof Liesl Zühlke,
a paediatric cardiologist based in
the Division of Cardiology, are part
of a team of paediatric specialists
investigating Multi-system inflammatory
syndrome in children (MIS-C), a rare
disease which compromises the
immune system of children and seems
to have COVID-19 as a precursor.





Together with their team, Dr Kate Webb and Prof Liesl Zühlke aim to capture data from children with COVID-19 and MIS-C across the country.

COVID-19 in the continent's children: UK award supports new research

study headed by Prof
Heather Zar promises fresh
insight into understanding
the determinants of SARS-CoV-2
infection and COVID-19 in children
in Africa.



RIGHT: Mother and child participants in the birth cohort study, the Drakenstein Child Health Study.



Occupational Medicine advocates for workplace health and safety

he Occupational Medicine
Division, a relatively small team
in the Faculty, has made a
large footprint on the South African
landscape, by playing major role in

workplace health and safety in the midst of COVID-19 pandemic.





Prof Jeebhay, A/Prof Shahieda Adams, Dr Zahida Sonday, Dr Roslynn Baatjies, Dr Itumuleng Ntatamala, Faranaaz Bennet, Jarrod Matthei (visiting student), Dr Amy Burdzik

CARING FOR THE CARERS

any health workers have reported that mental health conditions such as anxiety, depression and burnout have been made worse by the COVID-19 pandemic. The Division of Consultation Liaison Psychiatry has developed a service which aims to prioritise employee health and wellness during the pandemic.

Doctors and health workers have been painted as 'heroes' during the pandemic, however, they are not super human. 99







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Research Deputy Dean

Ambroise Wonkam

ver the past year, under exceptionally difficult circumstances, the Faculty of Health Sciences (FHS) research directorate has continued to enhance faculty research performance in many of our disease areas of strength: infection, neuroscience and mental health, chronic lifestyle diseases, cancer, and other disease burdens that are particularly relevant to Africa. The directorate has also increased its global visibility in emerging themes such as genetics and data sciences, while stepping-up to the challenges of the ongoing COVID-19 pandemic.

We have strengthened our research support with the effective implementation of specific programmatic stimulus grants for clinical researchers, emerging researchers and University Research Committee (URC) accredited research groupings – so contributing to building a diverse human capital with specific attention to the transformation of the Science Cohort. This, with the implementation of awards for 19 honours students from disadvantaged demographic backgrounds.

We have enhanced strategic groupings by increasing the number

of new URC-accredited entities, while supporting the renewal of established ones. We have monitored the implementation of enabling platforms such as the electronic Research Administration (eRA) system and finalised the development of a FHS risk registry. Moreover, the portfolio has delivered on numerous key operational objectives which included: refining the Faculty research enterprise budget principles; implementing a research fund deficit policy; developing an innovative system for cost recovery for FHS core facilities and support services; restructuring the Faculty Research Office notably with the appointment of a director of Faculty Research; as well as the appointment of a Research Diligence Manager.

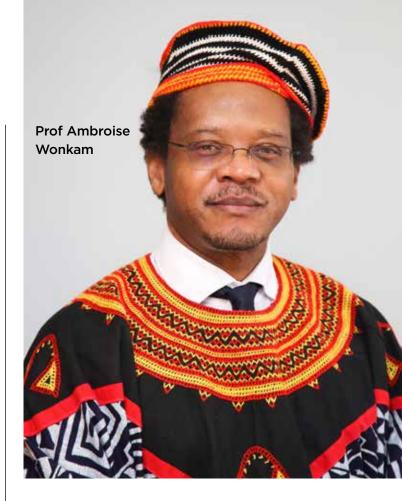
While the COVID-19 pandemic is an added unpredictable challenge – and many of the implications thereof are yet to be measured – it has also presented the portfolio with new opportunities. A dedicated FHS COVID-19 Research task team was setup, with selected members meeting weekly over 10 months to; brainstorm and implement novel operations such as ushering in a new way of

research administration, enhancing collaborative and multidisciplinary research, refining of health and safety processes including developing a system for rational occupation of spaces.

The COVID-19 pandemic is making scientific research visible to the wider public in particular through Public Health and Epidemiology; setting new technological approaches for more accessible gatherings and training for more people; developing new research streams on emerging infectious diseases that have accelerated novel biotechnology in diagnosis, vaccine development, molecular epidemiological surveillance of infections, the timely identification of a new variant and the subsequent adjustment of public health interventions, as well as the advancement and adaptation of new operational processes and health and safety measures.

FHS research has greatly contributed to vaccine development and therapeutic interventions through clinical trials and other research. Currently, FHS researchers are undertaking over 100 new COVID-19 research projects with some highlighted on the dedicated portfolio on the FHS website. The accelerated knowledge creation during the COVID-19 pandemic will ensure continued successful management as we progressively return to normality over the coming year, hopefully.

However, the crisis has increased the pressure on soft-funded groups impacting laboratory-based



experiments and resulting in student outputs which have been greatly delayed and, in some cases, completely stopped. The long-lasting effect of the COVID-19 pandemic on our research enterprise will need to be formally monitored and measured in the years to come, both in terms of newly created opportunities, as well as unresolved challenges.

We are excited to continue forging ahead with the dynamic deanery team and the research strategic plan for the next 10 years. The Faculty Research Strategy will continue to build on our current strengths and to develop innovative thematic areas, and will aim to reframe the concept of excellence in research which extends beyond the classical productivity metrics. This reframing will be embedded in the igniting of agencies to promote an equal and just South African, African, and global society grounded in health equity.



27 COVID-19-related grants were awarded to researchers at FHS from external funders during 2020.

These have a combined award value of over R155 million.

The Human Research Ethics Committee approved almost 150 COVID-19-related applications. **50** COVID-19-related applications were received and approved by the Faculty Biosafety Committee.

A total of 95 COVID-19-related journal articles were published by UCT researchers in 2020. The National Research
Foundation allocates
A-ratings to researchers who are international leaders in their field. Of the 36 A-rated researchers at UCT, 10 of them are based at FHS. In addition to these, the Faculty hosts 35 B-, 73 C- and 25 Y-rated researchers.





DID YOU KNOW?

