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VACANCY ANNOUNCEMENT

Job Summary

Position:	**Senior Research Scientist - Post doc (1 Post)**
Reports To:	**Principal investigator/Country Lead**
Work Station:	**Dar es Salaam**
Apply By:	**14th July 2025**

Institute Overview

Ifakara Health Institute (IHI) is a leading research organization in Africa with a strong track record in developing, testing and validating innovations for health. Driven by a core strategic mandate for research, training and services, the Institute's work now spans a wide spectrum, covering biomedical and ecological sciences, intervention studies, health-systems research, service delivery and policy translation.

Position Summary

Ifakara Health Institute is seeking a highly motivated and qualified **Senior Research Scientist-Post Doc (Modelling)** with advanced modelling expertise to drive MoDD Africa's mission of delivering tailored, model-based evidence and forecasting for malaria control. The successful candidates will lead the development and application of advanced mathematical and geospatial models to address malaria control challenges, working closely with NMPs, regional hubs, and global collaborators. This role offers a unique opportunity to contribute to cutting- edge research and build a lasting network of African modellers.

The **Modelling for Decisions in a Dynamic Africa (MoDD Africa)** project is a collaborative, innovative initiative designed to bring together modelers, researchers, and decision-makers to support national decision-making for malaria control, with an initial focus on malaria in the **Democratic Republic of Congo (DRC), Nigeria, and Tanzania**. These countries account for half the world's malaria deaths and over 40% of cases, making them critical focal points for impactful intervention. The project aims to deliver robust, evidence-based tools, forecasting systems, and model-based advisory systems to support public health decision-making in the face of rapidly changing environmental and social dynamics across Africa. By integrating environmental, entomological, epidemiological, and health system data.

The candidate will be offered a dynamic and inclusive research environment within leading African research institutes. Opportunities for professional development through training, hackathons, and international collaborations. Access to high-performance computing resources and datasets from MAP and Vector Atlas. A chance to make a direct impact on malaria control in high-burden countries, and support for career advancement through publications, networking, and mentorship.

Duties and Responsibilities

- Develop and implement advanced statistical and geospatial modelling frameworks to analyze the interplay of environmental changes, vector behavior, and disease outcomes.

Ifakara Branch
Off Mlabani Passage
P.O. Box 53 Ifakara
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- Lead the creation of models assessing the impact of climate, urbanization, and land-use changes on vector dynamics and intervention effectiveness.
- Contribute to unified frameworks for early warning systems for emerging malaria threats.
- Identify and address research questions on climate and socio-environmental impacts on malaria and other vector-borne diseases.
- Establish learning hubs to develop model-based ecosystems in collaboration with public health stakeholders in the DRC, Nigeria, and Tanzania.
- Facilitate workshops, hackathons, and modelling competitions to promote collaboration and skills transfer.
- Mentor and supervise junior researchers, promoting knowledge exchange within the team.
- Collaborate with NMPs and other stakeholders to translate modelling outputs into actionable recommendations.
- Foster effective communication to ensure model uptake and utilization in decision-making processes.
- Uphold rigorous data and code management standards, including thorough documentation and version control.
- Oversee project management activities, ensuring milestones are achieved on time.
- Adhere to workplace safety protocols and institutional policies.
- Take reasonable care for your own safety and health and avoid harming the safety and health of others through any act or omission at work.
- Identify and assess workplace hazards and apply hazard controls.
- Report every workplace injury, illness or near miss, no matter how insignificant they seem.
- Abide by institutional policies and procedures.

Qualification and Experience
- PhD in geostatistics, biostatistics, mathematics, infectious disease modelling, mathematical modelling, climate science, or any other quantitatively related discipline with epidemiological know-how.
- Experience of working with national disease programs, and managing relationships with senior stakeholders, data owners, and collaborators.
- Knowledge and experience in working with ministries of health in LMICs, NMPs, funding agencies, and bilateral organizations.
- Experience in developing and delivering training for different audiences.
- Previous experience working on malaria or other mosquito-borne diseases, especially with vector control or malaria biology.
- Experience with knowledge synthesis, such as conducting literature reviews and evidence synthesis, to support model assumptions and fill gaps in data and parameters.

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Skills and Competencies

- Proficiency in mathematical, geostatistical and computational modelling, particularly in infectious diseases or vector-borne diseases.
- Proficiency in one or more programming languages (e.g., R/Python, Stata), knowledge of other statistical software and data visualization applications.
- Demonstrable commitment to using best practices in writing code, including the use of source control, code documentation/repositories, and coding standards.
- Track record of scientific publications in high-quality peer-reviewed journals in the areas of epidemiology, modelling, or health system research.
- Track record of scientific publications in high-quality peer-reviewed journals in the areas of epidemiology, modelling, or health system research.
- Familiarity with climate and meteorological data and experience with climate modelling.
- A demonstrated commitment to capacity-building and strengthening institutional networks within African research institutions.

Remuneration

An attractive and competitive remuneration package will be offered to successful candidates as per IHI salary scales.

Equal Opportunity

IHI is an equal opportunity employer. We prohibit intentional biases or discrimination and harassment of any kind at the work place and during recruitment. All employment decisions are based solely on job requirements and individual qualifications, and our recruitment process is governed by the labour laws of Tanzania.

Mode of Application

All candidates who meet the above job requirements should send their application letters together with their detailed curriculum vitae (CVs) showing contact addresses including email, telephone/cell phone numbers and copies of academic and professional certificates to the email address below.

The **deadline** for this application is **12:00 noon on Monday July 14 2025.** All e-mail application subject lines should include: **[Senior Research Scientist-Post doc-1 Post – MoDD Africa]. Only shortlisted applicants will be contacted for an interview.**

Senior Human Resources and Administration Manager
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