

SCHOOL OF CLINICAL MEDICINE NEWSLETTER



<https://www.wits.ac.za/clinicalmed/>

EDITORIAL

Dear Colleagues

Welcome to our winter newsletter. We are halfway through the year and through winter.

The COVID restrictions are officially over, we don't have to wear masks any longer and staff and students are all back on campus. It is good to be back to nearly normal after so long. Social isolation was one of the many bad consequences of the pandemic.

Sadly, we lost Mr Victor Mokokotlela, a Clinical Associate and BCMP lecturer. He made a significant contribution to both the program and the School. His tragic passing is a sad loss to colleagues, friends and family. We wish you all strength and comfort during this sorrowful time.

Prof Robin Green, a Wits Alumnus and Head of School of Clinical Medicine at the University of Pretoria, also passed away. Sincere condolences to his colleagues and family.

On a happier note, we extend hearty congratulations to Ass. Prof. Sithembiso Velaphi on his promotion to Full Professor – a great personal achievement and a feather in the cap of the School. Well done!

Congratulations as well to our Associate Professor John Ouma, our new Academic Head of the Department of Neurosciences. We wish you and your department to go from strength to strength.

Keep safe and warm in this winter weather. Happy reading!

Prof Daynia Ballot
Head of School

UNIVERSITY OF THE
WITWATERSRAND
JOHANNESBURG



FACULTY OF
HEALTH SCIENCES

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STAFF ACHIEVEMENTS

CONGRATULATIONS TO:

Congrats!

Prof Daynia Ballot with her second term reappointment as Head of School!

Prof. Ballot is a full Professor at the University of the Witwatersrand (Wits), former Head of the Neonatal Unit/ Paediatric ICU at Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) and Head of the School of Clinical Medicine at Wits. She is a “Witsie” – having completed both her undergraduate and postgraduate training at Wits and with three of her children as Wits alumni.



She completed her MBBCh at Wits in 1982 and worked as a Research Fellow with Prof Thomas Bothwell in the Iron and Red Cell Metabolic Unit in 1984. She completed her PhD in Iron Nutrition and Metabolism in 1989. Prof Ballot qualified as a Paediatrician with the FCPaeds in 1990 and registered as a neonatologist in 1993. She was then appointed as a specialist in the Neonatal/ Paediatric Intensive Care unit at CMJAH in 1990 and a principal specialist (Head of Clinical Unit) in 2001. Prof Ballot was promoted to Associate Professor at Wits in 2002, and full Professor in 2019. She enjoys clinical work, but also has a strong interest in research, with particular reference to neonatal sepsis and determinants of outcome in high risk newborns. She also enjoys teaching. Prof Ballot has supervised 33 MMed, 11 MSc and 1 PhD to completion. She is currently supervising or co-supervising an additional 14 postgraduate students (9 MMed, 1 MSc and 3 PhD). Prof Ballot has a B3 rating with the National Research Foundation. She has 96 DHET accredited publications and four book chapters and has edited one book. Prof Ballot completed 162 peer reviews for national and international journals and was rated one of the top ten peer reviewers in South Africa in 2017. She has raised more than R7 million in grants for her research program Project to Improve Neonatal Care (PRINCE) which was recognized at Faculty level in July 2016.

Prof Ballot served two terms on the council of the College of Paediatricians of South Africa. She has been an examiner/ convener and moderator for both the FCP part 1 and the certificate in Neonatology for the College of Paediatricians of South Africa. She is an internal and external examiner for both MMed and PhD degrees. Prof Ballot served as chair of the Wits Paediatric Fund from 2001 to 2018 and received both the Wits Volunteer and Vice Chancellor's Academic Citizenship for that role. She was awarded a service excellence award for neonatal care by CMJAH in 2016. Prof Ballot was appointed assistant head of the School of Clinical Medicine at Wits in January 2017, head of cluster C (Paediatrics, Obstetrics and Family Medicine) and was appointed Head of the School of Clinical Medicine later that year and has now been reappointed for a second term in 2022 as Head of School of Clinical Medicine.

