THE HUB CONNEXION
Department of Human Biology
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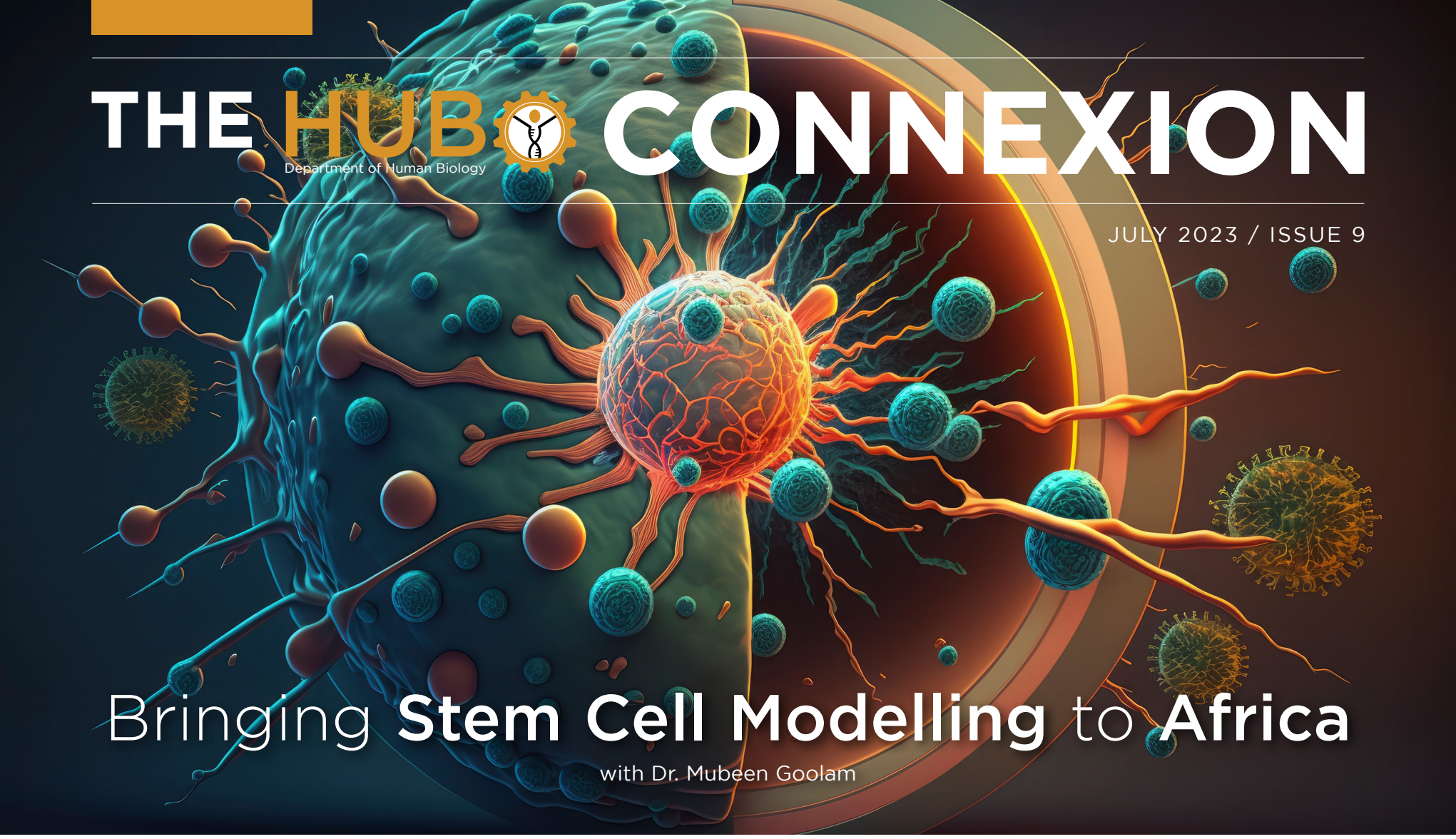


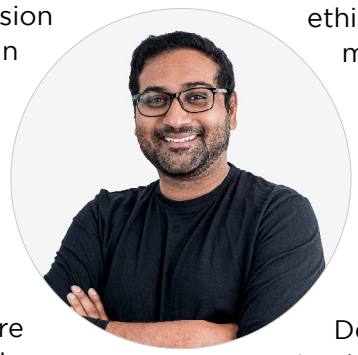
Bringing **Stem Cell Modelling** to **Africa**

with Dr. Mubeen Goolam

Since he first read about stem cells in a Time magazine article in high school, **Dr. Mubeen Goolam** has dreamed of helping to drive cutting-edge stem cell research and using it to solve priority health challenges on the continent.

BACKGROUND AND ACADEMIC JOURNEY

Mubeen was born and raised in Zwartdam, within the Cape Flats. His academic journey started at UCT after winning the Anglo-American Open Scholarship which allowed him to come a BSc in Genetics and Microbiology. He then joined the Division of Cell Biology at HUB to complete his Honours in Medical Cell Biology and joined the lab of Prof. Sue Kidson with his first taste at stem cell research. He stayed on in the Kidson lab to complete his Master's degree, funded by the NRF and Ernst and Ethel Ericksen Trust. During this time, he focused on developing an in vitro model of the cornea. Following his MSc, he was selected as the Mary Gray Fellow and took up a place at St John's College, Cambridge. Here he registered for a PhD in the Department of Physiology, Development and Neuroscience, at the University of Cambridge. His PhD focused on identifying the molecular mechanisms involved in early cell fate decisions during mouse development. He then moved to the Sir William Dunn School of Pathology at the University of Oxford to undertake his postdoctoral research as a Junior Research Fellow of Wolfson College.



> Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.
>
> Margaret Mead

These productive and inspiring periods of research enabled him to be ready to establish his own research group which he did when he returned to HUB in 2020 to set up his own stem cell research lab, in the Division of Cell Biology, where he first learnt how to culture stem cells. Since joining UCT he has gained recognition for his work by making the Mail and Guardian 200 Young South Africans List and being elected as a Fellow of the South African Young Academy of Science (SAYAS).

