DSSD Team, Affiliations and Project Role

Ann Mwangi, PhD
Associate Professor of Biostatistics and Acting Director of the Institute of Biomedical Informatics at Moi University Moi University (MPI)

Judy Mangeni, PhD
Lecturer in the Department of Epidemiology and Medical Statistics, School of Public Health, Moi University (Co-I)
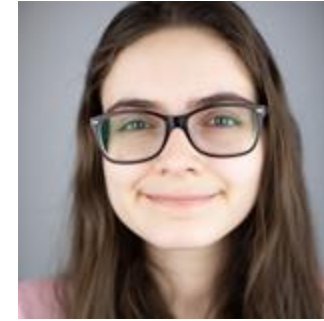
Eileen Immaculee BBM, MS
IBMI/Moi
(Co-Program coordinator)

Iris Wanga, BSc.N, MPH.
AMPATH/Moi
(Program coordinator)

Joseph Hogan, ScD
Professor of Biostatistics and Carole and Lawrence Sirovich Professor of Public Health at the Brown University School of Public Health (MPI)

Jessica Gjonaj, BS
Research Coordinator, Section for Global Health, Institute for Excellence in Health Equity, NYU School of Medicine

Rajesh Vedanthan, MD, MPH, MS
Associate Professor and Director of the Section for Global Health at the NYU School of Medicine (MPI)

Rumi Chunara PhD, ScM
Associate Professor, NYU School of Engineering and School of Global Public Health (Contact PI)

D·S·S·D

Program Overview & Highlights

The DSSD Training Program is a collaboration between New York University, The NYU Grossman School of Medicine, Moi University, and Brown University that is funded by the *National Institutes of Health DS-I Africa network*.

Our main training grant will:

- Develop MSc and PhD data science tracks at Moi University (Kenya)

- Upskill and equip PhD students, Postdocs and Faculty from Moi to teach classes and do research

- Also upskill through short courses on machine learning and social determinants

- Infuse a focus on data science *and* social determinants throughout

Need for Data on Social Determinants

Why does this data matter?

Social Determinants of Health

Education Access and Quality

Health Care Access and Quality

Economic Stability

Neighborhood and Built Environment

Social and Community Context

Social Determinants of Health
Copyright-free

Healthy People 2030

- Social determinants of health (SDoH) include forces, systems, and conditions that shape the environments in which people are born, grow, work, live, and age
- These factors are cross-cutting through many disease and health outcomes.
- Since SDoH have such great influence on people's livelihoods, it's important to be able to properly inform analytical models studying these factors in order to be able to implement any interventions where necessary.

Need for Local Context on Data

Appropriate Local Knowledge & Contexts

- In order to more effectively obtain, integrate and analyze datasets, the involvement of local experts and data scientists is crucial.
- We aim to enable individuals with knowledge of local issues in order to create more coherent models with SDoH data.
- There is a need around the world for data science expertise to be combined with experiences and cultures of the local residents and workers being studied.
- For example, considering questions about how factors like "stigma" are defined differently in the USA vs Nigeria.

NYU

6

Social Determinant Community of Practice

- As part of the new project supplement, we have formed a <u>Community of practice on social determinant data</u>.

- This group will focus on elevating data science capacity in the African context while also creating data resources that will inform models that mitigate oversimplification, homogenization, and the neglect of the surrounding social structure.

- **Data science will be used to create social determinant data as well as link together for analyses**

Ongoing Activities

Working Groups & Grant Applications

- Currently our community of practice has led to the formation of two subgroups:
  - Scoping Review Group: working towards creating a scoping review of current literature across Sub-Saharan Africa focusing on how SDoH data are being studied in the region
  - Data Indexing Group: working towards creating a repository of existing data.
- Recently, the leaders of our two subgroups submitted a grant application for the Data Empowerment Fund funded by the Patrick J. McGovern Foundation, Omidyar Network, and Open Collective Foundation. The purpose of this fund is to support initiatives, such as our Community of Practice, which enable agency and community control of local data and data sources.

NYU

Questions? Comments? Collaborations?

Contact Information:

jessica.gjonaj@nyulangone.org

rumi.chunara@nyu.edu

NYU