



Event Title: Partnerships in STE(A)M Innovation and Future Africa Symposium

Host: Harvard Center for African Studies Africa Office

Dates: November 03 and 04, 2022

Format: Virtual

Event Description:

The Africa Office of Harvard University Center for African Studies (CAS) will convene a two-day virtual symposium on Thursday, Nov 03 and Friday, Nov 04, 2022. Titled Partnerships in STE(A)M Innovation and Future Africa Symposium, this symposium will provide a platform to highlight ongoing Harvard-funded and CAS supported STE(A)M research led by Harvard faculty and their Africa-based collaborators; survey findings of the Africa Research, Implementation Science, and Education (ARISE) Network researchers; and feature a roundtable discussion on digitization of African Languages. CAS aims to broaden knowledge about Africa and bring African perspectives to bear on the scholarship of the Harvard community and beyond. Attendees of the symposium will have an opportunity to engage with researchers and contribute to their ongoing research projects.

Symposium Objectives

In vast efforts to tackle a global pandemic, Africa demonstrated that it has capacity to carry out research to address its problems and to contribute scientific solutions to broader global challenges. Research carried out locally in Africa, coupled with international collaborations, provides actionable and sustainable solutions for the continent. The World Bank has advocated that the "economic and social prosperity of countries depend on the state of science, technology, engineering, and mathematics (STEM)." The symposium will feature research projects that aim to provide for a deeper understanding of problems in the African context and seek new discoveries to solve challenges and advance future development.

The COVID-19 pandemic presented new challenges for healthcare, food security, and education, and the global response effort has relied on STEM advancements from biomedicine and the use virtual technology, demonstrating the increased importance of STEM-based solutions to combat novel challenges. Research carried out through the Motsepe Presidential Research Accelerator Fund and through partnerships like the ARISE Network and Botswana Harvard Partnership

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contribute directly to solutions that advance well-being, address the challenges of a changing climate, and promote education access for all in Africa.

While gaining increased attention, the unquestionable value of arts and humanities in STEM, or STE(A)M, requires broader exploration for a deepened understanding. The symposium will highlight some of the outstanding research work done in Africa and in the diaspora to digitize African languages. Featured works will demonstrate how technology could be a solution to preserving African languages in danger of extinction and to using African languages to impact delivery of services including in healthcare, immigration, legal processes, and learning. The symposium will also highlight ongoing efforts to advance STE(A)M education in Africa.

Over two days, the second annual Partnerships in STE(A)M Innovation and Future Africa Symposium will explore the following thematic areas: (i) Nutrition and Food Insecurity; (ii) Healthcare Delivery; (iii) Effects of COVID-19 on the progress made on other disease epidemics, and (iv) Digitization of African Languages and (iv) The importance of integration of Arts in STEM education.

SYMPOSIUM PROGRAM

Thursday November 3, 2022 - Day 1

8:00am ET/ 2:00pm SAST: *Welcome Remarks*

- Prof. Emmanuel Akyeampong, Oppenheimer Faculty Director, Harvard Center for African Studies

8:10am ET/ 2:10pm SAST: *Opening Remarks*

- Prof. John Shaw, Vice Provost for Research, Harvard University (TBC)

8:20am ET/ 2:20pm SAST: *Keynote Address: The Role of Partnerships in Advancing STEM Research in Africa*





- Keynote Speaker: Prof. Mosa Moshabela, Deputy Vice Chancellor – Research and Innovation, University of Kwa-Zulu Natal
- Moderator: Prof. Rifat Atun, Professor of Global Health Systems, Harvard T. H. Chan School of Public Health

ARISE Network Survey Presentation

9:00am ET/ 3:00pm SAST: *COVID-19 Survey*

- Dr. Sulemana Watara Abubakari , Principal Research Fellow, Kintampo Health Research Centre
- Dr. Emily R. Smith , Assistant Professor, Milken Institute School of Public Health, George Washington University
- Moderator: Dr. Mary Mwanyika-Sando, Chief Executive Officer, Africa Academy for Public Health

Motsepe Research Fund Supported Research Presentations

9:30am ET/3:30pm SAST: *Empowered Postpartum: Increasing Postpartum Care among New Mothers in Kenya with Tailored Behavioral Intervention*

- Dr. Jessica Cohen, Professor of Global Health, Harvard T. H. Chan School of Public Health
- Ms. Anneka Wickramanayake, Director of Research Evaluation and Design, Jacaranda Health
- Moderator: Dr. Bizu Gelaye, Associate Professor of Epidemiology and Psychiatry, Harvard T. H. Chan School of Public Health, Harvard Medical School and The Chester M. Pierce, MD Division of Global Psychiatry, Department of Psychiatry, Massachusetts General Hospital