Two Faculty of Health Sciences researchers have been included in the Highly Cited Researchers (HCR) list for 2020. They are HCR veteran Professor Dan Stein and Estelle (Vicki) Lambert, who features on the list for the first time this year.



1670 accredited journal articles published in 2019.

The value of FHS research contracts approved in 2020 was R1,421 million, up from R1,104 million in 2019. This accounts for about 65% of UCT's total.

RANKINGS

UCT 1st in Africa -

Best Global Universities in Africa (US News)

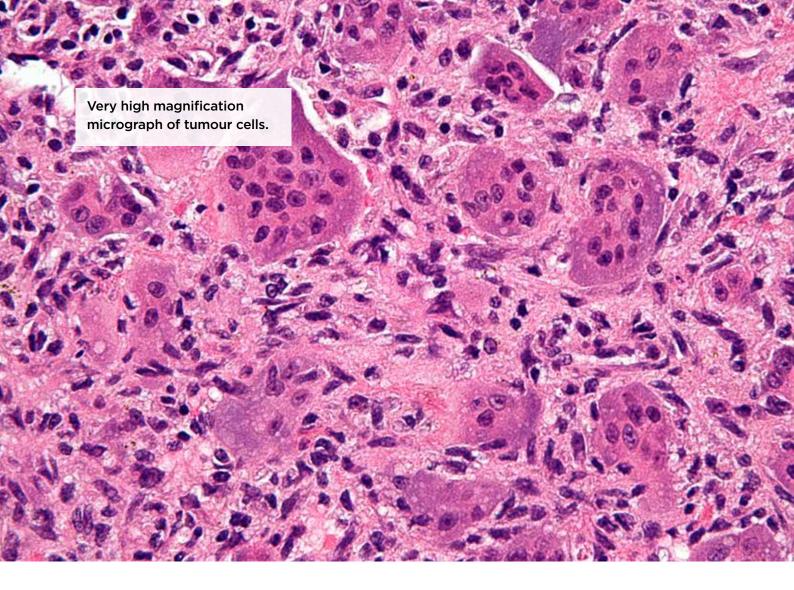
Best universities for 'clinical. pre-clinical and health'

- UCT is ranked 65th in the world (THE)

Most international universities - UCT is ranked 39th in the world (THE)

Subject Rankings in the World

- Infectious diseases is 9th (US News 2021)
- Public, environmental and occupational health is 36th (US News 2021)
- Immunology is 47th (US News 2021)
- Public health is 53rd (US News 2021)
- Microbiology is 79th (US News 2021)
- Psychiatry/Psychology is 92nd (US News 2021)
- Anatomy & physiology is top 100 (QS 2020)
- Medicine is top 100 (QS 2020)
- Clinical Medicine is 103 (US News 2021)
- Cardiac and Cardiovascular Systems is 109th (US News 2021)
- * ShanghaiRankings' Global Ranking of Academic Subjects (GRAS) 2020
- * US News Best Global Universities 2021
- * Quacquarelli Symonds (QS) 2020



Cancer treatment gets personal

The search for better cancer treatments continues, as current options often cause severe side effects. Less than 5% of experimental anticancer drugs are approved for use in humans, but scientists are bringing new technologies to the quest.

ancer is caused by multiple contributing factors. These include genetic mutations and abnormalities which cause cells to grow faster than normal. The differences between normal and tumour cells have started to become clearer to researchers since the

human genome was mapped. It is now understood that a single approach to cancer treatment is inadequate. There is a need for more targeted and personalised therapies.



Selective dorsal rhizotomy 30 years on

elective dorsal rhizotomy (SDR) is a procedure used in the treatment of spasticity in children with cerebral palsy. But, despite the now-common use of SDR as treatment, it is not known what the long-term outcomes are. Professor

Nelleke Langerak picks up the baton from Faculty of Heath Sciences' academics who laid the foundation for her continued work.





(From left to right): Prof Kit Vaughan, Dr Nelleke Langerak, Prof Roland Eastman, Prof Warwick Peacock, Dr Nienke Veerbeek, Prof Robert Lamberts and Prof Graham Fieggen celebrate the first neuroscience PhD at UCT in December 2019.



New multifunctional TB blood test validated

esearchers from the South
African Tuberculosis Vaccine
Initiative (SATVI) at the
Institute of Infectious Disease and
Molecular Medicine, the Center for
Global Infectious Disease Research
- Seattle in the United States, and
a large consortium of collaborators





have developed and validated a simple, blood-based test that has the potential to serve multiple functions in the fight against tuberculosis (TB).



COVID-19's interaction with HIV and TB investigated

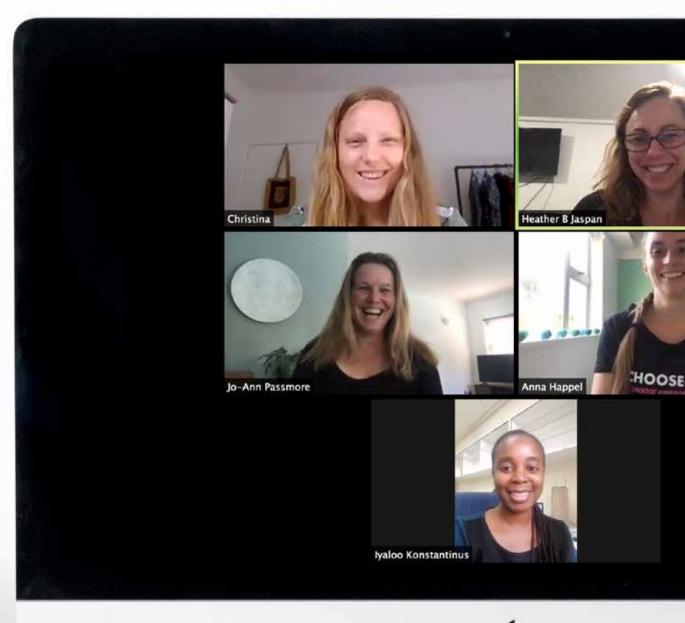
he HIATUS study, a research programme launched in 2020 by the Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa), an Institute of Infectious Disease and Molecular Medicine centre, investigates the interaction between the COVID-19 pandemic and common endemic infectious diseases in the South African context.





Prof Robert Wilkinson, group leader at the Francis Crick Institute and director of CIDRI-Africa.

