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FACULTY OF
HEALTH SCIENCES



Faculty of Health Sciences Newsletter - December 2024



Message From The Executive Dean: Health Sciences - Prof Annie Temane



Dear FHS Team,

As we come to the close of this incredible year, I want to take a moment to reflect on everything we have achieved together. We have accomplished so much in 2024, in teaching and learning, research and innovation and community engagement and all the other leadership roles that you played a role in the faculty. This is all due to your dedication, commitment, and teamwork. I THANK YOU!

Here are just a few highlights of what we have achieved this year:

Our module success rate remains stable, and our dropout rate decreased slightly. I believe that in the coming year, we will achieve the one-digit dropout rate in our purposeful collaborative core area. Departments have taken initiatives in demonstrating and showcasing excellence in teaching and learning and technologies for the future in our faculty. What we need to do, is to be more visible in our communities to highlight what we as a team can do in and out of the classroom.

Students and academics have won several medals and awards such as the Faculty Prize for the Most Prestigious Student Among Undergraduate and Honours Students, 2024 Chancellor's Medal and IAAM Scientist Medal. Academics made their mark on international platforms and represented the faculty very well.

This is excellent, to be amongst students and academics who strive to make impact in their profession. Your enthusiasm and dedication have been the driving force behind every accomplishment and milestone we have attained.

I am thrilled about the strides we have made in the promotion of academics to different levels of seniority and especially to have a first ever appointment of a Distinguished Professor in the faculty, the appointment of the Executive Dean of the Faculty and to have one of our faculty members appointed as the Deputy Vice-Chancellor in Research and Innovation. We are also proud of the Long Service Award recipients who have given their commitment towards work and the university. This reflects the high standards we set and the excellence we consistently strive for.

Once again, I want to thank you for your consistent dedication, enthusiasm, and motivation. I cannot wait to see what we can achieve together in the upcoming year. Let us continue to succeed, grow, and collaborate in the New Year as we implement UJ's new strategic 2035 plan and celebrate UJ's 20th anniversary.

With sincere gratitude,
Prof Annie Temane
Executive Dean:
Faculty of Health Sciences





Pictured (From Left): Colleagues celebrating a double win for the Faculty of Health Sciences at the 2024 Community Engagement Excellence Awards Ceremony. Representing the Phelophepa Project and Riverlea Project: Mandla Sibiya (Biomedical Sciences), Dr Ansel de la Rey (Optometry), Health Training Centre Manager: Dr Pieter Else Project Lead: Riverlea Clinic, Ayesha Suliman (Optometry), Optometry Clinic Manager: Sipepiso Mhlope and Shalin Bidassey Manilal

Riverlea Clinic Wins 2024 Community Engagement Excellence Award and Phelophepa Train Project Awarded Best Health Sciences Departmental Project

The Faculty of Health Sciences Riverlea Project won first prize at the 2024 Community Engagement Excellence Awards Ceremony at the School of Hospitality and Tourism on 8 November. The outreach project, established in 2010, is a collaborative initiative by the University of Johannesburg, South African Medical Research Council, Riverlea Development Trust and City of Johannesburg.

The Riverlea Project enhances and promotes general wellness within the Riverlea community through targeted intervention by UJ's Department of Environmental Health, Podiatry Clinic, Laser Research Center, Optometry Clinic, Department of Medical and Radiation Sciences (MIRS) – specifically antenatal ultrasound scans and Department of Sport and Movement Studies.

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The project, led by Health Training Centre Manager, Dr Pieter Els, serves the Riverlea population of around 33 000 people and incorporates work-integrated learning for UJ health science students and researchers.

It also forms part of an active study that effectively responds to health issues identified. This project requires a long-term, cross-sectorial plan of action rooted in a strategy to eliminate poverty and joblessness and addresses Sustainable Development Goals 3 - Good Health and Wellbeing and Goal 10 - Reduced Inequalities.

To date, over 34000 people, including community members and UJ students and staff members, have directly benefited from the UJ Riverlea Community.



Department of Optometry's Phelopepa Train Project Receives Best Health Sciences Departmental Project at the 2024 UJ Community Engagement Excellence Awards Ceremony

Pictured: Project Lead, Dr Ansunel de la Rey and Optometry Lecturer Ayesha Suliman and Clinic Manager Sipepiso Mhlope. The initiative screens 100 patients daily for 10 days, amounting to a total of 5000 patients yearly. The Transnet Phelopepa Health Train celebrates 30 years of operation, except for the period under the COVID-19 pandemic. Over the last 27 years, a total of 135 000 patients have benefited from the project, which supports Sustainable Development Goals (SDGs): Goal 3 – Good Health and Wellbeing + Goal 10 - Reduced Inequalities + Goal 17 - Partnerships for the Goals.





Professor Annie Temane Appointed as Executive Dean: Health Sciences

Professor Annie Temane has been appointed Executive Dean: Health Sciences for a term of five years, effective from 01 October 2024 to 30 September 2029.

Prior to her appointment, she served the faculty in her capacity as Acting Executive Dean since January 2023, Vice-Dean: Research and Innovation and the former Head of Department: Nursing. She has been instrumental in driving the University's strategic objectives in the Faculty of Health Science. Her academic career spans more than a decade, from lecturer to senior lecturer to associate professor and she was inaugurated as a full professor on 18 July 2024.

Prof Temane holds a PhD in Psychiatric Nursing Science; her inaugural address was titled, "Achieving Mental Health for Our Communities: Challenges and Opportunities. In her address, she highlighted the significant burden placed on caregivers of individuals with mental health conditions, stressing the need to support their well-being to ensure they can provide quality care. Prof Temane also pointed out the fundamental rights and freedoms of people with mental health conditions, advocating for their potential to recover and function optimally in their communities.



Professor Christopher Yelverton Vice Dean: Research and Global Engagement

Professor Yelverton was appointed as Vice Dean: Research and Global Engagement for a term of three years, effective from 01 October 2024 to 30 September 2027.

His leadership is focusses on enhancing the quality and impact of the Faculty of Health Sciences research outputs. He remains committed to fostering a research culture that values innovation, collaboration, and excellence, including expanding research capacity by increasing funding opportunities, supporting early-career researchers, and promoting interdisciplinary research. Prof Yelverton believes collaboration is critical to achieving the best research outcomes in conjunction with creating an environment where cutting edge research can thrive and UJ can become a global leader in key areas of strength.

SAMRC-UJ PACER Director Appointed as UJ Deputy Vice-Chancellor: Research and Innovation

Prof Refilwe Phaswana-Mafuya has been appointed Deputy Vice-Chancellor: Research and Innovation Designate, effective from 01 October 2024 to 31 December 2024, and Deputy Vice-Chancellor: Research and Innovation, for a term of five years, effective from 01 January 2025 to 31 December 2029. The Faculty of Health Sciences takes this opportunity to wish her well in her new role.

Prof Phaswana-Mafuya is a qualified epidemiologist and public health scientist, trained at the University of Limpopo and the London School of Hygiene and Tropical Medicine. She is the founding Director of the first-ever South African Medical Research Council (SAMRC) Extramural Unit (EMU) at UJ, known as the "Pan African Centre for Epidemics Research" (PACER).

The EMU is a 15 - year award with an annual baseline funding of R1m given to a scientist with scientific leadership, stature, track record, and recognition by peers in the field. Prof Phaswana-Mafuya developed PACER as a credible mechanism for epidemiological and public health research training - building a new generation of scientists for handling current epidemics, future pandemic preparedness, and sustenance of the knowledge enterprise.

She is concurrently one of UJ's scarce skills professors (Professor of Epidemiology and Public Health) and she continues to do pioneering work in the HIV field. She is also a visiting scholar at the Pan African University of Life and Earth Sciences Institute based at the University of Ibadan, Nigeria, where she teaches and supervises MSc Biology and MSc Reproductive Health students across the African Continent.

Further, she is a Research Affiliate at the Arnold School of Public Health, University of South Carolina, USA. She has served as a mentor at the Department of Higher Education and Training Future Professors Programme, 2023 (Phase II). Prof Phaswana-Mafuya has an extensive track record of over 20 completed large-scale studies, over 170 peer reviewed publications, books, book chapters, technical reports and over 100 high profile presentations across continents.

Over the years, Prof Phaswana-Mafuya's work has contributed to advances in her field, such as Societal Impact, Pan Africanism, Global Excellence, and internationalisation, among others. She designed large-scale, rigorous, multi-country epidemiological studies that employed novel, complementary and specialised methods to generate robust evidence, including groundbreaking population-based surveys, integrated biological behavioural surveys, mapping population size estimations, Key Population implementation science studies, methods of prevention packages programme studies or combination prevention studies.



She has successfully led research teams, administered projects, and collaborated with researchers locally, regionally, and internationally to produce evidence on health indicators never measured before, their determinants, causal pathways, risk heterogeneities, and differential impacts in over 30 African countries.

Cumulatively, her work contributed to methodological advances in her field; generated scientific evidence on HIV prevention and treatment continuums among marginalised hard-to-reach, vulnerable, under-researched and under-served individuals and communities in resource-constrained environments; guided future research and programmatic directions; strengthened research infrastructure, best practices, health systems, policies, and programmes.

Throughout her career, she established intra and inter-institutional, national, South-South, and North-South collaborations, networks and linkages, which expanded the scope, visibility, and impact of her work, allowing for cross-country comparisons in SSA and across other regions of the world, ensuring global relevance, and competitiveness. Overall, her research contributed to inclusive and equitable health programmes. The studies provided strategic information to inform comprehensive and equitable HIV responses, guide the design of strategies to expand national and continental programmes, disrupt HIV interventions and policies, inform future research directions, and strengthen the public health care system using robust novel scientific methods that also informed vital national and WHO statistics.

LRC's Prof Houreld Appointed as Incoming WALT President

The World Association for Photobiomodulation Therapy (WALT) celebrated its 30 Year Anniversary and 14th International Congress at PBM 2024 in London on 23-24 August. WALT is the largest photobiomodulation conference, which inspires and connects the global community of PBM researchers, clinicians, and students. Laser Research Centre's Professor Nicolette Houreld was announced as the association's incoming President.