We are looking forward to your continued leadership and wish you all the best for your term.

CONGRATULATIONS TO:

Prof John Ouma with his appointment as Head of Department (Department of Neurosciences) from the 1st of July 2022.

Prof Ouma holds an MB ChB degree from Makerere University as well as a master's degree in Neurosurgery from the University of the Witwatersrand, Johannesburg.

He holds three fellowships, the College of Medicine of South Africa (Neurosurgery), the American College of Surgeons, and the Royal College of Surgeons (Neurosurgery). He is the recipient of the Gold Medal for best performance at the first attempt of the Intercollegiate Royal Surgical Colleges examination in neurosurgery examined jointly by the Royal colleges of England, Ireland, Edinburgh, and Glasgow.



Prof Ouma served as the clinical head of department of Neurosurgery at the Charlotte Maxeke Johannesburg Academic hospital (CMJAH) between 2002-2013, and then as chief specialist and Head of Department of Neurosurgery at the Chris Hani Baragwanath Academic hospital from 2013 to date. He has also served as Neurosurgeon at the Wits Donald Gordon Medical centre since 2001.

He was appointed Academic Head of the Division of Neurosurgery in the University of the Witwatersrand in 2014 and continues in the post.

He is the current president of the Society of Neurosurgeons of South Africa (SNSA) for the term 2021-2023. He is an examiner and convener for the FC Neurosurgery (SA) finals, and completed two terms as senator and member of the examinations and credentials committee of the Colleges of Medicine of South Africa (CMSA).

He was appointed the Infectious diseases section editor for the prestigious journal WORLD NEUROSURGERY in December 2021.

Congratulations

PROMOTIONS

CONGRATULATIONS TO:

Associate Professor Sithembiso Velaphi with his promotion to Full Professor.

Professor Velaphi qualified as a medical doctor (MBChB) from Faculty of Health Sciences, University of KwaZulu-Natal (formerly known as University of Natal, Black Section) in 1986.

He specialized in Paediatrics, training as a registrar with the University of the Witwatersrand from 1989-1992, qualifying with Fellowship in Paediatrics with the College of Medicine of South Africa in 1992.



He trained and qualified as a Fellow in Neonatal-Perinatal Medicine with University of Texas, Southwestern Medical Center in Dallas, USA from 1998 to 2001.

He passed his MMed in 1995, and PhD in 2017 with the University of the Witwatersrand.

He also has a MSc in Epidemiology with London School of Hygiene and Tropical Medicine. He is currently the Clinical Head of Department of Paediatrics and Child Health at Chris Hani Baragwanath Academic Hospital. His research interests include neonatal infections and asphyxia.

Sithembiso Velaphi

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STAFF OBITUARIES

We are wishing the families, friends and colleagues peace, comfort, courage, and lots of love during their time of sorrow.

MR VICTOR KHECHANE MOKOKOTLELA

Victor was an Associate Lecturer at the University of the Witwatersrand's Division of Clinical Associates within the Department of Family Medicine and Primary Care.

He was born in Lesotho and their family relocated to Carletonville in 2002. His journey as a pioneer in the clinical associate profession began in 2009 when he was part of the first cohort of students enrolled in the Bachelor of Clinical Medical Practice degree. He completed his three years of study in 2011 and entered the workforce as the first Clinical Associate at the Carletonville Hospital in 2012. His passion for the profession was palpable as he interacted with colleagues and patients, leaving a lasting impression.



In the same year, his pioneering spirit moved him to become a founding member of the Professional Association of Clinical Associates in South Africa (PACASA), where he contributed immensely to the growth of the association. It was through his service to the profession that he was able to travel and attend local and international conferences, influencing the growth and recognition of the clinical associate training and practice.