Mubeen also has a passion for scientific communication and is a two-time 'FameLab' finalist and has been featured on BBC radio and in The Independent talking about his research. Outside of the lab Mubeen loves food, travel, good coffee and improving his photography skills. He is currently on the hunt for the best coffee shop in Cape Town.

GOOLAM LAB RESEARCH

Research in the Goolam lab focuses on using stem cell-based organoids to model development and disease in culture. Stem cell-based model systems have the benefit of being easily accessible and allow for unfettered manipulation of the model enabling a deeper understanding of the cellular and molecular mechanisms that govern lineage specification, developmental potential, and tissue morphogenesis. While it is normally extremely challenging to study tissues like the brain or the embryo for a host of ethical and accessibility issues, stem cell-based organoid models can circumvent these challenges.

However, there is very little African-based organoid research due to limited skills, equipment, and funding resources despite its evident value for disease modelling and drug development. The Goolam lab is seeking to plug this gap by focusing on developing the first African population derived organoid models. Despite having the most genetically diverse population in the world, Africa is significantly underrepresented in global disease modelling, largely due to a lack of local focus on using these systems. The Goolam lab is aiming to be the premier stem cell organoid group in Africa and is particularly focused on modelling early embryonic neurological development in vitro.

The Goolam lab's research is supported by grants from UCT, the NRF, SAMRC and the Gabriel Foundation and a host of colleagues and collaborators who have supported Mubeen and his development.

Mubeen hopes he can help shift the narrative on stem cell research, from being a technology residing firmly in the Northern hemisphere, to a more African perspective to better understand human development, towards improved diagnosis and treatment of diseases.

Mubeen's research philosophy is driven by one of his favourite quotes, attributed to Margaret Mead. **'Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.'**

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

FACULTY OF HEALTH SCIENCES

Farewell from HOD Prof. Sharon Prince

Dear HUB colleagues,

I took up the position as Head of Department of Human Biology on the 1st of April 2020 which was right at the start of the Covid-19 pandemic. These were difficult and scary times and we lost two dear colleagues. But as a department we supported one another, and your commitment and dedication ensured that the operations and academic programme continued in HUB. I am deeply grateful to all of you and leave the position of HOD with many new friends and beautiful memories. Each one of you taught me important lessons.

I wish the acting HOD, A/Prof. Delva Shamley, and the HUB leadership all the best.

Many thanks for the beautiful farewell messages and gifts.

Take care of yourselves and continue to build and protect our wonderful department. Working with you has been a true privilege and I wish each of you my very best.

Warm wishes,
Sharon

Meet our new HOD A/Prof. Delva Shamley

A/Prof. Shamley has held several senior positions in the faculty and is the new Head of the Department of Human Biology.

A/Prof. Shamley has a track record of postgraduate student supervision to PhD level, publications, and grant success. Key positions have included Director of the Clinical Research Centre in the FHS (UCT); Head of Physiotherapy at Oxford Brookes University (OBU); Deputy Director for Research (OBU); Deputy Director of Bournemouth Clinical Trials Unit (UK); international consultant OxCATT; visiting Professor University of Nigeria; Enugu, external consultancies include peer reviewing for journals, and grant reviewing for the HTA (UK), NRF (SA), Flanders Foundation (Belgium) and EDCTP (EU).

A/Prof. Shamley teaches across several disciplines including lecturing MBCHB undergraduates in clinical reasoning, gross anatomy, and histology; and Registrar MMed Research Methods and Research Supervision, training and mentoring of clinicians to design, plan and implement clinical research.

A/Prof. Shamley is a founding member of the African Clinical Trials Consortium and consults in Africa and the UK on developing business plans for Clinical Trials Units. Her research programme includes proteomics and genomics of latent effects of adjuvant therapy in breast cancer survivors. She is also committed to the development of care pathways for post cancer treatment morbidity, which provides evidence for the Cancer Survivorship Plan for South Africa. She developed the first Early Warning System (EWS) to identify patients at risk of developing complications in response to treatment which is being used in the UK and Australia. In addition, she has a team exploring potential systemic causes of morbidity by correlating the clinical phenotype of the shoulder after treatment for breast cancer with biomarkers of inflammation and angiogenesis, and their associated genetic variants.

A/Prof. Shamley has an executive MBA which together with her leadership experience, anatomical, clinical and research background, makes her an ideal Head for a department as multifaceted as Human Biology.

Celebrating Dr. Rachael Dangarembizi

MRC/FCDO AFRICAN RESEARCH LEADERS AWARD

The HUB family proudly unites to congratulate our very own **Dr. Rachael Dangarembizi** for her extra-ordinary achievement in bagging the prestigious MRC/FCDO African Research Leaders Award for her project titled: *Unravelling the Mechanisms of Neurological Damage during Cryptococcal Infection of the Brain.* We wish her all the best for her research project and that she emerges with flying colours ensuring the Department and University's name is embossed in gold in the pages of history.

Encouragement & Motivation

by Farzaanah Soeker, MPhil Biokinetics

It is no secret that postgraduate studies can be quite a lonely journey. You may be lucky enough to find a friend (or two), but you rely mostly on the academic staff and alumni for support.

My MPhil journey was longer than I expected. The obstacles I faced were things I couldn't imagine. The good times were amazing and the bad times were rock bottom. There was a time during my journey that I was ready to give up. I was on the verge of deregistering and had already made up my mind that a degree wasn't worth the stress. I sent my supervisor an email about my decision and then proceeded to contact the department administrator on how to proceed. When I called Ayesha Hendricks about the process that I should follow, she spoke to me in the kindest, softest, and sweetest voice. She said she understands why I needed to leave this degree and she can guide me on how to do it, but as a Mother she wanted me to try one more time. Mind you, I wasn't asking for her advice, I was asking how I can end it all. Ayesha heard me. She heard my words, but she also understood my difficulties.

Her words stuck. All I needed to do was to try one more time and I did just that. It was that one try that got me through the biggest obstacle in my academic journey. I went on to complete my MPhil degree and on graduation day I realised the importance of having a good support system.

I will forever be grateful to Ayesha Hendricks. While we know that her job is as an Administrator, we also know that she is a Mother to all her students (yes, she calls us HER students), she is a counselor when stressed, she is a friend when needed and she is a kind soul on a rough day.