Prof Nicolette Houreld serves as a Professor in the Laser Research Centre; she is an NRF C1-rated scientist with a Scopus h-index of 33. She is also appointed Adjunct Professor at the Centre for Podiatry and Diabetic Foot Care and Research, in Manipal College of Health Professions at Manipal Academy of Higher Education in India (2023-2025).

As a distinguished researcher, Prof Houreld has made seminal discoveries in biophotonics, particularly in photochemistry and photobiology, elucidating cellular and molecular mechanisms in response to photobiomodulation (PBM) with applications in diabetic wound healing. Her research has been published in international, top-tier peer-reviewed journals, garnering widespread recognition and high citations from the scientific community. Her contribution to the scientific development in photobiomodulation and wound healing is evident through the 96 internationally accredited journal articles, 12 book chapters, and 27 accredited conference proceedings. Over the last three years she has been listed in the top 2% most widely cited scientists by Elsevier and has a five-year Field-Weighted Citation Impact of 1.50.



Prof Nicolette Houreld
Laser Research Centre

The World Association for Photobiomodulation Therapy (WALT) was formed in 1994 in Barcelona, Spain at the joint Congress of the International Laser Therapy Association (ILTA) and the International Society for Laser Application in Medicine (ISLAM) when these two international groups merged, and WALT became the leading world body for promoting research, education and clinical applications in the field of photobiomodulation with lasers and other light sources. The multinational membership includes the world's leading experts in all forms of treatment mediated by the photobiomodulating effects of light occurring without thermal effects on irradiated tissue.

Heidi Abrahamse Recognised as Distinguished Professor

Professor Heidi Abrahamse celebrates three decades of service to UJ in 2024 and has been recognised as a Distinguished Professor in her field. She has been the Director of the Laser Research Centre at UJ since 2007 and has held the DSI/NRF Chair in Laser Applications in Health since 2015. As an NRF B-rated scientist with a Scopus H-index of 53 and 11,026 citations, her research is focused on Photodynamic therapy and Photobiomodulation, with a particular focus on cancer diagnosis and treatment, diabetic wound healing and regenerative therapy. Her publication record is impressive, with 334 peer-reviewed accredited journal publications, 65 accredited full paper proceedings, 55 chapters and 2 books.

Since joining the University in 1994, Prof Abrahamse has taught six undergraduate and two postgraduate courses. As Director of the Laser Research Centre, she leads a dynamic research team consisting of six staff members, four visiting professors, 12 postdoctoral fellows, 20 doctoral students, and 10 master's students. Her extensive service on various Faculty, University, National, and International Committees and Boards, including the National Health Research Committee and the UJ Council, underscores her unwavering commitment to academia and research. Prof Abrahamse has received numerous national and international research awards, including being the first and only female to win the Distinguished Vice-Chancellor Award for Excellence in Research twice, the HERS Lifetime Achiever Award and the PBM 2024 WALT President Trophy. She was also invited to deliver keynote and plenary talks at multiple international conferences. Despite these accolades, she considers facilitating the development and accomplishments of her postgraduate students and staff as her greatest achievement. She has supervised 28 honours, 62 masters, 40 doctorates and hosted 32 post-doctoral fellows.





Teaching and Learning



In celebration of African Traditional Medicine Week, from 26-31 August, the Department of Complementary Medicine hosted Kgosi Kgolo Lehasa II (Dr LM Moloi) Makgolokwe-a-Mafehleng, the Mocholoko Medical Foundation Chairman, and eNet Health Medical Botanical Aid Founder and traditional medicine practitioners. Traditional African medicine is a holistic discipline involving indigenous herbalism combined with aspects of African spirituality. It is estimated that 80% of Africa's population relies on traditional medicine for primary health needs. In some cases, traditional medicine is the only healthcare service available, accessible and affordable to many people on the continent.

EMC CPR and Choking Training

The EMC Department has been involved in CPR and choking training and demonstrations in the various communities around Johannesburg. The most recent training involved a request from a charity organisation, whose provider had cancelled at short notice, interested in demonstrating to the community how to perform effective CPR and what to do in case of emergencies. The EMC staff and student team, took manikins and equipment and were involved in demonstrating and teaching the community some of the basic life-saving skills. This initiative has proved to be very successful.





HAP Introduces 3D Printed Bones into Teaching and Learning

Department of Human Anatomy and Physiology (HAP) lecturer Dr Nicolene Jooste has embarked on the use of 3D - printed bone kits to enhance teaching and learning in her lectures. Dr Jooste distributed 160 3D-printed bone kits to the Medical Imaging and Radiation Student cohort enrolled in the Anatomy and Physiology 1 module. The bone kits were printed using the expertise of the Water and Health Research Centre Project Co-ordinator Xylan de Jager and team members Zubair Meeah, Moloko Machaba, Allen Gumede and Sabelo Thabethe.

- The models from which the bones were printed, started their inception as virtual 3D artistic representations of the bones of the upper limb, which were sourced under creative commons licensing.
- These initial models were only vaguely representative of the anatomically correct specimens needed and much processing work was required.
- The models were refined by including necessary anatomical specificity and smoothing out the models' surfaces.
- Thereafter, the models were printed using resin printers.

These models were distributed to students with much excitement and curiosity during their osteology practical sessions. Student opinions and results associated with the 3D-printed bone kits will feature in an anatomical education project currently being researched by PhD candidate Melusi Sibanda under the supervision of Dr Jooste and Dr Erna Bruwer. Preliminary results indicate that 3D-printed bone kits from which students can learn when not in the practical laboratory contribute positively to their results and motivation. Preliminary insights from this project have led to additional project conceptions, for which proposals are currently being prepared.

Simulation Laboratory AV/IP

The Faculty of Health Sciences Simulation Laboratory was designed to mimic patient care from incident to hospitalisation, providing an immersive learning experience for our nursing, emergency medical care, and medical imaging and radiation sciences students. Post COVID, the faculty received several requests from universities for a guided tour of the laboratory with the intention of recreating the same or similar set-up at their training and teaching institutions locally, and incorporating UJ's AV/IP approach to the assessment of students in training.

Here is how the design came to fruition:

In 2018, colleagues from the Department of Emergency Medical Care, Mr Benjamin van Nugteren and Prof Christopher Stein proposed the removal of assessors from the room during practical assessments to determine how it will impact students. EMC Information and Communication Specialist William Maruping proposed that the Department of Emergency Medical Care invest in four TVs, four cameras, and four wireless transmitters to develop a proof of concept. Assessors were removed from the assessment room to a different location but limited by the wireless connection range. The set-up was successful, and Covid pandemic occurred, increasing the need for the set-up to be implemented to avoid physical contact between people.

Currently, the simulation laboratory has a closed-circuit camera system that has static (fixed) cameras and microphones in each room in the lab, A public address system (PA) for teaching and announcements, 10 skills stations (cubicles) with each having a TV, microphone, and a camera.

For the proposed setup: UJ AVU designer Sifiso Radebe joined the project and proposed the implementation of a full-scale Audio/Visual over Internet protocol (AV/IP) system. The proposed equipment includes the latest Dante technology, PTZ cameras (180 degrees), highly sensitive microphones, 4K60 resolution recording, and 4k displays for viewing. The purpose of this set-up is to have an audience for the simulation assessment within one of the viewing rooms internally or remotely anywhere in the world as the system will use cloud storage and streaming. The fully scalable system will accommodate the simulation laboratory's growth through the coming years.



UJ and SMU Host Joint IPE Event

University of Johannesburg (UJ) and the Sefako Makgatho University (SMU) partnered to host an Interprofessional Education (IPE) Simulation event for a scaffolded case study at the UJ Island in the Vaal Triangle from 26-27 September 2024. UJ's Faculty of Health Sciences has ten academic departments, and the Faculty of Health Sciences at SMU has eleven departments, that cater to health professions undergraduate programmes.

The two faculties collectively, selected 22 students and 10 staff members to participate in the joint initiative that encompassed four IPE sessions over the two-day engagement. The interprofessional teams from the two universities, represented Dentistry, Speech Therapy, Emergency Medical Care, Medical Imaging and Radiation Sciences, Medicine, Complementary Medicine, Pharmacy, Occupational Therapy, Optometry and Environmental Health and Public Health. The event closed with a successful collaboration and a tour of UJ Island.

Breaking Down Silos – Exploring Transdisciplinary Research, Teaching and Learning in the Faculty of Health Sciences

In an era where healthcare challenges are increasingly complex and interconnected, the need for collaboration across disciplines has never been more critical. Dr Herman Myburgh who is heading the Metaverse Research Unit (MRU) at the Institute of Intelligent Systems at UJ, in collaboration with the Faculty of Health Sciences, is at the forefront of this paradigm shift, embracing innovative technologies and transdisciplinary approaches to enhance education and patient care. This article explores groundbreaking research that combines virtual reality (VR), augmented reality (AR), and multilingual applications to revolutionise teaching and learning across various health science disciplines.

The Power of Transdisciplinary Research

Transdisciplinary research goes beyond traditional interdisciplinary collaboration by integrating diverse knowledge and methodologies to create new conceptual frameworks. In the context of health sciences education, this approach is invaluable in preparing students for the complexities of modern healthcare. Our faculty's recent initiatives exemplify this transdisciplinary spirit, bringing together nursing, radiology, computer science, linguistics, and educational technology expertise. The result is a suite of three cutting-edge applications that enhance learning experiences and bridge gaps between different healthcare specialties.

