



The goal of Mawazo is to enable more African women to become leaders across society. This has been my story, and it can be the story of many other women if given the chance to thrive and the resources to succeed.

Dr. Rose M. Mutiso
 CEO & Co-Founder of the Mawazo Institute

# Index

Letter from Our CEO	04	Our Impact	16
Our Values	05	Programme Spotlight	18
About Mawazo	06	Institutional Achievements	29
The Mawazo Story	07	What We've Learned	30
Our Big Idea	09	Conferences and Trainings	32
Africa at a Glance	10	Media	36
African Women at a Glance	11	Financial Report	40
Kenya at a Glance	11	Our Team	42
Why Our Work is Needed	13	Our Staff	44
Our Theory of Change	14	Our Partners	48
Our Programmes	15	Contact Information	50



### **Letter from Our CEO**

When my co-founder and I started the Mawazo Institute, we wanted to give Kenyan women in the sciences an opportunity rarely given to them: to shine, grow to the best of their abilities, and position themselves as leaders.

2018 was our most ambitious year yet. It saw us meet our goals for our first cohort of PhD Scholars and showed us the great potential—and need—for programmes like ours. In its inaugural year, our PhD Scholars Programme for African women received an overwhelming response: 170 applicants from seven African countries, including the DRC, Zimbabwe, Malawi, Nigeria, and Rwanda. Our final 10 Scholars are finding urgent solutions to problems facing the region, from the threat of zoonotic viruses to the need for smart African cities. With a median age of 32, they represent the future of academia, policy, and leadership in Kenya and the region.

More than half of our inaugural PhD Scholars are on track to earn their doctoral degrees by 2020. The other half, in the next three years. In a country where only 11% of every doctoral class graduates, we cannot underscore the importance of this. We are grateful to have received the support of partners including the African Population & Health Research Centre (APHRC), The Conversation Africa, and the German Academic Exchange Service (DAAD) in implementing the Scholars programme in its first year.

Mawazo envisions itself as an incubator for great ideas. We know that there is a lot of exciting, pivotal research taking place on the continent that many remain unaware of. To that end, we work to improve engagement with science among policy makers and the general public. We were thrilled to officially launch our public engagement programme in January 2018 with the first ever Nairobi Ideas Night: an event that introduced local researchers to new audiences. We went on to host other events including the 2018 African Science Week (in partnership with the Next Einstein Forum, Johnson and Johnson Innovation, and the L'Oréal Foundation) — and launched our own science

podcast, the Nairobi Ideas Podcast. Giving listeners across the globe an opportunity to meet some of Kenya's most ambitious scientists. By publicizing the work of African scientists, thinkers, and makers in this way, particularly women, it not only encourages them to continue excelling in their work, but also provides validation for current and future generations that science is important. Mawazo also contributed to a number of important policy conversations on the future of the African higher education sector and women's participation in science — establishing ourselves as a valuable peer.

As we look ahead, we are encouraged by what we have achieved in our first year of programming. 2017 was about setting a solid base for Mawazo. 2018 was about piloting our programmes and establishing ourselves in the higher education ecosystem. What we have accomplished is in no small part due to the support of the many individuals and organisations who also believe in the importance of empowering African women, nurturing young scientists, and promoting public engagement with science. We continue to see the value in our work, and can only look forward to more achievements in the coming years. It is our hope that you will journey with us in our growth and that to our beneficiaries, we will continue to be a niche source of support, nurturing Africa's young female scientists and the next generation of thought and policy leaders.

1450

Rose M. Mutiso, Ph.D. CEO and Co-Founder

### **Our Values**

### Respect

We treat everyone with respect and dignity.

### Collaboration

We are collaborative and partnership driven — as a team and within our ecosystem.

### Independence

Our scholars and fellows set their own research agendas and their findings are not influenced by funders, or others.

### **Purpose**

We are bold and ambitious.
We work hard and with
conviction. We are optimistic
about our work and its
impact.

### **Excellence**

We raise the standard through creativity, innovation, and rigor. We are curious, adaptable, value growth, and are continually learning.

### **Integrity**

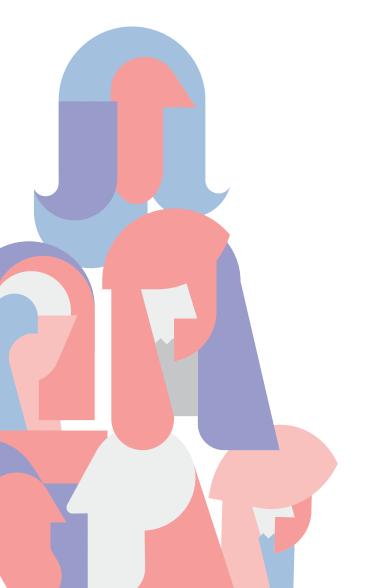
We are principled, transparent, and consistent in all we do.



### **About Mawazo**

A research and leadership incubator for women with ideas.

We envision a world in which the voices and ideas of African women are amplified to shape the future of the continent.



The Mawazo Institute is a non-profit research institute founded in 2017 and based in Nairobi, Kenya. In Kiswahili, mawazo means "ideas." Mawazo's mission is to support the next generation of female scholars and thought leaders in East Africa, and to get policymakers and the general public engaged with their work. Mawazo's programmes equip young African women to conduct high quality research on issues affecting African development. We also provide training and platforms for our programme beneficiaries and other local experts to spark important conversations and influence decision making in the public sphere. From our institution's home base in Nairobi, we also support the professional development of a broad audience of African researchers and practitioners via our digital platforms.

Mawazo accomplishes its mission through four core programmes. The PhD Scholars and Research Fellows programmes provide research funding and other support to African women based in East Africa who are pursuing doctoral studies and postdoctoral research in science, technology, engineering and mathematics (STEM), as well as the social sciences. The Public Engagement and Policy programme connects the research produced by our fellows and other local experts to policymakers and the general public to promote public understanding of complex issues, and encourage evidence-based decision making. The Training and Resources programme connects African researchers and practitioners to training materials, resources and opportunities that promote their academic and professional development.

## **The Mawazo Story**

Investing in the next generation of African female leaders.

The Mawazo Institute was founded in 2017 by Dr. Rose M. Mutiso and Rachel Strohm, who met while pursuing undergraduate studies at Dartmouth College in New Hampshire, USA. Their combined research backgrounds in the physical and social sciences, as well as their global work experiences in the US, South Asia, and sub-Saharan Africa in the subsequent years, led to the creation of Mawazo. They both found that the further they advanced in their careers, the fewer women, in particular African women, they found engaged in high level policy discussions, important public debates, and academic leadership.

For our founders, it was a dangerous oversight that African women's voices were crucially missing when it came to charting solutions to some of the greatest challenges facing the 21st Century, despite their disproportionate impacts on the continent and on women themselves. Rose and Rachel established Mawazo with the belief that African women — particularly young women — can infuse new energy, talent, and skills needed to unlock a more secure and equitable future. Our founders understood that good ideas also need platforms to achieve their impact. This is why Mawazo is invested in finding avenues for the public and policy makers to engage with the work of African researchers, experts, makers, thinkers, and innovators.

The Mawazo Institute is an investment in the next generation of African women who will go on to be thought leaders and changemakers in academia, industry, civil society, and the public sector. A thought leader is an expert in their field who has a public platform to communicate their ideas. Thought leaders are recognised as a trusted source of credible and relevant information by leaders in government and industry, as well as the general public.

The Mawazo Institute



To us, science encompasses both the broad fields of STEM (Science, Technology, **Engineering, Math) and** the Social and Behavioral Sciences. We define 'science' as inclusively as possible because we believe that multi-disciplinary tools are needed to tackle global challenges. It is versatile thinkers challenging traditional boundaries of science who will shape the future.

# **Our Big Idea**

Leveraging academia and women to generate new ideas for Africa

Ideas are powerful. They are the essence of creativity, the spark to innovation and the call to research. As Africa confronts entrenched and emerging socio-economic challenges, fresh ideas and new approaches are needed. With approximately 15% of the world's population, the continent has great potential for innovation. Yet, despite promising developments in areas such as technology and communications, Africa's research and development capacity remains significantly underutilised. Africa's research output is the lowest in the world, and the limited research produced is often inaccessible to non-expert audiences such as policymakers and the general public. Further, women's vital contributions are left out of policy and decision making, yet girls and women make up half the continent's population.