Hormonal contraceptives, hurting or healing – UCT study investigates









Online meetings became part of a new way-of-working during lockdown. Pictured here, the UChoose-A-Star team including Drs Christina Balle (first author), Iyaloo Konstantinus, Anna-Ursula Happel, A/Profs Heather Jaspan and Jo-Ann Passmore



Research on vaginal health in young women, specifically in the territory of hormonal contraceptive methods, continues to evolve. Despite the benefits of contraceptives, which are vital for young women's reproductive health and used worldwide by over 150 million women, some concern has arisen on the potential effects of these prevention methods on the vaginal environment, and the associated risk of sexually transmitted infections, including HIV.

nintended pregnancy and its negative social, economic, educational and health-related effects are particularly severe for adolescents. Although the benefits of hormonal contraceptives are clear. concerns have been raised regarding the potential disruptive effects of contraceptive-use on the female genital tract's mucosal environment and the risk of vaginal infections. The use of the injectable Depo-Provera has been associated with an increased risk of contracting HIV. This is of major concern since injectable contraceptives are the preferred prevention method for many adolescent girls and young women in sub-Saharan Africa who remain at high risk of both vaginal infections, including HIV, and unintended pregnancies.



Better probiotics for vaginal health

Newly isolated strains of vaginal *Lactobacillus* bacteria perform better than those currently used in South African vaginal probiotics. This is according to research published by an international team led by the Institute of Infectious Disease and Molecular Medicine. The findings could mean more effective treatment for bacterial vaginosis, and a lowered risk of adverse outcomes for pregnancy and sexually transmitted infections, including HIV.

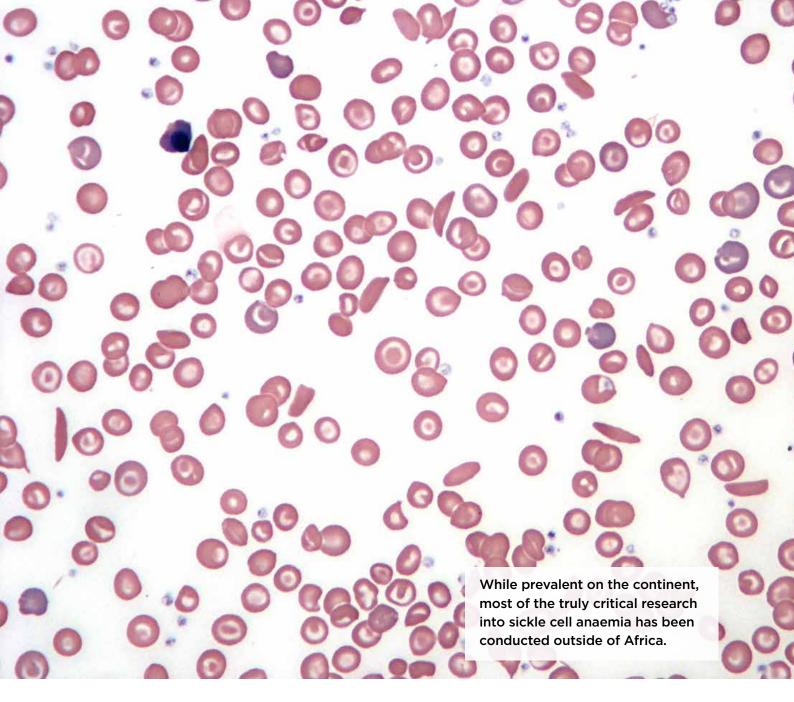
acterial vaginosis is the most prevalent condition affecting reproductive health and HIV risk in South African women, and current standard-of-care – antibiotic treatment – does not lead to a

durable cure," says Associate Professor Jo-Ann Passmore from the Faculty of Health Sciences Division of Virology.





A vaginal probiotic with geo-adapted strains of bacteria could improve the reproductive health of South African women.



UCT sickle cell genetics study a first for Africa

ew research investigating the genetic modifiers of long-term survival in individuals with sickle cell anaemia (SCA) reveals a range of possible pathways for novel therapeutic interventions. Professor Ambroise Wonkam, principal investigator and director of Genetic Medicine of African Populations (GeneMAP) in the University of Cape

Town's Division of Human Genetics, says apart from the study's clinical potential, the fact that it is so deeply rooted in Africa also presents the opportunity for a paradigm shift in science policy and diplomacy.



Global Surgery Fellowship programme a first for UCT

pearheading a move to become an internationally recognised global surgery research hub, the Faculty of Health Sciences (FHS) at the University of Cape Town launched the Global Surgery Fellowship programme in 2020. Funded through the South African Medical Research Council Mid-career scientist grant for R6 million, it was awarded to A/Prof Salome Maswime, Head of the Global Surgery Division at the FHS Department of Surgery. The programme welcomed its first cohort of postgraduate research fellows in July 2020.



Global surgery provides an opportunity for research across large populations with different health systems.

- Head of the Global Surgery Division, and 2020 World Economic Forum Young Scientist, A/Prof Salome Maswime, having launched the Global Surgery Fellowship programme in 2020.



Millions of new variants

in African genomes discovered

An estimated three million novel genetic variants in over 300 genomes have been discovered through a new, large-scale African collaboration between researchers from the Human Heredity and Health in Africa (H3Africa) consortium, which includes academics from the University of Cape Town.

paper on the study, titled "High-depth African genomes inform human migration and health", was published in the distinguished journal *Nature*. The abstract led with: "The African continent is regarded as the cradle of modern humans, and African

genomes contain more genetic variation than those from any other continent, yet only a fraction of the genetic diversity among African individuals has been surveyed."





While previous African studies have mostly been led by people outside of the continent, this study to explore the breadth of genomic diversity across Africa was driven by African scientists.

Diabetes is a ticking time bomb in

Sub-Saharan Africa

Diabetes is a serious, chronic condition that affects the lives and well-being of individuals, families, and societies globally. It is characterised by excess levels of sugar in the blood.

here are three main types of diabetes: type 1 diabetes, type 2 diabetes, and gestational diabetes. Non-communicable diseases result in people living for many years in poor health in sub-Saharan Africa. In fact, one-third of all health loss

(measured using disability-adjusted life-years) in 2019 in sub-Saharan Africa was due to noncommunicable diseases such as diabetes.



