



## **Call for MSc Research Fellowship**

### **Introduction**

Despite progress in vaccines, diagnostics, and treatments, eliminating infectious diseases remains difficult, particularly in low- and middle-income countries (LMICs) due to limited access to these health solutions. Enhancing local production of health products could improve their availability and affordability. However, translating research into public health products and bringing them to market is especially challenging in these regions, facing obstacles from innovation to commercialization. The innovation ecosystem, encompassing policies, regulations, standards, and intellectual property rights, is vital for success, but challenges differ by country. In Ethiopia, there have been some successes in developing in vitro diagnostic devices, but significant regulatory challenges persist in product registration, market authorization, and commercialization. The specific reasons for these obstacles are not well understood. Supported by the Bill and Melinda Gates Foundation, the Armauer Hansen Research Institute (AHRI) has launched the “Strengthening Health Innovation Ecosystem in Ethiopia (SHINE)” project. The SHINE team is looking for an MSc student to join a research project aimed at thoroughly understanding the challenges and facilitators related to in vitro diagnostics. This research will identify, evaluate, analyze, and synthesize experiences related to the innovation and commercialization of in vitro diagnostic tests in Ethiopia, to outline the facilitators and barriers to successful and sustainable commercialization.

### **Overarching research question**

#### Evidence synthesis

- What experiences, challenges, and interventions from other LMICs can inform the innovation and commercialization of in vitro diagnostic devices in Ethiopia?

#### Opportunities, gaps, and challenges to innovate and commercialize

- Do innovators have the necessary educational background and ongoing professional development?
- Are there supportive policies, legal frameworks, standards, intellectual property rights (IPR), and implementation guidelines for health innovation commercialization?
- Are key stakeholders (involved in innovation, standardization, regulation, IPR protection, and commercialization) engaged in effective collaboration, networking, and communication?
- Do stakeholders have the belief, attitude, and culture to embrace and commit to the commercialization of health innovation products?
- Are the required physical and sustainable financial resources available for innovation and commercialization?

#### Barriers and enablers to innovate and commercialize diagnostics and health products

- Are demand, purchasing capacity, accessibility, and user culture considered during the innovation process of in vitro diagnostic devices?
- Is the cost-benefit analysis of the innovation supported by evidence-based data?



- Are affiliated institutions, regulatory authorities, and industries working together collaboratively throughout the innovation pathway to bring the product to market?
- Are key stakeholders effectively executing their roles to drive innovation from development to large-scale production and commercialization?

#### Develop intervention and implementation model

- Will the product address one or more major health issues in the country?
- Does the model consider the political climate, sociodemographic, sociocultural, and economic contexts of the population/end-user, as well as the environment where the product will be used?
- What mechanisms are included to motivate inventors, innovators, and manufacturers to commercialize health innovation products?
- Does the model account for potential facilitators and barriers to innovation and commercialization of health products in the country?

#### **Thesis Project Duration:**

The studentship is for one year, and it will commence upon acceptance of the candidate.

#### **Value of the Studentship:**

The studentship covers all necessary project-related costs, including access to AHRI facilities and shared office space. However, please note that there is no monthly stipend or per diem payment.

#### **Who is eligible to apply?**

- The selected student will focus on the key questions about *in vitro* diagnostics. Thus, applicants should hold a first degree in Laboratory Management, Behavioral Health, Laboratory Technology Sciences, Social Sciences, Social Pharmacy, and related fields, be Ethiopian citizens, and be registered at one of the Ethiopian universities.
- Additionally, they must have completed all coursework and be able to verify this with a certificate.
- Female MSc students in these fields are especially encouraged to apply.

#### **How to apply?**

Interested candidates should submit the following documents to email:

[rersearch.training@ahri.gov.et](mailto:rersearch.training@ahri.gov.et)

1. **Concept Note:** Problem Statement and Justification: Clearly define the problem you intend to address and justify its importance; Research Questions: Elaborate on the specific questions your research aims to answer; and Methodology: Describe the methods you plan to use in your study; implementation plan; budget etc.
2. **Cover Letter:** A one-page letter that introduces yourself, explains your interest in the position, and highlights your relevant skills and experiences.
3. **Curriculum Vitae (CV):** A tailored CV, not exceeding two pages, that outlines your academic background, research experience, and any relevant skills or achievements.



4. References: Two references who can attest to your academic performance and suitability for the research position.

**Application deadline**

Full Application documents should be received on 15<sup>th</sup> October 2024.

([research.training@ahri.gov.au](mailto:research.training@ahri.gov.au)).