











# Call for Applications for Scientist Positions: Post Doc Fellows and Phd

## **BACKGROUND**

The Sydney Brenner Institute for Molecular Bioscience (SBIMB) seeks interested candidates for scientist positions as part of its contributions to the Harnessing Data Science for Health Innovation in Africa. The SBIMB hosts the MADIVA Research Hub which seeks to apply data science to provide insight into the problem of multi-morbidity in Africa. Change in lifestyle across Africa as well as extended lifespans means that increasing numbers of people have multiple diseases which creates a significant toll on both individual health and public health systems. We believe that data science methods can help tackle the problem by building risk models to understand where pre-emptive steps can be taken and by building monitoring and analytic systems. The SBIMB also contributes to the eLwazi Open Data Science Platform (www.elwazi.org) which is building an interactive environment for African scientists. eLwazi provides a flexible, scalable open data science platform for the DSI-Africa consortium to find and access data, select tools and workflows and run analyses on a choice of computing environments, all through easy to use workspaces. Some of these positions will be based in Wits's SAMRC Rural Public Health and Rural Health Transitions Research Unit, a collaborator in MADIVA. For all positions, candidates should be able to work independently and collaboratively. Candidates should have a relevant qualification in computational science, data science, public health, biostatistics, genomics or cognate discipline, and have at least basic competence in programming and the Linux command line. Post-specific requirements are shown below.

# **POST-DOCTORAL FELLOW (Two Positions)**

- Must have completed PhD in a related position. We will consider applications from candidates who have formally submitted their PhD for examination
- One position will work on eLwazi's cloud/computational workflows projects and should have a strong computing background, excellent knowledge of Linux and experience in workflows and/or cloud computing.
- The other position will work on a data science project in MADIVA building and applying risks.

#### **PhD**

- Must have an MSc in computer science, statistics, electrical engineering, bioinformatics or genomics
- Very good programming skills and a strong background in statistics or machine learning is essential.
- Will work with researchers at Wits and IBM Research on building risk models for Multimorbidity.

All positions are renewable annually based on satisfactory performance. The PhD position is anticipated as a 3-year position; the data programmer is a two year position; and all other positions are 5-year positions.

### **APPLICATION DEADLINE**

The applicationletter and supporting documents must be submitted via email addresses: **SBIMB@wits.ac.za**; Copied to: **kerry.glover@wits.ac.za**, and addressed to The Selection Committee, with the subject line POST DOC FELLOW AND PHD MADIVA on or before **August 26**, **2022 at 1700 hrs (EAT)**, **1600 (SAST)**. Applications received after this deadline will NOT be considered.