Governments need to act urgently to encourage changes in behaviour in a bid to manage this lifestyle disease.



The University of Cape Town's (UCT) Division of Epidemiology and Biostatistics in the School of Public Health and Family Medicine (SPHFM) secured a R120 million grant from the United States (US) National Institutes of Health for a new birth cohort study to examine obesity in pregnant women living with HIV, as well as their children. UCT joins an international consortium including Columbia University and Northwestern University in the US.

besity is commonplace worldwide, with increasing prevalence in South Africa and other countries in sub-Saharan Africa. "This condition links together many non-communicable diseases, such as diabetes, hypertension and heart disease. Levels of obesity in adults and

children in South Africa are increasing, presenting a major threat to public health over future decades," said Professor Landon Myer, the head of the SPHFM at UCT's Faculty of Health Sciences.



Lockdown limits safe spaces for abused women

Lockdown has had myriad consequences, including an increase in crimes against women in South Africa and the world. With the commemoration of 16 Days of Activism for No Violence against Women and Children, researchers from the University of Cape Town are working collaboratively with national entities invested in the alleviation of this abuse.

he study, "Impact of COVID-19 and lockdown on mental health and gender-based violence in South African women," is a collaboration between the Institute of Infectious Disease and Molecular Medicine at the UCT Faculty of Health Sciences, the Centre for the AIDS

Programme of Research in South Africa, the Desmond Tutu Health Foundation, the Seattle Children's Research Institute in the United States and the Burnet Institute in Australia.





Researchers implemented a telephonic survey to assess the physical and emotional well-being of adolescent and young women living in the Western Cape and KwaZulu-Natal during lockdown.

Using bacterial shape to understand TB gene function

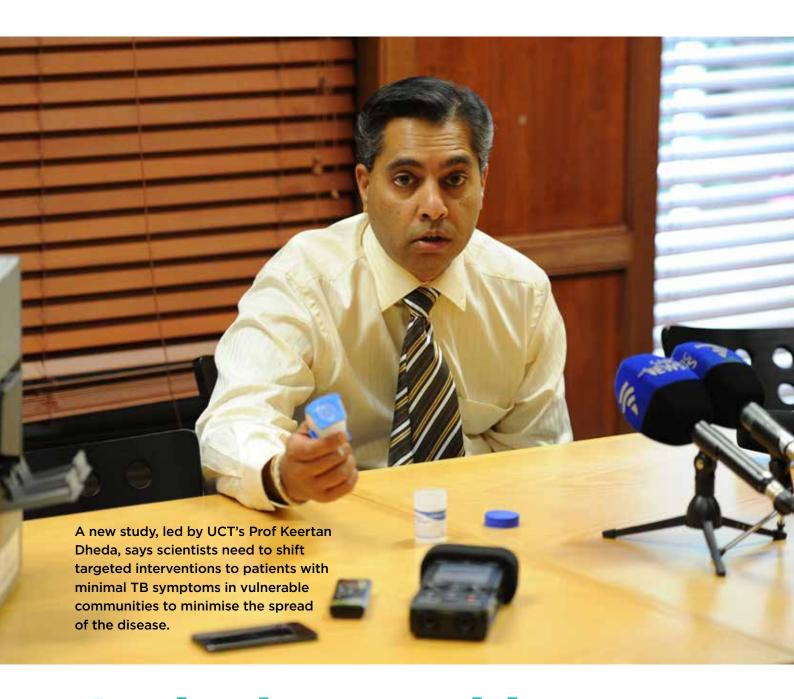
To better understand individual gene function, and help predict the mechanisms of action of certain tuberculosis (TB) drugs, a team of researchers at the University of Cape Town's Institute of Infectious Disease and Molecular Medicine studied the factors that can impact the cell shape of *Mycobacterium* tuberculosis (M. tb), which causes TB.

urvival, and by extension reproduction, is a biological imperative - one made particularly difficult by the hostile environments often encountered by living organisms. To overcome

this challenge, organisms, including bacteria, have developed mechanisms that enable them to adapt to stressors.







Actively searching out TB cases 'critical'

burgeoning epidemic of drugresistant tuberculosis (TB) threatens to derail global control efforts [of the disease]," and countries like South Africa must shift gear to actively search out drugsensitive and drug-resistant cases, renowned researcher Professor Keertan Dheda wrote in a paper published in the leading medical journal, *Nature Medicine*.

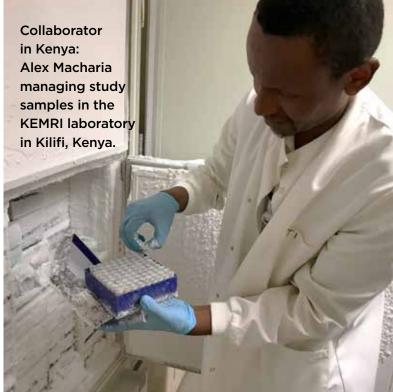




The genetics of neurodevelopmental disorders in Africa

Researchers at the University of Cape Town's (UCT) Department of Paediatrics and Child Health in the Faculty of Health Sciences are working collaboratively on the NeuroDev Study. The study, titled "Genetic Characterization of Neurodevelopmental Disorders in African Populations," investigates the genetics of neurodevelopmental disorders (NDDs) in African populations.