My advice to any student: when you're stuck on your academic journey, and you feel like the odds are against you, just give yourself one more chance, I promise you won't regret it.

CABA gets scholars excited about Science

By Mrs. Megan Petersen and Dr. Kentse Mpolokeng

Above: UCT staff and postgraduate students together with staff and students from Silikamva High School students.

The Division of Clinical Anatomy and Biological Anthropology (CABA) hosted two successful outreach initiatives with schools in Cape Town during the month of April.

The **first outreach** co-ordinated by science educator Mr. Randall Christians and led by Prof. Delva Shamley, was held on 26 April 2023 at Disa Primary School, a no-fee public school in Bonteheuwel on the Cape Flats.

The aim of the initiative was to expose Grade 7 learners to anatomical sciences in the hope it would spark an interest, leading some to cultivate a love for human biology. Seventy Grade 7 learners were exposed to anatomical models, with UCT staff and students giving talks regarding the major parts of the human body. Learners also had an opportunity to view histological slides through a microscope. Disa staff and students enjoyed the visit by UCT, and expressed their hope that it would be the first of many more science outreaches to come.

The **second outreach** was held on 29 April at the UCT Anatomy Building. The initiative was led by Dr. Kentse Mpolokeng and Ms. Jeshika Luckrajh, together with Dr. Itumeleng Ntatamala for the School of Public Health. This outreach programme was in collaboration with the Life Sciences teachers at Silikamva High School in Imizamo Yethu with the aim of helping learners consolidate their knowledge about the human body, and gain exposure to university-level teaching and learning, to help consolidate their classroom learning. The team had planned an engaging and informative programme that included interactive anatomy demonstrations and discussions led by experienced academic staff and postgraduate students doing research in the Department of Human Biology.

> I learned a lot that I did not know and that got me thinking about the future and what I want to do after school.
>
> **Silikamva High School student**

Thirty-seven Life Sciences learners from Silikamva were part of the first group of Grade 10 - 12 learners hosted at the Faculty of Health Sciences campus as part of the 'Science-Is-Fun' high school learner outreach programme. This initiative was scheduled in two parts: the first was an **academic session** with the aim of providing practical anatomy demonstration sessions to help improve the learning of key Grade 12 life sciences and human biology concepts in the curriculum; followed by **career guidance and a workplace preparedness session** with the aim of providing tailored career guidance as the learners begin contemplating their future careers and preferred places of work. Ms. Nambita Ntshongwana, a Student Recruitment Officer at UCT, conducted a *what every learner needs to know* session regarding the UCT application process, followed by motivational talks by undergraduate FHS students from rural backgrounds studying across programmes offered by the faculty.

The academic session received positive feedback from the learners, with some reflecting: *"I really enjoyed this session, it was the first time seeing real human tissue..."* and *"It was great to bring the practical element of life sciences as we do not have such resources in our school."*

The career guidance and workplace preparedness session was organised by Dr. Itumeleng Ntatamala, Occupational Medicine Specialist and Senior Lecturer in the UCT Occupational Medicine Division. The session was provided under the auspices of the Qaphela! WorkSafe and Stay Healthy Initiative, which focuses on occupational health and safety training for young workers and teens at high schools, technical and vocational colleges, and workplaces. Qaphela! is an isi-Xhosa and isi-Zulu term for 'be careful, be safe, and be watchful!'. The initiative aims to train young workers and teens on the identification of common hazards and risks in the workplace, prevention of occupational injuries and diseases and 'staying healthy', characteristics of 'decent work/good job', and importantly the rights of young workers as enshrined in South Africa's occupational health and safety legislation. The learners further discussed where to get help should health and safety problems arise in the workplace.

The career guidance and workplace preparedness session also received positive feedback from the learners, with some reflecting: *"It was exciting! Your lecturers and students were amazing – I could not stop admiring that..."* and *"I felt welcome at UCT and would love to come back if given a chance."*

Above: UCT Staff and postgraduate students, together with staff members from Disa Primary School, Bonteheuwel. Source: Cape Flats News/ Bonteheuwel Community News

Dr. Sharief Hendricks presenting at the UK-CPN Conference in Bath.

HPALS takes the global stage

Showcasing Research at International Conferences in 2022 and 2023 (so far)

By Natalie Erskine

Dr. Sharief Hendricks, a prominent expert in rugby research, attended the UK Concussion Prevention Network (UK-CPN) Conference in Bath, organised by the University of Calgary and the University of Bath, in 2023. Additionally, he presented at the following conferences in 2022:

- The Application of Instrumented Mouthguards to Optimise Player Welfare Conference in Leeds.
- The European College of Sport Science Conference in Seville.
- The Blue Bulls Rugby Union Coaching Conference in Pretoria.
- The International Festival of Sport, Exercise and Medicine Conference in Pretoria.
- The World Rugby Medical and Science Conference in Amsterdam.

Profs. Collins and **September**, along with **Dr. Laguette** and **Dr. Firfey** (left), represented GEMS (Genomic Solution to Musculoskeletal Injuries) and HPALS (Health through Physical Activity, Lifestyle and Sport) at the 14th International Congress on Human Genetics. This momentous event marked the first time the congress was held in Africa.

Dr. Kentse Mpolokeng presented a poster: *'A rare anatomical variation of the ophthalmic artery taking origin from the anterior cerebral artery'* at Anatomy Connected 2023 in Washington, DC.

