

NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

# THE UNSUNG HEROES:

Acknowledging the Vital Contribution of Support Staff in Public Health

ISSUE 1 | VOLUME 7

CAUTION WET FLOOR



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Prof Adrian Puren

### Message from THE EXECUTIVE DIRECTOR

Dear Readers,

Welcome to the latest edition of the NICD Pulse, where we explore the remarkable strides in public health. This issue centres on the theme of **"The Unsung Heroes: Acknowledging the Vital Contribution of Support Staff in Public Health**," highlighting the Institutes and our employees' extraordinary efforts in advancing the public's well-being.

One shining example is the silent contribution of our unsung heroes and heroines that contribute to the institution's success. Among these unsung heroes are the dedicated NICD laundromat team, who work tirelessly to ensure our researchers have clean lab coats.

In pursuit of advancing public health, you can look forward to an informative read on the collaborative partnership between the Korean National Institute of Health (KNIH) and the NICD that drives Marburg virus research and addresses emerging infectious disease threats in Africa.

We are also proud to announce the relaunch of CoughWatchSA, an innovative initiative that engages the public through the power of participatory surveys. By actively involving citizens in the monitoring and



reporting of flu symptoms empowers individuals to contribute directly to public health efforts. Together, we can harness the collective wisdom of our communities and drive positive change.

Furthermore, we would like to congratulate the newly appointed Head of the Centre for Tuberculosis (CTB) and the Head of the Provincial Epidemiology Team (PET). Their invaluable expertise and leadership will undoubtedly steer us toward new frontiers in managing tuberculosis and other infectious diseases. We look forward to witnessing their visionary approaches and the impact they will have on public health outcomes. We reflect on the valued contributions of Sister Maleshwane Magasa, as we bid her farewell in her retirement.

This edition is a testament to the unwavering dedication and remarkable achievements of the NICD team who navigate uncharted territories, break down barriers, and pave the way for a healthier and safer future. We hope their stories inspire you.

Thank you for joining us on this journey of discovery and collaboration.

Please continue to share activities within your departments and centres with our Senior Communications Manager, Sinenhlanhlaj@nicd.ac.za. Thank you for your ongoing support and commitment, Enjoy the edition.

### **MEET OUR EDITORIAL TEAM**



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## Taking a closer look at the TB Diagnostic Network in South Africa – The USAID Diagnostic Network Assessment (DNA)

#### By the Centre for Tuberculosis (CTB)

The United States Agency for International Development Diagnostic Network (USAID) (DNA) Assessment recently conducted a comprehensive review of the TB Diagnostic Network in South Africa, in collaboration with the Centre for Tuberculosis, the National Health Laboratory Services (NHLS), and the National TB Programme (NDoH). Spanning from the 27<sup>th</sup> of February to the 10<sup>th</sup> of March 2023, the assessment aimed to evaluate the diagnostic network, its practices, and algorithms, identifying challenges and proposing evidence-based interventions to enhance its efficiency in meeting the goals of the National Strategic Plan.

With consultations at the national level and visits to 46 TB diagnostic facilities across all nine provinces, the findings praised the wellstructured and organised TB diagnostic network, led by the robust National TB Reference Laboratory. South Africa's adoption of a cutting-edge testing algorithm, utilising Xpert Ultra as the initial diagnostic test and adhering to World Health Organization (WHO) recommendations for universal drug-susceptibility testing (DST) for resistance to rifampin (RIF), was also recognised. Despite these positive aspects, areas requiring improvement were identified, and a comprehensive report has been shared with NHLS executives and the TB Directorate to address them effectively.

## CANVA TRAINING

On the 28<sup>th</sup> of June 2023, a Canva Training session was the NICD. The purpose of the training was to enhance the capacity for health/science communication within the institute by providing Centres with access to Canva, a visual design tool. This platform offers pre-made templates that can be used to create graphics, presentations, and other communication Centre Heads were requested to nominate two individuals from their respective Centres to receive training and utilise Canva for easier generation of academic posters and presentations.



#### By Puseletso Kobedi

Behind the scenes of every successful workplace, are heroes and heroines who often go unnoticed. Among these unsung heroes are the dedicated NICD laundromat team, who work tirelessly to ensure our researchers have clean lab coats.

In this article, we shed light on the essential contributions of Ms China Seete and Ms, Simangele Mtshali and recognise their hard work and dedication. In the world of public health, where scientific research, testing, and analysis are conducted, maintaining cleanliness and hygiene is of utmost importance. The significance of wearing clean lab coats cannot be overstated among the essential practices in the lab environment. Clean lab coats serve as a barrier against contamination, safeguarding both the researchers and the integrity of the research itself.

