

Call for Applications for Post-Doctoral (Post-doc) Fellowship in Translational Health Sciences

I. Background

The University of Rwanda-College of Medicine and Health Sciences (UR-CMHS), with financial support from the "Team Europe Initiative on Manufacturing and Access to Vaccines, Medicines, and Health Technologies (TEI MAV+) "aim to increased skilled workforce for vaccine and drug research and development in Rwanda. This initiative is strategic to Rwanda Vision 2030 as Centre of Biomedical Research & Bio-pharmaceutical companies. The recent African Union (AU) decision to have Rwanda host the African Medicines Agency (AMA), and the African Bio-manufacturing Institute (ABI) serves as a key opportunity to fast-track the development of Bio-pharma manufacturing capacity for Rwanda and Africa at large.

The overall objective of TEI MAV+ is to contribute to an increased skilled workforce for vaccine, diagnostic and drug research and development (R&D) in Rwanda. It also re-enforces the recent 4x4 health workforce reform approved by the GoR in July 2023, which aims to increase the number of skilled health workforce in the country.

II. Description

The Post-Doc has the following three Research Thematic Areas aligning with the government of Rwanda's (GoR) priorities for strengthening Rwanda's biopharma manufacturing capacity and research ecosystem.

- 1. Human Genetics and Genomics
- 2. Infectious Disease & Immunology
- 3. Clinical Trials

The program targets motivated Postdoctoral Fellows specializing in one of the above research thematic areas. The fellow will undertake research on leveraging translational health sciences to address significant bio-manufacturing and vaccine development challenges in Rwanda.

Under the mentorship of an experienced team of faculty, the Postdoctoral Fellows will be expected:

- 1. Conduct independent research
- 2. Supervise PhD students within TEI MAV+ similar tracks
- 3. Contribute to ongoing research projects
- 4. Publish research findings
- 5. Work effectively with advisory and supervisory team
- 6. Collaborate with other researchers
- 7. Prepare for their future career (e.g, participating in postgraduate teaching, assessment and academic program review, conference, publications, etc.)

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8. Be able to generate research grants in collaboration with senior mentors

III. Number of Position and Research Areas

Three postdoctoral positions are available under the above-mentioned research thematic areas supported by the UR-EU-TEI/MAV+ Project. The postdoctoral fellows shall undertake research in one of the 3 topics of the research thematic areas listed below. Shortlisted applicants will have to prepare a full research proposal (*see attached template*) and present a short (10 minutes) defense on the topic in front of a selected jury for the final selection.

Research Thematic Area 1: Human Genetics and Genomics

Research Topic: Application & Integration of Multi-Omics in Health and Diseases: Integrated omics technologies are revolutionizing healthcare that provide a comprehensive molecular understanding of individuals and diseases, enabling personalized medicine, improved diagnostics, and tailored treatments. These technologies analyze the entire set of molecules in an organism, including genes (genomics), epigenetics marks (epigenomics), RNA (transcriptomics), and proteins (proteomics), to identify biomarkers and patterns associated with disease. By integrating these data using advanced bioinformatics and (AI), healthcare can become more predictive, preventive, and precise, leading to better patient outcomes. This theme focusses on application of epigenetics and transcriptomics in understanding etiology of different diseases burden in Rwanda settings such as Post Traumatic Stress Disorders (PTSD), cancer and neglected tropical diseases and other aging diseases including CVDs and mental health disorders.

Research Thematic Area 2: Infectious Diseases and Immunology

Research Topic: Investigating Immune Responses to Tropical Pathogens

This project will explore immune mechanisms involved in tropical infectious diseases, with a focus on understanding host-pathogen interactions, immune system variability, and factors influencing disease progression and treatment outcomes. The research may incorporate advanced immunological and genomic techniques to study immune responses, inform therapeutic strategies, and contribute to public health efforts in vulnerable populations. Specific pathogens, technologies, and approaches will be defined as the project evolves.

Research Thematic Area 3: Clinical Trials

Research Topic: Strengthening Clinical Trial Capacity in Rwanda. The theme of focus will include optimizing drug regimens, evaluating preventive chemotherapy strategies, and assessing innovative interventions such as integrated deworming programs. This position is part of an ambitious program to strengthen Rwanda's clinical research capacity, with particular emphasis on advancing high-quality clinical trials for vaccines and therapeutics.



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IV. Call for Application & Funding

This call for 3 Postdoctoral fellows' positions will be primarily funded by UR EU TEI-MAV+ Project under the research fund management of the University of Rwanda's Single Project Implementation Unit (SPIU). Successful candidates will be funded for tuition fees, monthly living allowances, field allowances and other research expenses, for the 2 years of fulltime programme.

The fellowship program is expected to start in the academic year 2025-2026. Priority will be for candidates from UR, though potential candidates from relevant government & public institutions will be considered for the fellowship. The postdoctoral study will be performed partly in Rwanda and partly in a selected international partner university/institution. All selected candidates will be registered under the postdoctoral in Translational Health Sciences-CMHS, UR.

V. Application Requirements for fellowship

The applicant must be:

- 1. Rwandan
- 2. Holding a relevant PhD degree related to the above research thematic areas within the last 5 years
- 3. Be a UR permanent staff
- 4. Committed to complete postdoctoral research within 24months with at least two publication
- 5. Ready to continue to work with UR after the completion of postdoctoral studies
- 6. Not in possession of another fellowship
- 7. English proficiency
- 8. Must be under 40 years of age for male applicants and under 45 years for female applicants

VI. Application File

- 1. Application letter addressed to UR, Center for Post-Graduate Studies (UR-CPGS) indicating for which research thematic area the application is being made
- 2. A personal motivation statement for the fellowship programme. The statement should demonstrate commitment, motivation, and reasons for interest in the topic of research themes (Max. 2 pages)
- 3. Update Curriculum Vitae (Max 3 pages)
- 4. Notarized PhD, Masters and Bachelor's degrees and transcripts
- 5. Recommendation letter from at least two academic referees. One of the recommendation letters should be issued by a previous supervisor, preferably the PhD degree supervisor
- 6. Copies of valid identification card or passport
- 7. A statement of not having another active fellowship
- 8. Recommendation letter from the current employer stating past and the current positions occupied by the candidate in the institution, and ensuring the candidate gets study leave for entire period if chosen for the fellowship (if any).







- 9. Link or Copies of publications (at least 2)
- 10. Postdoctoral research concept notes (Max 15 pages) clearly indicating the research gaps, the research problem and the research objectives, a detailed methodological approach, and a description of the expected scientific results, significance and the development impact of the research (use the attached research template).

VII. Selection Process

Shortlisted candidates will be invited to the interview on dates that will be communicated through their emails.

VIII. How to apply and key dates

A copy of complete application file should be submitted by email (as a zipped file) to the UR-CPGS officer at ur-cpgscholarship@ur.ac.rw, Tel: 0792988304 copy to Prof. George Mala (gmotieno@gmail.com) the EU TEI-MAV+ PhD Coordinator, Prof. Ezera Agwu (agwuezera@gmail.com), Co-PI UR EU TEI-MAV+ Project and Prof. Leon Mutesa (1.mutesa@ur.ac.rw), Tel: 0788 451 013 PI UR EU TEI-MAV+ Project.

Application should be submitted not later than 24th October 2025.

Done at Kigali on 3 / 10/2025

Assoc. Prof. KAYIHURA Muganga Didas

Acting Vice Chancellor