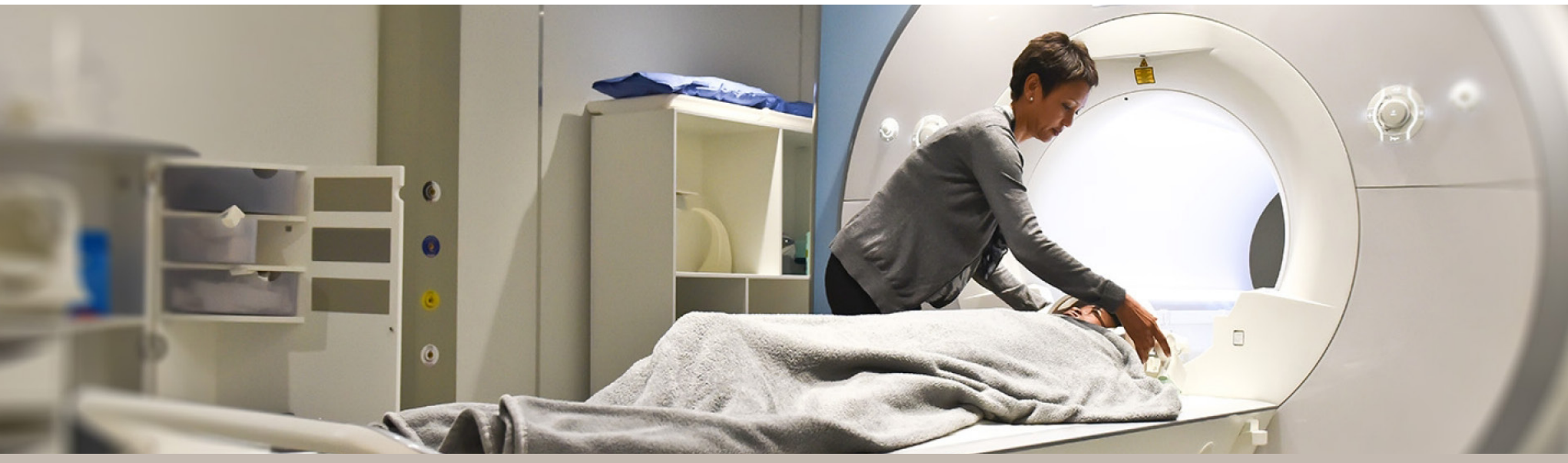
Dr. Dale Rae, an expert in sleep research, attended the European Sleep Research Society Congress in Athens, Greece. During the congress, Dr. Rae presented a poster on sleep characteristics and the efficacy of the Insomnia Severity Index in a low-income South African community. Her research shed light on the importance of understanding sleep patterns within diverse populations and emphasised the need for effective interventions to address sleep-related issues.

The **HPALS Biomechanics team** played a crucial role in the Women's Cricket Conference, held in Paarl, to kick off the ICC Women's T20 Cricket World Cup. This conference featured a wide range of talks covering topics such as cricket concussion, mental health and performance in cricket, as well as leadership, inclusion, and women's participation in the sport.

Among the HPALS staff and students in attendance (below) were **A/Prof. Yumna Albertus**, **A/Prof. Janine Gray**, **Mr's. Trevino Larry**, and **Jordan Leondiris**. Their presence at the conference emphasised HPALS' dedication to the promotion, well-being and performance of female cricket athletes.

Dr. Jeroen Swart (below), a renowned figure in cycling medicine and science, presented research at multiple conferences in 2022:

- The International Festival of Sport, Exercise and Medicine Conference in Pretoria where he was also Chair of the Symposium: *Cycling Medicine and Science.*
- The International Festival of Sport, Exercise and Medicine Conference in Pretoria: *Pro vs Amateur – Differences in cycling biomechanics.*
- The Science and Cycling Conference in Denmark where he gave the Keynote Address *Training intensity distribution: Which is best?* as well as contributing to a panel discussion.
- The Science and Cycling Conference in Denmark where he presented: *Return to play from severe injury.*



Cape Universities Brain Imaging Centre (CUBIC)

University of Cape Town (UCT), Stellenbosch University, Siemens and SAMRC Collaboration

The Cape Universities Brain Imaging Centre (CUBIC), was formed in 2007 through collaborations between UCT, Stellenbosch University, the MRC and Siemens. It included a 3 Tesla (3T) Siemens MRI scanner and was situated on Stellenbosch University's Medical Campus next to Tygerberg hospital.

Funding from several sources, including the NRF, Technology Innovation Agency, Cancer Research Trust, Siemens and UCT made it possible in 2015 to expand the facility to its current site at the Neuroscience Institute at Groote Schuur Hospital, and to purchase a new 3T full-body Siemens MRI scanner. The new facility was named the Cape Universities Body Imaging Centre, and on 13 November 2019, the CUBIC PET-CT suite was opened, funded by UCT, and the Bill and Melinda Gates Foundation. The first scan was performed two days later.

Using the Siemens Skyra MRI scanner, imaging modalities such as T1-weighted imaging, diffusion tensor imaging, MR spectroscopy and functional and resting state functional MRI are used to assess structure, function, and metabolism. CUBIC also hosts a Hyperfine low-field scanner, a smaller, mobile scanner that has been developed to provide lower-cost, more accessible MR imaging in contexts where traditional MRI may be too costly or not practically possible.

PET-CT (Positron Emission Tomography and Computed Tomography) is a hybrid imaging method that combines the metabolic information provided by PET imaging with the structural information obtained from a CT scan. PET is considered the most sensitive available technique for the non-invasive study of physiology, metabolism, and molecular pathways in living humans. Most scans use a glucose analogue tracer to identify sites of infection or cancer. Other tracers can be used to investigate the distribution of specific receptors throughout the body.

CUBIC is the only research-dedicated MRI facility in Africa, and so many of the studies conducted focus on locally relevant problems. These include investigations into the effects of prenatal alcohol and drug exposure, the long-term impact of living with HIV, the effects of trauma on neurodevelopment, and various cardiac conditions and diseases, as well as studies looking at 'normal' growth and development in a South African context.

Other studies are focused on technology development, including those aiming to improve image quality in difficult-to-image participants such as infants. While globally, most PET-CT facilities are used in the context of cancer, most local scans performed at CUBIC investigate infections, including site, extent, and response to treatment. Not all scans involve human participants, though: postgraduate students developing motion correction algorithms have used pineapples as 'subjects. CUBIC has also been approached by researchers who wanted to scan pomegranates (to see if their hydration changed during cold storage) and eggs (to investigate whether they could be sexed before hatching)!

The staff at CUBIC represent a wide range of backgrounds and expertise. The CUBIC MRI team is headed up by **Prof. Ernesta Meintjes**, while CUBIC PET-CT is headed up by **Dr. Tessa Kotze**.

CUBIC STRUCTURE AND HISTORY

The Cape Universities Brain Imaging Centre (CUBIC) is a joint initiative between Siemens, the University of Cape Town, Stellenbosch University, and the Medical Research Council.