China and Smangele have been working at the laundry since 2019, and they wash between 50-60

lab coats per week. Operating massive equipment of machines and dryers for producing pristine creases. The NICD engages in sensitive research, which requires safety and cleanliness. Maintaining a hygienic environment is crucial in the lab environment to avoid compromising the results and endangering public safety. Clean lab coats are an integral part of maintaining cleanliness.

Although load shedding has been a huge challenge, with meticulous planning, the lab coats get delivered to the various centres every week without fail.

In the pursuit of public health excellence, a clean lab coat is more than a piece of clothing—it is a symbol of commitment to scientific integrity and safeguarding public health. We thank China and Smangele for their hard work and dedication.



## Joining Hands To Understand Emerging Infectious Disease Threats In Africa

#### By Dr Jacqueline Weyer, Koketso Matjane

On the 8<sup>th</sup> of June 2023, representatives from the Korea National Health Institute (KNIH) were hosted on campus by officials from the Centre for Emerging Zoonotic and Parasitic Diseases (CEZPD). The high and maximum containment facilities at the CEZPD and other Centres around the NICD were visited during the day.

The KNIH, through its International Cooperation Program, are funding collaborative research between the CEZPD and the Sokoine University of Agriculture. This research is conducted under the umbrella of the Southern African Centre for Infectious Diseases Surveillance (SACIDS) and will address questions on the ecology and epidemiology of the Marburg virus disease (a viral haemorrhagic fever with a high case fatality rate) in the Kagera Region of Tanzania.

The KNIH has been working to promote healthy lives and conquer disease since the 1940s and today has an impressive portfolio of cutting-edge contributions to biomedical science. Owing to their coinciding objectives, the CEZPD, through the NICD and the KNIH are now seeking ways to further future collaborations.

To learn more about the KNIH visit: <a href="https://www.nih.go.kr/eng/">https://www.nih.go.kr/eng/</a>



Representatives of NICD, KNIH, and Sokoine University met at the PRF Training Centre to seek ways to collaborate to promote public health research, particularly involving emerging zoonotic pathogens.

From front, left to right: Dr Jacqueline Weyer (Head CEZPD, NICD); Dr Joo-Yeon Lee (Director Centre for Emerging Virus Research); Prof Janusz Paweska (preceding Head CEZPD, NICD); Prof Gerald Minizo (Associate Professor, Sokoine University); Dr Hee-Young Lim (Staff Scientist, KNIH)

From the back, left to right: Dr Jeong-Su Lee (Senior Staff Scientist, KNIH) and Dr Edson Kinimi (Assistant Lecturer, Sokoine University).

## **Call for Manuscript submissions:** share your work with us!

#### By Koketso Matjane

The wait is finally over! The <u>Public Health Bulletin</u> <u>South Africa'(PHBSA)</u> website is in full operation and accepting manuscripts. The PHBSA will house research on communicable and non-communicable diseases, in the following categories: Surveillance, Epidemiological, Outbreak, Case studies, Opinion pieces, and Risk assessment & prevention research. Submission to the Public Health Bulletin South Africa offers the following benefits:

- Rigorous peer-review process: the PHBSA values excellence and will follow a rigorous peer-review process to obtain high-quality research outputs.
- Visibility and reach: the PHBSA will utilise various social media tools and press releases to enhance researchers' output. Moreover, owing to its free access, the PHBSA is anticipated to reach a greater audience.

3. Transparency: the PHBSA will utilise the criteria outlined in the instruction manuals as a basis for the review process.

Researchers are encouraged to read and follow the publishing guidelines (available on the website), before submitting their manuscripts.

To keep up with the PHBSA developments, follow PHBSA on:



https://www.facebook.com/profile. php?id=100092524597024



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https://www.linkedin.com/company/93264249/admin/feed/posts/

## What are people saying on social media?



#### Dr. Gatimu Mucha @GatimuMuchai

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Gail Boreham Thankyou for a very informative article on RSV disease. Like Reply Hide 3w



## **Community Voices Matter:** Exploring the Benefits of CoughWatchSA's Participatory Survey

#### **By Nande Harmans**

Public health is a collective responsibility that requires active involvement from individuals, communities, and organisations. One powerful tool in promoting public health is the participatory survey, a method that encourages the public to actively participate and contribute to vital research.

Discover the remarkable benefits that come from your active involvement and the public's participation in participatory surveys, fostering improved overall well-being within communities;

**Empowering Individuals:** Participatory surveys enable individuals to shape public health strategies, gaining a deeper understanding of community health issues and becoming key contributors to interventions.

**Influence Decision-Making:** Public participation in surveys influences decision-making, shaping policies, programs, and resource allocation based on community voices and experiences.

**Identifying Public Health Priorities:** Participatory surveys allow communities to express concerns and priorities, guiding practitioners and policymakers to address pressing needs and tailor interventions accordingly.

**Enhancing Data Accuracy and Relevance:** Public participation in surveys ensures comprehensive and representative data, overcoming biases and leading to effective public health strategies.