Victor resigned from Carletonville hospital and joined Wits academia in 2014. He taught clinical associate students, empowering individuals through skills teaching, lecturing, and clinical bedside teaching. In 2020, Victor completed the Honours in Bioethics and Health Law. Victor supported the Year 3 curriculum and clinical training, becoming the Course Coordinator in 2022. His strength is in student interaction, clinical teaching, and patient care delivery. He was intending to pursue a Master's degree. He was involved in many Faculty of Health Sciences committees including the Transformation Committee, Interprofessional Learning, and the BCMP Training Committee. His dedication to teaching and his willingness to collaborate with various departments went as far as volunteering his time on weekends to facilitate first aid training that was organized by the Division of Emergency Medicine.

Victor passed on whilst on vacation in Clarens, Free State, near the Maluti Mountains of Lesotho. The essence of Victor's spirit was wholesome. May we be inspired by his essence to LIVE intentionally.



PROFESSOR ROBIN GREEN

On Friday the 27th of May 2022, the Paediatrics and Child Health community in South Africa received the sad news of the passing of Professor Robin Green that evening. Whilst he was ill for a long period his death came as a sudden unexpected event that has shocked us all.

Robin was an alumnus of the University of the Witwatersrand where he underwent his undergraduate and postgraduate training. He completed his MBBCh in 1985 and showed a keen interest in Paediatrics when he obtained his DCH a few years later in 1990 and then trained as a Paediatrician obtaining his FCPaed in 1991.



Although he moved across to the University of Pretoria in the latter part of his career, Robin maintained close ties with Wits, particularly in his field of pulmonology and allergology. Prof Debbie White trained as a paediatric pulmonologist under his supervision, while employed by Charlotte Maxeke Johannesburg Academic Hospital (CMJAH). She returned to establish an excellent paediatric pulmonology unit at CMJAH, with a special interest in cystic fibrosis. Most recently, Robin was the external assessor for the Wits School of Clinical Medicine's Quinquennial review in 2021.

His early career as a Paediatrician started at the Johannesburg General Hospital (now Charlotte Maxeke Johannesburg Academic Hospital) where he was the deputy head of Pulmonology (1992-1994). He then went into private practice for several years before returning to academia when he was appointed an Associate Professor of Paediatrics at the University of Pretoria (UP) in 2005. Prior to this, in 2003 he obtained his PhD from Wits University and the following year passed the Diploma in Allergology (Dip Allergol (SA)). His PhD looked at inflammatory airway disease and investigated the quality of life and cost of these conditions. In 2009, he was promoted to Full Professor, Head of the Department of Paediatrics and to Chief Specialist at UP. His last qualification was in 2013 when he was awarded his DSc from UP.

Robin has been a giant in the field of paediatric pulmonology and allergology and was considered one of the leading and founding experts in these sub-specialties. At UP he established the Division of Pulmonology which grew into a centre of excellence, training many Paediatric Pulmonologists in South Africa as well as allergology graduates.

At UP, he went on to become the Director and Chair of the School of Medicine in 2018.

Robin was closely involved with the Colleges of Medicine of South Africa at both the level of specialist training and examinations as well as at the level of sub-specialty certification. He was the President of the College of Paediatricians from 2011-2014.

Over his career he has been a convenor and moderator for the Certificate exams in Paediatric Pulmonology and Paediatric Allergology as well as the Diploma in Allergology on many occasions.

His research expertise and commitment to improving health care led to 20 co-authored national guidelines and three international guidelines focusing on asthma, allergic rhinitis and HIV/AIDS for Managed Health Care. He was on the International Editorial Advisory Board of several medical publications. He published over 100 peer-reviewed papers and was lead author and co-author in many guidelines in allergology and respiratory disease in children in South Africa.

In Robin, we recognize a truly amazing human who not only was loved and respected by many for his academic, clinical and teaching skills, but for his humanity. He was a gentle soul that showed respect in the manner he approached his colleagues and his juniors. His generosity of spirit and kindness is borne out by all who remember him today as a wonderful teacher and senior who led with patience and compassion. His involvement in all the various structures, institutions and bodies speaks to his yearning for the improvement of the level of paediatric care in general and paediatric pulmonology in particular in South Africa.