The core focus of the centre is collaborative neuroimaging research. The CUBIC is situated on the Stellenbosch University Health Sciences Campus and was commissioned in March 2007. Since then multiple research projects have been initiated in key areas including neurocognitive effects of HIV, TB, medical drugs, alcohol, crystal methamphetamine (TIK), fetal alcohol syndrome, trauma and schizophrenia. We have also had an impressive growth in basic science research on improved imaging and analyses techniques.

In a collaboration with the Centre for High Performance Computing, data archiving and analysis can be facilitated on the largest computer cluster in Africa.

VISION

To establish ourselves as a cutting-edge neuroimaging research facility with a focus on problems that are specific to the South African environment. Through this we aim to develop and foster technical expertise, publish results in peer-reviewed journals, and strive towards better healthcare management in South Africa.

OPPORTUNITIES

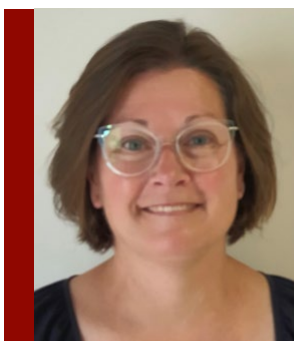
A variety of postgraduate opportunities have evolved as a result of the ongoing projects at CUBIC. These span the fields of biomedical engineering, psychiatry, psychology, physics, computer science, and radiology. For students who want to be involved in brain-behaviour research please visit the Cross-University Brain and Behaviour Initiative website. Postgraduate imaging programmes are also offered by UCT's Department of Biomedical Engineering.

SIEMENS · CUBIC Cape Universities Body Imaging Centre · saMRC advancinglife

RESEARCH FOCUS
CAPE UNIVERSITIES BRAIN IMAGING CENTRE (CUBIC) TEAM

PROF. ERNESTA MEINTJES

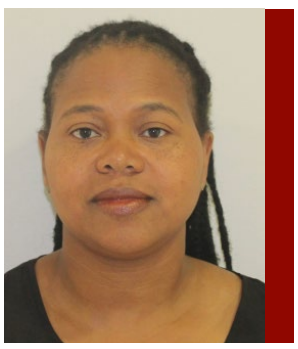
Prof. Ernesta Meintjes is the Director of CUBIC MRI and led efforts to secure funding for the 3T Skyra MRI scanner. One of her favourite parts of working at CUBIC is the great, passionate, and inspiring team, who create a really happy space. Outside of work Ernesta enjoys being outdoors, including running, swimming, climbing, and cycling: she is taking part in the Freedom Challenge RASA event in June, an off-road cycle from Pietermaritzburg to Wellington. She also enjoys sewing and baking and plays the cello for the FHS Orchestra.



DR. TESSA KOTZE

Dr. Tessa Kotze is the Director of CUBIC's PET-CT and did the groundwork for the acquisition of the PET-CT scanner. She is responsible for planning and medical management and preparation of SOPS. She supports and assists the nuclear medicine radiographers performing the scans and assists in designing and implementing research protocols. She is also responsible for producing all the clinical and some of the research reports for the research scans. Tessa's favourite part of the job is pushing buttons and solving clinical puzzles. She previously headed the Department of Nuclear Medicine at Groote Schuur Hospital.

PATRICIA MAZWI MAISHI



Patricia Mazwi Maishi is a senior MRI radiographer. She was a diagnostic radiographer for 21 years before responding to an advert for a position at CUBIC that provided a new and refreshing workplace with a focus on research and clinical MRI. One of her favourite aspects of her work is the sense of community at CUBIC, where various medical professionals, researchers and participants come together with the primary objective of public health. She particularly enjoys the profound interactions with the patients before the start of each imaging session. In her non-work time Mazwi enjoys Bible reading, long walks, watching K-dramas with her husband and listening to gospel music.

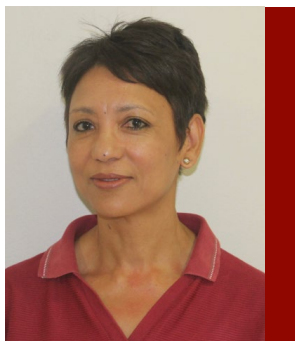
FRANCES ROBERTSON

Frances Robertson is a senior research officer and MRI physicist, who identifies as a neuroimaging scientist or biomedical engineer. She helps studies to set up imaging protocols, provides advice on analysis and helps to keep the associated equipment and software working properly. She stepped into these roles after completing a postdoc in MR imaging in the BME division. Her favourite part of working at CUBIC is meeting a variety of people who want to do interesting things using MRI. Outside of work Frances recently did her first sprint triathlon and has bigger ambition in this direction if, as she puts it, her "middle-aged joints agree to play along"! She sees herself as a dog person but has a very beautiful and slightly crazy cat who is doing his best to convert her.

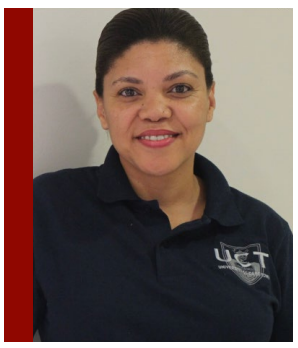
STEPHEN JERMY

Stephen Jermy is a junior research fellow, who is responsible for running the cardiac post-processing lab, including training researchers in cardiac MRI post-processing, and for assisting with technical problems as they crop up. He also represents CUBIC on the HUB DRC. He started working for CUBIC as a research assistant after completing his Master's in BME. One of his favourite parts of working at CUBIC is the relationships he has formed with the rest of the CUBIC staff and researchers, and the day-to-day interactions with each other. Outside of work, Stephen enjoys boardgames with friends and playing computer games, coming home to his partner and his dog, and walking and hiking in the forest.