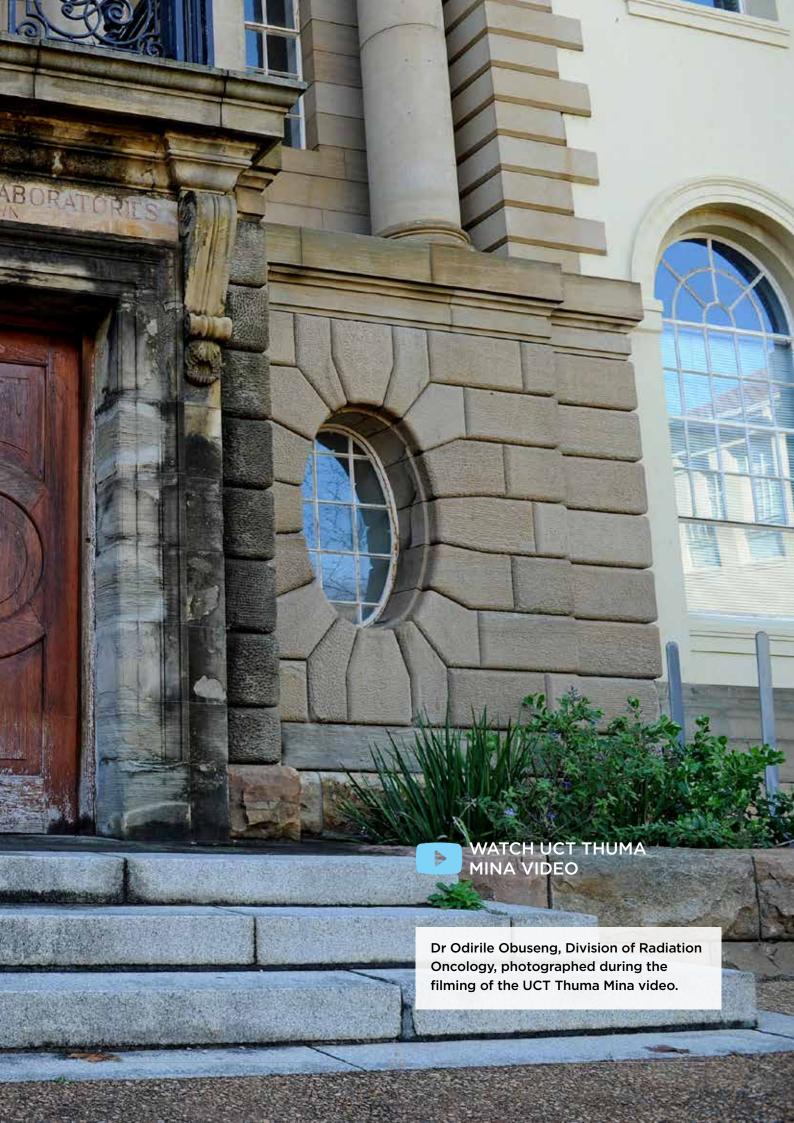
ABOVE Dr Gina Itzikowitz administering one of the behavioural assessments to a participating family in Cape Town.

euroDEV is one of the first studies that has looked at the genetics of NDDs on the African continent in a meaningful way. It is an examination of children who have received a diagnosis of autism spectrum disorder, intellectual disability and attention deficit hyperactivity disorder, including other NDD impairments. NDDs are

a group of childhood-onset conditions which tend to have a varied clinical presentation, depending on the child. They may be associated with significant impairment of personal, social, and cognitive functioning.

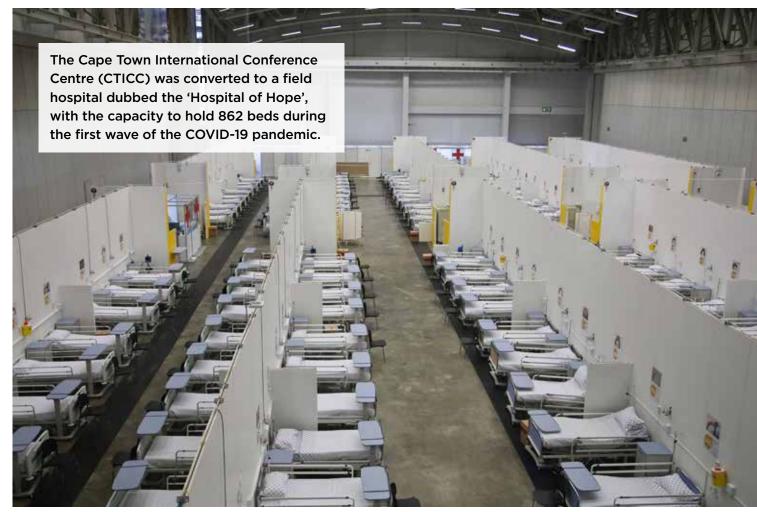




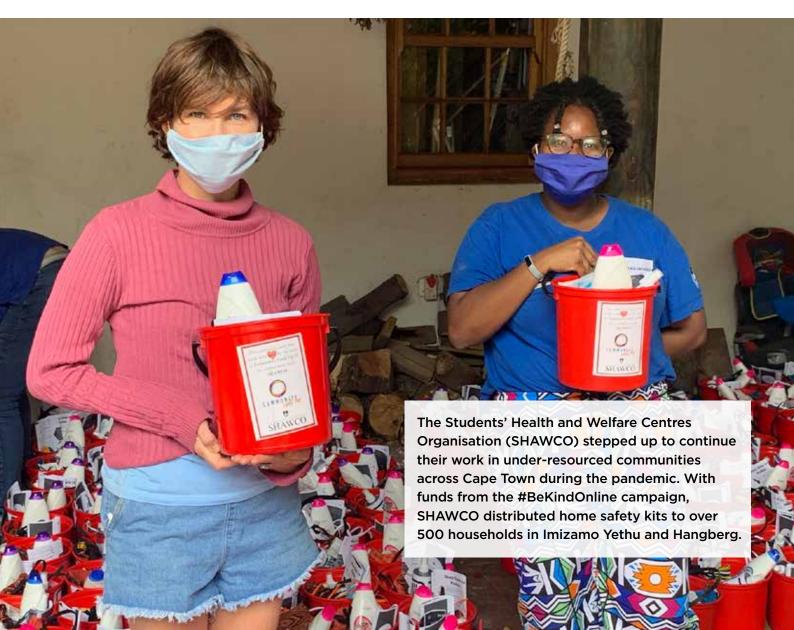




A student collecting her personal protective equipment (PPE) at a competency assessment at the end of her Navigating COVID-19 course, which followed completion of her quarantine period. In less than a week, members of the Faculty, under the leadership of the Deanery, were tasked with rapidly developing a COVID-19 preparedness course to equip final year medical students for their return to the clinical platform.









THE BONGANI MAYOSI LEGACY PROJECT

The Bongani Mayosi Legacy Project consists of several initiatives celebrating his life and work. Some of which include the launch of the Bongani Mayosi Bibliography and the 'Celebrating the Bongani Mayosi Legacy Exhibition' which celebrates the vision, impact and influence of Prof Mayosi on the academic endeavours of the health sciences and University of Cape Town (UCT) students. The name of the Health Sciences Library was changed to the Bongani Mayosi Health Sciences Library with effect from 1 July 2020.