Perhaps one of the best expressions of Robin's sensitive and caring soul was his weekly blog entitled 'Life Less Ordinary'. This was his way of sharing life lessons he had learnt and the compilation of these at various times has culminated in six publications – A Life Less Ordinary; A Life More Extra Ordinary; If Life Must Be Ordinary Count Me Out; No Ordinary Life; An Ordinary Life and Making Life Better in a Time of Crisis.

In the past week there has been an outpouring of messages of condolence from his colleagues and friends across the country and beyond. These beautiful messages show just how much he had made a mark on not only in the world of Paediatrics but also in the lives of all those who were fortunate to have known him.

We will miss you Robin, as we remember your gentle nature and smile, consoled only by the legacy you have left of hundreds of trained specialists and subspecialists and countless other healthcare professionals whose lives you have impacted through your wonderful spirit.

Prof Ashraf Hassen Coovadia – Academic Head of Paediatrics and Child Health, Wits
Prof Daynia Ballot – Head of School of Clinical Medicine, Wits
In Memory of Prof Robin Green



2ND ANNUAL WEST RAND HEALTH DISTRICT RESEARCH CONFERENCE

On the 31st May 2022 the West Rand Health District held its second annual Primary Care Research Conference. The Scientific Committee was convened under the leadership of Dr Egbert Wenegieme, who is jointly appointed as the Head of Clinical Unit of Family Medicine and Lecturer at Wits, together with his team. The venue was the Sterkfontein Psychiatric Hospital Auditorium.

The theme for this year's conference was: Re-engineering Primary Health Care through research in the West Rand. The programme consisted of 18 presentations, with topics ranging from Covid-19 research to mental health challenges amongst healthcare providers, presented by nurses, dentists, medical officers and Family Medicine registrars.

The conference was opened by the Chief Director of the West Rand, Mrs. Thembokuhle Karigani followed by a keynote address from Professor Laurel Baldwin-Ragaven, who reflected on how COVID-19 has changed research in a multiplicity of ways.

The conference received support from the Wits academic Family Medicine leadership. Associate Professor Olufemi Omole, academic head of the Division of Family Medicine, gave an input on Primary Care Research challenging us to become better clinician-scholars, with practical advice. Adjunct Professor Richard Cooke, academic head of the Department of Family Medicine and Primary Care (DFMPC) chaired a session on COVID-19 and its impact on Primary Health Care. The final session was chaired by Dr Joel Francis, Senior Researcher in the DFMPC, which showcased outputs from the district-based Family Medicine Department.

Over 150 healthcare providers attended the conference; and, the West Rand Health District would like to thank all the sponsors who made



West Rand Family Medicine Department-
Dr A. Llale, Dr B. Uwakata, Dr F. Fadahun,
Mrs T. Karigani, Dr E. Wenegieme and
Dr I. Bokoro



Prof O. Omole, Prof R. Cooke, Dr N. Ngene,
Dr A. Llale, Prof U. Subramaney



West Rand Family Medicine Registrars- Dr O. Kanozire, Dr J. Ohanson, Dr M. Nonyane, Dr E. Matsila, Dr M. Kapinga, Dr C. Mc Magh, Ms N. Ngwenya, Dr K Sethunsa

this event a success. We look forward to continuing this tradition, and enhancing our research profile through evidence-based and operational research outputs.

Prof Laurel Baldwin-Ragaven
Department of Family Medicine and Primary Care

SCHOOL OF CLINICAL MEDICINE - PUBLICATION COST



Dear School of Clinical Medicine Colleagues,

The School wants to inform you of two options that are available to assist school researchers with covering the costs of publications. The first and preferred option is available within the School of Clinical Medicine (SOCM) and will cover 100% of the publication cost. The second option is available via the Central Library and will cover part of the publication cost. The details to access the sources of funding are explained below:

Option 1: [SOCM Publication Fund Application](#)

Please note that there is funding available in the School for the full payment of publications in accredited journals. Funding is available to staff and students within the School on a first-come-first-serve basis. This funding is not applicable for research units.

