

UNVEILING OUR 2023 MAWAZO FELLOWS!

We are excited to introduce our **third cohort of Mawazo Fellows year 2023/2024**.

We are doubly excited to announce that unlike previous cohorts which mainly comprised **Fellows from the East African region**, for 2023/2024, our Fellows are selected from all over the African continent. The cohort consists of **40 Mawazo Fellows**, who are current **PhD candidates** at universities, representing **sixteen (16) African nations**. Each is pursuing innovative local research in a range of fields including **Agriculture; Technology; Climate Change; Engineering; Gender and Governance; Business, Entrepreneurship and Economics; Health; and Education**.

These women Fellows join a growing network of previous Mawazo Institute Fellows (current Alumni), and a **larger network of women in research, scholarship and innovation**, building upon this critical mass of **emergent and established voices** on the continent. By supporting the professional development of African women in the knowledge sector, we can amplify the voices and contributions of these women, and therefore contribute to the continent's development.

The Mawazo Fellowship is one of the Programmes of the Mawazo Institute that **provides professional development through a range of online courses and free resources** created and curated by the Mawazo Team, with early-career African researchers in mind, as well as critical support of scholars on their path-to-PhD, and beyond.

Find out more about each of our 40 Mawazo Fellows and details about their research below.

Agriculture and Food Security



AUNE TUYOLENI ANGOBE (Namibia)

Investigation of facultative Crassulacean Acid Metabolism (CAM) photosynthetic adaptation in Southern African species as a novel agricultural production system in drier climates



DARLINE DIZE (Cameroon)

Novel antitrypanosomal diaminoquinazoline analogues from repurposing the Medicines for Malaria Venture Open Access Pathogen Box library



MONIQUE AINYAKOU (Ivory Coast)

Contribution to the recovery of waste from poultry slaughterhouses in the district of Abidjan



REHEMAH GWOKYALYA (Uganda)

The role of bacterial symbionts in mediating bi-trophic interactions between host- and parasitoids in invasive fruit flies



SOUAND TAHI (Benin)

Optimization of machine learning techniques performances in maize yield prediction under several controlled weather and fertilisation patterns

Climate Change, Natural Resources, and Environment



AISSATOU SITTA (Niger)
Assessment of Sub-seasonal to Seasonal Operational Climatic Forecast Methods and Skills over Sahelian Region



FELICIA ENOCH IKPOKONTE (Nigeria)
The environmental legal framework and resolution of environmental disputes in the Nigerian petroleum sector



JACINTA KINYUNZU (Kenya)
A 2000 year record of Indian ocean SST and implications for adaptation to climate extremes in Eastern and southern Africa



JOSEPHINE MWAFULA (Zimbabwe)
Spatio-temporal dynamics of sediment fluxes in Tugwi-Mukosi: A large inland dam in Zimbabwe



LYDIA DZIEDZORM SENANU (Ghana)
The use of modified ceramic water filters to remove arsenic and mercury from surface mining water



LULEKA DLAMINI (South Africa)
Assessing climate-smart agricultural options for rain-fed small-scale farmers in data-limited areas of South Africa: The integration of remote sensing and crop models



MA-LYSE NEMA (Rwanda)
Characterization and Modelling of Landslides and Risk Evaluation in the Kivu Catchment of Rwanda



NANCHIN WINIFRED KAZEH (Nigeria)
Implications of climate and anthropogenic land-use change on bird species composition and distribution in Nigeria



NQOBIZITHA NDEBELE (Zimbabwe)
Development of a high efficiency antifouling nanocomposite polymer membrane for water treatment.

Education and Pedagogy



THANDILE TANZILE GULE (Eswatini)

Sustainable water management of aquatic ecosystems of Addis Ababa city, Ethiopia in the face of urban expansion, climate and demographic changes



MIRIAM LOIVOTOKI (Tanzania)

Assessing educational support systems for children with autism spectrum disorders (ASD) within inclusive settings in selected regions in Tanzania.