Application 1: Virtual Reality for Nursing Education

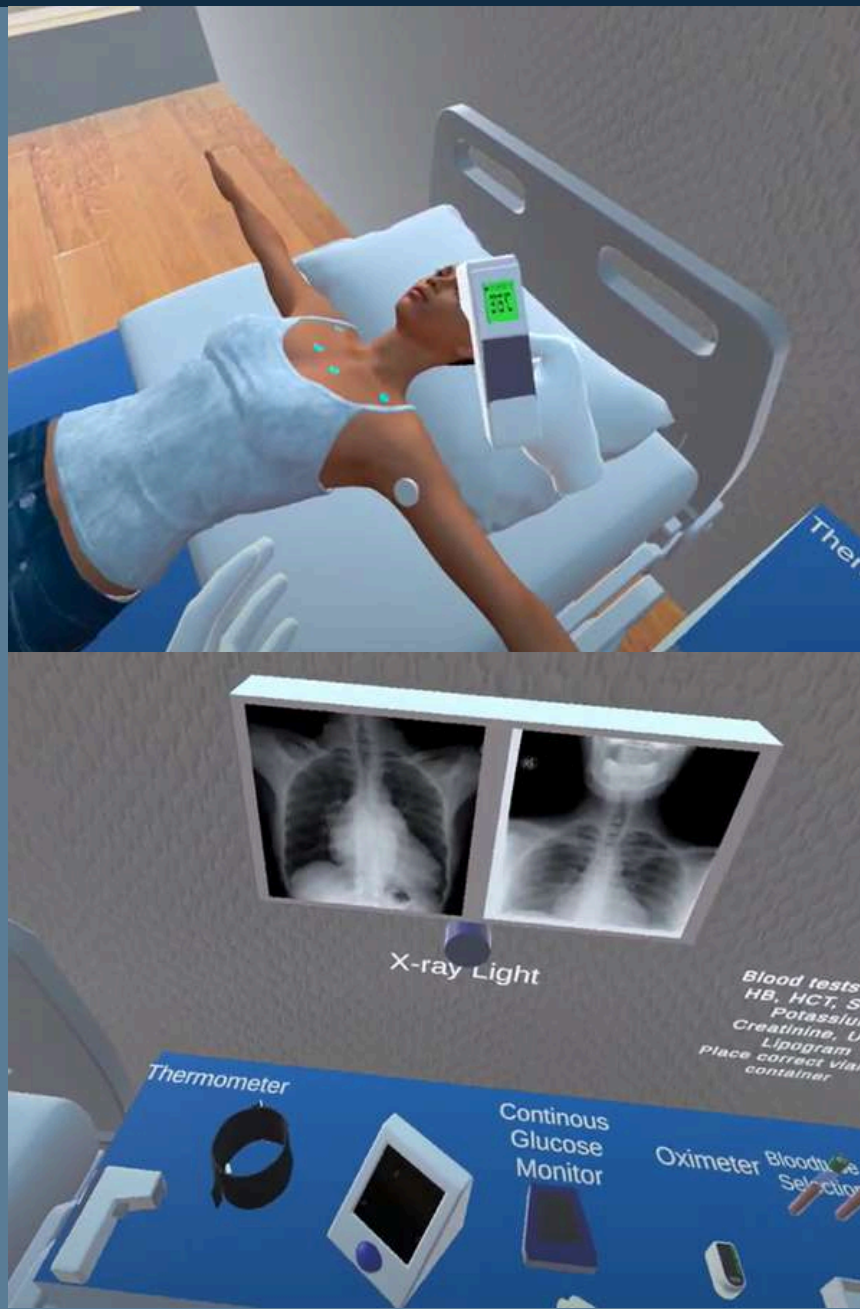
Prof Charlene Downing from the Department of Nursing and Dr Myburgh recently supervised Sr. Jayd Clara through her M. Cur. degree, which she received with distinction. In the MRU developed application that Sr Clara tested with recently graduated nurses, this immersive simulation allowed future nurses to diagnose and manage a severely hypertensive patient in a risk-free, virtual environment.

Key Features of the Application:

- Interactive Patient History-taking.
- Simulated vital sign measurements (BP, ECG, blood glucose, oxygen saturation).
- Virtual auscultation of heart and lung sounds.
- Access to simulated biochemical lab results and chest X-rays.

This VR experience breaks down silos by integrating knowledge from nursing, cardiology, radiology, and laboratory medicine. It allows nursing students to practice complex diagnostic processes involving multiple healthcare professionals while fostering a more holistic understanding of patient care.

In testing this application, the nurses expressed that the experience was enjoyable and stimulated critical thinking and reasoning. As this experience created a safe environment, there was less pressure on the nurses, allowing them to take time to think about the possible diagnoses. A video of this VR experience can be viewed here: <https://youtu.be/6PrZrshf5Sw>



Application 2: Multilingual Radiography Positioning App

The second application addresses a critical need in our diverse healthcare landscape: clear communication between radiographers and patients from various linguistic backgrounds. This application was developed to run on Android and iOS devices, with the ultimate goal to enhance patient care and ensure optimal delivery of radiographical services.

In this collaborative endeavour, Dr Shantel Lewis from the Department of Medical Imaging and Radiation Sciences Department (MIRS), together with several other MIRS colleagues, and Dr Herman Myburgh explored how ThuthukaCare (TC), the name chosen through a consultative process, could have a beneficial impact on communication in a radiographic setting.

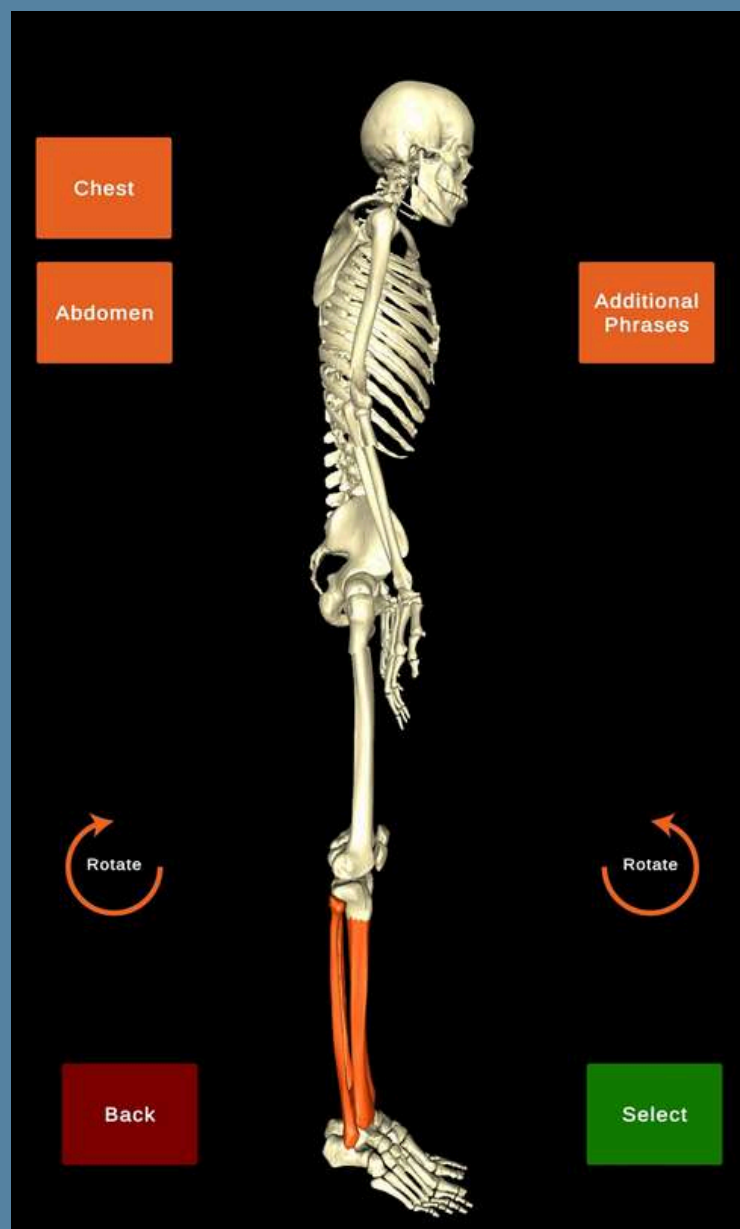
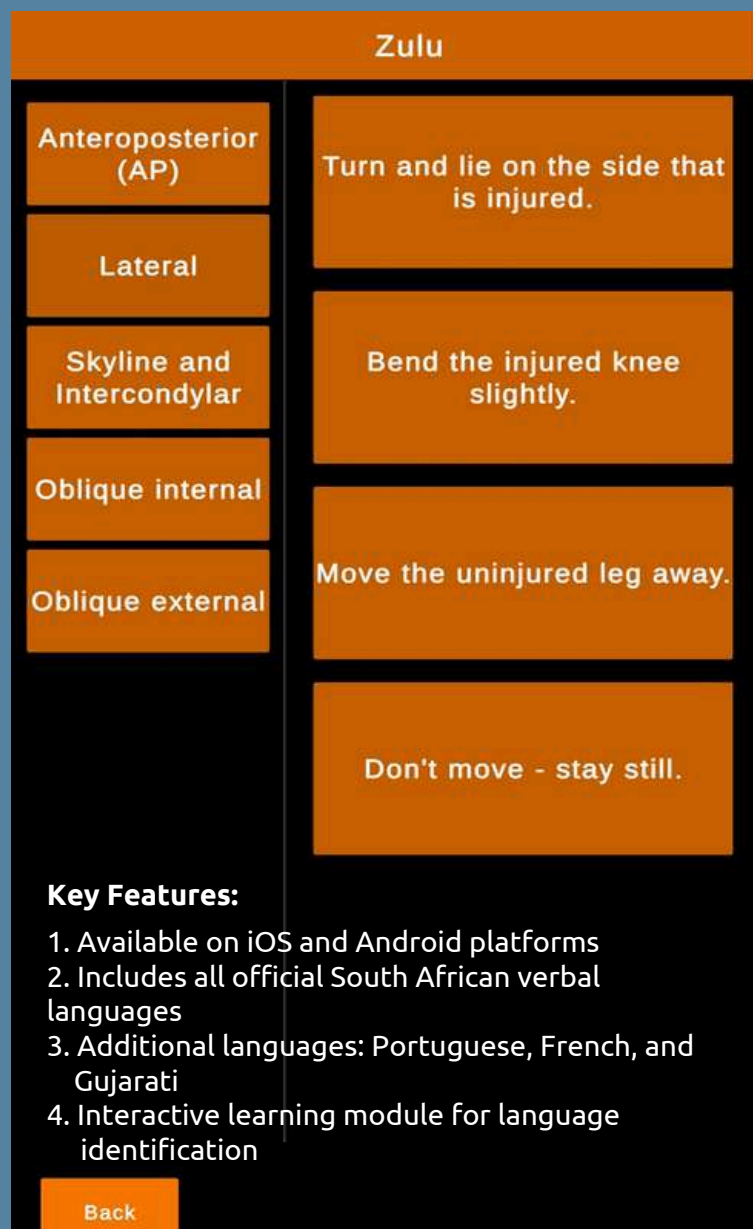
Currently, the TC app offers patient instructions for 82 radiography examinations in English, Afrikaans, isiZulu, Sesotho, Setswana, Sepedi, Xitsonga, Tshivenda, IsiXhosa, SiSwati and isiNdebele, as well as in French, Portuguese, and Gujarati – with more languages to follow.