The Bongani Mayosi Legacy Project was launched on 28 January 2020, commemorating the 52nd birthday of Prof Mayosi. The event was a collaborative initiative between UCT Libraries and the Faculty of Health Sciences.



Ujala Satgoor, Executive Director of UCT Libraries, presents a leather-bound bespoke copy of the bibliography, especially handcrafted for the occasion, to the Mayosi family.

The Bongani Mayosi Bibliography was a UCT Libraries initiative which was compiled and published by UCT Libraries to celebrate his legacy. The bibliography is a compilation of all Prof Mayosi's peer-reviewed research output which spans the period 1989-2019.

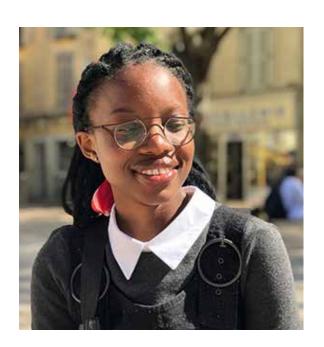




"THOUGHTS"

Medical student, Reatlegile Malatji, was one of three winners in the Res4Res Virtual Festival 2020. Her visual art piece titled "Thoughts" was inspired by her grandmother's recollections of poverty and hardship and the power of freedom of expression.





The African Academy of Sciences (AAS) has nominated two Faculty of Health Sciences' (FHS) academics as 2019 fellows. The fellowships are awarded to scholars who have achieved academic excellence and have contributed to significant scientific advancements in their fields of study.





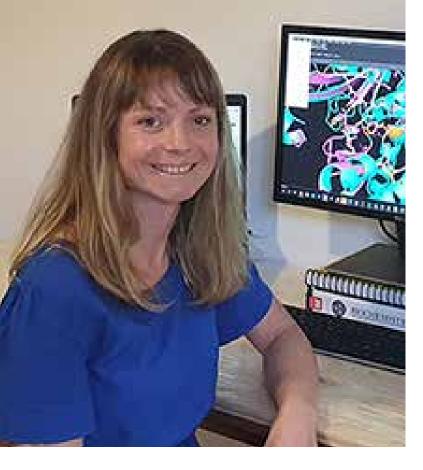
Member of the Institute of Infectious Disease and Molecular Medicine, Prof Collet Dandara is the principal investigator for the Pharmacogenomics and Drug Metabolism Research Group at UCT. He investigates how genetic variations affect individual responses to drugs.



A/Prof Nicki Tiffin's research looks at the overlap between health genomics, health informatics and epidemiology research.



James van Duuren is one of ten FHS alumni and students who were selected for the Mail & Guardian's 2020 list of 200 Young South African innovators changing our world. Van Duuren is completing his Master's in Public Health on a Mandela Rhodes Scholarship and is the deputy secretary of the People's Health Movement in South Africa.







From the 700 applicants and among the 30 successful candidates two young researchers from the Institute of Infectious Disease and Molecular Medicine have been selected to form part of the 2020 cohort of Future Leaders – African Independent Research (FLAIR) fellows. They are Dr Lauren Arendse, Drug Discovery and Development Centre (H3D) and Dr Felix Sizwe Dube, Department of Molecular & Cell Biology. These fellowships, a partnership between the African Academy of Sciences (AAS) and The Royal Society and supported by the Global Challenges Research Fund, are awarded to talented African early-career researchers whose work is focused on solving the needs of the continent.



In September, Tadej Pogačar won the 2020 Tour de France cycle race. His victory was also an extraordinary achievement for A/Prof Jeroen Swart (pictured here) and several other doctors from the Division of Exercise Science and Sports Medicine, based at the Sports Science Institute of South Africa (SSISA), who led the medical team for UAE Team Emirates. The appointment as medical director of UAE Team Emirates in January 2019 was the realisation of a dream that began when he was 11 years old, says Swart.







Being inducted into UCT's College of Fellows is one the highest accolades an academic staff member can receive at the University. The award recognises members of permanent academic staff for original and distinguished work that merits special recognition. This year, Council recognised four new fellows from the Faculty. They are Profs Linda-Gail Bekker, Jonathan Blackburn, Johannes Fagan and Landon Myer.







Prof Keertan Dheda (right) was awarded the South **African Medical Research** Council Platinum Award. which is one of the most prestigious awards made to individual researchers. This accolade recognised his seminal contributions to the optimal use of frontline point-of-care tools for tuberculosis (TB) diagnosis and its impact on patient outcomes, as well as his work on the management of drug-resistant TB in South Africa, which has shaped global and national policy.









As part of their Health in Context course, a group of fourth year medical students partnered with Alpha and Omega Outreach to ensure the community was well informed about mental health and misconceptions about COVID-19. Faculty of Health Sciences' student, Regan Boden, said students were divided into groups to assist with health-promotion activities.



The Chan Zuckerberg Initiative announced an Imaging Scientist award to Dr Caron Jacobs, postdoctoral fellow in the Institute of Infectious Disease and Molecular Medicine and the Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa) for her programme "Democratizing Imaging for Infectious Disease Research in Africa".





The Pathology Learning Centre team launched their Pathology Lexicon A-Z App via the Apple App and Google Play stores on 1 September. It is hoped that the App will help students become confident users of the descriptive language of pathology, specifically as it relates to "gross" or macroscopic pathology. The App came about because in pathology particular adjectives are used quite specifically, and without a grasp of this lexicon, students are on the back foot when studying pathology texts or when required to describe a pathological lesion themselves. This may be an even bigger hurdle for students whose first language is not English, so the App includes a pronunciation guide (voice), and isiXhosa and Afrikaans equivalents for each word.

Doctors Peace Francis and Inga Mgaleli were the inaugural winners of the Bongani Mayosi Medical Students Academic Prize for 2020. This is a prestigious national award which aims to recognise final-year medical students who epitomise the academic, legendary, and altruistic life of Prof Mayosi. The awardees were voted for by their peers based on three critieria: academic achievement, emotional intelligence, and social accountability.