PETRONELLA SAMUELS

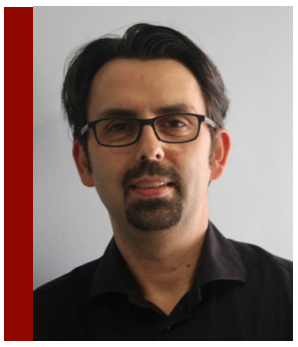


Petronella Samuels is the Head Radiographer at CUBIC-MRI. She works closely with the CUBIC physicists to assist researchers in testing sequences and set up protocols for their studies, and does quality control to ensure good-quality images are obtained for research and clinical scans. Before CUBIC, she worked closely with Ernesta and the late Prof. Bongani Mayosi in cardiac imaging, a rare and scarce skill due to its complexity, and for which she has a passion. Petronella's favourite aspect of working at CUBIC is the opportunity for growth. Her involvement in various research projects gives her the opportunity to produce and present findings at the annual meetings of the International Society for Magnetic Resonance Imaging, where she can connect with experts in the field, exchange knowledge and ideas and see other parts of the world at the same time. When not at work Petronella enjoys festivities with her husband, three daughters (and their significant others) and grandson, and other family and friends. She loves Zumba and ballroom dancing and hopes to climb Mount Kilimanjaro.



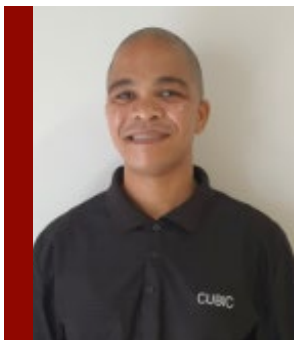
MARIAAN JAFTHA

Mariaan Jaftha is a senior MR radiographer with a passion for MRI, and an interest in the functionality of the brain. Before CUBIC, she was employed in private practice, where her work was primarily general radiography duties. She enjoys how, as a junior researcher, her professional foundation and keen interest in MRI qualifies her to contribute to the advances being made in the field. She has gained invaluable experience and has been exposed to various MRI platforms and systems. Being part of the CUBIC team offers unique opportunities to apply novel MRI techniques to address major public health concerns particular to the South African context. Mariaan enjoys reading autobiographies, is involved in charity work and loves hiking.



DANIEL DOETZ

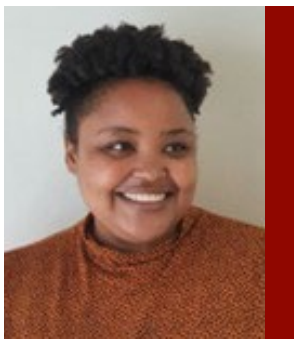
Daniel Doetz is the Business Manager for the FHS's core research facilities, including CUBIC. He joined CUBIC in 2015 after the position was advertised. His main responsibility is ensuring that CUBIC is kept running smoothly, which includes financial administration, procurement of consumables and equipment, and staff management. His favourite part of the job is strategic development. Daniel is a passionate musician and plays the cello and double bass. He is a big lover of classical choral chamber music.



ELTON LAWRENCE

Elton Lawrence is the Facility Assistant at CUBIC. His job is to support research and teaching activities at CUBIC by cleaning and servicing the facility and its instruments, as well as removal and disposal of medical waste, laundry management, maintenance, and restocking consumables. Elton started his career in the Department of Medicine. He then moved to Dermatology, where he assisted graduate students with their research, before joining CUBIC. His favourite part of his job is the interaction with the patients, helping to prepare them for their scans, but more importantly, encouraging them to be strong and brave despite their suffering. He says he feels privileged and blessed to be able to provide care and support to the patients. He also enjoys being challenged and learning new things, which includes completing GCP, First Aid and Firefighting courses. In his free time Elton enjoys watching boxing, weightlifting and CrossFit. His family is his biggest support.

PHILISA MGUDLANDLU



Philisa Mgudlandlu is CUBIC's Administrative Assistant. She is the frontline contact person and is responsible for providing effective administrative support to CUBIC, and ensuring the unit runs smoothly. She joined CUBIC in 2021, after seeing an advert for the job on the UCT website. She enjoys helping everyone on the CUBIC team achieve their goals and objectives by keeping things organised and on schedule; by relieving her colleagues of administrative work, she's able to help them use their time more efficiently. When not at work, Philisa is involved in teaching HILO, which is a mixture of aerobics and ballroom dancing, at the Langa Sports Complex.

HERO OF HUB
MEET: MRS. KHALIDA CRAWLEY

My late Father is my hero as he has taught me the values of humility, honesty, kindness, and respect. He not only taught me these values, but embodied these qualities and therefore he will always be *my* HERO!

Tell me about your career journey, from school to work and jobs before UCT, and finally how you got your start at UCT.

Approximately 18 years ago I applied for a Course Secretary position at UCT. At this point in time, I was a newly qualified Nuclear Medicine Radiographer, with absolutely no experience in administration. My computer literacy skills were seriously lacking, but I was desperate to find employment as my Dad had recently (at the time) passed away.

Prior to my application for employment at UCT, I worked as a locum radiographer at various private practices in Gauteng for two years. At the time, there were unfortunately no vacancies for Nuclear Medicine Radiographers in the Western Cape. After the passing of my Dad I had no choice but to return to Cape Town as my Mom was living alone and needed my assistance.

At the same time, I had applied for a Nuclear Medicine Radiographer position in Saudi Arabia as well, and had to choose between either staying in Cape Town or leaving. No secret to what I chose and gave up working in a Hot Lab, administering intravenous injections, scanning patients, and making up pharmaceutical material for a life at Human Biology. I had no idea when I came to the Anatomy Building for my interview with Prof. Graham Louw, UCT would soon become my second home, as I am still here!

Tell me about your time at UCT. When did you start? Was it in HUB? Tell us about the changes you have experienced in your time here. What stories do you have about your time at UCT.

My journey at UCT started in 2004 as a Course Secretary and I soon became Prof. Graham Louw's "right-hand man". I assisted Prof. Louw in providing administrative support for the 2nd and 3rd year MBChB courses.

From 2004 to 2007 Prof. Sue Kidson was the HOD and during this period I progressed to the position of Administrative Assistant. Prof. Laurie Kellaway took the reins from Prof. Kidson as HOD, and I enjoyed working with him, as I felt that I gained his respect when he provided me with an excellent reference.

In 2019 Prof. Malcolm Collins became the HOD and under his leadership I successfully applied for the position of Administrative Officer, which is a position I still occupy.