This app transcends traditional disciplinary boundaries by combining radiography, linguistics, and mobile app development. It not only aids in practical patient positioning but also promotes cultural competence and language skills among healthcare providers.

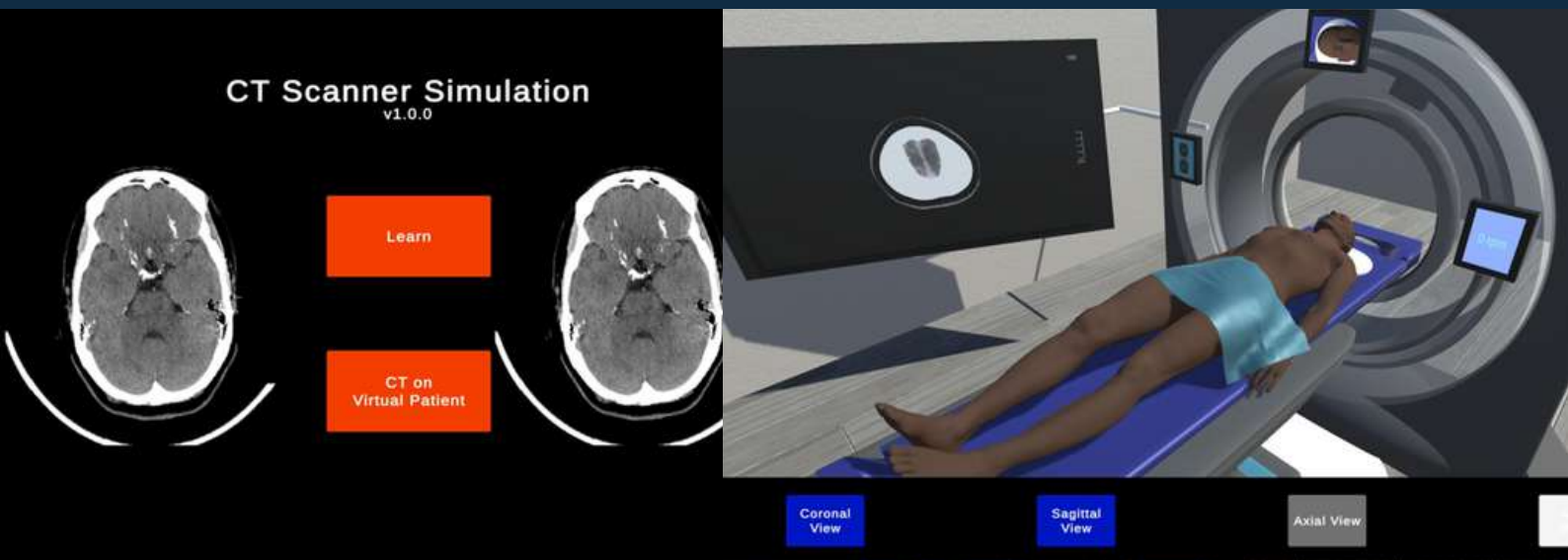
Voice overs for the various prompts were generated using AI solutions for those languages that are currently available, and the remaining languages were recorded by first-language speaking students of MIRS.

Furthermore, this application also follows a gamified learning opportunity, where radiographers are challenged to listen to different audio clips and identify the language spoken. We hope this will allow radiographers to quickly identify which language a patient is comfortable with, choosing the correct set of audio clips to correctly position the patient.

Following the relevant approval for research processes, this application will soon be tested. A video of this application can be viewed here: <https://youtube.com/shorts/knDrNb20FwA>



Application 3: Augmented Reality CT Scanner Simulation

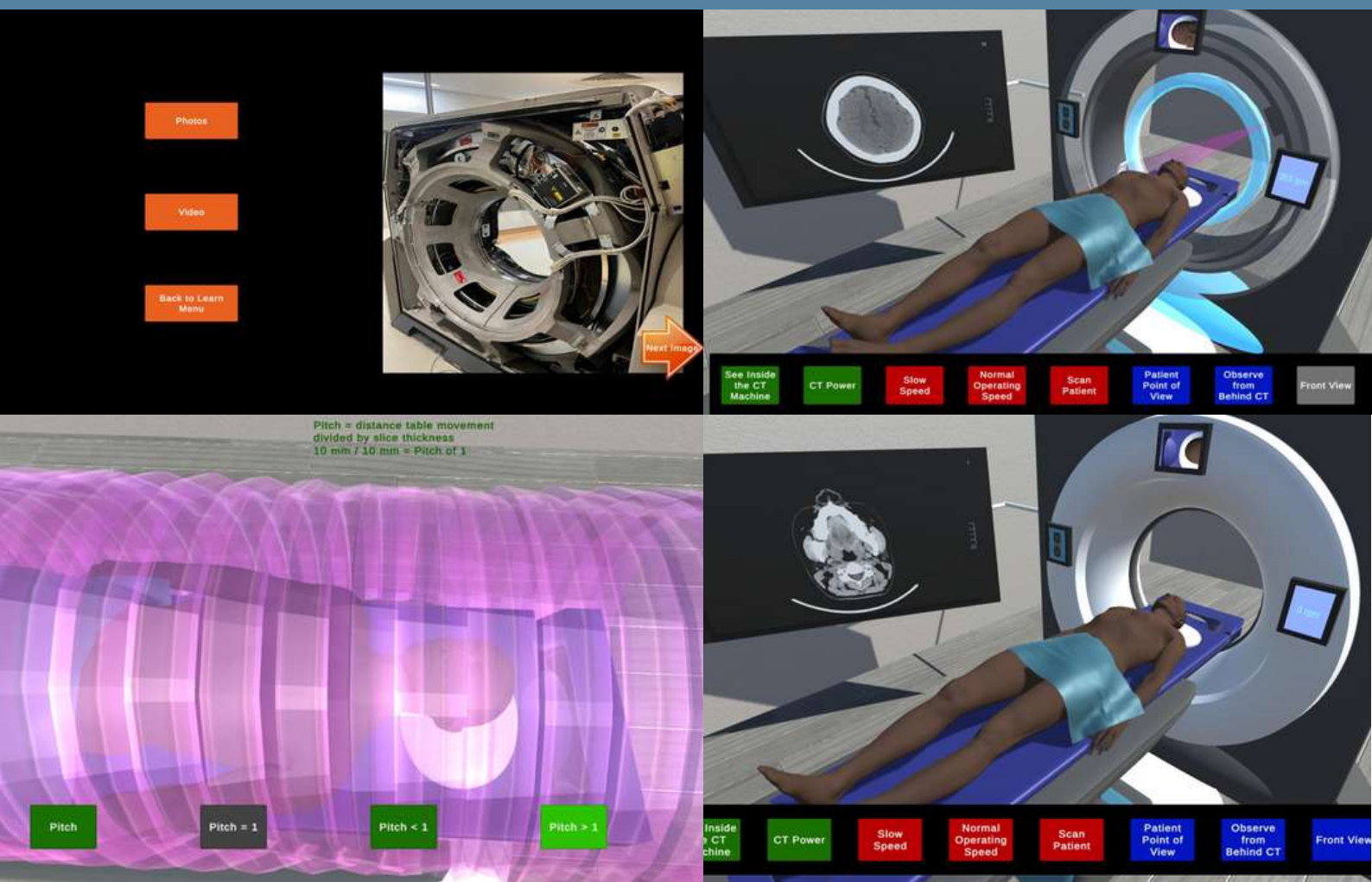


The third application in our suite leverages AR to demystify the complex workings of CT scanners for radiology students. This application collaboration was between Dr Herman Myburgh and Ms Nicole Badriparsad from the MIRS Department.

Key Features:

- AR visualisation of CT scanner positioning and operation
- Cut-through view of X-ray processes
- Interactive explanation of 'slicing' and 3D reconstruction
- Exploration of CT pitch concepts and their impact on image quantity and patient exposure
- AI-powered digital avatars explaining key components.

This AR application illustrates the transdisciplinary nature of modern healthcare education. It combines radiology, physics, computer graphics, and artificial intelligence principles to create a comprehensive learning tool. A video of this experience can be viewed here: <https://youtu.be/7mVzh0HWeaE>





Breaking Down Silos: The Impact on Education and Patient Care

The development and implementation of these three applications demonstrate how transdisciplinary approaches can transform health sciences education:

- **Enhanced Understanding:** By visualising complex processes and equipment, students gain a deeper understanding of difficult concepts to grasp through traditional teaching methods alone.
- **Improved Communication:** The multilingual app not only aids in patient positioning but also prepares students for the linguistic diversity they will encounter in their careers.
- **Risk-free Practice:** VR and AR simulations allow students to practice high-stakes procedures without risking patient safety, building confidence and competence before entering clinical settings.
- **Holistic Perspective:** Each application encourages students to think beyond their specific discipline, considering how their role interacts with other healthcare specialties.
- **Technological Literacy:** Exposure to cutting-edge technologies prepares students for a future where digital tools will play an increasingly important role in healthcare delivery.

The transdisciplinary research and applications developed within our Faculty of Health Sciences by the MRU represent a significant step forward in breaking down traditional silos in healthcare education.

By leveraging VR, AR, and multilingual mobile applications, we prepare the next generation of healthcare professionals to think holistically, communicate effectively, and adapt to rapidly evolving technologies.

These initiatives not only enhance the quality of education but also potentially improve patient outcomes by fostering a more integrated and technologically adept healthcare workforce. As we continue to explore the intersections of various disciplines, we are excited about the possibilities that lie ahead in transforming health sciences education and, ultimately, healthcare delivery.

Our faculty's commitment to transdisciplinary research and teaching is a model for other institutions seeking to prepare students for the complex, interconnected world of modern healthcare. By breaking down silos, we are building a future where collaboration, innovation, and holistic thinking are at the heart of medical practice and education.

Should you be interested in collaborating with the Metaverse Research Unit (MRU), contact:

Dr Herman Myburgh

E-mail: hermanm@uj.ac.za
Institute of Intelligent Systems

Biomedical Sciences Graduate, Aaqilah Minty Receives Top Faculty Award

Ms Aaqilah Minty's dedication and hard work culminated in receiving the Special Award Faculty Prize during the Faculty of Health Sciences graduation ceremony on 24 July 2024. The 23-year-old, now a medical laboratory scientist at Lancet Laboratories, consistently excelled throughout her four years of study.

