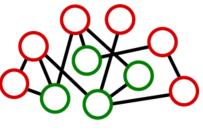
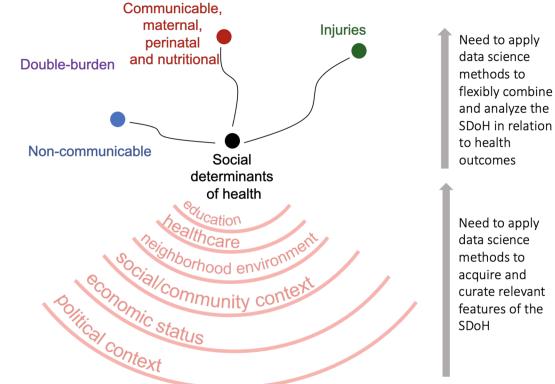
# NYU-Moi Data Science for Social Determinants Training Program



D•S•S•D



#### Why Data Science for Social Determinants?





data science methods to acquire and curate relevant features of the







University of Nairobi



#### THE AGA KHAN UNIVERSITY









## **Building Upon Counterpart Relationships & Social Networks**







The Data Science for Health Discovery and Innovation in Africa (DS-I Africa) consortium consists of a data science platform and coordinating center, seven research hubs, seven data science research training programs and four projects focused on studying the ethical, legal and social implications of data science research.

NAMBARI, the Moi-Brown Partnership for HIV Biostatistics Training, is a research training program to build biostatistics capacity for HIV research at Moi University. supported by the Fogarty International Center at the US National Institutes of Health (D43TW010050) since 2015.

Founded in 1989, AMPATH is an academic medical partnership between North American academic health centers led by the Indiana University School of Medicine in Indianapolis, Indiana, the Moi University School of Medicine, centered in Eldoret, Kenya, and both the US and Kenyan governments.



#### **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)



BSc.N, MPH AMPATH/Mo i (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)









#### 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

## Timeline

Aim 1: Capacity building via long- term training	PhD Sandwich Trainees
	Postdoc Trainees
	Faculty Fellows
Aim 2: Moi Program Development and Evaluation	MSc Data Science Track Creation
	PhD Data Science Track Creation
	MSc Trainees
	PhD Trainees
Aim 3: Continuing Education for Moi and Neighbors	Data Science Education Special Topics Workshops
	Social Determinants and Data Science Workshops
	Stakeholder meetings



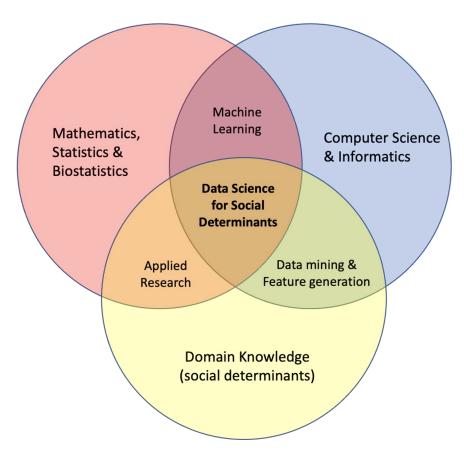
## First Trainee Cohort Spring 2023



- Philomena Ngugui, PhD Faculty Fellow. Moi University, Institute of Biomedical Informatics (IBMI) Tutorial Fellow, Researcher (PhD in Health Informatics, University of Bergen)
- Job Nyangena Nyameino, MD MSC Faculty Fellow. Medical doctor and digital health professional currently working as a lecturer and researcher at the Moi University Institute of Biomedical Informatics (PhD in Health Informatics, University of Bergen)



## Curriculum





#### **MSc Data Science Track Creation**

- Previously: through NAMBARI facilitated a revision and expansion of the biostatistics curriculum at Moi through faculty development.
- Stakeholder input sought
- Curricula overlap with NYU discussed/organized



## **Other Opportunities**

- Workshops, "How do I integrate social determinants into my work", "Machine Learning and Predictive Inference"
- Opportunity to consolidate SDoH knowledge; 27/80 applicants for 2023 workshop already are utilizing social determinants
- Social Determinant working group



#### Successes

- Dr. Nyangena next steps as Senior Deputy Director Directorate of Digital Health, Informatics, Policy & Research (Health Informatics) at Kenya Ministry of Health, focus on social determinants from community health data systems
- Identified many champions across multiple universities, schools and departments which have all made the program a success
- Relationships fostered through short term experiences and other interactions



## Challenges

- Coordination across multiple schools (NYU and Moi)
- Trainee research experiences



#### **Long-term Vision**

- Exemplar for Data Science & Social Determinants (curricula and research)
- Rapidly increase cadre of Data Science leaders at Moi University and beyond



### **Questions? Comments? Collaborations?**

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