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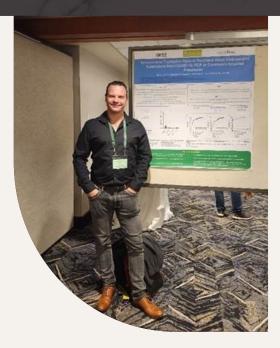
Fostering Community Engagement and Collaboration: Participatory surveys promote community engagement, problem-solving, and shared responsibility, allowing collaboration for improved community health and well-being.

Stay tuned for the upcoming CoughWatchSA platform. Join and share it to make a difference!

## **Globally Uniting For Public Health**

Strengthening Communities Worldwide





#### **By Nande Harmans**

Wayne Howard, Senior Medical Scientist for the Centre for Vaccines and Immunology, made a notable presentation at the esteemed Keystone Symposia on Lung Inflammation: Friend or Foe in Viral Infections conference. Held at Snowbird Resort, Utah, and USA from the 23<sup>rd</sup> to 26<sup>th</sup> of April 2023, Wayne delivered an engaging presentation titled "Kynurenine to Tryptophan Ratio in Peripheral Blood Distinguishes Tuberculosis from COVID-19, PCP, or Community-Acquired Pneumonia." His valuable insights contribute to advancing our understanding of distinguishing these respiratory conditions.

### Advancing Collaborative Efforts: US CDC Headquarters Delegation Explores CTB'S Work

#### By the Centre for Tuberculosis (CTB)

The Centre for Tuberculosis (CTB) had the privilege of hosting a delegation from the US Centres for Disease Control and Prevention (CDC) headquarters and the CDC South Africa office from the 27<sup>th</sup> to the 31<sup>st</sup> of March 2023. The purpose of their visit was to assess the progress of the funded activity titled "Application of Whole Genome Sequencing to Enhance Microbiological and Epidemiological Surveillance of Drug-Resistant Tuberculosis in South Africa." The delegation had the opportunity to tour the TB laboratory and the core sequencing facility, gaining valuable insights. Additionally, CDC-HQ presented their external quality assurance (EQA) program for TB tests, which holds potential benefits for South Africa. The week concluded with a debriefing session involving the Executive Director of NICD, the National TB Programme, and NHLS Academic Affairs Research Quality Assurance (AARQA).

## CENTRE FOR TUBERCULOSIS



## From healing hands to a lasting impact: Reflecting on the Journey of Sister Maleshwane Magasa

#### By Nande Harmans

After 12 years of dedicated service with the National Institute for Communicable Diseases (NICD), Sister Maleshwane Magasa, an Occupational Nurse Health Practitioner, bids farewell as she embarks on a welldeserved retirement. Reflecting on her remarkable journey, Sister Magasa takes us back to her first day at the NICD in early 2011.

Coming from an environment with different health hazards, she faced challenges but received invaluable support from colleagues like Prof Bloomberg and managers who guided her. Their unwavering support contributed to her professional growth and she is immensely grateful.

During her time at the NICD, Sister Magasa had memorable moments like attending the Bio-Safety and Risk conference, expanding her knowledge and connecting with global professionals. She also played a vital role in protecting and supporting scientists during the Ebola Outbreak in Sierra Leone, providing vaccinations and safety measures. These experiences brought her immense gratification.

Sister Magasa gained invaluable insights into General Lab Practices, working with dedicated colleagues and utilising the OHASIS program. These experiences and resources enhanced her ability to provide exceptional care to her colleagues.

A significant moment in Sister Magasa's career reaffirmed the importance of her work. She received a critical call from a struggling colleague, and without hesitation, provided necessary medical procedures, sought emergency assistance, and informed the family. Her swift response and expertise profoundly impacted her colleague's life, resulting in hospitalisation and proper care for a week. Reflecting on her experiences, Sister Magasa offers valuable advice for aspiring Occupational Health Practitioners. She highlights the importance of passion, empathy, and a comprehensive approach to serving others. Recognising the impact of occupational health on both individuals and communities, she acknowledges the significant contributions of the NICD and envisions even greater horizons for the Institute in the future.

Sister Magasa eagerly anticipates an active retirement, volunteering, and making a difference. She looks forward to new adventures, travelling, and exploring the world. Her legacy of dedication, compassion, and commitment to occupational health is celebrated as we wish her a fulfilling journey in this new chapter of her life.



Sister Maleshwane Magasa

## Youth Championing the Future of Public Health Interventions

#### By Puseletso Kobedi

In recent years, young people at the National Institute for Communicable Diseases (NICD) have been making significant contributions to the field of public health and research. Young researchers in the infectious disease space have been instrumental in advancing scientific knowledge and discovering new strategies to combat communicable diseases.

