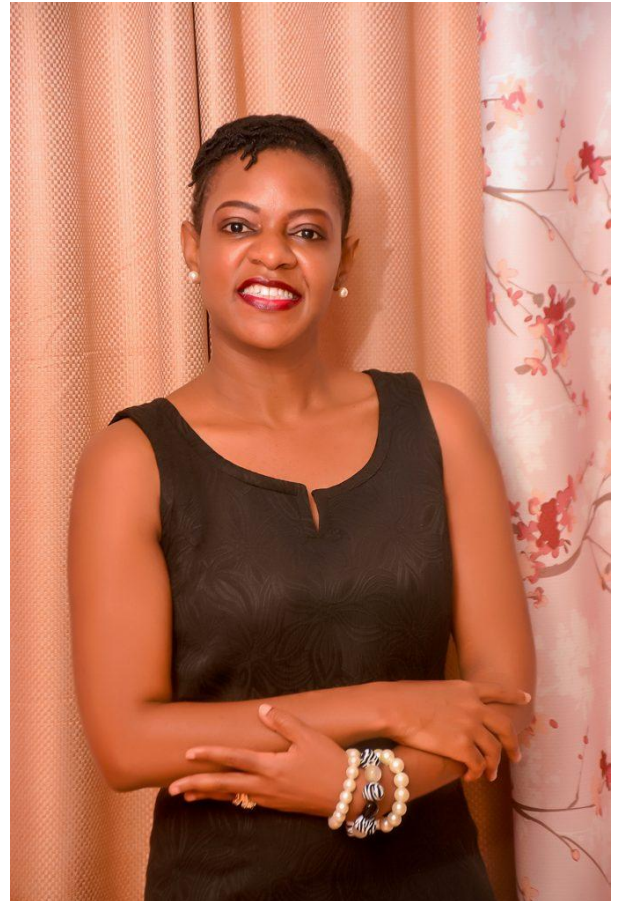


Prossy Naluyima



Give us a brief bio of yourself.



I am a laboratory scientist with a bachelor's degree in biomedical laboratory technology from Makerere University, a Master of Science degree in Biomedical Science from the University of Ulster, Northern Ireland, UK, and a doctorate in Medical Science, specializing in Immunology from Karolinska Institute of Sweden.

I have 20 years of experience in medical research with the Makerere University Walter Reed Project (MUWRP), Uganda. I oversee laboratories that support the evaluation of the health of patients, and the safety and immunogenicity of biological

products for the prevention or therapy of infectious and non-infectious diseases.

I am the Ugandan laboratory lead for the ACESO Uganda program. Furthermore, I am a member of the national task force for the Uganda Public Health Emergency Operations Centre, under the Ministry of Health. I am also a member of the Global Health Security Agenda consortium as well as the Signature Initiative to Mitigate Biological Threats in Africa (SIMBA) Sub-Working Group 4 (Non-Proliferation).

We would like our audience to know more about MUWRP. What can you tell us about this research organization and the major work that it is a part of?

MUWRP is a non-profit biomedical research organization, whose mission is to mitigate disease threats through quality research, health care and health systems strengthening. The project's scope includes clinical research in infectious and non-infectious diseases such as HIV, Ebola, Marburg, COVID-19, Influenza, and Influenza-like illnesses, and neglected tropical diseases such as Schistosomiasis, and cervical cancer, among others. A major part of the clinical research is clinical trials: we have conducted more than twelve phase I and II vaccine clinical trials including the first Ebola vaccine trial in Africa.

Over the course of your education and in your capacity as a laboratory director, what are one or two research projects that you are very proud of and are very close to your heart?

For my PhD, I studied the role of innate cellular immunity in the immunopathogenesis of HIV-1 infection in Uganda. One major finding was a previously undescribed population of terminally differentiated effector CD8 T cells that acquire enhanced innate cell-like characteristics during chronic viral infection. This research demonstrated that the immune system is highly adaptive in the context of viral infections, and

such functions can be harnessed for the development of vaccines or therapies.

The 2014-2016 Ebola outbreak was harrowing to watch and exposed weaknesses in public health systems in sub-Saharan Africa. I am therefore very proud of the work we have done in Uganda over the last 5 years to build the capacity of a multi-disciplinary team to care for patients infected with high-consequence pathogens and simultaneously conduct safe and ethical research that can inform better therapies and prevention strategies. This expertise was used during the Sudan Ebola virus outbreak in Uganda last year, demonstrating that it was possible to rapidly set up field labs to offer clinical lab tests that guide better management of such patients in low-resource settings.

What impact do you believe the work you have done so far has had in the field of infectious diseases?

Evaluating the safety and immunogenicity of candidate vaccine products in the Ugandan population has brought forth data that has contributed to the licensure by the European Medicines Agency of the Zaire Ebola virus vaccine *Zabdeno*. In addition, our research in cohorts of people living with HIV and in those at high risk of infection is contributing to a better understanding of HIV-treated infection in sub-Saharan Africa and the design of novel HIV vaccine immunogens.

We would love to get more acquainted with your work. Care to share a link to your ORCID and/or ResearchGate profile so that people can have a look at your publications?

[ORCID account Dr Prossy Naluyima](#)

[Researchgate profile Prossy-Naluyima](#)

What are some of the day-to-day tasks that you are involved in as part of your role as a laboratory director?

I provide principal investigator-level support for the design, implementation, management, coordination, and analysis of research protocols for studies undertaken in infectious and non-infectious diseases such as HIV, Ebola, Marburg, and Schistosomiasis. I plan and direct the overall policies and goals for the organization's laboratory services. I also supervise graduate students conducting research in the MUWRP laboratories.

You have grown and progressed during your time at MUWRP. What advice do you have for upcoming immunologists when it comes to career progression?

Be curious and willing to do what it takes to satisfy that curiosity. Immunology is still a nascent field in Africa and more hands are needed.

When the opportunity to learn more came in the form of the 1st Infectious Diseases in Africa symposium, I applied for it with the help of my then-laboratory director, Dr Michael Eller. That symposium opened my eyes to the field of immunology. I met other young people from all over Africa who were already pursuing careers in immunology and had the opportunity to learn from world-renowned immunologists such as Prof. Clive M. Gray and Dr Mario Roederer. After that I pursued every opportunity, I could find to learn and do more, but I also started to read widely on the field as it pertained to HIV infection in particular.

Senior researchers are always on the lookout for hard-working, smart and curious young people to mentor. If you are one, it will not take you long to find your way. I am very glad to still be pursuing collaborative projects with most of my mentors, a testament to the great relationships we have formed over the years.

What are three top things that you think anyone visiting Uganda should try out whenever they are coming through for a

visit?

Uganda regularly features in the top 10 best tourism destinations in the world. God blessed us with such a beautiful country, that it is very difficult to choose just three things. The river Nile, and its source in Lake Victoria, is a must-see. White water rafting is one of its major attractions. The Rwenzori Mountain ranges are another stunning attraction. While there, include visits to the Queen Elizabeth National Park to see the wildlife. And of course, go down to Bwindi Impenetrable Forest to see the gorillas. Be prepared to chance upon crater lakes, waterfalls, and other such beautiful sights along your way to the major attractions.

Interview by Vanessa Muwanga