"This is a very special award for me because my colleagues are the ones who nominated me for it. At the beginning of first year, we were told that we are the 'best of the best'. Over the past six years my colleagues have proven to be the best of the best in their empathy for patients, in their commitment to justice, in their courage to have the difficult conversations, in their perseverance through six very difficult years at UCT, through their academic excellence, through their ability to lead in varying spheres throughout the Faculty and University. It is so humbling to be affirmed in this way by such an excellent group and by peers who have walked a tough journey with me and who know me," said Dr Peace Francis.





A/Prof Marc Hendricks (left) from the
Department of Paediatrics and Child Health and
Dr Linda Boloko (above) from the Department
of Medicine were awarded the Professor
Bongani Mayosi Netcare Clinical Scholarship in
2020, a highly competitive, prestigious national
award to support black clinical scientists with
their doctoral or past doctoral research.



A message of inclusivity, empowerment and togetherness proudly worn on the back of the Health Sciences Students' Council T-shirts.





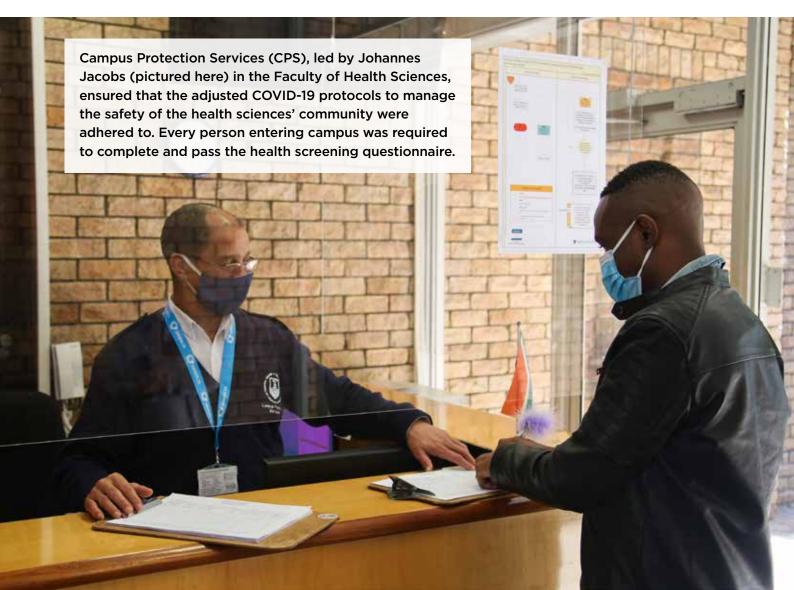
The 2020 UCT Open Textbook
Award is shared by Prof
Johan Fagan (Division of
Otolaryngology) and Dr Michael
Held (Orthopaedic Research
Unit) for their respective
contributions to the open
access teaching and learning
of two important healthcare
fields. Open textbooks
are an important way to
promote inclusivity, diversity,
accessibility, and transformation
in higher education.





The cleaning team on- and off-campus sites are appreciated for their dedication and hard work during the pandemic in ensuring that staff and students could safely return to work, studies and research activities.











Screening, social distancing and sanitising has been the order of the day for those who were allowed to return to campus.



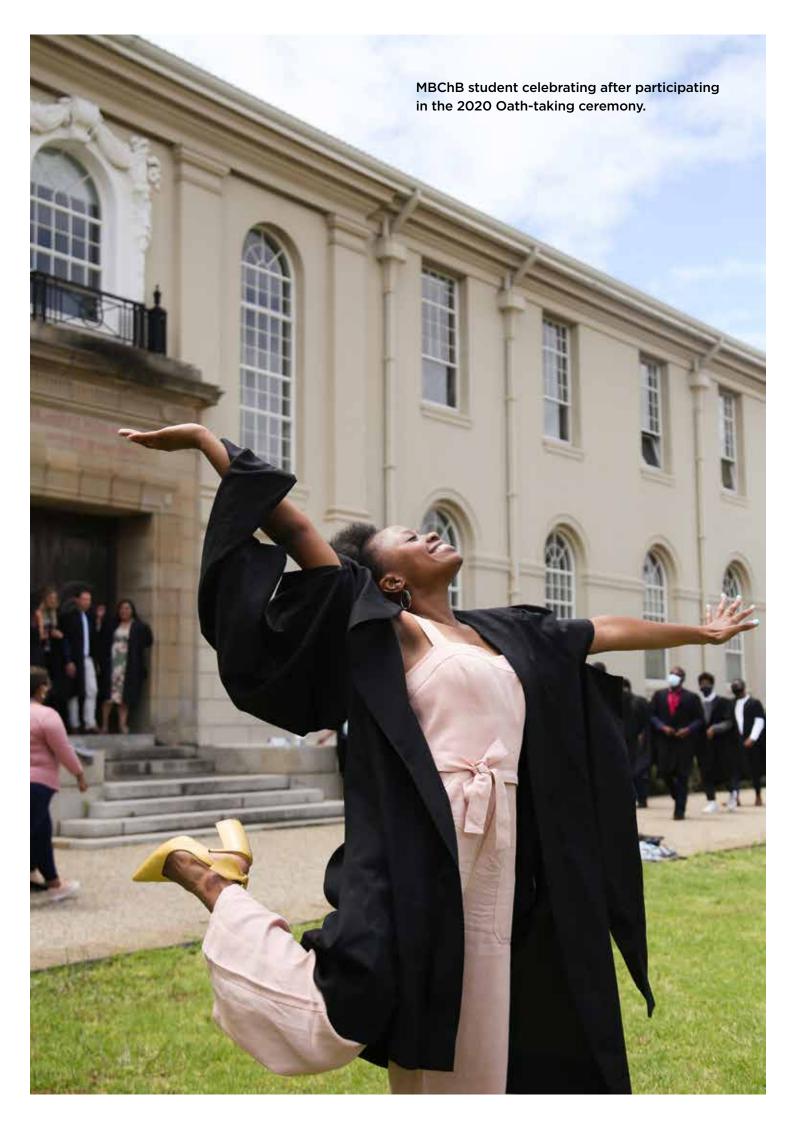
Members of the Deanery visited various health facilities in the Garden Route District including Knysna Hospital, George Hospital, Oudtshoorn Hospital and Dysseldorp Clinic. They also met with Faculty of Health Sciences' students working on the rural clinical platform.