More needs to be done to incubate new ideas for Africa's development, integrate them into policy and public life, and support the equal participation of women in knowledge and decision-making spheres. Mawazo believes that by diversifying and supporting the ecosystem in which ideas are developed and shared, we can inspire the home-grown solutions Africa's future needs. Our work begins by tapping into the underlying potential of academia as an engine for both innovation and women's empowerment.

At Mawazo, we believe that academia can be a tool for the empowerment of women – and that women are key to unlocking its underutilised potential by infusing new talent, energy, and perspectives into research, policy making, and public discourse. We believe that by diversifying and supporting the ecosystem in which ideas are developed and shared, we can inspire the homegrown solutions Africa's future needs.





### **Africa at a Glance**

### QUANTITY AND QUALITY OF RESEARCH BEING PRODUCED IS LOW DUE TO OVERSTRETCHED RESOURCES.

Sub Saharan Africa is home to 15% of the world's population but produces less than 1% of global research output in STEM.

The World Bank and Elsevier, 2014. "A decade of development in sub-Saharan African science, technology, engineering and mathematics research.

Africa needs an extra 1 million PhD's to find home grown solutions for its pressing development needs.

Christoffels, Allan. 2018. "Africa needs another million PhD scientists to develop homegrown solutions". Quartz Africa

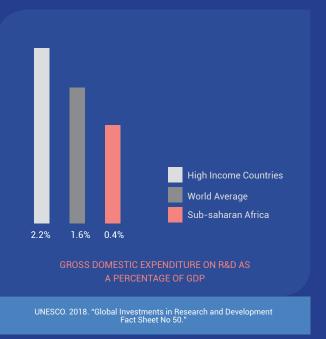
Only 15% of articles in top journals in the field of African Studies were written by scholars based in Africa.

Briggs, Ryan, and Scott Weathers. 2016. "Gender and locaton in African politos scholarship: the other white man's burden?" African Affairs

The region's share of global citations is less than 0.2%.

Britsh Council and German Academic Exchange Service. 2018. "Building PhD Capacity in Sub-Saharan Africa."





### **African Women at a Glance**

#### WOMEN REMAIN UNDERREPRESENTED IN BOTH RESEARCH AND ACADEMIA.

On average, women make up 30% of Africa's researchers, and much less in many countries.

80% of women pursuing PhD studies in Kenya are self funded.

DOMINANT EXPERTS ON AFRICAN ISSUES ARE TYPICALLY MALE INCLUDING SCHOLARS

#### **LIMITED FUNDS**

STUDENTS EXACERBATE LOW COMPLETION RATES.

## Kenya at a Glance

2:1 Ratio of men to women enrolled in PhD programmes with the ratio being even worse in STEM fields.

Over half of teaching staff at public universities do not have PhDs.

Only 11% of every doctoral class graduates.

As of 2014. 5 of the 22 public chartered universities in Kenya had adhered to the one-third gender rule among teaching staff.

The average amount of time taken to complete a PhD degree is 4-5 years globally. Kenyan **PhD students** take an average 6 years.

E. Mukhwana, S. Oure, S. Kiptoo, A. Kande, R. Njue, J. Too and D.K. Some. "State of University Education in Kenya. Commission for University Education". Discussion Paper 04. Nairobi, Kenya.

Omulando, Carolyne, and Peter L Barasa. 2018. "Research and PhD Capacities In Sub-Saharan África: Kenya Report". British Council and German Academic Exchange Service, DAAD.

E. Mukhwana, E.J, L.J Koskei and O.S Oure. 2017. "Gender and diversity among staff of Public Universities in Kenya." RUFORUM. Working Document Series (ISSN 1607-9345) No. 15: 75-91



# The Mawazo Institute was our "discovery of the year" in 2018. We share the goal of unleashing the potential of women in science and research.

- Dr. Helmut Blumbach

Director DAAD Regional Office Nairobi

# Why Our Work is Needed

Promoting female thought leadership and public engagement with research.

Mawazo provides resources to academics, researchers, and people interested in science throughout Sub-Saharan Africa. We focus on helping young African women to launch careers in academia and research, working with them to build their core expertise and equipping them to be public-facing scholars who are poised to influence policy and public discourse with their ideas. Our core programmes target Kenya and the East African region, complementing the work of other national, regional, and global actors offering support to African researchers, universities, and research institutions. In particular, Mawazo's unique approach fulfills a set of unmet needs for:

Young African women who remain persistently underrepresented in knowledge sectors Early career doctoral and post-doctoral researchers who represent the "missing middle" in the African higher education and research pipeline

Local funding to support researchers and experts at local universities and institutions

Cross-disciplinary support for researchers that can leverage knowledge and tools from diverse fields and promote interdisciplinary synergies

An emphasis on thought leadership and public scholarship within research and academia that creates a pipeline of publicly-engaged scholars who can make research useful beyond the ivory tower

To serve our beneficiaries, we partner with peer institutions and networks operating in our sector. Together, we support uptake and engagement with research, and position more African women to become experts, thought leaders and innovators.



# **Our Approach**

At Mawazo we:

Find women with ideas, from PhD scholars to early-career academics and researchers.

Support their career development through professional and leadership training, mentorship, and networks.

Help them develop their ideas by providing research funding, training, and other support.

Help them share their ideas with policymakers and the public by offering training and platforms for policy outreach and public engagement.

### **Our Programmes**

Providing academic and career support to early career female and African researchers.

The PhD Scholars, Training and Resources, and Public Engagement and Policy programmes were launched in 2018 – 2019. The Fellows programme is expected to launch in 2020.

#### PhD Scholars Programme

A one-year, non-residential fellowship for women pursuing PhD studies in East Africa in any discipline in STEM and the social sciences. Beneficiaries are under 40 and can be nationals of any African country. Scholars receive grants to support their research, conference travel, and ongoing training. They also receive professional and leadership skills training, research and editorial support, mentorship, and networking opportunities.

### Public Engagement and Policy Programme

To enhance public understanding of complex issues and promote evidence-based policy making, we connect the research produced by our fellows and other local experts to policymakers and the general public. Using various platforms, we also facilitate open and informed discussion on challenges facing the continent – and the solutions needed. This includes podcasting, informal public events, op-eds, blogging, social media, accessible and informative publications, media interviews, and policy outreach activities.

#### Training and Resources

We connect African students, researchers, and practitioners to resources to aid their academic and professional development. We do this through a curated online platform that shares information on conferences, funding, and other opportunities, and by providing free online training resources on a range of topics targeted at early career researchers.

#### Research Fellows Programme

A one-year, non-residential fellowship for early career East African women who are within 5 years of receiving their PhD degree and conducting research in a specified thematic area. Fellows receive research grants of up to \$10,000 and similar career support to PhD Scholars. Fellows also undertake substantial policy and public engagement activities related to their research for the programme duration.



# **Our Impact**

#### PUBLIC ENGAGEMENT AND POLICY PROGRAMME AS AT JUNE 1<sup>ST</sup> 2019



43,000+ COMBINED WEBSITE VISITORS



2,300+ SOCIAL MEDIA FOLLOWERS



20+ MEDIA MENTIONS



1000+ RSVPS



20 EXPERT PANELISTS



**5** PODCASTS



600+ ATTENDEES



5 PUBLIC EVENTS



20+ BLOG POSTS



THEMES NAIROBI IDEAS NIGHTS



2 E-BOOKS



450+ SECTOR EXPERTS & STAKEHOLDERS ENGAGED



NEEDS SURVEY OF AFRICAN WOMEN PHDS



12 SDGS TARGETED BY MAWAZO RESEARCHERS



2 POLICY WORKSHOPS ON HEALTH AND ENERGY HELD

#### TRAINING AND RESOURCES

- ACADEMIC WRITING TRAINING
- ACADEMIC PUBLISHING TRAINING
- GRANT WRITING TRAINING
- ACADEMIC PRESENTATION SKILLS TRAINING
- POLICY OUTREACH TRAINING
- RESEARCH FINANCIAL MANAGEMENT TRAINING
- LEADERSHIP TRAINING
- OP-ED TRAINING
- PUBLIC ENGAGEMENT AND COMMUNICATION TRAINING



PRE-PHD STEM CAREER WORKSHOP CO-HOSTED



170+
OPPORTUNITIES FOR
AFRICAN RESEARCHERS
SHARED



7,900+
WEBSITE VISITS TO THE
ONLINE RESOURCE CENTRE

#### **TESTIMONIALS**

"As a medical doctor and public health professional, participation in Mawazo's public engagement programme gave me new platforms and audiences to share my passion and commitment to health as a human right."

