MAKERERE UNIVERSITY

MakNCD Research Training Program

NIH Fogarty International Center

TRAINING IN NONCOMMUNICABLE DISEASES EPIDEMIOLOGICAL, DATA SCIENCE AND IMPLEMENTATION SCIENCE RESEARCH TO STRENGTHEN EVIDENCE-BASED INTERVENTIONS, POLICY AND CONTROL IN UGANDA (MAKNCD).

CALL FOR APPLICATIONS

FOR PHD DEGREE FELLOWS IN NCDs RELATED RESEARCH

The Makerere University Non-Communicable Disease (MAK-NCD) Research Training Program is a research capacity building program based at Makerere University College of Health Sciences with collaboration at John Hopkins University and funded by the United States National Institute of Health-Fogarty International Centre (D43TW011401). The overall goal of this training program is to develop a comprehensive mentored research-training program in Uganda that will build local capacity to address the challenges of NCD control and management and promote the use of research findings to inform decision-making and policy.

This call for applications is targeting mainly junior researchers with interest in building an independent research career in noncommunicable diseases research with focus on Epidemiology, Data Science and Implementation Science research to strengthen evidence-based interventions, policy and control in Uganda

Fellowship package

The PhD fellowship support is for up to three (3) years (full-time), subject to annual performance reviews and progress milestones. Successful scholars will be registered at Makerere University and may undertake sponsored didactic research methods training at the Johns Hopkins University (JHU), USA, to receive additional skills development and mentorship in NCD research.

PHD Scholarship

1) Must have a concept or a research idea proposal in one of the following NCD areas; Chronic Respiratory Diseases (CRD) with focus on Chronic Obstructive Pulmonary Disease and Asthma, Chronic Kidney Disease (CKD), cardiovascular diseases (CVD) & Hypertension.
2) Concepts for studies that identify and validate key biomarkers and demonstrate robust machine-learning methodologies for predicting risk, supporting diagnosis, characterizing disease severity, assessing treatment response, and estimating prognosis for the targeted NCDs.
3) Studies that leverage multimodal data sources, including genetic, clinical, demographic, and environmental datasetsorbenchmarkmachine-learning models against established risk-scoring systems.
4) Studies that aim to use existing genetic datasets related to kidney disease; identify key genetic variants linked to CKD onset and progression; and develop machine-learning models to predict CKD risk using genetic, epidemiological and clinical data.
5) Commitment to develop and maintain a productive career devoted to NCD
6) Must have two (2) mentors in the proposed area of research.

Application Resources:

The following datasets are available for candidates who aim to use large data sets:

- Vicinity cohort RHSP (~2,400 Echocardiography measurement done, ~3,000 spirometry, ~20,000 blood pressure measurements)
- Longitudinal Rakai Community Cohort Survey, South Central Uganda 20 surveys conducted since 1994
- Fatumo, Segun, et al. "Uganda Genome Resource: a rich research database for genomic studies of communicable and non-communicable diseases in Africa." Cell Genomics 2.11 (2022).

Application Process:

ELIGIBILITY

Applicants should meet the following minimum requirements:

- Master's degree in Computer Science, Statistics/Biostatistics, Mathematics, Bioinformatics, Epidemiology, Public Health, Health Informatics or another data-intensive discipline.
- Demonstrated interest and/or experience applying data science methods/technologies to health research or health systems.
- Strong quantitative or computational skills (e.g., programming, statistical analysis, machine learning, data management).
- Ugandan citizenship and commitment to advancing NCD research in Africa.
- Ability to enroll in and complete full-time PhD training at Makerere University.
- *Note: Additional program- or department-specific admission requirements may apply.*

Note: Proof of admission is **not required at the time of application**. However, **preference will be given to applicants who have already secured admission to, or are currently registered in, a relevant PhD programme.**

APPLICATION PACKAGE & SUBMISSION

Submit the following documents by email as a single application package:

- NIH Biosketch (maximum 4 pages) including relevant publications (if any).
- Cover letter stating that you can commit 100% of your time to the fellowship (maximum 1 page).
- 2-page research concept note highlighting: research problem, specific aims, research design, and analysis plan.
- Academic transcripts and certificates for the relevant Master of Science (MSc) degree.
- Statement of purpose / motivational letter (maximum 800 words) for undertaking doctoral training with research focus on NCDs
- Two letters of recommendation with up-to-date contact details from academic referees.

Email subject line (recommended):
APPLICATION – Doctoral Scholarship – MakNCD PhD

File naming convention (recommended):
LastName_FirstName_DocumentName (e.g., Batte_Charles_CV.pdf)

Application Deadline

MONDAY 23rd FEBRUARY 2026

Program contact:
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