



# UNIVERSITY OF MAURITIUS

## VACANCY

Applications are invited from suitably qualified candidates for the post of **Research Assistant**, for a task-based assignment to work on the NIC funded research project entitled “**African Genomics Data Hub (AGDH)**”.

### Qualifications Required:

- A degree in Computing, Biological Sciences, Bioinformatics or any other equivalent qualification.

### Profile

Candidates must have:

- Excellent programming skills (Python programming and shell scripting);
- Excellent database development skills (both relational and non-relational);
- Proven experience in the design, development, testing and maintenance of Web-based applications (preference: using Django);
- Excellent analytical skills;
- Keen interest in Human Genomics research;
- Excellent interpersonal and teamwork skills;
- The ability to attend regular face-to-face/online meetings. Online meetings with collaborators in Africa might be beyond the normal office hours due to different time zones; and
- Availability to start work as from 02 September 2024.

### Responsibilities & Duties

#### Task 1 African Genome Variation Database (AGVD)

- Write code to process genomic datasets and convert them into suitable format for ingestion by the AGVD database;
- Maintain the AGVD Web application, to fix bugs or for minor improvements as necessary following evaluation and user feedback;
- Maintain accurate documentation of the development/ programming of the application;
- Attend meetings & training concerning the project;
- Prepare progress reports; and
- Any other tasks related to the project.

#### Task 2 Genotype-Phenotype Association Database (Gen2Phen)

- Review literature on genotype-phenotype data resources;
- Review literature on machine learning approaches for genotype-phenotype associations;
- Use ML models to derive genotype-phenotype associations in African datasets;
- Participate in the design and development of the Gen2Phen database;
- Participate in the design and development of the Gen2Phen Web application;
- Maintain accurate documentation of the development/ programming of the application;
- Attend meetings & training concerning the project;
- Prepare progress reports; and
- Any other tasks related to the project

### Task 3 African Genomics Medicine Portal (AGMP)

- Write code to process genomic datasets to extract African-specific data and convert them into suitable format for ingestion by the AGMP database;
- Maintain the AGMP Web application to fix bugs or for minor improvements as necessary following evaluation and user feedback;
- Maintain accurate documentation of the development/ programming of the application;
- Attend meetings & training concerning the project;
- Prepare progress reports; and
- Any other tasks related to the project

### Remuneration

For each task, an all-inclusive allowance of Rs 90,000 - **upon satisfactory completion.**

### Duration of Contract

For each task, the appointment will be offered for a contractual period of ten (10) months. The tentative starting date will be **02 September 2024.**

### Mode of Application

Letter of application together with a detailed *Curriculum Vitae* and photocopies of qualifications, birth certificate, marriage certificate (if applicable), testimonials and equivalence of qualifications (where applicable) should be sent **by email** to Dr A W Ghoorah ([a.ghoorah@uom.ac.mu](mailto:a.ghoorah@uom.ac.mu)) and copied to the **Dean of Faculty of Information, Communication and Digital Technologies** ([deanfoicdt@uom.ac.mu](mailto:deanfoicdt@uom.ac.mu)) by **Noon (12:00 PM) on 02 August 2024, at latest.** The email subject should read **“Research Assistant for African Genomics Data Hub”**. Applications received after the closing date will not be considered.

The University reserves the right:

- to call for interview only the most appropriately and best-qualified applicants;
- not to make any appointment as a result of this advertisement.
- to conduct a written/apptitude test as and when required.

12 July 2024

Dean, Faculty of Information, Communication and Digital Technologies