The School can pay for the publications directly or reimburse the authors. Applications can be submitted via the hyperlink above.

Funding is limited and available until Wednesday, 30 November 2022.

Option 2: [Wits Open Access Publishing Fund Application](#)

Kindly note that there is also funding available from the central library for all researchers including research units. The library will reimburse the researcher for part of the publication fee.

The central library will require the following documents:

- Proof of payment
- Tax invoice

The form can be downloaded from [here](#).

Kindly contact Boipelo.Kgosinkwe@wits.ac.za should you have any questions or issues with the hyperlink/s above.

SCHOOL GRADUATE STUDIES & RESEARCH COMMITTEE NEWS

Mr Nkhluleko Joshua Ndlangamandla

Mr Ndlangamandla obtained a Bachelor of Health Sciences (Physiology and Fundamentals of Health and Disease) in 2016 and an Honours in Bioethics and Health Law in 2017, that focused on the prioritization of mental health care services for mental health care users, both degrees were obtained from the University of the Witwatersrand.

He is currently an MMed Administrative Assistant at the Department of Surgery assisting with coordinating the progress of Registrars throughout their MMed degrees. He was formerly the deputy chairperson for the Wits Postgraduate Association in 2018/2019.



Mr Ndlangamandla has previous work experience at the Wits Human Research Ethics Committee and the Wits Health Consortium, Ethics Department, from 2018 - 2020. In both cases he facilitated the Ethics applications process as an administrator.

Mr Ndlangamandla is registered for a Master's in Public Health (Rural Health) at the School of Public Health at the University of the Witwatersrand. He has an interest in Mental Health in Rural and underserved communities with a special focus in the mental health of school going adolescent and their perception and attitudes towards their own mental health.

Mr Ndlangamandla hopes to integrate sports-based programs in schools that will bring to the fore the potential leadership skills that adolescents possess and their ability to have sports as outlet for coping with mental illness. In his spare time, he enjoys online video gaming and participating in team sports such as netball and basketball.

2022 MMed Funding

Dear Colleagues,

Please note that there is funding available in the School of Clinical Medicine to support MMed postgraduate research. The funding will cover conference registration fees and/or research-related costs, as outlined under the guidelines below:

Guidelines on MMed Fund Expenditure

The MMED fund is generated from a rebate on the Registrar's bursary, the money is therefore specifically allocated to MMED support within the School. As the money is

derived from council funds, the funds must be spent in the year and will not roll over.

The Head of School, Cluster heads and Senior Operations Manager (HOS group) will review the amount available at the start of the year and allocate a portion to the Graduate Studies and Research Committee to fund registrar conference attendance and sundry research costs. The balance of the funds will remain in the School account and will be managed by the HOS group for promoting research related activities in the School. These may include, but are not limited to, funding Research Day, scientific editing of research submissions, assisting publication costs of other postgraduate students and research training. In order to prevent underspending, any unspent funds at the end of September will be reallocated to the different cluster heads.

MMed registrar application for funding for research in 2022: -

Eligibility: The MMed fund is intended to support MMed postgraduate research within the Wits SOCM. A successful individual may only be awarded funding once in a 2-year cycle.

Applicants may only apply for funding if their MMed proposals have been accepted by the departmental assessor group.

The categories that will be funded will only include the following:

1. Conference registration:

- Up to a maximum of R8,000 (local) or R16,000 (international)
- Proof of accepted abstract for a conference presentation is required

2. Research-related funding to support an MMed project budget:

- Up to a maximum of R25,000
- A typed detailed budget is required with the application
- This may include funding for blood tests, laboratory reagents and/or consumables but not equipment, stationary or laptops.

Distribution of funding between the SOCM clusters:

The distribution of available funding between the SOCM clusters will directly reflect the size of each cluster. Applications for cluster-specific funding will be open to registrars between January and September of each year. From October to December of each year, any unspent cluster funding will be pooled together for the SOCM clusters and distributed to successful registrar applications on a first-come-first-serve basis.