 Dr. Stella Bosire, 2018 Face of Kenyan Science and Co-Executive Director of UHAL EASHRI "Mawazo is providing a platform to enhance women's voices in research. I am proud to collaborate with Mawazo to enhance the use of evidence to inform policy and practice in the continent"

Lynette Kamau-Ngondi, Policy & Communications
 Officer at African Population and Health Research
 Center (APHRC)

#### PHD SCHOLAR PROGRAMME AS AT JUNE 1<sup>ST</sup> 2019

170
APPLICANTS

**40+** 

27
SKILLS TRAININGS

20
CONFERENCES
ATTENTED

10 RESEARCH FIELDS 10

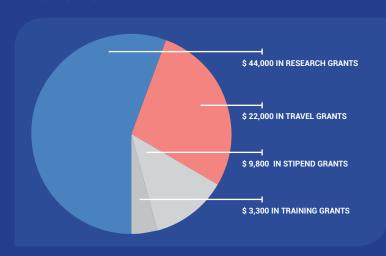
6 UNIVERSITIES

SCHOLARS GRADUATING IN 2019

MEDIA MENTIONS OF SCHOLARS JOURNAL ARTICLES
PUBLISHED

HEALTH POLICY WORKSHOP ORGANISED

#### **DISBURSED**



100%

OF PHD SCHOLARS WOULD RECOMMEND THE PROGRAMME TO OTHERS

**84**%

OF MAWAZO
DISCRETIONARY STIPENDS
WERE SPENT ON
CHILDCARE AND OTHER
FAMILY EXPENSES

100%

OF PHD SCHOLARS RATED THE MAWAZO IN-HOUSE TRAININGS AS "EXTREMELY HELPFUL" IN ACHIEVING THEIR RESEARCH AND CAREER GOALS

50%

SCHOLARS SECURED ADDITIONAL EXTERNAL GRANTS WITH SUPPORT FROM MAWAZO

\* Mawazo conducted Exit Surveys with its 2018 PhD Scholars to gauge their experiences and rate the programme's effectiveness.

"Being part of a group of women who are all pursuing PhDs and from different fields was a rare experience. It has inspired me and given me hope for my own PhD. One on one interactions with the Mawazo Team and the guidance I received was also invaluable."

Susan Gichuna, 2018 Mawazo PhD Scholar

"The programme has been an eye opener on the numerous career opportunities available. The skills have gathered through the in-house trainings will go a long way in developing and growing my career."

- Winnie Nyamboki, 2018 Mawazo PhD Scholar



# Programme Spotlight: Our PhD Scholars' Big Ideas

Realising the transformative power of African research.

Our Scholars were drawn from six leading Kenyan universities and represent 10 individual fields of research ranging from Applied Mathematics to Virology. The Mawazo Scholars were chosen because we believe their research is relevant to African development priorities, contributes new knowledge to their field of study, and holds the potential for transformational change in their communities and beyond.

In their work, our Scholars are exploring novel approaches to challenges facing Kenya and the region from: combatting traffic congestion in the Nairobi Central Business District through machine learning, to using mathematical models to develop strategies for controlling HIV transmission among Kenyan adolescents, to using animation and virtual reality to preserve Africa's intangible culture. Over the course of a one-year non-residential fellowship, Mawazo provided Scholars with resources to further their research and professional development through a comprehensive package of support including research funding, conference travel grants, training grants, networks and mentorship. Scholars also participated in a series of engaging short courses developed by Mawazo and its partners to diversify their skill sets in areas related to academic publishing and grant writing, media and communications, budgeting and financial management, policy outreach, and leadership, among other areas.

We invite you to meet the 2018 Mawazo PhD Scholars and learn more about their Big Ideas. We also worked with the Scholars to help them produce accessible blog posts on their background and work, and we invite you to learn more by visiting: mawazoinstitute.org/blog

African researchers have so many unique insights to contribute to the world. I am passionate about equipping them with the skills and resources they need to support their research, and amplifying their voices so that their important contributions are heard.

Rachel Strohm
 Board Chair and Co-Founder of the Mawazo Institute

# Peris Ambala



# **University:**Kenyatta University, Institute of Primate Research (IPR)

### **Field:** Virology

#### **Project Title:**

Determination of Molecular Characteristics of Filoviruses Circulating In Humans, Wild Caught Non-Human Primates, Bats and Rodents In Laikipia

#### Why is your research important?

In the recent decade, dangerous human pathogenic viruses have emerged in different geographical locations within Africa, with outbreaks occurring almost annually. Majority of these viruses are zoonotic viruses, which means they can be transmitted directly from animals to humans. Currently, there is a scarcity of information on filoviruses at the human-animal interphase in Kenya. These are a group of viruses, such as the ebola virus, that cause hemorrhagic fevers in humans. Specifically, my study looks into the zoonotic potential of filoviruses circulating in rodents, bats, non-human primates and humans in Laikipia county Kenya, where animals live in close proximity to humans. My research will help fill knowledge gaps around filoviruses in Kenya and improve prevention and control of zoonotic viruses in the country. Data from my research may also be used for early detection of looming filovirus outbreaks. Moreover, subsequent characterization of the isolated viruses will be of benefit to the development of drugs, vaccines, and diagnostic kits in the region.

#### How has Mawazo supported your research?

Mawazo support allowed me to complete my research project and I am currently analysing my findings and working on a first draft of my thesis manuscript with my supervisors. Mawazo support also enabled me to host a community sensitization workshop on filoviruses in partnership with USAID-Predict, where I engaged with stakeholders on the wider issues of zoonotic viruses and other pathogens in Laikipia County.



# Teresia Njihia



#### **University:**

Jomo Kenyatta University Of Agriculture and Technology, International Centre of Insect Physiology and Ecology (icipe)

#### Field:

Plant Health Science and Management

#### **Project Title:**

Field Evaluation of a Trapping System for the Control of Antestia Bugs, Antestiopsis Thunbergii, in Coffee Plantations

#### Why is your research important?

A specific threat to coffee crop cultivation in Kenya is infestation of the Antestia bug, a pest native to Africa. This pest poses a serious risk to smallholder farmers' household incomes, causing crop losses estimated at 45% of total yield and ruining the coffee for the international market. My research provides new knowledge on the chemical cues involved in interspecific communication (plant-insect) and intraspecific communication (insectinsect) behavior. These behavior-modifying chemicals can provide a natural, non-toxic, and target-specific alternative to costly and toxic pesticides. Techniques applied in the study can also be used to study other insects which are pests or vectors of diseases (such as fall armyworm and mosquitoes) or beneficial insects (such as bees). In this way, my work will create a positive impact on agriculture, the backbone of African economies, and other aspects of environmental and human health.

#### How has Mawazo supported your research?

Mawazo's support allowed me to complete the last stage of my research for which funding was lacking. I was able to complete and submit my thesis for approval and graduated in 2019 with my doctoral degree! Trainings offered by Mawazo were also very helpful and educative, covering topic areas that were not taught in my PhD classes and helped me build my leadership and public speaking skills.

# Melissa Allela



### **University:**Technical University of Kenya

#### Field:

Design and Creative Media

#### **Project Title:**

Storytelling Using Experimental Animation Techniques: Digital Mediation of African Orature Using New and Emerging Technologies

#### Why is your research important?

In a rapidly changing world, how do we leverage the capabilities of emerging technologies to preserve African oral traditions of storytelling? My research on storytelling through experimental animation explores the use emerging technologies, such as artificial intelligence and virtual reality as a medium for relaying works of African oral literature. I study and create animation systems that bring together interactive narratives and animated virtual humans, and thus have the potential to relay the unique features of African oral storytelling in a digital medium. My research uses a studio-based research design commonly used by practitioners in the creative industries, uniquely linking the worlds of academic research, interactive technology, and the creative arts. Through my research, I will make a conceptual and technical contribution in the use of emerging technologies for the preservation of our intangible cultural heritage.