Ms Minty, the top student in her degree, achieved the Best in Class for all but one module in her second year. She also garnered the most distinctions and earned service awards for her mentorship. The Faculty Prize for the Most Prestigious student among Undergraduate and Honours students for 2023 was a crowning achievement for her.

"I was completely shocked when I got the e-mail. My degree is filled with extremely intelligent people, so I couldn't believe it. I am really thankful; it acknowledges my hard work and sacrifices," she said.

Ms Minty graduated with a BHSc in Medical Laboratory Science with a final mark of 86%. Although initially expected to pursue a medical degree, she found her niche in medical laboratory sciences, appreciating its blend of medical work without patient interaction. Choosing UJ was an easy decision for her Minty, partly influenced by her familiarity with the institution through her mother, a lecturer there. The BHSc degree offered by UJ provided superior opportunities and better bursary options than other universities.



"University studies are expensive and while I got opportunities from other universities, their bursary options were not as good as the one at UJ. The difference between my degree BHSc and a BSc – if you come to a lab setting the BHSc is a higher qualification with higher pay and more opportunity. It is a vast degree and UJ offers the best opportunity for it."

Reflecting on her academic journey, she emphasised the importance of hard work. "I work very hard. I don't always feel smart, but I make sure I understand everything. My advice to students is simple: work hard and don't compare yourself to others." She also stressed the importance of a good work-life balance.

"While you are in varsity only once, it is ok to party but remember the money and sacrifices that your parents had to make to put you in school. Once you have your degree and job you will have all the money to party and do what you want. Sacrifice for your degree. If you fail at even just one thing, you push your life back for six months over a party? It doesn't make sense."

Ms Minty has been working at Lancet for the past year and a half as part of the UJ Integrated Learning Programme. She enjoys exploring new restaurants, watching movies, and sports in her free time. Looking ahead, Minty plans to pursue a master's degree and hopes to become a lecturer, driven by her passion for teaching.



EMC's Dirk Kotze Awarded 2024 Chancellor's Medal

The University of Johannesburg's (UJ) Faculty of Health Sciences celebrated special award recipient Dirk Kotze with the Chancellor's Medal during the 22 July 2024 winter graduation ceremony. Mr Kotze earned his Master's in Emergency Medical Care (EMC) with a final mark of 87%. While unable to attend the ceremony as he resides and works in London, UK, he expressed his immense honour at receiving the Chancellor's Medal.

"It represents a significant milestone in my academic and professional journey. This award validates the countless hours of hard work and sacrifices needed to complete this degree. I am immensely proud of this achievement and inspired to continue striving for excellence and contributing positively to the field of emergency medical services." A career driven by passion

Dirk Kotze chose to study EMC to make a tangible difference in people's lives. "Studying EMC at UJ provided me with essential emergency medical and rescue skills, enabling a career filled with exciting roles and opportunities. After earning my undergraduate degree, I worked as an emergency care practitioner/critical care paramedic, responding to emergencies both on the road and as part of a Helicopter Emergency Medical Services team. I've also taught paramedic students and gained valuable international experience by working in different healthcare systems and cultures. EMC has thus offered me a diverse and ever-expanding career."

Pursuing his master's degree allowed him to enhance his strong interest in research, academic writing, and future opportunities in the field. His master's dissertation, titled "The Effect of Prehospital Endotracheal Intubation on Short-Term Mortality in Non-Traumatic Brain Pathologies: A Retrospective Cohort Study," aimed to evaluate the association between prehospital endotracheal intubation (ETI) and mortality in the emergency department and during hospital admission for patients with non-traumatic brain pathologies such as stroke, seizures, and poisonings.

"This study was chosen due to the significant lack of existing literature on this association. Since prehospital ETI is a high-risk intervention performed daily in South Africa, obtaining quality evidence to support or refute this intervention is essential. The results were very interesting and challenged some well-established beliefs in the field. I am excited about the contribution this study will make to the progressively expanding evidence base of the emergency medical care field."



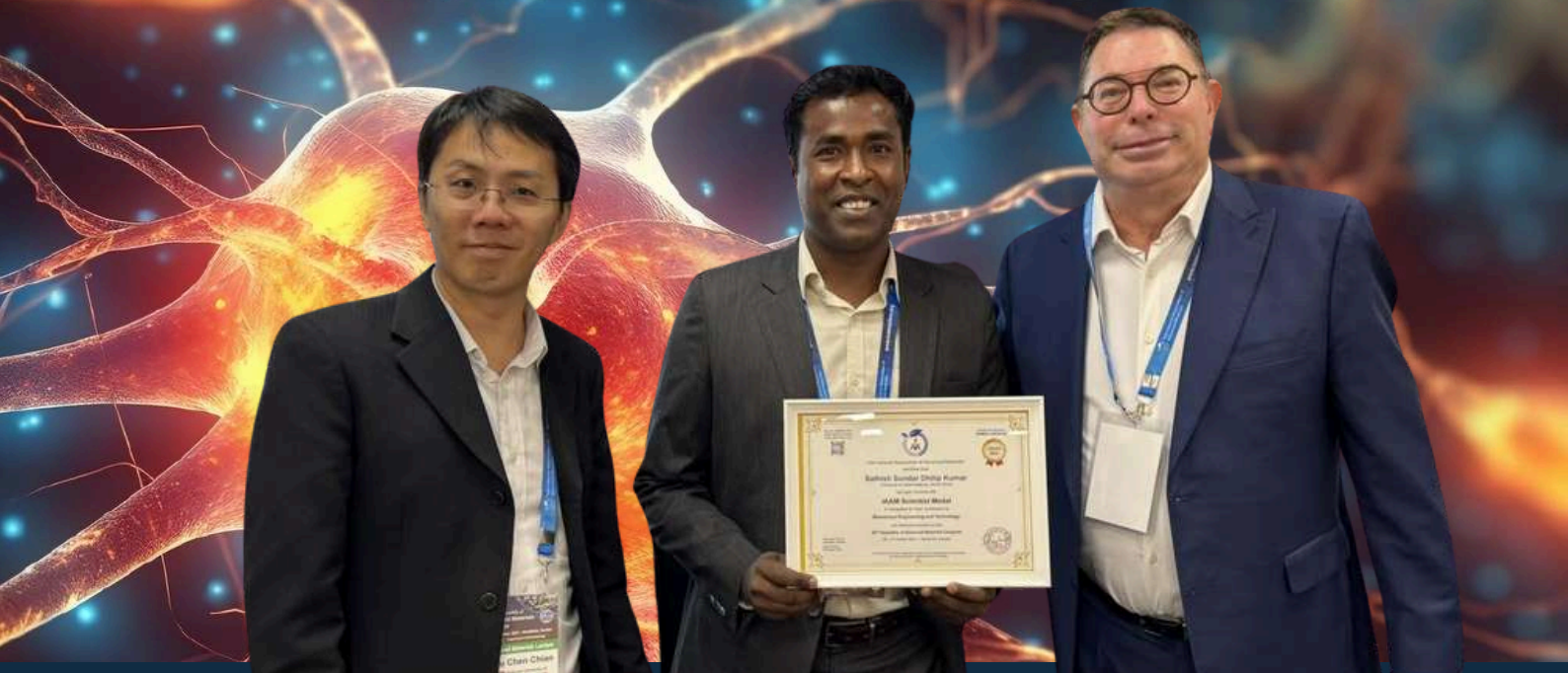
Choosing UJ for Excellence

Mr Kotze selected UJ for his studies because of its renowned EMC programme which is known for its comprehensive curriculum, high standards, and emphasis on practical skills. "UJ offers state-of-the-art facilities and experienced faculty who are leaders in the field, ensuring top-quality education and training. For my master's, I chose UJ based on my incredible undergraduate experience and the quality education and support I received. Additionally, UJ's commitment to research and innovation in emergency medical services aligned with my personal and professional goals, providing an ideal environment to develop my knowledge and skills."

Advice for students

Mr Kotze's advice to students is to never give up. "Throughout your studies, you will inevitably face decisions to either stop and give up or continue and complete your studies. During my studies, setbacks and hardships made me want to quit, but I persevered and successfully completed my studies, even excelling. As President Nelson Mandela famously said: 'It always seems impossible until it's done.'" His plans include completing his doctorate part-time while continuing to work clinically in the UK and building his international experience. "I also hope to continue contributing to research projects and innovation in the emergency medical care field."

International Awards and Global Engagement



Laser Research Centre's NRF C2-Rated Nanobiotechnologist, Dr Sathish Sundar Dhilip Kumar Awarded IAAM Scientist Medal in Stockholm, Sweden

Researcher and Senior Lecturer at the Laser Research Centre (LRC), Dr Sathish Sundar Dhilip Kumar was awarded the IAAM Scientist Medal for his contribution to the field of Biomedical Engineering and Technology by the International Association of Advanced Materials at the Baltic Assembly of Advanced Materials Congress (AMC), which was held from 29-31 October 2024, Stockholm, Sweden. Dr Kumar was invited to deliver a talk on "Enhancing Diabetic Wound Healing Through the Synergistic Use of Biopolymer-Based Biomaterials and Photobiomodulation." The conference is an interdisciplinary forum designed to foster collaboration among professionals from academia, industry, and governance. The conference emphasises advancements in translational research and technology innovations, particularly in alignment with the United Nations Sustainable Development Goals (UNSDGs) and Net-Zero commitments. Overall, 238 abstracts from 26 countries, 14 thematic sessions led by 28 esteemed chairs, and 66 talks over three days.

Dr Kumar is an NRF C2-rated researcher and nano-biotechnologist and has been a member of the IAAM organisation since 2018. He also recently joined the Editorial Board of Scientific Reports within the Nature Portfolio, where he will be assigned to handle articles in the nanotechnology category. According to Clarivate Analytics 2024, Scientific Reports is one of the most cited journals in the world, with more than 734 000 citations in 2023 and continues to receive widespread attention in policy documents and the media. Dr Kumar said: "I want to express my gratitude to the Secretary General of IAAM, Sweden, Prof Dr Ashutosh Tiwari for encouraging me to join the new initiative on the "Net-Zero Consortium" and the opportunity to collaborate on IAAM initiatives in the future. I want to thank LRC Director, Distinguished Prof Heidi Abrahamse for her mentorship, constant support and encouragement. I would also like to acknowledge the NRF-KIC programme for awarding me the funding support to attend and present my work at this conference. This opportunity has been invaluable, and I am grateful for their support."