Approval of funding applications:

The approval of MMed funding applications will be managed by a SOCM Graduate Studies and Research sub- committee. There will be four deadlines per annum: 28 February 2022, 31 May 2022, 31 August 2022, 30 September 2022.

Each departmental representative serving on the SOCM GSRC will receive and screen applications from their Department for each round. Only eligible applications will be put forward by the departmental representative to the SOCM GSRC MMed fund sub-committee for final approval. At any given time, this sub-committee will consist of two members from each cluster and a registrar representative from each cluster. The sub-committee has the discretion to increase the above amounts if there is available funding and if the additional amount is properly motivated by both student and departmental GSRC representative.

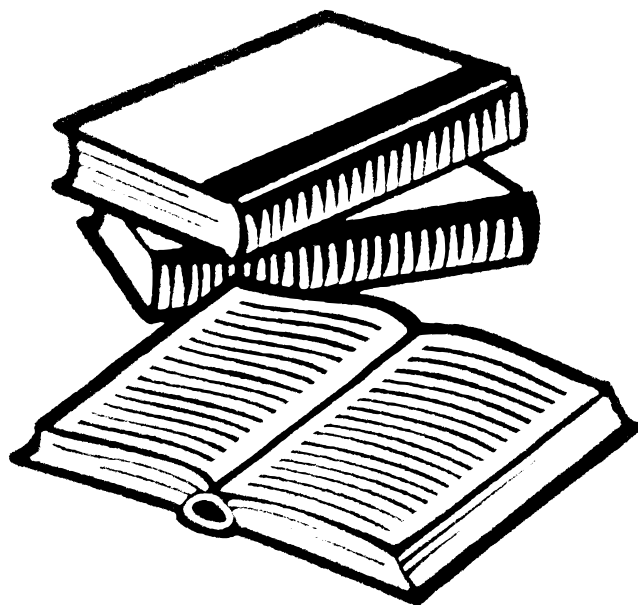
Applications can be submitted via the link below:

[SOCM MMed Fund Application](#)

The office of the HOS will be notified of the successful applicants and will process the monies.

The next closing date: Wednesday, 31 August 2022.

Please contact Boipelo.Kgosinkwe@wits.ac.za should you have any questions or issues with the link.



GENETIC RISK SCORES COULD PREDICT DISEASE IN AFRICANS

8 JUNE 2022 - WITS UNIVERSITY

Using genetic risk scores to predict which individuals have a higher risk genetically of developing a particular disease is set to revolutionise medicine.

The genetic risk scores (GRS) approach to predicting disease risk enables early detection and treatment in a personalised way.

GRS has shown significant progress and potential in European populations. However, applying the approaches developed from European data to African populations shows that GRS are 4.5 times less accurate. This is partly due to the fact that people of African ancestry account for only 1.1% of the global participants in genomic studies.



A study by scientists at the Sydney Brenner Institute for Molecular Bioscience (SBIMB), with colleagues in Uganda and the UK, set out to understand how compiling genetic information into genetic risk scores from African Americans, Europeans, and multiple ancestries (Asians, Europeans and African Americans) could help identify people who are likely to have high and low lipid levels in African populations.

Lipid (fats) levels refer to the amount of cholesterol and fats (called triglycerides) in the blood. These measurements give doctors a snapshot of lipids in a person's blood. Lipids such as cholesterol and triglycerides in the blood can clog arteries, making a person more likely to develop heart disease.

The study, titled Transferability of genetic risk scores in Africa, was published in Nature Medicine on 2 June 2022.

This study gives insights into genetic information that can be compiled into genetic risk scores to identify African people with high and low lipid levels.

This is essential for the early identification of people who are most likely to have elevated levels of lipids in the future. These individuals can then benefit from early interventions that will reduce their chances of having heart and blood vessel-related diseases in the future.