#### How has Mawazo supported your research?

Mawazo funding allowed me to purchase requisite Virtual Reality equipment and attend conferences that advanced my research. Thanks to their support, I was also able to secure funding from the 2019 HEVA Cultural Heritage Seed Fund. which will allow me to expand my research and create new works.



# Elizabeth Mutua



#### **University:** Kenyatta University

#### Field: **Computer Science**

#### **Project Title:**

Data Mining for Smart Cities: Predictive Analysis for Minimization of City Traffic Congestion: Case Study: Nairobi City (Kenya)

#### Why is your research important?

Road traffic congestion is a major issue in many cities around the world. A lot of research has been done in the field of data mining and predictive modeling for smart cities, and especially in the transport sector. However, most research models in use, particularly in geographies like Africa, have significant limitations. Firstly, understanding traffic congestion patterns requires dynamic models that leverage high-quality historical traffic data to predict traffic conditions at different timescales, including hourly, weekly, and monthly. Rich spatial information also needs to be integrated into these models, such as alternate routes. My study aims to create a model that fills these gaps, improving predictive ability and ultimately easing congestion. The model will be tested using data generated from recently-installed digital traffic cameras along four major roads leading into the Nairobi city centre. Once validated through comparisons with this real-world data set, my hybrid model will then be applicable for predicting road traffic in Nairobi and other smart cities.

#### How has Mawazo supported your research?

The academic writing and publishing training helped me write two papers required for my PhD programme which were critical for my research. Mawazo's support allowed me to attend the 2018 Deep Learning Indaba Conference in South Africa, where I was appointed to the Accommodation Committee. The Mawazo Institute also helped pay off outstanding tuition fees that presented a challenge to completion of my degree.

# Judith Koskey



### **University:**Egerton University

#### Field:

**Environmental Science** 

#### **Project Title:**

Assessment of The Effects of Land Use on Water Quality and Macroinvertebrate Abundance and Diversities in Njoro and Kamweti Rivers, Kenya

#### Why is your research important?

The River Njoro is a critical watershed in Kenya's Rift Valley, important to the population of its catchment area as a source of water for domestic use and livestock. It is a source of riparian vegetation products and also of great economic value through tourism and the conservation of biodiversity. Over the years, it has experienced rapid population increase and associated land cover change resulting in negative impacts on water resources, human health, rural livelihoods, and the local economy. These socio-economic aspects and land use change over the past ten years — and their influence on the water quality and macroinvertebrates of River Njoro — before, and after its rehabilitation need to be assessed as an indicator of the watershed's conservation. My study gives important information on impacts of conservation and provides recommendations on the best mechanisms for conserving the watershed with improved livelihoods.

#### How has Mawazo supported your research?

Mawazo financed the research portion of my project in its entirety. Through their support, I conducted field trips to collect samples and analysed these in the lab. I have since completed my research and I am now working on my thesis for defense. The grant also allowed me to attend a GIS for Natural Resource Management training which equipped me with crucial GIS mapping and resource development skills used in my research.



# Marilyn Ronoh



### **University:**University Of Nairobi

#### Field:

**Applied Mathematics** 

#### **Project Title:**

Mathematical Modelling of HIV Transmission Dynamics Coupled with Awareness Among Adolescents and Young Adults in Kenya

#### Why is your research important?

Kenya has made significant gains in controlling the HIV/ AIDS epidemic over the past decade, however, a spike in new infections among adolescents and young adults, young women especially, is threatening to undo decades of progress. In my research, I use a mathematical model to explore the effects of increasing comprehensive knowledge of HIV/AIDS among Kenyan adolescents and young adults on the incidence and prevalence of the disease in this demographic group. Incorporating real epidemiological data, my model gives far more accurate predictions than existing models. In addition to assessing the efficacy of HIV/AIDS awareness interventions among adolescents and young adults in Kenya, my research will also help predict HIV re-emergence factors in this group, including revealing critical gender-specific trends. My work can thus inform government and stakeholders to make accurate projections and allocate resources more effectively to address this emerging crisis. It also provides a foundation for further research by helping other mathematicians improve their models and enabling public health researchers and practitioners to develop and test better strategies to control HIV/AIDS.

#### How has Mawazo supported your research?

I attended five conferences and workshops across five countries, which taught me skills for current methodologies in my research area. The feedback I got from presentations made at conferences also improved my work greatly. During the programme, I also successfully published two peer-reviewed academic articles. Lastly, Mawazo generously supported costs towards my university tuition fees that have made it possible for me to graduate on time.

# Susan Gichuna



### **University:**University of Nairobi

#### Field:

Climate Change and Adaptation

#### **Project Title:**

Impact of Weather and Climate Variability on Urban Commuter Travel Behavior: A Case Study of Nairobi Central Business District

#### Why is your research important?

Globally, climate change and variability is recognized as the greatest challenge to humanity. Climate change impacts such as floods, heat waves, unpredictable rainfall patterns and extremely low temperatures, among others, worsen existing challenges in the transport sector. For instance, in the last year, Kenya experienced above normal rainfall that had a major effect on commuting and transport infrastructure in both urban and rural areas. Dilapidated bridges washed away, roads were cut off and others blocked by mudslides, showing an urgent need to establish strategies for reducing risks associated with increased climate variability and extreme weather events in the Kenyan transport sector. My research will contribute to knowledge on the impacts of climate change on urban transport and inform future urban transport policy and planning that can enhance climate resilience of urban transport, and commuters in Kenya.

#### How has Mawazo supported your research?

When I joined the Mawazo programme, I was stagnating with my research. I received invaluable personalized support and guidance that eventually led me to change my research topic during the fellowship year. I am happy with my new research topic that better aligns with my interests and career goals and as a result, I have been making good progress in completing my PhD.



# Jacqueline Owigo

#### **Project Title:**

Return and Reintegration in Post Conflict Contexts: A Case Study of Returnees in Somalia

#### Why is your research important?

Globally, return migration is becoming an increasingly salient policy issue due to the high number of asylum seekers and refugees. Moreover, governments are increasingly determined to return undocumented migrants and, in some cases, refugees to their countries of origin. Currently, Somalia is experiencing significant increased return migration which includes people from the diaspora, deportees or failed asylum seekers, voluntary repatriation of refugees and disengaged combatants. In addition, an estimated 1.1 million people are internally displaced within Somalia. Not all returns are voluntary and the returning refugees and migrants do not have the same needs, nor motivation to return. Much more needs to be known about the experiences of those who have already returned and their reintegration outcomes. My research will highlight the experiences Somali returnees face from their very own perspective, with a view to identifying areas for policy intervention that may be effective in improving reintegration outcomes.

#### How has Mawazo supported your research?

Most importantly, Mawazo's support enabled me to fund my dissertation research, which I would not have been able to afford on my own. The training on Op-Ed Writing was also very helpful, exposing me to communication platforms available to share my research, and allowing me to establish contact with an editor-in-charge. Mawazo also supported my attendance at valuable conferences like the 2018 UN Major Group for Children and Youth Pre-ICM Youth Forum.



#### **University:**

United States International University
- Africa (USIU - Africa)

#### Field:

International Relations

# Winnie Nyamboki

#### **Project Title:**

The Economic Consequences of Poor Health in Kenya

#### Why is your research important?

Previous literature has established that health plays a vital role in explaining labour market behaviour, with economists finding that a healthier workforce is more productive. In Kenya, Malaria and diseases of the respiratory system are leading causes of morbidity, accounting for 55.3 percent of all reported morbidity cases in 2015. While the prevalence of these conditions is still rising, it is not clear how this affects labour supply in the Kenyan context. Previous studies on the relationship between health status and labour market behaviour have generally focused on developed countries. My study examines and quantifies the contribution of specific types of acute illness on the propensity to participate in the labour market in Kenya. This research will provide sound economic analysis on the burden of illness and injuries in Kenya, contributing important evidence for policy interventions at both the national and county levels.