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bring community stories to bear

A team of young videographers participating in Eh!woza's unique blend of biomedical research workshops and skills development through media training have focused their lenses on the impact of COVID-19 in Khayelitsha, which has one of the highest tuberculosis (TB) rates in the world.

h!woza's inaugural project
engaged high school
learners on TB research. The
interactive science workshops
hosted by the organisation exposed
learners to renowned academics,

and postgraduates and postdoctoral fellows from the Institute of Infectious Disease and Molecular Medicine.



Social Responsiveness Award: A unique study on youth and HIV

South Africa has the world's largest cohort of young people with HIV. More than 300 000 adolescents aged between 10 and 19 are living with the virus. Part of the born-free generation, their health outcomes – and those of their families – reflect the triumphs, as well as the enduring challenges of post-apartheid healthcare, said Dr Rebecca Hodes, the recipient of the University of Cape Town's (UCT) Social Responsiveness Award for 2019.

r Hodes is a researcher in UCT's AIDS and Society Research Unit, which straddles the faculties of Humanities and Health Sciences. The award recognises her collaborative study

Mzantsi Wakho (Your South Africa), which was conducted in the Eastern Cape.







Prof Elmi Muller wins the 2019 Alan Pifer Award

In 2008 Prof Elmi Muller, then a young transplant surgeon based at Groote Schuur hospital, completed the world's first kidney transplant between an HIV-positive patient and donor. Now, 12 years later, Muller is recognised as a global authority on kidney and liver transplantation and a trailblazer in the field of organ transplantation in HIV-positive patients. It is this dedication to making organ transplantation available to vulnerable people that has led to Muller being recognised with the 2019 University of Cape Town (UCT) Alan Pifer Award.

he award, which carries a purse of R20 000, is granted annually by UCT's Vice-Chancellor in recognition of outstanding welfare-related research that benefits South Africa's disadvantaged people.





SHAWCO: Student-led community outreach

In response to the COVID-19 pandemic, the Faculty of Health Sciences' Students' Health and Welfare Centres Organisation (SHAWCO) has stepped up to continue their work in under-resourced communities across Cape Town.



RIGHT SHAWCO Health has adhered to safety precautions such as screening, social distancing and regular handwashing. All volunteers have also been working in full personal protective equipment.





The work by the student-led non-profit organisation included the distribution of pamphlets, home care packages, a fundraising initiative, work with homeless people and a flu vaccination drive.

Grant supports 'Creating a legacy of trust within the public'

In May 2020 the Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa), based at the Institute of Infectious Disease and Molecular Medicine, was awarded funding to support its critical public engagement (PE) mission of ensuring this work is mutually beneficial to both researchers and local communities. The additional funding, awarded by Wellcome, is to span a two-year period, while the centre enriches and further develops its PE activities.



or Zandile Ciko, CIDRI-Africa's PE

Manager, engagement between researchers and the public is important because it encourages the creation of accessible spaces and activities that shape public health for communities. "This develops informed research through public input. An example of which is examining the

potential acceptability of medical interventions in everyday life – so outside the structure of a clinical trial. The only way to understand this would be through ongoing engagement between researchers and the public," she said.





UCT-Africa Virtual ENT:

A buoyance for academia during COVID-19

stablishing a new online
academic programme called
UCT-Africa Virtual ENT and
launching a flourishing YouTube
channel during a pandemic. These
are just some of the achievements
of the Division of Otolaryngology
in the Faculty of Health Sciences.





The magic of Cape Town Together: Self-organising, neighbourhood-level responses to the COVID-19 crisis











ape Town Together, a network of self-organising neighbourhoodlevel groups known as Community Action Networks (CANs), emerged in response to the COVID-19 pandemic. Dr Leanne Brady and Eleanor Whyle, from the Health Policy and Systems Division, began working with a team of community organisers, social activists and public health practitioners who sought to catalyse a community-led response to COVID, and its socio-economic impacts. From sharing information and resources, to setting up community kitchens, the network became an important part of the overall societal response.













Building Global Communities of Practices to Reduce Risks from Chemicals and Waste

sing online platforms the Division of Environmental Health is developing globally active online peer-to-peer learning, stakeholder engagement and collective problem-solving in the complex environment of ensuring the sound management of chemicals and waste, to protect the health of marginalised women, children and workers.





In 2020, based on Prof Andrea Rother's pesticide and chemical research and capacity building reputation, the Division of Environmental Health spearheaded four new *Communities of Practices* (CoPs).

Inclusive Practices Africa launches on a high note

There are over 300 million persons with disability on the continent. The impact of the burden of disease and disability as well the socio-economic and socio-structural factors that often inhibit the progression of marginalised communities, requires a strong need for the reduction of inequality. The Faculty of Health Sciences' Inclusive Practices Africa, accredited in 2020, takes this work head on.

HIV and TB testing sites start COVID-19 research

ince its inception in 2004, the Desmond Tutu Health Foundation (DTHF) has established several clinical research sites in under-resourced communities in South Africa, while focusing on communities at high risk of contracting HIV and tuberculosis (TB). Through community partnerships and efforts, the Foundation also collaborates with those most at risk in order to find innovative solutions to prevent and treat HIV, TB and other related infections.



person's functioning may be affected by a variety of factors including sensory (vision, hearing), physical, communication impairments, mental illness and intellectual impairment. While people have functional limitations - they become disabled when their capabilities and/or strengths are not recognised.





Two rehabilitation care workers, who are also Higher Certificate in Disability Studies alumni, providing support to persons with disabilities to access information and health screening in their communities during the lockdown in 2020.





Harnessing community agency

ability to pay should determine whether you live or die," said A/Prof Lydia Cairncross, the head of the Breast and Endocrine Surgery Unit at the University of Cape Town's (UCT) Faculty of Health Sciences and Groote Schuur Hospital.

An equitable health system organised on the principles of social solidarity and equality is one in which an unemployed health worker from Khayelitsha would have the same access to quality care (including high care and intensive care) as a chief executive officer of a major conglomeration, Cairncross added.

We need one health system to effectively implement a strategy to contain a virus that crosses social boundaries.







We remember them

Siyabak



humbula

Ter nagedagtenis aan

