









# **Call for Applications for Seed Pilot Projects 2023**

# 1. Background

The Multimorbidity in Africa: Digital Innovation, Visualisation and Application (MADIVA) research hub is a five (5) year project funded by the National Institutes of Health's (NIH's) Harnessing Data Science for Health Discovery and Innovation in Africa (DS-I Africa) program. https://dsi-africa.org/ https://www.madiva.africa/

MADIVA seeks to recruit two (2) pilot projects to develop research applications to inform individual and public health challenges amidst the rising prevalence of multimorbidity in Africa through data science.

MADIVA has access to rich longitudinal epidemiological data sets, partial but increasingly available clinical and laboratory records, and genomic data.

The datasets are derived from a rural transitioning population in Bushbuckridge, South Africa, and an urban environment in Nairobi, Kenya, under the umbrella of the MRC/Wits Agincourt Rural Public Health and Health Transitions Research Unit and the African Population & Health Research Centre (APHRC), respectively. Both are established Health and Demographic Survey Sites (HDSS).

The scope of possible projects is not limited, but the examples listed below are based on identified ongoing needs:

- Clinical data abstraction and digitisation. District Health Information System (DHIS) compliant
- Data linkage of a single patients records from varying existing databases - deidentification of patient records
- Population risk stratification, including polygenic risk scores
- Models for ethically and socially responsible access to cross border patient records
- Observational Medical Outcomes Partnership (OMOP) data modelling of existing datasets
- Data science methods for "data-missingness" in clinical records
- The role of climate change in Multimorbidity
- Computational models for validation of Verbal Autopsy reports
- Gen 3
- Multimorbidity/clinical data visualization dashboard

# 2. Eligibility Criteria

- These seed projects must be clearly linked to the hub and use the opportunities that the hub provides.
- Be current or prospective teaching or research staff at an international university or research institution.
- The lead applicant must have a PhD in the related areas.
- Preferably be nationals of an African country.
- There is potential for progression to a more detailed applications and/or longer projects.

#### 3. Assessment

The proposals will be assessed under the following criteria.

- The application MUST show relevance to data science applied to the problem of multimorbidity in Africa
- Overall idea and goals
- Feasibility bearing in mind capacity of the seed project team, timelines, required and available funding, and the difficulty of project
- Innovation
- Development impact
- Commitment to MADIVA Research Hub and DS-I policies

#### 4. What can be funded?

These seed projects must be linked to the hub but may propose work independent of the existing work. The grant can fund time (e.g., partial buy-out), travel, community or stakeholder engagement, and acquisition of existing data, but not collection of new data. Seed projects are expected to bring in their own in-kind support to cover any additional administrative costs. MADIVA provides a supportive and enabling environment within a skilled research team. We will not cover the cost of equipment or generation of new data. The budget may include an overhead of a maximum of 8%.

# **5. Responsibilities**

The successful applicant will be expected to:

- Identify a self-directed project related to the goals of the hub
- Choose collaborators and other members of your team as required
- Write a scoping review document relevant to the project
- Prepare a research proposal including a basic budget
- Identify possible additional data sets complementing hub resources
- Produce substantive research output and/or appropriate artefact, in the form of publications and or presentations in peer reviewed Journals and forums
- Consider a research proposal for submission for a full pilot project

### 6. Duration of the award

- The award is for a period of 18 months.
- Funding package: The value of the seed pilot project will be US\$ 70,000

# 7. Application Process

Please submit the following documents to:

#### SBIMB@wits.ac.za

Cc: kerry.glover@wits.ac.za; aphrctraining@aphrc.org

Subject title, "MADIVA: Call for Application for Seed Pilot Projects 2023."

- a) Online application Click here
- b) A single page Cover Letter (not more than 500 words) detailing the proposed project and its alignment with hub goals
- Research proposal maximum three (3) pages) including project plan and timeline
- d) Curriculum Vitae of the applicants including publications
- e) Support letter from the host institution

#### 8. Application Deadline

- The application letter and supporting documents must be submitted and addressed to the MADIVA, Training and Capacity Development Core, on or before 28 July 2023 at 1700 hrs (EAT), 1600 (SAST).
- Applications received after this deadline will NOT be considered.
- You will receive a response to your application by 18 August 2023.

### For more Information, please contact.

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