# Women of the World of Science WOWS Allies and Mentorship Scheme Africa

# **The Mentees**



#### Mulenga Chilumba Mwenda-Chimfwembe - PATH-MACEPA

Mulenga has been working in malaria research for almost 10 years. Her work has evolved from malaria microscopy to malaria molecular biology. She is currently involved in: Species characterisation of both the anopheles vectors and the plasmodium parasites; Genotyping of plasmodium falciparum species to track transmission; Seroprevalence analysis of blood samples using ELISA and Luminex platform; Basic sequencing of plasmodium amplicons using the Minlon; and Detection of anti-malaria drug resistance markers in plasmodium falciparum field samples.

Mulenga sees her career progressing in plasmodium genetics. At present, Zambia has very limited resources and platforms for her to build this career and she would like to utilize her scientific knowledge and understanding to be useful and give back to her country.

#### Danai Zhou - University of Zimbabwe



Danai is senior lecturer of biochemistry and genetics at the University of Zimbabwe, College of Health Sciences (UZ-CHS) in the Department of Medical Laboratory Sciences (DMLS). She holds a BSc in Applied Biology and Biochemistry from National University of Science and Technology, Zimbabwe, a MSc in Clinical Biochemistry, from the UZ-CHS and a PhD from the University of Oslo, Norway. Dr Zhou started her career as a high school teacher in Zimbabwe. After attaining her master's degree, she transitioned to junior lectureship at Chinhoyi University of Technology (CUT), in Zimbabwe in 2006. In 2009 she transferred to the UZ-CHS, and was promoted to senior lectureship in 2017. At the UZ-CHS, she has cosupervised many undergraduate and postgraduate students' projects, covering various areas including non-communicable and communicable diseases such as HIV. During her PhD, she was project leader for six master's students (four female). In April 2018 she received a Fogarty International Center, HIV Research Training Program (HRTP) postdoctoral fellowship. The HRTP is hosted by the University of Zimbabwe (UZ) and University at Buffalo. State University of New York (UB). Her HRTP postdoctoral award comprised opportunities to travel to the United States for two six-month visits to UB and a grant for pharmacogenomics research. In addition to the HRTP project, she continues to supervise UZ-CHS undergraduate and master's students, and is also supervising two female PhD students. She is currently contributing to empowerment of women and girls in science through leadership of activities of the Organization for Women Scientists for Developing Countries-Zimbabwe National Chapter.



# Chapwa Kasoma - African Centre for Crop Improvement (ACCI) University of KwaZulu-Natal

Chapwa obtained her BSc in Molecular Biology and Genetics and MSc in crop science (plant breeding and seed systems) from the University of Zambia in 2009 and 2013, respectively. She has over 5 years' experience working in the area of crop science mainly with national and international seed companies including Zambia seed company, DuPont Pioneer and Monsanto seed companies. Chapwa has worked in various roles research assistant, field agronomist and finally senior research associate. In 2014 and 2016, she participated in the African Women in Agricultural Research and Development (AWARD) fellowship and the Young African Leaders Initiative-Mandela Washington Fellowship (YALI-MWF), respectively. These experiences presented her with the opportunity to enrol as a PhD candidate in the African Centre for Crop Improvement (ACCI) at the University of KwaZulu- Natal in South Africa. She is currently in her third year of her PhD in plant breeding and she looks forward to applying herself actively in her country's research and development sector once doctoral studies are completed. Currently, she is also part of a three-member team implementing a project targeting three generations of females: high school girls aspiring for science, college females in STEM programs and women farmers. The project aims to instigate and sustain female participation in STEM subjects and careers.

# Mercy Badu - Kwame Nkrumah University of Science and Technology



Dr Badu holds BSc, MSc and PhD degrees in Organic and Natural Products Chemistry. She started her teaching and research career in 2007, when she was employed as a lecturer at the Department of Chemistry, Kwame Nkrumah University of Science and Technology (KNUST) following her MSc in the same Department. Mercy completed her PhD in 2015. She has won a number of international awards and fellowships during her PhD studies, these include the University of Michigan Africa Presidential Scholars Awards (2012), Commonwealth Split-Site scholarship award (2013) and L'Oreal UNESCO For Women in Science regional fellowships (2013). These awards gave her the opportunity to travel to universities in the United Kingdom and United States of America to work with renowned scientist in her field of study. It also gave her the opportunity to buy a few state-of-the-art pieces of equipment to establish her own research laboratory in Ghana. After her PhD studies Dr Badu secured a number research grants. These included: the Climate Impact Research and Capacity Leadership Enhancement (CIRCLE) post-doctoral fellowship (2017) and The World Academy of Sciences (TWAS), Individual Research Grant (2017-2019), the International Foundation for Science (IFS) grant (2018-2021), the Leading Integrated Research for Agenda (LIRA) 2030 Africa research grant (2019-2021) and, the Organisation for Women in Science in the Developing World (OWSD) Early Career Fellowship award (2019-2021).