Dr Tinashe Chikowore, a Wellcome Trust Fellow in the SBIMB and in the Wits-South African Medical Research Council (SAMRC) Developmental Pathways to Health Research Unit (DPHRU) co-authored the paper with Professor Segun Fatumo from the African Computational Genomics Group (TACG), the Uganda Virus Research Institute, and London School of Hygiene and Tropical Medicine (LSHTM). Dr Abram Kamiza, a scientist at the SBIMB and TACG, was first author of the study.

Chikowore says, “We found that constructing genetic risk scores using information from African Americans led to predictions that were 5.1 times less accurate compared to those from Europeans, and 1.3 times better than combining genetic information from multiple ancestries in Africa for blood cholesterol levels. However, we found that genetic prediction varies in Africa, performing well in urban South African people compared with those in rural Uganda, due to differences in age, lifestyles, environments, and genetics.”

Genetic risk scores added to conventional risk factors – which include age, sex, body mass index and type 2 diabetes – improved the ability to identify people with high lipid levels by 48%, according to the study.

This means that increasing the proportion of Africans in global genetic studies will ensure that more accurate genetic risk scores can be constructed for disease prediction in Africa.

Professor Michèle Ramsay, the National Research Foundation South African Research Chairs Initiative Chair of Genomics and Bioinformatics in African populations and Director of the SBIMB, says, “The genetic risk prediction for complex diseases and related traits is not yet ready for widespread implementation in a clinical setting.

However, significant advances are being made, primarily in studies with people of European ancestry. It is gratifying that this study, spearheaded by young African scientists and published in a high-impact journal, is highlighting transferability of genetic risk algorithms to African populations. We hope that continued investment and support from funders, pharma, and governments will ensure that genetic risk can contribute to early prediction and preventative strategies to address the burden of non-communicable diseases in Africa.”

<https://www.wits.ac.za/news/latest-news/research-news/2022/2022-06/genetic-risk-scores-could-predict-disease-in-africans.html>



SA RESEARCH LEADS TO NEW WHO GUIDELINES FOR IMPROVED TB TREATMENT

12 MAY 2022 - WITS UNIVERSITY

Ground-breaking research conducted in SA to find shorter, more effective treatment for drug-resistant TB has informed global policy changes.

The World Health Organization (WHO) has announced key changes to the treatment of drug-resistant tuberculosis (DR-TB), a significant development which will benefit patients with DR-TB in SA and globally. Treatment time has been slashed from 18 months to six, the number of pills reduced from 23 a day to 23 per week, painful injections eliminated and side-effects reduced.

The research also revealed that nine out of every ten patients treated with the new regimen will be cured, offering hope to those who have DR-TB. Through an early access programme, some DR-TB patients in SA are already benefiting from the new regimen.

Under the leadership of Dr Norbert Ndjeka, recently appointed by SA's National Department of Health as chief director of TB, much of this pivotal research was conducted by the University of the Witwatersrand and the Clinical HIV Research Unit (CHRU) as part of clinical trials including the Nix-TB and ZeNix studies conducted by the Global TB Alliance. The trials mostly conducted in SA produced robust data which changed international policy.

Mycobacterium tuberculosis are the bacteria that cause TB.



Dr Ndjeka explains, “The new WHO guidelines allow almost all forms of DR-TB to be treated with either BPaLM (a combination of bedaquiline, pretomanid, linezolid and moxifloxacin) or BPaL (bedaquiline, pretomanid and linezolid). We welcome the WHO announcement which facilitates rapid implementation of the new regimen.”

Pretomanid first received regulatory approval in August 2019 for the treatment of certain forms of highly drug-resistant TB. BPaL was most recently evaluated in TB Alliance's ZeNix trial. The BPaLM regimen was evaluated in the successful TB-PRACTECAL trial, sponsored by Médecins Sans Frontières, in which CHRU participated under the leadership of Dr Mohammed Rassool.

Dr Francesca Conradie, an infectious diseases researcher in the School of Clinical Medicine at Wits, executive director of CHRU's Isango Lethemba TB research unit and principal investigator of the Nix-TB and ZeNix clinical trials, says, “The timing has

been lightning speed from the findings of the clinical trials to the adoption by the WHO of the treatments tested. This achievement speaks to South Africa's TB programme and Dr Ndjeka's visionary approach to addressing TB, which includes a strong focus on rigorous research. Under his leadership, we have been delivering this treatment to those that need it most under the BPAL clinical access programme since March 2021."