FIREHIWOT GIRMA DIRES (Ethiopia)

Hydropower Generation and Operation Planning for Ethiopia



JOHRA SAID ALI (Kenya)

Iron and steel industry slag as heterogeneous catalyst in transesterification of waste cooking oil to Biodiesel



KEMI JEGEDE (Namibia)

Integrated renewable energy and resource network optimisation for off-grid energy supply to rural communities



LETTA MAHLOHONOLO NTULI (South Africa)

Fabrication, Characterization and Techno-economic Analysis (TEA) of low-cost, sustainable, non-invasive, and anti-microbial sweat-glucose sensors

Gender, Rights and Governance



STELLAH BONARERI OIRERE (Kenya)

Modification of macadamia shells to cellulose acetate for production of biodegradable plastic packaging



ESTHER MUNIRA GIMONO (Uganda)

Assessment of sexual reproductive health rights of deaf women and girls in Uganda



LILIAN MULATI (Kenya)

Structural Violence And Encampment Policy In Kenya: The Case Of Urban Refugees In Nairobi Metropolitan Region

Information and Technology



AMINATA DEMBELE (Mali)

A Novel Model for Detecting Distributed Denial of Service (DDoS) Attack in Software-Defined Networking Using Artificial Intelligence Techniques.



DORCAS GICUKU MWIGERERI (Kenya)

An Ensemble Approach based on Numerical Weather Prediction and Random Forest for Solar Energy Forecasting



IYANU PELUMI ADEGUN (Nigeria)

Development of an ensemble deep learning model for predicting lassa fever outbreak



MBITHE NZOMO (Kenya)

An Agent-Based Framework for Data Fusion, Situation Analysis, and Decision Support Towards Precision Health



MERCY MAWIA MULWA (Kenya)

Explainable Machine Learning Approach on Sensor Based Human Gait Analysis for Assistive Device Model Prediction and 3-D Design



PROSSY NAMUWULYA (Uganda)

Assessing the aetiology of measles disease and measles-like illness in Uganda

Life and Health Sciences



ADEDOYIN TINUADE ADEBOYE (Nigeria)

An Integrated Multi-omics Approach to Understanding Schistosomiasis Associated Bladder Pathology and Tumorigenesis



CAROLINE APONDI OCHIENG (Kenya)

Molecular characterization and transmission dynamics of Chikungunya and Dengue viruses in Kenya, 2011-2022



CELIA M.J. MATYANGA (Zimbabwe)

The Effect of African Potato (*Hypoxis hemerocallidea*) on the Pharmacokinetics of Tenofovir and Lamivudine



CLARISSA DETE (Benin)

Relative performance of model selection criteria based on Kullback's Symmetric Divergence in survival analysis with applications using genetic data



LOISE NTHAMBI JOSEPH (Kenya)

Urine high-risk human papillomavirus testing as an alternative cervical screening method in Kenya



LOVETH ILEVBARO OYEWO (Nigeria)

Prevalence, antibiotic resistance, virulence gene profile, and source tracking of *Listeria monocytogenes* strains



MARY WETANI AGORIWO (Ghana)

Towards strengthening rehabilitation for persons with Parkinson's disease: A multiphase mixed method study in the southern sector of Ghana



NONO VANESSA NINKEH (Cameroon)

Molecular characterization and genetic diversity of isoniazid-resistant strains of *Mycobacterium tuberculosis* clinical isolates in Cameroon



SALOME HEYMANN (Ghana)

The Effect of Nutrition on Chronic Inflammation and Severity of Autism Spectrum Disorder among Diagnosed Children in the Greater Accra Region of Ghana

Mathematics and Physical Sciences



TAONA EMMAH MUDHULI (Zimbabwe)

The impact of non-nucleoside reverse transcriptase inhibitor plasma levels and human milk oligosaccharide content on the gut microbiota of HIV exposed infants



LINEO MXAKAZA (South Africa)

Platinum based 2D metal dichalcogenides (PtS₂, PtSe₂, PtTe₂) decorated with N-doped graphene quantum dots for photo-electrocatalytic hydrogen evolution reaction (HER)