Who in the department, former or current has had the biggest influence on you? Could be the person who has helped you most or most inspired you.

Prof. Malcolm Collins had the biggest influence on me, as he gave me the confidence to fulfil my duties independently, never doubting me. I consider Prof. Collins to be a true leader and an inspiration as he led by example and didn't lose sight of the fact that we are all humans, irrespective of rank, and treated all staff with dignity and respect.

Tell me about what motivates you?

My two sons Umar (15) and Yasin (14) are my reason and motivation to get up and come to work each day. After everything is said and done, all my hard work is for them, as I want them to reach their full potential in all the different facets of their lives.

My sons provide me with the courage to persevere and face all my challenges head on. Their motto is: NEVER GIVE UP! They are both Mixed Martial Arts (MMA) fighters who took part in the South African National MMA Championships held in Gauteng from 3 to 6 May 2023. At the SA Nationals they received silver and bronze medals respectively, which qualifies them to take part in the International MMA World Championship in Abu Dhabi in August 2023. I am hopeful that my family and I will be travelling to Abu Dhabi in August with my sons to partake in this event...God willing.

All this could not be possible without my husband who is the driving force in our family. He is an Advocate and a firm believer in having a strong work ethic, and that success is not possible without discipline and hard work.

What do you feel are your greatest accomplishments while at UCT?

My greatest achievement is to be a working Mum of two boys who always strive to do their best in all their endeavours. I am proud to have taught them the values of being God-fearing, kind, honest, humble, and respectful to their fellow human beings, irrespective of race or social status.

What are your hobbies? What do you like to do outside of work?

I am not a gym bunny (LOL), but enjoy baking, trying out new recipes, I've been known to make the best baklava...and lately started watching or attending MMA events, especially when my sons are competing.

Who are your personal heroes or people you admire?

My late Father is my hero as he has taught me the values of humility, honesty, kindness, and respect. He not only taught me these values but embodied these qualities and therefore he will always be my HERO!

PEOPLE OF HUB
NEWS & ACHIEVEMENTS: DECEMBER 2022 - MAY 2023

Please send any recent achievements, awards, NRF ratings or the like that you would like published in the next issue of the HUB CONNEXION newsletter to your Divisional Comms Reps. We love to celebrate the achievements of the HUB family!

ACHIEVEMENTS

The South African Medical Research Council (SAMRC) held its 9th SAMRC Scientific Merit Awards recently to recognise excellence in health research. Read more here.

Congratulations to **Prof. Sharon Prince** on being awarded the **SAMRC's Gold Award** for her substantial and influential contribution to health, especially in low and middle-income communities.

Prof. Prince is the Head of the Department of Human Biology, in the Faculty of Health Sciences, at the University of Cape Town. Her research expertise lies in the fields of cancer cell and molecular biology.

Prof. Prince is also a past CANSA Type A research grant holder and a member of CANSA's Research Committee (RESCOM). Read more about her CANSA-funded project here.

AWARDS, GRANTS & MEMBERSHIPS

Prof. Sharon Prince was the recipient of the SAMRC Gold Medal for outstanding scientific contributions to health research in March 2023.

We would like to congratulate **Dr. Tanya Calvey** for her role as co-editor of the book From Fossils to Mind with Alexandra de Sousa (Bath Spa University) and Amélie Beaudet (University of Cambridge). The book is a peer-reviewed collection of research data and literature reviews by experts in paeloneurobiology, evolutionary neurosciences and evolutionary psychology. The volume of Elsevier's *Progress in Brain Research* focuses on interesting topics including what fossils can tell us about the evolution of our brain, how studying extant species lead scientists to make deductions about the human mind, and much more.

Dr. Tanya Calvey received a Start-Up and a Research Development Grant.

Dr. Kentse Mpolokeng received the NRF KIC Grant.

Ms. Jeshika Luckrajh received an NRF Thuthuka grant for her PhD.

Dr. Kentse Mpolokeng received the NRF Knowledge interchange (KIC) grant, and the UCT Visiting Scholar Fund (VSF).

Sudesh Sivarasu was awarded the NRF SARChI in Biomedical Engineering and Innovation (with effect from 1 January 2023).

Ms. Mazwi Maishi received the President's award for her abstract submitted to the ISMRT (International Society for Magnetic Resonance Radiographers and Technologists) annual meeting in June, Toronto.

The Africa Chapter of the ISMRM (International Society for Magnetic Resonance in Medicine) has been launched and various members of the Imaging Science Research group and CUBIC played a key part, and serve on the governing committee.

Dr. Dale Rae received a grant for R51 million over 5 years. The Wellcome Trust Mental Health Award: Integrating sleep and circadian science into our understanding and treatment of anxiety, depression, and psychosis. The study title is titled: *The clock is ticking: A longitudinal multi-site study addressing teen sleep as a means to limit depression and anxiety*. The Team includes:

- The PI is **Dr. Gosia Lipinska** (Department of Psychology, UCT)
- The Co-Is are **Dr. Dale Rae** (Human Biology, UCT); **Dr. Jonathan Davy** (Human Kinetics and Ergonomics, Rhodes University); **A/Prof. Laura Roden** (School of Life Sciences, Coventry University); **Dr. Ksenija Maravic da Sliva** (Psychology, Coventry University); **A/Prof. Karine Scheuermaier** (Physiology, Wits); **Dr. Stella Iacovides** (Physiology, Wits); **Dr. Xavier Gomez-Olive** (MRC/Wits Agincourt Research Unit)
- Our collaborators are **Prof. Ernesta Meintjes** (BME, UCT) and **Dr. Frances Robertson** (BME, UCT)

The **study sites for data collection** are Cape Town (WC), Makhanda (WC) and Coventry city (UK). Briefly, we aim to identify sleep- and circadian-related mechanisms through which adolescents may either develop, or demonstrate resilience to, depression and anxiety. Lived-experience experts will inform our understanding of the roles of sleep, circadian, environmental, psychological, and behavioural factors to strengthen a longitudinal design that we will implement. We will examine how the trajectory from sleep- and circadian-related changes to depression and anxiety during adolescence differs in low, medium, and high socioeconomic communities based in the United Kingdom and South Africa.