Left: Dr Dhilip Kumar presenting his research on Exploring Biomaterials and Photobiomodulation for Diabetic Wound Healing: Opportunities and Challenges at Sparklight: A Collaborative Workshop on Photobiomodulation and Light-Based Techniques for Human Health from 11-12 November 2024.

The event was hosted by University of Cape Town MedTech and UCT Biomedical Engineering Research Centre. The workshop sparked vibrant discussions and collaborations between thought leaders in photobiomodulations, biophotonics, and regenerative medicine.



LRC at PMB London 23-25 August 2024

Faculty of Health Sciences Laser Research Centre team members Prof Heidi Abrahamse, Dr Anine Crous, Prof Nicolette Houreld and Prof Michael Hamblin attended the World Association for Photobiomodulation Therapy's WALT Conference PMB2024 in London from 23-25 August 2024. The team formed part of an international delegation of 300 experts from across the globe. The well attended event acknowledged Prof Hamblin's contribution and honoured him with the Walt PMB Leadership Award, Prof Abrahamse was awarded the WALT President Trophy for her contribution from 2010-2012, the association also announced its presidency handover, and celebrated the incoming President, Prof Houreld.



Department of Emergency Medical Care Co-Hosts ECSSA 2024

The Department of Emergency Medical Care (EMC) co-hosted the Emergency Care Society of South Africa's ECSSA 2024 conference at the School of Tourism and Hospitality on 11-12 October 2024. More than 100 delegates attended the event, a range of topics were presented including clinical, educational and system-based oral presentations and posters. The conference was designed to bridge the gap between academia, operations and policy-makers within the prehospital domain. ECSSA 2024 was sponsored by Angels, FAST 112, Marcus Medical and STAT Tiakeni Medical and included 11 plenary discussions focused on scientific, operational/clinical, resuscitation, human factors and paediatrics. The conference included keynote presentations on "The Clinical Decision Support Tool and Recognising Excellence in Stroke Care: The Impact of EMS Stroke Awards and Angels Initiative". The conference was well represented by EMC staff who participated in presentations and event organising.



U21 Health Sciences Group - 2024 Annual Meeting - Netherlands

A team of academic representatives from the Faculty of Health Sciences attended the U21 Health Sciences Group 2024 Annual Meeting from 26 - 29 August at the Faculty of Medicine, University of Amsterdam, Netherlands. The 2024 engagement was themed, 'Data Driven Health Care and Teaching'. The four-day engagements included seven plenaries, poster presentations and awards, discussion forums, and the 2024-2025 Executive Committee appointment. Topics at the HSG 2024 AM included AI, Common pitfalls in data-driven education, system dynamics of the commercial determinants of health, data driven dental training and care, health informatics teaching, Mental health, SDGs, Inter-Professionals Education, Responsible and Applied AI, Revolutionising Healthcare: Exploring and Testing the Power of Large Language Models.



UJ Health Sciences Appointments to the U21 Health Sciences Group - Executive Committee: 2024 – 2025

- HoD: Sport and Movement Studies, Dr Lynn Smith (Health and Rehabilitation Sciences)
- HoD: Nursing, Prof Roinah Ngunyulu (Nursing and Midwifery)

More about U21

The U21 Health Sciences Group is one of the collaborative groups of the network for international higher education Universitas 21.

It was created in 2000 to provide the Health Sciences Faculty within Universitas 21 member universities with a framework for exploring opportunities for collaborative research, information exchange, and sharing of resources. The U21 Health Sciences membership includes Dentistry, Health and Rehabilitation Sciences, Medicine, Midwifery, Nursing, Pharmacy and Public Health.

The mission of the U21 Health Sciences Group " is to enhance individual and collective contributions by leadership to health sciences education and research and to social transformation through sharing of experiences and resources and through collaborative interdisciplinary projects."



Dr Fatima Ismail

UJ Awarded First Prize at WFC

Head of Department: Chiropractic, Dr Fatima Ismail and Ms Myra Wessels received First Prize for their research titled, "Culturally Competent Chiropractic Students: A South African University Study". The award was presented at the 12 World Federation of Chiropractic (WFC) Global Education Conference on 2 November 2024 at the Kuala Lumpur Convention Centre in Malaysia. The 2024 conference themed, 'Technology and Innovation: Shaping the Future of Chiropractic Education' commenced on 30 October 2024, and provided an opportunity for educators, practitioners, researchers, and students to exchange knowledge, explore innovative ideas, and forge connections that will shape the future of chiropractic care. The conference hosted the CERF-WFC Alan Adams Education Research Award Competition. First Prize winners received US\$1200 and 1 complimentary registration for the 2026 WFC Education Conference.



Prof Habib Noorbhai

Prof Noorbhai Represents South Africa at the 9th BRICS Young Scientists Forum

Biomedical Engineering and Healthcare Technology Research Centre (BEAHT) Director, Prof Habib Noorbhai has returned to South Africa after representing SA and UJ at the 9th BRICS "Young" Scientist Forum in Sochi, Russia from 25-29 November. He was selected from a pool of 166 applicants, as one of 12 South Africans to attend.

The Young Scientist Forum is one of the most effective platforms for expanding the network of international contacts among young scientists, including through the exchange of experience and best practices in supporting scientific research with the participation of young scientists and postgraduate students from the BRICS countries. It helps promote initiatives and to establish an integral system of international co-operation among future representatives of the science and innovation systems of the BRICS countries. These activities ensure the sustainable development of the BRICS cooperation and promote the development of the leadership position of the BRICS countries in science, technology and innovation. Prof Noorbhai also returns after successful completion of his Fulbright Research Scholarship as a Visiting Professor at Massachusetts Institute of Technology (MIT) in the United States.



Prof Christopher Yelverton

Prof Yelverton Wins Bronze Medal

Faculty of Health Sciences Vice Dean: Research and Internationalisation, Prof Christopher Yelverton was awarded a Bronze Medal at the JKA Gauteng Championship at the Standard Bank Arena on, 16 March 2024.

Laser Research Centre member, Dr Paromita Sarbadhikary was awarded the ISE APSS Travel Grant Award for her groundbreaking research at the 2024 conference. Dr Sarbadhikary's work has been recognized with this prestigious award, which supports outstanding researchers in sharing their work internationally. In February 2024, Dr Paromita Sarbadhikary also received the Distinguished Alumni Award from her alma mater, Barrackpore Rastraguru Surendranath College, West Bengal State University. She was also invited to participate in the academic procession for the 2024 Honorary Doctorate Conferment Ceremony hosted by Myles Leadership University in Johannesburg, South Africa, on 4 May 2024.



Dr Paromita Sarbadhikary with LRC Researcher Prof Blassan George



IFAA 2024

Anatomy and Physiology and Chiropractic staff members attended the 21st Congress of the International Federation Association of Anatomists in conjunction with the 74th Annual Meeting of the Korean Association of Anatomists (IFAA 2024) from 5-8 September 2024.

The congress was held at Kimdaejung Convention Centre in Gwangju, Korea under the theme, Innovative Anatomy. Anatomists from more than 60 countries attended IFAA 2024 and participated in in-depth discussions on anatomical terminology and how ethics has prompted a reconsideration of the roles and responsibilities of anatomists and the impact of the rapidly evolving landscape of science, technology, and diverse developments in the medical field in contemporary society.

In addition to the increasing demand for new knowledge and information about the structure of the human body and the challenge of advancing anatomy education and research.

As part of their travels, Prof Shahed Nalla delivered a presentation on Anatomy Teaching and Research at UJ at the Anatomy Department of NUS, Singapore. Together with Dr Sundika Iswarkumar-Govender, they engaged with colleagues of anatomy on potential teaching and learning collaborations and visited different facilities. The pair also visited the Anatomy Department at NTU, Singapore which boasts facilities equipped for teaching anatomy through multiple modalities. They also held discussions on future SOTL collaborations.



Dr Sundika Iswarkumar-Govender



Prof Shahed Nalla presenting on Vertebra C1 at the conference



2024 Environment and Health International Conference



"The Departments of Environmental Health and Complementary Medicine partnered to collaborate with Shanghai Medical College of Fudan University's (SMCFU) School of Public Health to co-host the 2024 Environment and Health International Conference on 8 November 2024 at STH Auditorium on Bunting Campus. Faculty of Health Sciences Vice Dean: Research and Innovation: Prof Christopher Yelverton together with Prof Zhijun Zhu, Vice President of SMCFU, delivered welcome remarks and exchanged gifts." The joint engagement is one of many planned future international collaborations. The conference held discussions on contemporary issues such as, 'The unintended consequences of urban expansion and gold mining. Elevated indoor radon levels in Gauteng communities neighboring gold mining tailings' and 'The role of Trace Metals in the Development and Progression of Prostate Cancer'. Mr Napo Molahleli from the Department of Environmental Health presented an analytical study to determine the prevalence of lead poisoning and related risk factors among primary school children from Maseru, Lesotho.



4th Year Complementary Medicine Students Studying Herbal Pharmacy Harvest Dandelions at Vic Yards

As part of their degree, students study biomedical and foundational subjects, ethics and jurisprudence, history, philosophy, phytochemistry, pharmacognosy, American European and other herbs from Western herbalism, major herbs from other medicinal systems, South African herbs, applied phytotherapy, herbal pharmacy, clinical phytotherapy. They are trained to produce ready-made products and formulations, compounding from purchased herbal tinctures and making tinctures, infused oils, and other preparations from herbs.

UJ Chiropractor Celebrates World Neurosurgery Article Publication



Chiropractic Lecturer Dr Glen Paton and his co-author's article on 'The Clinical Significance of Lumbar Transverse Process Lengths Associated with Lumbosacral Transitional Vertebrae: A Landmark for Lumbar Spine Enumeration' was selected as one of six Editor's Choice article for the September issue of World Neurosurgery.