#### How has Mawazo supported your research?

The 2019 research symposium hosted by Mawazo was critical in strengthening my research approach. The feedback received from established social scientists in attendance helped me refine my research question and data sources, creating a stronger thesis. I also gained valuable networks, improved my confidence, and public speaking skills and became more aware of how to better navigate the research process.



#### University:

University of Nairobi

#### Field:

**Economics** 



# Edinah Songoro



#### **University**:

Jomo Kenyatta University Of Agriculture and Technology, Pan African University Institute for Basic Sciences, Technology and Innovation (PAUSTI)

#### Field:

Molecular Biology and Biotechnology

#### **Project Title:**

Occurrence and Dynamics of Antimicrobial Resistance Genes in Selected Environments in Nairobi and Naivasha, Kenya

#### Why is your research important?

For decades, antimicrobial resistance has been a growing threat to effective treatment of an ever-increasing range of infections caused by bacteria, parasites, viruses and fungi, making the treatment of patients difficult, costly, or even impossible. My research studies the diversity of antimicrobial resistant genes in Nairobi and Naivasha Counties, using genomic tools to isolate resistant genes from various environmental samples such as soil, river water, and sewage. Findings from this research will help increase understanding of the relationship between resistance in the environment and the spread of antimicrobial resistance in human and animal populations. By sequencing the resistant genes found, I also plan to generate a data map showing antimicrobial resistance hotspots and areas of unique resistance genotypes. This research will be useful for stakeholders in finding more effective means of reducing the burden of infections caused by environmental microorganisms.

#### How has Mawazo supported your research?

Research grants offered by Mawazo enabled me to carry out the first part of my PhD research. Conference support also allowed me to attend conferences where I met experts and influencers in my field. Lastly, Mawazo's training on effective grant writing will be useful in applying for other grants and the science communication and public engagement training allowed me to see new ways of sharing my research.

### **Institutional Achievements**

Building a model institution for young African women.

Mawazo was founded on the idea that by empowering young African women within local academic and research ecosystems, they could make lasting contributions to African development that would in turn further empower young girls and women on the continent, multiplying the impact of our initial investment. To do this, we are building an effective institution that is a model for research production and dissemination on the continent, coupled with professional development, with our key beneficiaries — young African women — at its center. For this reason, Mawazo takes as much pride in its institutional achievements as it does in its programmatic accomplishments. Here are a few of our highlights and successes, so far.

#### Financial Sustainability

- Secured three-year seed funding
- Diversified our sources of funding through:
  - Additional funding from regional and sectorspecific grant makers
  - Small individual donations through our website
- Demonstrated track record
- Built relationships with potential funders

#### Our People

- Founded by two young female researchers
- Young, African, and majority female team of seven full and part-time staff
- Dynamic, flexible working environment
- Organic growth in staff, skills, and capacities
- Competitive compensation and benefits
- Strong HR policies and procedures

#### Systems and Processes

- Legal incorporation in Kenya and the US
- Successful grant management system for beneficiaries
- Strong accounting system and finance policy
- Statutory compliance in Kenya and US
- Successful 2017 and 2018 financial audits



### What We've Learned

As a young institution with bold ambitions, Mawazo is vested in learning from our mistakes and successes as we work towards our vision. Here are some key takeaways from our first two years of operation.

#### **OUR STRENGTHS:**

- Innovative Programmes: Mawazo's strength comes from innovative programmes that invest in marginalised individuals African, young, and female as catalysts for change within existing institutional frameworks. We provide a comprehensive package of support combining capacity building with funding to empower our beneficiaries to both learn and do, and adopt a liberal arts approach to curate a unique suite of training resources for African academics that is creative, engaging, and balances breadth and depth of learning. We also offer our beneficiaries tools and unique platforms for public engagement and policy outreach, including expert led in-house trainings, podcasting, digital media, and bespoke science events like Nairobi Ideas Night.
- Public Engagement and Thought Leadership: Mawazo believes that for science and research to be useful it must be accessible. That is why we integrated public engagement with research as a central pillar of our mission, providing visibility and thought leadership platforms to beneficiaries, and other local experts. Our first year of public engagement programming, and its resulting outputs, have backed our hypothesis and shown that there is demand for Mawazo's expertise in this area. Our staff and beneficiaries are a crucial pillar of our public engagement arm, by engaging audiences in their fields and on issues where they, and/or Mawazo is a sector leader.
- Leading with Mentorship: We know that mentorship is crucial to developing a strong pipeline of female thought leaders. As such, Mawazo, first, relies on the mentorship of experienced sector peers to guide our strategy and operations. Secondly, we create opportunities within our programmes and through special projects for beneficiaries to benefit from mentorship.
- Growing Partnerships: We rely on a growing network of 'Friends of Mawazo' to help us meet our mission. This network is comprised of local experts, trainers, facilitators, donors, programme and implementation partners, governmental bodies, higher education institutions, and private citizens who share in our commitment to developing the talents of young African women and spurring development on the continent.
- ◆ Dedicated Staff: Mawazo is supported by a lean core staff whose passion for our mission allows the organisation to dream big and do big. We owe our continued success to the dedicated expertise and all-hands-in approach of the Mawazo team in implementing our programmes and developing long term strategies that secure Mawazo's growth.

#### THE CHALLENGES WE'RE FACING:

- ◆ Strengthening the Pipeline: As with many places across the globe, there is a weak overall pipeline of girls and women in science. Mawazo's programmes target the highest levels of the pipeline and we are increasingly aware of the need to provide targeted support and resources for pre-PhD female scientists at the bachelors and masters level, and as early as high school (in limited cases) so as to impact the pipeline earlier.
- Structural and Cultural Barriers Women Face: Our interventions take place in an environment in which pervasive sexism and cultural biases dissuade girls and women from the sciences and denying them positions of leadership, even with the right credentials. To address this, Mawazo is a vocal advocate for women across all its platforms. We also provide flexible terms and grant extensions to our beneficiaries, and ensure a supportive environment for all our staff that recognises the multiple roles they play. Mawazo also produces in-house research outlining the challenges faced by African women in academia and recommendations for action.
- Growing Pains and a Steep Learning Curve: Our ambitions are great and require both growing expertise and an expanding team to accomplish. As a result, we are learning a lot along the way—and on the go. At the core of this learning is a strong, passionate, and motivated team that is still very lean for the work our programmes require. As we strive to build the type of organisation our mission requires, we have infused Mawazo with strong policies and well-researched strategies to guide our work. In the past two years, we have also grown our staff from two employees to a mix of seven full time and part time employees, and consultants who bring with them the expertise Mawazo needs in this critical stage of its growth.
- Long Term Financial Sustainability: Because Mawazo's main beneficiaries are women already facing financial constraints in their PhD studies and research, we cannot recoup costs by charging them for services such as training. To combat this challenge, Mawazo is engaged in sustained fundraising that targets major foundations and bilateral donors in high income countries. We also regularly collaborate with partners in the field to implement Mawazo's core programmes, thus increasing savings. Lastly, Mawazo is continuously identifying opportunities for local resource mobilization and monetization that can diversify its revenue stream.
- Socio-Political Events: Events beyond Mawazo's control including higher education policy changes, recurrent lecturer strikes, election cycles, governmental crackdowns, and other such events have the ability to impact delivery of Mawazo's programmes and delay the progress of our PhD Scholars and Research Fellows work. To combat this, Mawazo has developed contingency plans and adopted flexibility in delivery of key programme aspects. This allows us to be responsive in dealing with unforeseen events.