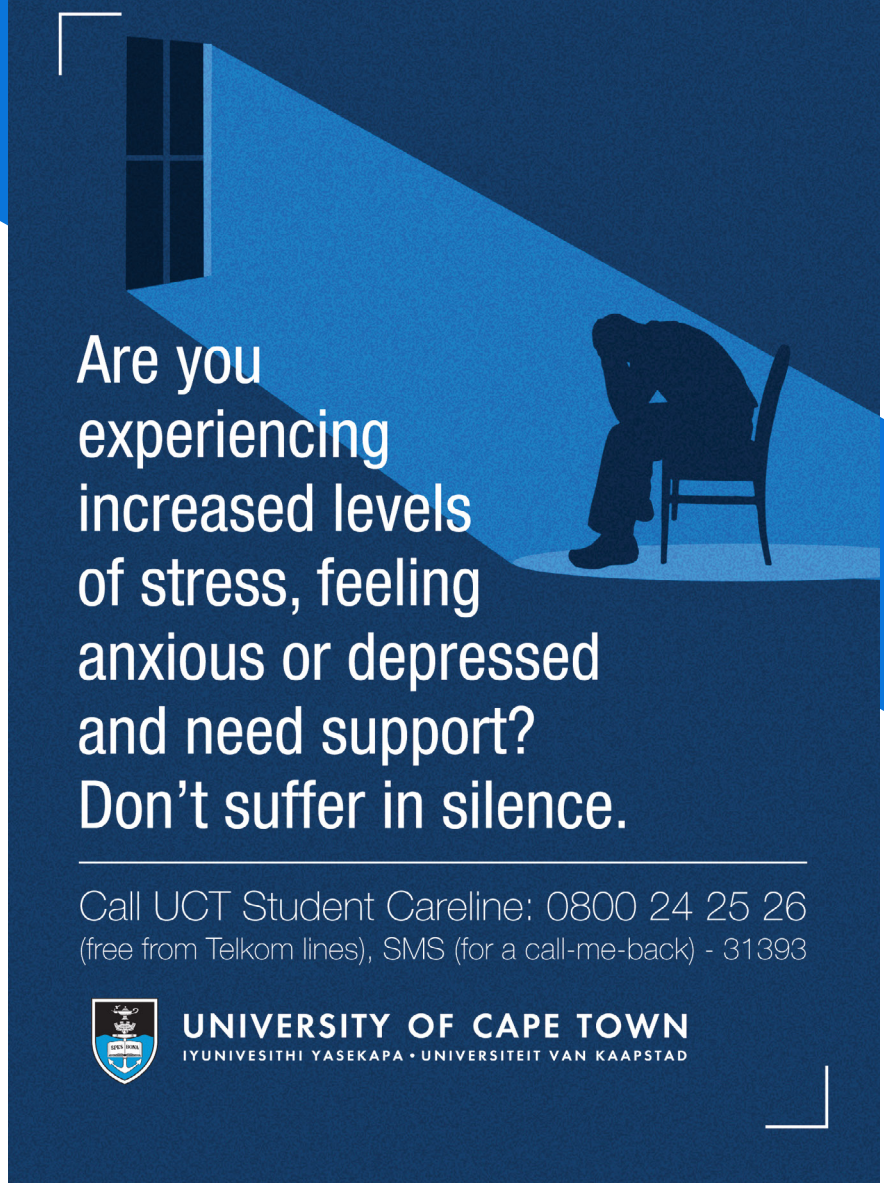
HUB COMMUNITY
UCT MEDTECH & HUB IFTAR

On Tuesday the 18th of April UCT Medtech (Division of Biomedical Engineering) and HUB hosted a departmental **iftar (breaking of the fast)**. It was a lovely event which aimed to share the meaning of Ramadhan with the HUB community.

Ramadan is the ninth month of the Islamic calendar which is characterised by the abstinence of food and drink from dawn until sunset. It is a very spiritual time for Muslims around the world, who spend much time praying and giving charity. Fasting is also symbolic of putting your physiological needs second and introspecting on your spiritual connection.

The event was open to all, with over 40 people attending, some with their families. Attendees were invited to fast voluntarily along with their Muslim colleagues for the full experience. A short talk was given to explain fasting and the process of iftar. The feast began on the cue of the call to Maghrib prayer with a date, fruits, and water. Afterwards, traditional savouries and biryani were enjoyed. Capetonion staples such as boeber, falooda and koeksusters complimented the meal.

A big thank you to all those who supported this initiative, especially those who brought their families and lovely treats for everyone to enjoy. Definitely an event to attend next year!"



COUNSELLING SUPPORT (FOR UCT STAFF)

Independent Counselling and Advisory Services (ICAS) counsellors are available.

- **Call toll-free** for counselling 0801 11 39 45
- Send a **please-call-me** to *134*905#
- **Email** uct@icas.co.za
- **Website** hr.uct.ac.za/hr/benefits/org_health/counselling

Chat live with an **ICAS counsellor** via the online app, **ICAS On-the-Go** (Google and Apple downloads). **The code for UCT staff is UNI003.**

SOUTH AFRICAN DEPRESSION AND ANXIETY GROUP (SADAG)

- Access the SADAG webinars and podcasts for practical tips and coping skills
- **Call** 0800 17 11 71 (toll-free from a Telkom line 24 hours a day)
- Send an **SMS** to 31393 to request a **call-back**
- **Email** office@anxiety.org.za for a counsellor to call you back
- Visit the **SADAG website** sadag.org for very useful information about how to cope with the daily stresses of working during the national lockdown
- Visit the SADAG Facebook page **Daily Expert Q&A from 13:00 to 14:00**
- **SADAG UCT Student Careline** 0800 24 25 26 (free from a Telkom line)

COUNSELLING SUPPORT (FOR UCT STUDENTS)

UCT Health Services for students
Tel: +27 (0)21 650 1020
Email: faranaz.murat@uct.ac.za
Website dsa.uct.ac.za/student-wellness/health-services/overview

UCT Counselling Services
Tel +27 (0)21 650 1017
Email lerushda.cheddie@uct.ac.za
Website dsa.uct.ac.za/student-wellness/counseling-services/overview

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FACULTY OF HEALTH SCIENCES