

Building a robust pipeline of scientists leading climate change research in Africa

Candidate Profile



Position Lecturer and researcher

Institution

Malawi University of Science and Technology (MUST), Malawi

Country

Tanzania

Education

PhD, Biomedical Sciences, Sokoine University of Agriculture (SUA), Tanzania

Mentor

Prof. Gerald Misinzo, OR. Tambo Africa Research Chair, Sokoine University of Agriculture (SUA), Tanzania

Research Area

Livestock production and management.

Linda Peniel Salekwa

2021 One Planet Laureate Candidate

Linda Peniel Salekwa earned her BSc in biotechnology and laboratory sciences from the Sokoine University of Agriculture in 2012 and then went to the Nelson Mandela African Institution of Science and Technology for her MSc in life sciences and engineering, specializing in health and biomedical sciences. More recently, she completed her PhD in biomedical sciences back at Sokoine and says, "It wasn't easy, but I managed."

Her father encouraged her to work hard, aim higher, and do well in science, especially in biology and mathematics.

Now married and the mother of four children, she is a lecturer and researcher at Mbeya University of Science and Technology in Tanzania a visiting scholar at KU Leuven in Belgium.

"Based on my educational background, it made me decide that I could progress in microbial research and help my community in that area," she says. "But also, as I was growing up—I am from the Masai community—I was seeing people suffering, so I briefly thought about being a doctor. But then I felt that I couldn't help in that angle, so I decided if not by treating people at least for diagnosis and prevention to serve both humans and livestock," says Linda. Linda is working on a number of zoonotic diseases and has gained experience in the field of arboviruses—particularly Rift valley fever, Dengue fever virus, Chikungunya, and Yellow fever virus. She is focusing on studying the transmission activity as well as on developing vaccines and diagnostic assays to address arbovirus infections in the region. "I expect to work further on viral infectious diseases to ensure control of outbreaks in the community," she says.

Linda is also doing research on antimicrobial resistance and its development in the environment as well as in both humans and livestock. "I am trying to explore the influence of the COVID-19 pandemic on antimicrobial resistance (AMR) development in the One Health aspect and possible ways to reduce its impacts in the near future," she says. "AMR is a threat in both the human and livestock sectors."

"During my BSc, we did a lot of courses, and I liked the new technique of molecular biology mostly in the field," she recalls. "We typically don't get support from the community, and women also tend to lack confidence because "we were raised that hard things have to be done by men, which makes the number of woman in this field low at less than 40 percent." One goal Linda has is to start a program to motivate women in STEM (Science, Technology, Engineering, and Mathematics). "I hope to visit secondary schools to say 'let no one discourage you." We are engaging in role modeling and nurturing, and to do that, I need a good platform to help when they are discouraged. I have a group called STEM-FEM (Science, Technology, Engineering, and Mathematics – Female) and have been organizing online and in person mentoring events to encourage. It is my wish to do something for women and the young generation in the community."

Linda has worked with pastoral communities in Mbeya, Dodoma, Singida, Manyara, and various other parts of Tanzania. "I get consent and take samples from the animals," she says. "I also intend to develop a mobile app to aid in determining acute cases in livestock, but COVID has delayed, so I didn't yet get the funding for this project."

She heard about the One Planet Fellowship from friends of hers who were AWARD Fellows, and she is so excited to have been selected. "The program has already been of assistance to me, especially due to the mentoring aspect," Linda says. "It has already helped me to know where I am going and has helped me to sharpen my soft skills. I believe that, with what I have acquired through the fellowship, I can do whatever I dream to do!"

She intends to share whatever she learns. "I am a university teacher and a mother—I will pass along to my students, my children, and my colleagues, and I can provide mentorship for opportunities they want to pursue."

Linda focuses on studying the transmission activity of arbovirus and developing vaccines and diagnostic assays to address arbovirus infections in Tanzania.

In terms of challenges, she mentioned the need to balance between family and career, as well as the lack of female role models. As she is currently in Belgium, she also mentions the choices she has to make.

Linda Peniel Salekwa is one of the growing number of candidates selected to participate in the One Planet Fellowship. The One Planet Fellowship is a career development initiative that is building a robust pipeline of highly connected, inter-generational scientists equipped to use a gender lens to help Africa's smallholder farmers cope with climate change. The One Planet Fellowship is funded by the Bill &Melinda Gates Foundation, the BNP Paribas Foundation, the European Union and Canada's International Development Research Centre (IDRC). African Women in Agricultural Research and Development (AWARD) and Agropolis Fondation are jointly implementing the Fellowship.

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