# **Conferences and Trainings**

#### As at June 1st 2019

Name of Event/Conference	Attended By	Date/Location
PASGR Advanced Training For Multi-Method & Policy Oriented Research	Participant: Edinah Song'oro, Mawazo PhD Scholar	3rd-11th April, 2019 in Nairobi, Kenya
After Office Hours : Why Africa Needs More Female Scholars and Thought Leaders	Speaker: Dr. Rose M. Mutiso, Mawazo CEO	28th March, 2019 hosted by the Nairobi Garage, Kenya
One Health Community Engagement and Results Dissemination Workshop: Sensitization on the prevention and control of zoonotic viruses	Convened by by Peris Ambala, Mawazo PhD Scholar	25th-30th March, 2019 sponsored by the Mawazo Institute, USAID Direct and the Institute of Primate Research (IPR) in Laikipia County, Kenya
Workshop contributing to the G7 inputs on gender equality on the theme: Promotion of African women scientists and their contribution to the global challenges the world is facing	Speaker. Dr. Rose M. Mutiso, Mawazo CEO	15th March, 2019 hosted by the L'Oréal Group and L'Oréal Foundation in Paris, France
The New York Times Battle at the L'Oréal Foundation's Breakfast Debate: How Gender Bias Impacts Research Outcomes	Debater: Dr. Rose M. Mutiso, Mawazo CEO	13th March, 2019 hosted in partnership with the New York Times in Paris, France
DAAD Alumni Conference: Young Scholars in Africa – Challenges and Opportunities	Elaine Mungai, Mawazo Programme Manager Panelist: Dr. Rose M. Mutiso, Mawazo CEO	1st – 3rd March, 2019 at the DAAD Regional Offices in Nairobi, Kenya'
L'Oréal-UNESCO For Women in Science Awards Ceremony	Dr. Rose M. Mutiso, Mawazo CEO	13th March, 2019 at UNESCO House in Paris, France
9th KEMRI Annual Scientific and Health (KASH) Conference	Delegate: Peris Ambala, Mawazo PhD Scholar	13th-15th February, 2019 in Nairobi, Kenya
Electricity Supply Monitoring Convening	Dr. Rose M. Mutiso, Mawazo CEO	22nd January, 2019 in Nairobi, Kenya
MIT Reality Virtually Hackathon	Participant: Melisa Allela, Mawazo PhD Scholar	17th-21st January, 2019 at MIT, Cambridge, Massachusetts, USA
UN Major Group for Children and Youth Pre-ICM Youth Forum	Delegate: Jacqueline Owigo, Mawazo Phd Scholar	8th-9th December, 2018 in Marrakech, Morocco

Name of Event/Conference	Attended By	Date/Location
Bright Club Ireland: Reclaiming the Meaning of Women Who Think	Performer: Dr. Rose M. Mutiso, Mawazo CEO	11th December, 2018 in Dublin, Ireland
L'Oréal-UNESCO For Women in Science, 8th African Fellowship Awards Ceremony	Speaker. Dr. Rose M. Mutiso, Mawazo CEO	5th December, 2018 in Nairobi, Kenya
Nairobi Ideas Night: Talk Techs Back Panel Discussion	Moderator. Dr. Rose M. Mutiso, Mawazo CEO	4th December, 2018 hosted in Nairobi during the 2018 Africa Science Week - Kenya
AfriCHI - 2nd African Conference for Human Computer Interaction (HCI)	Oral Participant: Melisa Allela, Mawazo PhD Scholar	3rd-7th December, 2018 at Namibia University of Science and Technology
3rd Siyacabanga Workshop on Ticks and Tick- borne Diseases Conference	Participant: Marilyn Ronoh, Mawazo PhD Scholar	26th-30th November, 2018 in Pietermaritzburg, South Africa
APHRC Advanced Research Methodology Workshop	Participants: Peris Ambala and Susan Gichuna, Mawazo PhD Scholars	4th-10th November, 2018 in Kigali, Rwanda
2018 Masamu Advanced Study Institute (MASI) and Workshops in Mathematical Science	Paper Presentation: Marilyn Ronoh, Mawazo PhD Scholar	16th-25th November, 2018 hosted by Botswana International University of Science and Technology (BIUST), Palapye, Botswana
Chuka University International Research Conference	Paper Presentation: Judith Koskey, Mawazo PhD Scholar	24th-26th October, 2018 at Chuka University, Kenya
Women in Energy Lunch: Lessons from Experiences in Science, Policy, and Capacity Building from an Early-Career Energy Enthusiast	Speaker: Dr. Rose M. Mutiso, Mawazo CEO	5th October, 2018 at Columbia Center on Global Energy, Columbia University, New York
Energy for Growth Hub: Lightning Talks	Speaker. Dr. Rose M. Mutiso, Mawazo CEO	27th September, 2018 at Center for Global Development, Washington D.C.
Women in African Power Webinar. Increasing Connections; Amplifying your personal brand through networking in the energy sector	Speaker: Dr. Rose M. Mutiso, Mawazo CEO	27th September, 2018 online event
First Lego League Launch	Keynote Speaker: Dr. Rose M. Mutiso, Mawazo CEO	15th September, 2018 hosted by GEMS Africa Institute of Teacher Training (GAITT), Nairobi, Kenya
Deep Learning Indaba 2018: Strengthening African Machine Learning Conference	Poster Presentation: Elizabeth Mutua, Mawazo PhD Scholar	9th-14th September, 2018 at Stellenbosch University, South Africa



Name of Event/Conference	Attended By	Date/Location
UNESCO Southern Perspectives on Migration: Addressing Knowledge Production, Policies, and Cooperation Conference	Delegate: Jacqueline Owigo, Mawazo Phd Scholar	5th September, 2018 at the Africa Centre for Migration, Johannesburg, South Africa
27th International Primatology Society Conference	Delegate: Peris Ambala, Mawazo PhD Scholar	19th-25th August, 2018 in Nairobi, Kenya
34th International Society of Chemical Ecology Conference	Oral Presentation: Teresia Njihia, Mawazo PhD Scholar	12th-18th August, 2018 in Budapest, Hungary
Energy for Development in a Carbon-constrained World (EDC2018): Energy for Transportation - Prospects and Challenges Plenary Discussion	Facilitator: Dr. Rose M. Mutiso, Mawazo CEO	5th-10th Agusut, 2018 in Deverey, United Kingdom
Mentoring Network for African Women in Academia, Inc (MTAWA) Panel Discussion and Graduate Career Workshop for Women	Panelist: Dr. Rose M. Mutiso, Mawazo CEO	24th-25th July, 2018 at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya
7th International Infection Control Africa Network (ICAN) Congress	Delegate: Edinah Song'oro, Mawazo PhD Scholar	8th-11th July 2018 in Cape Town, South Africa
University of Nairobi, Department of Physics Career/Mentorship Workshop	Keynote Speaker: Dr. Rose M. Mutiso, Mawazo CEO	6th July, 2018 at the University of Nairobi, Kenya
14th Migration Summer School	Participant: Jacqueline Owigo, Mawazo Phd Scholar	25th June-6th July, 2018 at the Migration Policy Centre at the European University Institute, Florence, Italy
Conservation International Discussion: How can educating and empowering women and girls support conservation goals?	Panelist: Rachel Strohm, Mawazo Board Chair	18th June, 2018 hosted by Conversation International, Nairobi, Kenya
Breakthrough Dialogue 2018: Rising Tides, Big is Still Beautiful; Paths to Overcoming Energy Constraints in Africa Panel Discussion	Panelist: Dr. Rose M. Mutiso, Mawazo CEO	20th-22nd June, 2018 at Cavallo Point, Sausalito, CA
International Centre of Theoretical Physics (ICTP), Physics of Complex Systems' Summer School	Poster Presentation: Marilyn Ronoh, Mawazo PhD Scholar	June, 2018 at Abdus Salam International Centre for Theoretical Physics, Trieste, Italy
African Institute of Mathematical Sciences (AIMS) Clinic on Meaningful Modelling of Epidemiological Data	Marilyn Ronoh, Mawazo PhD Scholar	28th May-8th June, 2018 in Cape Town, South Africa
Africa Utility Week 2018	Advisory Board: Dr. Rose M. Mutiso, Mawazo CEO	15th-17th May, 2018 in Cape Town, South Africa