Dr Glen Paton is a full-time lecturer at UJ's Chiropractic Department. He qualified in 2013 from UJ; thereafter, he served in private practice at a sports-based chiropractic clinic. He also holds a PhD in Clinical Anatomy from University of Cape Town. In 2016 he obtained his Internationally Certified Chiropractic Sports Practitioner (ICCSF) qualification through the International Federation of Sports Chiropractic. In 2019, he completed the upgrade to the ICCSP, received his International Certificate in Sports Chiropractic (ICSC) and was the fourth chiropractor in the world to be awarded it.



2024 Long Service Award Recipients

Nine Faculty of Health Sciences staff members were recognised for their commitment at the 2024 Long Service Awards. From top left: Distinguished Prof Heidi Abrahamse, Dr Ansunel de la Rey, with Health Sciences Executive Dean: Prof Annie Temane, Dr Pieter Els, Mrs C Sefadi, Dr Marietjie Richter and Mr Cyril Butsile.



2024

Staff Promotions & Awards

2024 Staff Promotions

Lecturer to Senior Lecturer

- Dr L Matshaka (Nursing)
- Dr S Ishwarkumar-Govender (Human Anatomy and Physiology)
- Dr L Hazell (MIRS)
- Dr M Chadyiwa (Environmental Health)
- Dr S Matlala (Nursing)

Senior Lecturer to Associate Professor

- Dr K Henrico (EMC)
- Dr TI Metsing (Optometry)
- Dr A Makkink (EMC)
- Dr R Razlog (Complementary Medicine)

Associate Professor to Professor

- Prof Blassan George (LRC)

Career Milestone Achievements

- Professorial Inauguration: Prof Annie Temane (Deanery)
- Distinguished Professor: Prof Heidi Abrahamse (LRC)

Long Service Awards

30 Years:

- Prof Shahed Nalla: Human Anatomy and Physiology
- Prof Heidi Abrahamse: Laser Research Centre
- Dr Marietjie Richter: Optometry

25 Years:

- Deidree Guilo: SLP Office
- Dr Ansunel del la Rey: Optometry

20 Years:

- Bathabile Vilakazi: Faculty Administration
- Christinah Mailula: Podiatry
- Dr Pieter Else: Health Training Centre
- Cyril Butsile: Human Anatomy and Physiology

2024 Support Staff Top Tier Awards

- Porchia Bergh
- Setjhaba Mokeke
- Prisca Sigauke
- Mduduzi Nzuza
- Leneshree Padayachee
- Elizabeth van der Berg



2024

Faculty Performance Awards

Research Output Top 3 Contributors Across the Faculty

- Laser Research Centre: Distinguished Professor Heidi Abrahamse
- Department of Complementary Medicine: Dr Zijjing Hu
- Department of Environmental Health: Prof Phoka Radebe

Community Engagement

- Geographical Reach: Water and Health Research Centre
- Sustainability Award: Riverlea Project
- Highest Number of Community Engagement Projects: Optometry

Departmental Success Rate:

- Environmental Health: 99%
- Optometry: 98.3%
- Nursing: 98.2%

Departments That Met and Exceeded Postgraduate and Undergraduate Enrolment Targets:

- Biomedical Sciences
- Environmental Health
- Podiatry
- Medical Imaging and Radiation Sciences

Departments that Decreased Undergraduate and Postgraduate Dropout Rate

- Chiropractic
- Podiatry

2025 Year End Function Best Dressed Award

- Biokineticist Tiren Govender
- Clinician Lisa Vermeulen

Staff and Student Prestigious Achievements

1. Chiropractic Postgraduate Student Silvio Cerone-Biagioni represented South Africa in karate competitions in Greece in January and Namibia in June 2024. His dedication to the sport and commitment to excellence on the international stage reflects the hard work and determination he brings to his training.

2. First-year Chiropractic student Emma Gomes represented South Africa at the FISU World University Championships Rowing in Rotterdam, Netherlands, in July 2024. Competing in the Women's Pair (W2-) event, her participation in this prestigious international competition showcases her exceptional talent and dedication.

3. Undergraduate Chiropractic student L. Elferink was selected to participate and represent South Africa as part of the U24 SA Underwater Hockey Team at the international competition in Malaysia in June 2024.

4. Bachelor of Health Sciences Sport and Exercise Science student Kendra Du Toit was recently awarded the Lifesaving South Africa Female Athlete of the Year Award. She was also chosen from her peers to captain the SA team that travelled to the International Lifesaving World Championships, held in Brisbane, Australia, in August 2024.

5. LRC Postdoctoral Research Fellow Lindokuhle Hadebe won the Photonics in Biology prize at the SAIP2024 Annual Conference.

6. LRC Postdoctoral Research Fellow, Lufuno Nemakhavani won the 2023 National Visualize Your Thesis Competition, she had won the People's Choice Award in 2024.

7. Postgraduate Student Warnu Hattingh received the Chiropractic Association of South Africa Academic Excellence Award 2024.

8. UJ Chiropractic Student Council awarded 1st prize in the Education Institution International World Spine Day Competition. This prestigious accolade recognises their hard work, creativity, and commitment to promoting spinal health awareness on a global scale.

9. Vice Dean: Research and Innovation, Prof Christopher Yelverton, won the World Federation of Chiropractic WFC-IBCE Poster Award Competition for the WFC African Region. His research, titled, "Chiropractic Attitude and Utilisation of Evidence-Based Practice in South Africa: A Secondary Analysis," has been recognised for its significant contribution to the field.


10. Department of Sport and Movement Studies Clinton Swanepoel, Gregory Gordon and Kendra Szeles were awarded for their oral presentations at the South African Sports Medicine Association Congress in Cape Town in October 2024.

11. LRC Senior Researcher and Lecturer, Dr Anine Crous has been elected Membership Director of the World Association for Photobiomodulation Therapy (WALT). Dr Crous will oversee initiatives to sustain and grow WALT's membership, working diligently to enhance the benefits offered to members. Her responsibilities include reporting current membership status, developing strategies to attract new members, and ensuring existing members remain engaged and valued. A significant aspect of her role will involve collaborating with the Vice President to produce a quarterly newsletter, issued three times a year, aimed at informing and engaging the membership. Through this platform, Dr Crous will also seek to solicit input from members on relevant issues, fostering a stronger sense of community and shared purpose within the organisation.


12. Two students from the Department of Environmental Health have been recognised among the Top Three Best Environmental Health Students in Africa. Sharon Tshepiso Monyela and Mandisa Kaunda received their awards at the 4th Africa Congress in Environmental Health at Emperors Palace from 11-13 November 2024.

13. Head of Department: Chiropractic Dr Ismail received a commendation for the 2024 National University Teaching Awards (NUTA) in recognition of her dedication to fostering transformative education, advancing student success, and championing excellence in higher education.

14. Head of Department: Chiropractic Dr Ismail and Ms Myra Wessels received First Prize for their joint research at the CERF-WFC Alan Adams Education Research Awards at the 12th WFC Global Education Conference 2024 in Malaysia. The award highlights their commitment to advancing chiropractic education and shaping a future that is both inclusive and impactful.



Industry Appointments

- Head of Department: Complementary Medicine, Dr Tsele-Tebakang appointed as the Vice-president of the Homeopathic Association of South Africa.
 - Head of Department: Emergency Medical Care, Dr Andrew Makkink was bestowed lifetime membership of the Emergency Care Society of South Africa at the 2024 Annual General Meeting.
 - Head of Department: Optometry: Dr Nabeela Hasrod was elected as a Director on the Board of the South African Optometric Association (SAOA). Her Portfolio is the Director of Education and Clinical Standards Committee.
 - Senior Optometry Lecturer, Dr Marietjie Richter was appointed to the International Admissions Committee of the American Academy of Optometry (AAO) in 2024. The committee members consider applications from international optometrists for the AAO Fellowship.
 - Vice Dean: Research and Innovation, Prof Christopher Yelverton has been elected President of the European Council on Chiropractic Education (ECCE). He is the first non-European to hold the position. The ECCE is an international autonomous organisation established by the chiropractic profession in Europe to accredit and re-accredit programs providing first qualification chiropractic education and training. The principal goal of the ECCE is to assure the quality of chiropractic first qualification education and training against a set of educational Standards. The Standards are intended for use by chiropractic programmes, both in the public university and private sectors, predominately (but not exclusively) in Europe, as part of programme self-evaluation, by the ECCE for external review of programmes and by international committees and bodies involved in the recognition and accreditation of chiropractic programs worldwide.
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1. LRC Senior Researcher, Prof Nicolette Hourelde was elected as the president of the World Association for Photobiomodulation Therapy (WALT). Prof Hourelde will oversee the organisation's smooth operations, promoting photobiomodulation (PBM) in scientific forums and popular media. She will also work to establish and nurture strategic partnerships with relevant organisations, ensuring WALT'S longevity and continued progress. Prof Hourelde has also been acknowledged by ScholarGPS Highly Ranked Scholars™ - Prior Five Years #9 in Wound Healing and ranked among the top 2% cited scientists in the Elsevier Stanford University database. She recently achieved a ranking of 93,596th in single recent-year impact.

2. Distinguished Professor Heidi Abrahamse has been ranked among the top 2% cited scientists in the Elsevier Stanford University database and ranked 63,843rd in career-long impact and 17,391st in single recent-year impact. She has also been acknowledged by ScholarGPS Highly Ranked Scholars™ - Lifetime ranked number #3 in Laser Surgery, and Highly Ranked Scholars™ - Prior Five Years #1 in cancer cells and PDT.

3. LRC Senior Researchers Dr Sathish Sundar Dhilip Kumar and Dr Anine Crous were nominated and selected for the third iteration of the U21 Programme, specifically designed for mid-career researchers (MCRs). The programme, delivered in partnership with Common Purpose, reflects the dynamic challenges researchers face and the leadership required both individually and collectively. Throughout the programme, participants will explore two core leadership themes: Collaboration, and being Adaptive and Nimble. This achievement underscores their commitment to advancing leadership skills and navigating the evolving research landscape.

4. LRC Senior Researcher and Lecturer, Dr Anine Crous has been selected for the prestigious DSI/THENSA Supervisor Enhancement Programme. The initiative will encompass the participation of 50 academics from various national South African universities from various faculties, and supervisors in Science, Technology, and Innovation, including Engineering, ICT and Health Sciences, to enhance the quality and quantity of academic supervisors to support the increased production of post-graduate qualifications and contribute to addressing the triple challenges of poverty, inequality, and unemployment threatening the advancement of our country.