10:00am ET/4:00pm SAST: *Optimizing Prevention and Care at the Intersection of TB, COVID-19, and HIV in Ethiopia: A Model for Sub-Saharan Africa*

- Prof. Anne Goldfeld, Professor of Medicine and Pediatrics, Harvard Medical School





- Dr. Daniel Meressa, Principle Investigator, St. Peter's Tuberculosis Specialized Hospital
- Moderator: Prof. Phyllis Kanki, Mary Woodard Lasker Professor of Health Sciences Immunology and Infectious Diseases, Harvard T. H. Chan School of Public Health

10:30am ET/4:30pm SAST: *Capacity Building to Support Genomic Characterization of SARS-CoV-2 Infections in Botswana*

- Prof. Roger Shapiro, Professor of Immunology and Infectious Diseases, Harvard T.H. Chan School of Public Health
- Dr. Sikhulile Moyo, Deputy Laboratory Director, Botswana-Harvard Aids Institute Partnership
- Moderator: Prof. Christian Happi, Director, The African Centre of Excellence for Genomics of Infectious Diseases, Redeemer's University, Nigeria

ARISE Network Survey Presentation

11am ET/5:00pm SAST: *Scaling-Up High-Impact Micronutrient Supplementation Interventions to Improve Adolescents' Nutrition and Health in Tanzania and Burkina Faso*

- Dr. Millogo Ouhohiré, Principal Research Fellow, Kintampo Health Research Centre (KHRC)
- Dr. Ilana Cliffer, Doctoral Candidate, Food and Nutrition Policy and Programs Division, Tufts Friedman School of Nutrition Science and Policy
- Moderator: Dr. Mary Mwanyika-Sando, Chief Executive Officer of Africa Academy for Public Health

Motsepe Research Fund Supported Research Presentation

11:30am ET / 5:30pm SAST: *Digital Interventions to Address Malnutrition and Food Insecurity Among Adolescents in Tanzania*





- Dr. Sachin Shinde, Postdoctoral Research Associate, Harvard T H School of Public Health, USA
- Dr. Masha Yussuf, Project Coordinator, Africa Academy for Public Health
- Moderator: Prof. Angela Unna Chukwu, Professor & Head of Biostatistics Unit, Department of Statistics, University of Ibadan, Nigeria

12:00pm ET/6:00pm SAST: *Closing Remarks*

- Prof. Emmanuel Akyeampong, Oppenheimer Faculty Director, Harvard Center for African Studies

Friday, November 4, 2022 - Day 2

8:00am ET/ 2:00pm SAST: *Welcome Remarks*

- Prof. Emmanuel Akyeampong, Oppenheimer Faculty Director, Harvard Center for African Studies

8:05am ET/ 2:10pm SAST: *Opening Remarks*

- Prof. Mark Elliot, Vice Provost for International Affairs, Harvard University

8:15am ET/ 2:15pm SAST: *Impact of COVID-19: Regression on Progress in the Treatment and Prevention of HIV, Tuberculosis, and Other Chronic Diseases in Africa*

- Prof. Kathleen Kahn, Professor of Public Health, University of Witwatersrand, South Africa
- Dr. Mohlopheni Jackson Marakalala, Associate Professor, Division of Infection and Immunity, University College London, UK; Wellcome Trust International Intermediate Fellow, Africa Health Research Institute, South Africa
- Dr. Shahin Lockman, Associate Professor, Harvard Medical School/Brigham and Women's Hospital, Harvard T.H. Chan School of Public Health, Director, Clinical Trials Unit, Botswana Harvard AIDS Institute Partnership





- Moderator: Dr. Moeketsi Joseph Makhema, CEO, Botswana Harvard AIDS Institute Partnership

9:15am ET/ 3:15pm SAST: *The Intersection of African Languages and Technology*

- Prof. John Mugane, Director, African Language Program, Department of African and African American Studies, Harvard University
- Dr. Paul Azunre, Director of Research, Dun & Bradstreet
- Dr. Vukosi Marivate, ABSA Up Chair of Data Science, University of Pretoria
- Moderator: Ms. Rooweither Mabuya, Digital Humanities Researcher, South African Centre for Digital Resources (SADiLaR)

10:30am ET/4:30pm SAST: Keynote: *The Integration of Arts in STEM Education: Creating Innovative Solutions for Future Africa*

- Ms. Adetola Salau, Senior Special Assistant on Education to the Executive Governor, Lagos State, Nigeria
- Moderator: Dr. David Sengeh, Minister of Basic and Senior Secondary Education and Chief Innovation Officer for the Directorate of Science, Technology, and Innovation of the Government of Sierra Leone

11:10am ET/5:10pm SAST: *Closing Remarks*

(TBC)

11:20am ET/5:20pm SAST: *Vote of Thanks*

- Prof. Emmanuel Akyeampong, Oppenheimer Faculty Director, Harvard Center for African Studies