Name of Event/Conference	Attended By	Date/Location
Open Africa Power programme	Participants: Susan Gichuna, Judith Koskey, and Marilyn Ronoh, Mawazo PhD Scholars Speaker: Dr. Rose M. Mutiso, Mawazo CEO	9th April, 2018 created by the Enel Foundation and hosted at Strathmore University in Nairobi, Kenya
Egerton University 12th International Conference	Paper Presentation: Judith Koskey, Mawazo PhD Scholar	28th-30th March, 2018 at Egerton University, Kenya
Next Einstein Forum (NEF) Global Gathering 2018: Producing the Next Generation of Female Thought Leaders in Africa	Speaker: Dr. Rose M. Mutiso, Mawazo CEO	26th-28th March, 2018 in Kigali, Rwanda
Science Africa Workshop on Pan-African Initiatives for Research Capacity Building	Dr. Rose M. Mutiso, Mawazo CEO	25th March, 2018 hosted as a pre-event to the NEF Global Gathering 2018
EAI International Conference on Innovations and Interdisciplinary Solutions for Underserved Areas, InterSol2018	Steering Committee: Dr. Rose M. Mutiso, Mawazo CEO	24th-25th March, 2018 in Kigali, Rwanda
CIFAR Women in Science Leadership Workshop: Fostering Diverse and Inclusive Leadership in Academia	Elaine Mungai, Mawazo Programme Manager	22nd-24th March, 2018 in Kigali, Rwanda
Africa Cooling Efficiency Conference: Plenary Discussion on African Cooling Initiatives	Moderator: Dr. Rose M. Mutiso, Mawazo CEO	21st March, 2018 in Kigali, Rwanda
Gender Summit 14 - Africa: Climate Change through the Gender Lens; Focus on Africa	Dr. Rose M. Mutiso, Mawazo CEO and Elaine Mungai, Programme Manager	9th March, 2018 in Kigali, Rwanda
Conference on Providing Reliable and Affordable Electricity in Rural Areas of Countries with Current Energy Deficits: "Linking up Mainstream and Novel Approaches to Electrification in Africa"	Speaker: Dr. Rose M. Mutiso, Mawazo CEO	27th February-1st March, 2018 hosted by the Rockefeller Foundation in Bellagio, Italy
Our Future Africa: The British Council's Role in Africa's Trajectory	Rachel Strohm, Mawazo Board Chair	22nd February, 2018 at the British Council in Nairobi, Kenya
Sustainable Energy Forum 2018, East Africa	Dr. Rose M. Mutiso, Mawazo CEO	19th March, 2018 hosted by the East African Community (EAC) in Kigali, Rwanda



## Media

Category	Media	Notes	Link
Media Appearances	Ikigai Space Blog, March 27, 2019. Meet the Women of Mawazo Institute.	Women's Month special edition of the Ikigai Blog featuring the Mawazo Institute as a women led institution	https://bit.ly/2vkipxM
	Business Daily Africa, March 8, 2019. #BalanceForBetter: Science is My Little Thing.	Mawazo PhD Scholar Elizabeth Mutua is featured in Business Daily Africa's celebration of International Women's Day 2019	https://bit.ly/2UuMPHK
	El Periodico, February 16, 2019. Talent Round Trip: The mobility of African scientists can be translated into development.	Mawazo Co-Founder and CEO Dr. Rose M. Mutiso is featured in an article discussing brain drain and the mobility of African women scientists	https://bit.ly/2tG7MEn
	The Conversation, February 7, 2019. Want to be a woman in science? Here's advice from those who've gone before.	Three Mawazo PhD Scholars, Judith Koskey, Marilyn Ronoh, and Melisa Allela share their advice for aspiring women scientists	https://bit.ly/2VkpAEy
	World Economic Forum, July 6, 2018. Is sub-Saharan Africa ready for the electric vehicle revolution?	CEO Dr. Rose M. Mutiso co- authors an article looking into the viability of electric cars within African countries	https://bit.ly/2KWZtzu
	Science Magazine, April 27, 2018. Africa cultivates innovation to boost global reach.	As the Next Einstein Forum's (NEF) 2018-2019 ambassador to Kenya, CEO Dr. Rose M. Mutiso features in this article exploring NEF's 2018 Global Gathering	https://bit.ly/2IAK3Pt

Category	Media	Notes	Link
Media Appearances	CBC Canada, April 11, 2018.  Often sidelined by Western journals, African scientists get their own peer-reviewed publication.	CEO Dr. Rose M. Mutiso shares her thoughts on the launch of a new pan-African journal for African Scientists	https://bit.ly/2KTxEbj
	The Guardian, April 10, 2018. Africa's unsung scientists finally gettheir own journal to spread research.	CEO Dr. Rose M. Mutiso shares her thoughts on the launch of a new pan-African journal for African Scientists	http://bit.ly/2lzJeN0
	Voice of America, April 2, 2018.  Overcoming Barriers, African  Scientists Creating Award-  winning Innovations.	CEO Dr. Rose M. Mutiso and Next Einstein Forum (NEF) ambassador to Kenya discusses participating in the 2018 forum convening	https://bit.ly/2GvSwmk
	Africa Utility Week, March 26, 2018. Research Interview: "Energy and climate change are priority sectors for us, though we were struck by how weak the power sector research pipeline is in Kenya."	As a member of the Advisory Board for the 2018 African Utility Week, CEO Dr. Rose M. Mutiso shared her expert views on Africa's energy sector	https://bit.ly/2UBj8ox
	Thayer School of Engineering at Dartmouth, February 18, 2018. Alumni Portrait: Rose Mutiso '08 Th'08.	Speaking to her alma mater, Dr. Rose M. Mutiso shares her science journey and motivations for founding the Mawazo Insitute	https://bit.ly/2UtET9v
Videos	Meet the 2018 Mawazo Scholars.	Produced by Mawazo, in this short video, we hear from the 2018 Scholars about their fellowship experience.	https://www.youtube. com/watch?time_ continue=2&v=0- pKS793unY
	Bright Club Ireland, January 7, 2019. Reclaiming the meaning of women who think.	CEO and co-founder Dr. Rose M. Mutiso uses stand-up comedy to talk about her personal scientific journey and the work of the Mawazo Institute	https://bit.ly/2Gtnrx6



Category	Media	Notes	Link
Videos	Nairobi Ideas Night, December 5, 2018. Stories Behind the Science.	In a special edition of Nairobi Ideas Night, six women scientists share their science journeys as part of of 2018 Africa Science Week - Kenya organised by 2018-2019 NEF ambassador and Mawazo CEO, Dr. Rose M. Mutiso	https://bit.ly/2vkjUfo
	BrandPlus TV Kenya, December 3, 2018. Africa Science Week Kenya Campaign Launch, Business News.	Coverage of the Africa Science Week-Kenya launch event organised by NEF ambassador, Dr. Rose M. Mutiso	https://bit.ly/2vhc5qD
Journal Articles	Njihia T.N., Torto B., Murungi L.K., Irungu J., Mwenda D.M. and Babin R. (2018) Ripe coffee berry volatiles repel second instar nymphs of Antestia bugs (Heteroptera: Pentatomidae: Antestiopsis thunbergii). Chemoecology 28, 91–100. https://doi.org/10.1007/s00049- 018-0259-3. IF 1.642	Journal article co-authored by Mawazo PhD Scholar Teresia Njihia exploring issues related to development of safe pest management strategies and sustainable agriculture. The article earned the 2018 award for "Best published science paper by an icipe (International Centre of Insect Physiology and Ecology) scholar" for Teresia Njihia.	https://bit.ly/2Ds36qY
	Wairimu, Josephine & Chirove, Faraimunashe & Ronoh, Marilyn & Malonza, David. (2018). Modeling the effects of insecticides resistance on malaria vector control in endemic regions of Kenya. Biosystems. 174. 10.1016/j. biosystems.2018.09.002.	Journal article co-authored by Mawazo PhD Scholar Marilyn Ronoh, presenting a model to investigate the effects of vector resistance to control strategies for malaria	https://bit.ly/2DtAAVU

The Scholars programme equipped me fully with training resources which are only delivered partially during theoretical sessions in school. I would rate everything Mawazo has equipped us with as excellent."

- Judith Koskey
2018 Mawazo PhD Scholar



# **Financial Report**

Annual income and expenditure for the past two years of Mawazo's operations are summarised below.