Dr Conradie is also the principal investigator of the BPAL clinical access programme in SA which is funded by USAID. "The treatment of drug resistant TB has been a rapidly changing field in the last 10 years and new medicines for DR-TB have been rapidly incorporated into the South African national TB programme," she adds.

Professor Shabir Mahdi, Dean of the Faculty of Health Sciences and Professor of Vaccinology at Wits, says, "In this centenary year of the University of the Witwatersrand, our researchers continue to produce ground-breaking research of international importance and more so for South Africa and Africa. The findings from this study will inform treatment programmes across the world, make treatment of the deadly scourge of TB more tolerable for patients, improve outcomes for patients and relieve pressure on health systems."

Conradie explains that the updates announced by the WHO include shorter novel six-month all-oral regimens for the treatment of multidrug and rifampicin-resistant TB (MDR/RR-TB), with or without additional resistance to fluoroquinolones (pre-XDR-TB). The new regimen consists of only three or four medications, namely, bedaquiline, pretomanid, and linezolid, with the addition of moxifloxacin.

"In addition, based on data from SA's national TB programme, the WHO has also recommended an alternative 9-month all-oral regimen for the treatment of MDR/RR-TB. In this regimen an older drug, ethionamide has been replaced with a newer drug, linezolid. Ethionamide has many side effects that often deter patients from completing their treatment."

According to the WHO, TB remains a threat to global public health and is one of the leading infectious causes of death globally. In 2020, an estimated ten million people developed TB and 1.5 million died from the disease. Owing to the impact of Covid-19, TB incidence could increase globally in 2022 and 2023.

"South Africa has once again delivered trailblazing research which will improve outcomes for patients with DR-TB in South Africa and internationally. This accomplishment has inspired us to continue our work in addressing the TB burden through research that produces better and shorter treatments that can cure the disease," concludes Dr Ndjeka.

About the Clinical HIV Research Unit

The Clinical HIV Research Unit is a division of the Wits Health Consortium which is wholly owned by the University of the Witwatersrand. South Africa is at the epicentre of the HIV and tuberculosis (TB) epidemics. CHRU runs clinical trials undertaking clinical research to prevent, treat and manage HIV/Aids, TB and associated diseases, as well as Covid-19. Its mission is to deliver excellence and quality in clinical research.

WITS JOURNAL OF CLINICAL MEDICINE

The Wits Journal of Clinical Medicine is a peer-reviewed, Open Access scientific research journal published triennially, and was established to provide a forum to showcase scientific research from the School of Clinical Medicine at the University of Witwatersrand, Johannesburg as well as from other institutions nationally and internationally. Please note that Volume 4, Issue 2, July 2022 is now available online.

The Wits Journal of Clinical Medicine is now PUBMED Central accredited!

Submissions are welcomed and the journal has a particular focus to encourage clinical and translational research especially from new academics, including students, registrars, fellows and junior consultants.

The Wits Journal of Clinical Medicine also provides a space where the various Departmental Research Day abstracts can be shared.

WJCM publishes original papers, review papers, case reports and letters to the editor. Send your manuscript to: PAM SINGH (pam@wjcm.co.za). For more information, visit the official website of the journal:

<https://journals.co.za/content/journal/wjcm>

Please click here to sign up for direct alerts on new articles and issues:

<https://journals.co.za/registration/personal>

Prof Pravin Manga (Editor)



SUBMISSION OF CONTENT

The newsletter will be published bimonthly and we welcome all content, staff (academic & professional) achievements, profiles, and student events and achievements. Photos are always welcome. Should you wish to submit any content for publication, kindly send it to: Rita.Kruger@wits.ac.za by 31 July 2022.

*(Please note that due to space restrictions content may be edited)

<https://www.wits.ac.za/clinicalmed/>