5. UJ Faculty of Health Sciences Biomedical Engineering and Healthcare Technology (BEAHT) Research Centre Director, Prof Habib Noorbhai has been selected as one of 12 South African representatives, out of 166 competitive applications to attend the BRICS Young Scientist Forum and the 7th BRICS Young Innovator Prize, in Russia from 25-29 November 2024 in Sochi, Russia.

6. LRC Senior Researcher and Lecturer, Prof Blassan George was elected as a Fellow of the Royal Society of Biology. This prestigious fellowship recognises Prof George's significant contributions to the field of biology and his commitment to advancing biological sciences.

7. LRC Postdoctoral Research Fellow Dr Paromita Sarbadhikary was awarded the Distinguished Alumni Award from University Barrackpore Rastraguru Surendranath College, West Bengal State University, where she completed her master's degree. She was also invited to participate in the academic procession for the 2024 Honorary Doctorate Conferment Ceremony, hosted by the Myles Leadership University in Johannesburg, South Africa on 4 May 2024.

8. LRC Senior Researcher and Lecturer Dr Sathish Sundar Dhilip Kumar was appointed as an Editorial Board Member of the journal Discover Nano, a journal published by Springer Nature. Discover Nano will receive its first impact factor under its new name in 2025 and is DHET accredited.

9. LRC Senior Researcher and Lecturer Dr Rahul Chandran was elected member of the Royal Society of Biology. This prestigious membership recognises Dr Chandran's significant contributions and expertise in the biological sciences. Being part of this esteemed society highlights his commitment to advancing biological research and his standing as a leading scientist in his field. This honour reflects his dedication to the scientific community and his ongoing efforts to foster innovation and excellence in biological research.

10. LRC Senior Researcher and Lecturer Prof Houreld has been appointed as an Expert Scientific Panel Member for the South African Medical Research Council (SAMRC) Self-initiated Research (SIR) Grants in Vaccines, Diagnostics and Drug Discovery, as well as the One Health. She also received her NRF C1 rating in 2024 and is recognised as an established researcher with a sustained record of productivity in her field. Her rating indicates that she is recognised by her peers as having produced a body of quality work that is internationally competitive and reflects the consistency and impact of the work over an extended period.

11. LRC Distinguished Professor Heidi Abrahamse was appointed to contribute her expertise to the National Research Foundation (NRF) as a member of the Specialist Committee. Specifically, she will serve on the Health Sciences Board, focusing on Basic Health. This nomination is a testament to Prof Abrahamse's esteemed reputation and significant contributions to the field of health sciences. Her involvement in the assessment of applications will ensure rigorous evaluation and support the advancement of research in basic health within the NRF framework.

12. LRC Distinguished Professor Heidi Abrahamse was appointed as a task team member for IUPAC. This project aims to standardise the terminology relevant to the biomedical and environmental applications of the photodynamic effect. The field has expanded remarkably since its early days, yet no recommended glossary has been compiled. As a result, "ad-hoc" redundant terms and acronyms are coined, generating confusion and hampering the acceptance of the approach in the broader scientific community. By involving learned Societies operating in relevant fields, we will compile a coherent and shared glossary, reducing ambiguity and enhancing clarity for all stakeholders. This project will result in the publication(s) of recommended terminology (PAC recommendation) and dissemination at conferences.

13. LRC Distinguished Professor, Heidi Abrahamse has been appointed Peer Reviewer for the Design and Implementation Evaluation of the Strategic Health Innovation Partnerships (SHIP) at the South African Medical Research Council (SAMRC). She will assist the Department of Science and Innovation (DSI) and the partner institutions in ensuring the quality of the evaluation, where quality is defined as technical rigour and policy relevance, while maximising the ownership and commitment of the partner departments.

14. Distinguished Professor Heidi Abrahamse, LRC Director and SARChI Chair in Laser Applications in Health within the Faculty of Health Sciences, was rated Number Three in the World for Laser Surgery, Lifetime Achiever and Number One for PDT in the last five years according to ScholarGP.

15. Mrs Manoko Molabe was nominated for the 2024 HERS-SA Higher Education Women Leaders Awards, she was one of the top five finalist for the category Emerging Young Women Leaders (Support).



Community Engagement

WHRC reaches new milestone with Community Engagement

As we celebrated Global Handwash Day on 15 October 2024, the Water and Health Research Center (WHRC) achieved a remarkable community engagement milestone: washing 10,800 hands in 2024. The WHRC team uses a combination of science-based principles, showmanship and instant gratification to engage young and old to address the question, “Why should I wash my hands?”.



This year, the WHRC added the testing of phones with ATP to educate people on device hygiene and the risk of taking one's phone to the toilet, especially if one does not wash hands. ATP, or adenosine triphosphate, is an energy molecule found in all living things and shows the presence of microorganisms on the device. At each site, ATP levels on devices were compared to toilet seats to drive home the message of device hygiene and the risk of taking your phone to the toilet. Learning from past lessons, the team showed that making education fun is one way to keep people engaged. They do this by creating a carnival atmosphere with arcade-like games and 3D-printed prizes for those who show they can wash their hands.



They achieve this by using GloGerm™ to show people if they are washing their hands properly. GloGerm™ is a surrogate for bacteria that fluoresces when exposed to a blacklight, showing you where you did not wash your hands properly. A DIY handwash station was used for people to wash hands, something anyone can make using everyday supplies.

By tracking the water use at events in Gauteng, Mpumalanga and Limpopo provinces, they have shown that this waterwise method is not only an adequate water supply but uses on average only 200ml, compared to 2l or more when washing hands with running tap water (using an average flow rate of 6 l/mi, washing for 20 seconds as recommended by the World Health Organization).



This achievement demonstrates their commitment to providing all with access to clean water and hygiene education. At the heart of this success lies our innovative approach to hand hygiene training, which has proven highly effective in promoting lasting change. By combining interactive training with instant gratification, we empower participants to visualise the germs on their hands, wash them, and see the impressive results. This engaging method is paired with ATP testing, a cutting-edge technology that quantifies bacterial load, driving home the importance of proper hand hygiene.

WHRC Project Manager Xylan De Jager said: “The community's enthusiasm and participation have been instrumental in our success. We're grateful for their openness and eagerness to learn, which has created a dynamic and supportive environment.”. As the WHRC celebrates this milestone, they look forward to continuing their work towards a healthier, more water-wise community.



In October 2024, the University of Johannesburg launched its “UJ for Societal Impact” project in Limpopo. The Faculty of Health Sciences (FHS) contributed to this with a variety of projects at local villages; this included first aid training for ten teachers and community members by the Department of Nursing, with each of the three neighbouring villages gifted a First Aid Grab Bag. The Matatani Clinic, a multi-functional clinic installed and solar powered by the Faculty of Engineering and the Build Environment (FEBE) received the fourth Grab Bag. The clinic was designed and constructed by the Water and Health Research Centre (WHRC) to allow a variety of patient interactions ranging from general medical consultations to visual screening using Optometry equipment. UJ Health Sciences departments like Podiatry, Nursing, Optometry and Chiropractic and visiting staff from the Provincial Department of Health will be able to use the clinic.

The second project undertaken by the WHRC focused on refurbishing the Matatani Village Creche to provide shade for the teachers and students who use the creche. By mixing hard and soft shading, airflow could be channeled to decrease the temperature under the shade, and collect rainwater stored in a JoJo tank. Similar design principles were applied to create an outside food preparation area for the creche, allowing on-site food preparation. On the day of the launch, the Department of Optometry carried out visual screening for primary school children while the WHRC ensured that the children knew how to wash their hands properly using their innovative handwash training methods.



Department of Sport and Movement Studies Adopts A Creche

The Department of Sport and Movement Studies hosted a mini sports day for Grade R learners from crèches in Riverlea and surrounding areas on 23 August 2024. Head of Department, Dr Lynn Smith said, "The Riverlea community is one that is close to our hearts at UJ and the Faculty of Health Sciences, and we take our social responsibility towards the community seriously. The department became involved in the Riverlea Community Outreach Programme in 2011 and introduced the Adopt-a-Crèche Mini Sports Day in 2015 as part of an Early Childhood Development programme. The foreseeable impact is to identify and develop motor skills in young children and encourage active lifestyles from early on that will last their lifespan. My team and I believe that sport participation at a young age will not only encourage healthy physical activity habits, but will also embed in our young ones the spirit of teamwork and sportsmanship, and also fun!" Dr Smith also thanked the organising committee, Ms Thembi Mbatha, Mr Junior Chandomba, Ms Cheryl Volkwyn and Dr Simonè Ferreira for the hard work putting the event together, as well as the Higher Certificate students in the department who enthusiastically participated and engaged with the little scholars.



Disclaimer: Consent for use of images obtained from the parents/guardians.



Department of Biomedical Science staff and students at the visit to Queens High School in Johannesburg East, in promotion of their undergraduate course. The engagement forms part of the Departments youth outreach initiative where they actively promote their profession through career counselling and awareness.



Africa By Bus Mozambique



Africa By Bus - Mozambique



Africa by Bus -Mozambique

Six departments from the Faculty of Health Sciences participated in the 2024 Africa By Bus – Mozambique tour from 6-12 July, the 34-member team returned to South Africa after successfully screening 535 community members and distributing 200 pairs of reading spectacles.

The international project forms part of the Faculty's SDG outreach initiative, taking healthcare to vulnerable communities in neighbouring SADC countries. The team consisted of 28 students and six academic staff members from the Departments of Emergency Medical Care, Nursing, Complementary Medicine, Optometry, Sport and Movement studies and Environmental Health.

Africa By Bus exposes UJ students and staff to a new country, health system, community, and environment, extending UJ's presence in Africa through meaningful engagement.

Africa By Bus Mozambique was carried out in partnership with Instituto Superior de Ciências de Saúde (ISCISA) and Eduardo Mondlane University and included the participation of six Mozambican students. The local students assisted with translation and liaison within the communities visited.

The 2024 trip provided free health screening from 8-9 July to members of the low-income, urban community of Maputo, Mozambique. The screening included the identification of the key indicators of the following Non-Communicable Diseases (NCDs) including hypertension, obesity, diabetes mellitus, cholesterol, and vision testing/screening.