# **TOTAL EXPENSES**



**70.4%** PROGRAMME EXPENSES **US\$ 258,830.59** 

29.6% ADMINISTRATION EXPENSES US\$ 108,759.02

# **MAWAZO 2018 OVERALL OPERATING REVENUES AND EXPENSES**

REVENUES	AMOUNT (US\$)
2017 Donations Brought Forward	226,591.97
Individual Donations	202,700.00
Foundations and other donors	39,268.00
TOTAL REVENUES	468,559.97
EXPENSES	
Program Expenses	
PhD Scholars	199,935.59
Public Engagement and Policy	58,699.99
Training and Resources	58,895.00
Total Programme Expenses	258,830.59
Supporting Services Expenses	
Administration Expenses	94,779.01
Fundraisng Expenses	13,980.02
Total Supporting Services Expenses	108,759.03
TOTAL EXPENSES	367,589.62
Operating Revenues over Operating Expenses	100,970.35



# **Our Team**

# Meet the founders



Rose. M Mutiso

Dr. Rose M. Mutiso is the co-founder and CEO of the Mawazo Institute. She is also the Research Director of the Energy for Growth Hub, and the current Next Einstein Forum Ambassador representing Kenya. Rose has worked extensively as a researcher and practitioner focused on technology and policy dimensions of energy, environment, and innovation issues globally. Most recently, her work has focused on power sector issues in Africa, particularly the links between renewable energy, energy efficiency, and energy poverty.

She is a Materials Scientist by training with research experience in the fields of nanotechnology and polymer physics. Rose is passionate about harnessing science and technology to improve lives, and elevating women to positions of leadership and influence in African society. She earned her BA and BE in Engineering Sciences with a concentration in Materials Science from Dartmouth College, and her PhD in Materials Science and Engineering from the University of Pennsylvania.



Rachel Strohm

**Board Chair** 

Rachel Strohm is co-founder and chair of the board at the Mawazo Institute. She is also a PhD candidate in Political Science at the University of California, Berkeley. Over the course of her PhD studies, she came to see that the voices of African academics were greatly underrepresented in social science research on Africa. She's passionate about leveling the playing field for scholars from low income countries.

Rachel has previously worked as a research manager with Innovations for Poverty Action, where she managed a portfolio of more than 20 studies in development economics in Ghana, Uganda, Ethiopia, Mexico, and the Dominican Republic. She has also worked in microfinance and small business development in the DRC and Rwanda. She holds a BA in Geography and French from Dartmouth College, and an MA in International Relations from the School of Advanced International Studies at Johns Hopkins University. She is originally from Chicago.



# **Our Staff**



Elaine Mungai **Programme Manager** 



Elizabeth Ngala Finance Manager



Maina Wachira

Research and Communications

Assistant



Ashley Muthaka Operations Manager



Kari Mugo

Digital Media and Public

Engagement Consultant



Naliaka Odera

Content Creator

# Elaine Munga

### **Programme Manager**

Prior to joining Mawazo, Elaine worked as the lead business analyst at Doreo Partners, where she managed programs geared towards poverty alleviation, youth employment, and financial inclusion for thousands of rural farmers across Northern Nigeria. Elaine has also worked as a research analyst at the Kenya Civil Society Platform on Oil and Gas where she participated in advocacy and policy making in Kenya's extractives industry. As a consultant, she has conducted extensive market research for private equity firms in Kenya.

She holds a Bachelor of Business Science in Actuarial Science degree from Strathmore University. Originally from Nairobi, Elaine is passionate about using data to foster informed decision-making that will spearhead Africa's growth.

# Ashley Muthaka

### **Operations Manager**

Ashley Wangui Muthaka is the Operations Manager at Mawazo Institute. Before joining Mawazo, Ashley was a Business Development and Solutions Administrator at DHL Supply Chain East Africa, where she was responsible for business development and client relationship management at the head office in Nairobi, Kenya.

She holds a Bachelor of Science in Business
Administration with a Concentration in Accounting degree and a Master of Science in Supply Chain Management degree from Towson University in the USA. Born and raised in Nairobi, Ashley is passionate about the community and women's empowerment.

# Elizabeth Ngala

### **Finance Manager**

Liz Ngala is a Certified Public Accountant of Kenya (CPA-K) with over 10 years working experience. She has a strong mix of experience, expertise and qualifications, with major areas of focus on finance procedures and controls, tax management, financial analysis, and internal audits. She previously worked as a financial accountant and senior legal accountant at Anjarwalla & Khanna Advocates, and a finance manager at Horizon Africa Capital Limited. She is also currently the Finance Manager at EED Advisory Limited. Liz was educated at Strathmore University, Nairobi.

99

Mawazo, through its extraordinary leadership, has been able to carve out an important place in the higher education sector in Kenya. This goes to show that the work we are doing is not only important, but it is also ground breaking and transformative.

That in itself is something to be proud of.

- Elaine Mungai

99

The future is female. This is something I personally believe and fits well with Mawazo's vision, mission, and values. I'm very passionate about women's empowerment and there's no better way to do this than to provide support and mentorship to African women through my work at Mawazo.

- Ashley Muthaka



# Kari Mugo

### **Digital Media and Public Engagement Consultant**

Kari Mugo is an activist, writer, and communications consultant supporting the work of agitators, dreamers, and social justice movements working towards a universe of equals. Before joining Mawazo Institute, she was Operations Manager at the National Gay and Lesbian Human Rights Commission, where she oversaw program and staff management. She brings with her four years of experience partnering with nonprofits and local government agencies in Minnesota, USA and Nairobi, Kenya to tell their stories.

Kari is skilled in developing external communications, fundraising, and community engagement - and believes in the power of storytelling. She holds a Bachelor of Arts degree in Economics and Political Science from St. Cloud State University USA.

Mawazo is an organisation imagining new African futures, the type with women and good policy at their centre. These rich futures Mawazo is helping to create, are the reason I support its work.

- Kari Mugo



### Naliaka Odera

### **Content Creator**

Naliaka is a freelance writer, editor and social media consultant. She is the Co-Founder and Managing Editor of 'Of Africa', an online platform that celebrates women of African descent while fostering editorial talent. She is also a founding member of 'Social 4 Rookies', a training and consultancy group that teaches companies and individuals the integral concepts of branding online at a beginners level. She holds a BA from the University of British Columbia and has an ongoing love affair with words. Through Of Africa and her consulting, she stresses the importance of people learning vital communication skills to be able to speak for themselves.

### Maina Wachira

# Research & Communications Assistant

Maina is a recent graduate of the University of Chicago, where he earned a Bachelor of Arts in Philosophy while exploring his interdisciplinary interests through coursework in mathematics and literature. Before joining Mawazo, he worked on the editorial team of Sliced Bread Magazine, volunteered at Open Books Chicago, and organised on Chicago's South Side with the Midwest Workers' Association in order to connect local residents to public utilities and legal help. During his time as a student, the sight of major academic institutions neglecting their local communities sparked his passion for supporting diverse research environments and publicly accessible knowledge.

99

We live in a diverse world, so equity demands that the researchers whose ideas shape public life represent that diversity. I support Mawazo's work because it pursues this ideal by helping early-career women become engaged and confident in a research landscape often dominated by men.

- Maina Wachira

I have loved working with Mawazo to develop events that connect the Kenyan public to academic research, especially in our joint efforts to train the Mawazo Scholars in research communication. The Scholars are a brilliant group of women, being raised to greater excellence and influence by the tireless work of Mawazo's wonderful staff.

# - Dr. Jessamyn Fairfield

Physicist, School of Physics at National University of Ireland Galway and Founder of Bright Club Ireland



# **Our Partners**

Funding Partners:

Donors who provided direct funding support for Mawazo's programmes.



DAAD Deutscher Akademischer Austauschdienst German Academic Exchange Service











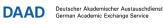
Implementation Partners: Institutional partners who helped us deliver programmes, including trainings and other events.































Being part of a group of women who are all pursuing PhDs and from different fields was a rare experience. It has inspired me and given me hope for my own PhD.

- Susan Gichuna 2018 Mawazo PhD Scholar

# Leveraging experts, citizens, and decision makers to inspire the big ideas our future needs.

- The Mawazo Institute

# For more information:

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