Every year during youth month, we take the opportunity to recognise the work of our young scientists and turn the spotlight on them and their work. In this edition, we chat with Dr Natalie Viljoen, a postdoctoral research fellow within the Centre for Emerging Zoonotic and Parasitic Diseases (CEZPD). In an age where opportunities

for young people are endless, what sparked her interest and led to her journey into the field of public health?

Natalie's, journey began when she was in the third year of her undergraduate degree, and she recalls telling her mom, "I've found it! I've found the thing that both intrigues and challenges me at the same time." Fast-forward a few years later, she's working on her postdoctoral research project entitled "Understanding the zoonotic potential of bat and rodent-borne viral agents through genomics informed surveillance and characterisation." Her primary focus has been on the

"I've found it! I've found the thing that both intrigues and challenges me at the same time."

lyssavirus, and in addition to the characterisation of novel viruses, she has been compiling an update for rabies in South Africa that is guided by all available surveillance, geospatial and sequence data to improve our understanding of rabies epidemiology in South Africa and identify research gaps.

> As a young researcher having to play a role in the public health space, Natalie shares that "As young people, we are comfortable working in a diverse and inclusive work environment and embrace different perspectives and change. We continually seek to improve the way things are done and to improve our knowledge of both the old and new." She hopes to continue her work toward eliminating dog-mediated human rabies.

The contributions of young people in the infectious disease space are essential in tackling global health challenges and securing a healthier future for all. Their research, innovation, advocacy, and collaboration are driving progress in infectious disease prevention, treatment, and control. By coming together, celebrating, and supporting these young champions, we nurture the next generation of global health leaders who will continue to work tirelessly to safeguard communities worldwide.

# ACHIEVEMENTS

 Introducing Dr Shaheed Vally Omar as the newly appointed Head of the Centre for Tuberculosis (CTB) and Ms Lehlohonolo Kumalo Chandu as the Head of the Provincial Epidemiology Team (PET)





Dr Shaheed Vally Omar

Ms Lehlohonolo Kumalo Chandu

2. The Centre for Tuberculosis achieved a significant milestone by becoming the first-ever performance evaluation laboratory to be listed by the Prequalification Unit for tuberculosis nucleic acid testing (NAT) evaluations. This remarkable achievement was officially recognised on 20th April 2023 as part of the World Health Organization's prequalification process for in vitro diagnostics. The listing serves as a testament to the centre's exceptional capabilities and dedication to advancing the field of tuberculosis diagnostics, reinforcing its position as a leader in the fight against this global health challenge.



World Health Organization



#### 3. Victorious Finishes: Celebrating Comrades Marathon Achievements

Dr Susan Meiring, a dedicated member of the Division of Public Health Surveillance and Response (DPHSR) GERMS-SA, achieved a remarkable milestone by completing her first Comrades Marathon in an impressive time of 10 hours, 56 minutes, and 7 seconds, aiming to inspire others living with type 1 diabetes to overcome any obstacles and pursue their goals with absolute determination.

Mr Sunnieboy Njikho, a Field Project Coordinator for DPHSR GERMS-SA in Mpumalanga, accomplished his personal best time of 10 hours and 17 minutes in his fourth Comrades marathon, surrounded by an exhilarating atmosphere and dedicated supporters, including his wife and fellow GERMS surveillance officers from KZN, who formed an amazing support crew. "This ultimate human challenge proved demanding yet incredibly fulfilling, making it an experience that everyone should have at least once in their lifetime."

Mr Mandla Nyembe, from the HIV Sero-Molecular division Centre for HIV and STIs (CHIVSTI), embarked on a challenging journey to the Comrades marathon, facing obstacles such as unfavourable weather conditions with rain and scorching heat, making his training arduous. Despite these difficulties, as it was his third Comrades marathon, he persevered through the demanding circumstances. During the race, he encountered moments of struggle, feeling the weight in his legs, particularly with only 6 kilometres left, yet he resolved to press on until the very end. With an impressive finishing time of 10 hours and 4 minutes, he surpassed his previous achievement, showcasing his resilience and determination beautifully.

Mr Shane Redelinghuys from the Centre for HIV and STIs (CHIVSTI) had another life-changing experience running The Ultimate Human Race. The Comrades ultramarathon taught him valuable self-discipline through commitment and training. Achieving his goal, he finished at 8:47:12, below 9 hours. Despite the cold start, proper refuelling and hydration helped him endure the warming weather. He had a good run, with a brief knee pain around 65km, but recovered and finished strong in the last 20 km. A pleasant experience was shared with his friends and family.



Dr Susan Meiring, DPHSR GERMS-SA





Mr Sunnieboy Njikho, Field Project Coordinator for DPHSR GERMS-SA Mpumalanga.





Mr Mandla Nyembe, Centre for HIV and STIs (CHIVSTI).





Mr Shane Redelinghuys, Centre for HIV and STIs (CHIVSTI)