Mercy also works with mentoring organizations to mentor young women pursuing careers in the field of STEM. Including organizations such as: African Research Academies for Women Ghana (ARAW-G), MasterCard Foundation Scholars under the Campaign for Female Education (Camfed) programme, the Millennium Development Authority (MiDA) Internship and Mentoring programme. She has also co-founded the Women in Science Technology Engineering and Mathematics (WiSTEM) initiative. The aim of the WiSTEM initiative is to inspire and sustain the younger generation in pursuing careers in the field of STEM. WISTEM works in collaboration with the Vice Chancellor's Office, KNUST to organize mentoring and leadership coaching programmes in Ghana.

# Owusu Dorcas-Ohui - Garden City University College

Orwusu is a young female scientist with a PhD. Her career goals are to become an academic tutor in a higher education institution and a successful researcher in the area of infectious disease in Ghana and Africa. Currently, she is employed as a Lecturer in the Department of Medical Laboratory Technology, Garden City University College, a private institution in Kumasi Ghana. Her duties include giving lectures in Molecular Biology, supervising undergraduate student research as well as providing academic and consultative support to students in their learning activities. She has previously worked as a Biomedical Scientist on various research projects at the Kumasi Centre for Collaborative Research in Tropical Medicine through which I obtained my PhD in Immunology.

Dr Dorcas-Ohui hopes to establish her research career in immunology and infectious disease. Her long-term goal is to become an academic professor well vested in her field of expertise and also doing excellently well with her personal life.

In her endeavour to be successful, she has managed through all the challenges associated with being a female, young and living in a resource-limited country, Ghana. Currently, she is the only female lecturer in her academic Department and the challenges she faces include being an efficient role model for the students.





# Ekenechukwu Ogbuagu - Nnamdi Azikiwe University Teaching Hospital Nnewi Anambra State Nigeria

Ekenechukwu is a doctor (MBBS) with over 10 years of clinical practice experience.

She works as a Principal Medical Officer (PMO) in a tertiary healthcare facility in Nigeria. She has remained in active clinical practice as the head physician in charge of HIV care and management. This position made her develop great interest in HIV medicine. She manages over 5,000 HIV positive patients with varying clinical, immunological and virological stages. She also chairs the drug selection committee where patients who have failed on their HIV treatment regimen are discussed and managed. She has a MSc in Human Physiology and a WHO/TDR Massive Open Online Course (MOOC) certificate on Implementation Research (IR) with a focus on Infectious Diseases of Poverty (IDP). She is currently a PhD student in Physiology.

As a PMO in the hospital, she participates in the training of Resident doctors, Internship Doctors and Medical undergraduates who do rotational postings in the HIV clinic. This position has also helped her to mentor both undergraduates, medical and allied health professionals academically in basic medical research methods. Since 2016 she has coordinated the professional continuing development program for medical officers in the clinic. This has included the responsibility of organizing workshops and trainings. Dr Ogbuagu also supervise antiretroviral treatment (ART) commencement and ART switches.

### Njunda Anna Longdoh - University Of Buea

Njunda obtained her PhD in Medical Microbiology and Parasitology in 1997 at the University of Lagos, Nigeria. She started lecturing in 1998 in the University of Buea, Cameron. Dr Anna Longdoh, has been Head of Department for Medical Laboratory Sciences for eight years followed by the Vice Dean for Programs and Academic Affairs for four years, and she has been the Vice Dean for Studies and Student Affairs for the past three years. Her research focuses on diagnosis and interaction of tropical infections. She has more than a hundred scientific publications in peer-reviewed journals. Some of her research findings have been presented at both national and international scientific workshops. She has been involved with writing new curricular for programs in the field of microbiology and parasitology and has a passion for teaching haematology to students. She offers career counselling to students at workshops organised by the Ministry of Higher Education and is a co-author of three books. As a sideline activity, she is involved with farming in her community. As a member of the African Chamber of Commerce she owns a farm where she does some agriculture with rural women. As a scientist and farmer, she encounters a lot of young people and rural women who look up to her for directions in various aspects of their lives. She talks to them about some of their health issues, work-life balance amongst other areas of concern.



# Estelle Madaha Longla - University of Yaoundé, Cameroon

Estelle graduated with a BSc in Biochemistry in 2008, an MSc in Medical Microbiology specifically in Bacteriology in 2013 and is currently an outgoing PhD scholar. During her PhD years, she has studied the Biochemistry and the genetic resistance of clinical isolates of Pseudomonas aeruginosa and Acinetobacter baumannii.

From 2016-2018 she was working as a Medical Analysis Engineer in a Medical Analysis Laboratory (Laboratoire d'Analyses Medicales du Centre) here in Yaoundé, Cameroon. Following this she found an opportunity to travel for a research visit at North West University in South Africa. She spent twelve months there from November 2018 to October 2019. This placement helped her sharpen her skills in molecular analyses and management of whole genome sequencing data. Early results of her thesis have been presented during two Medical Biology events in 2019. Two manuscripts are written and the first one is about to be submitted. Estelle has gained lots of skills through online courses. This has included courses on Bacterial Genomes: From DNA To Protein Function Using Bioinformatics with Wellcome Genome Campus Advanced Courses and Scientific Conferences (certificate obtained) and an online course on metabolomics with the University of Birmingham.