

## **Research Assistant (Intern) – FAIR Data and Cholera Preparedness (2 posts)**

Location: Lilongwe, Malawi

Duration: 6 months (possible 3-month renewal)

Reports to: PHIM Research

Supervision: PHIM Research Health Data Scientist

Collaboration with: National Statistical Office, Meteorological Department, University Disease Modelers, UNICEF Malawi, and other partners

### **Background**

The Committee on Data (CODATA) of the International Science Council (ISC), in collaboration with the Government of Malawi, UNICEF Malawi, and the Ministry of Health, is implementing a FAIR Data-driven initiative to enhance cholera preparedness and response. This initiative supports the Malawi Multi-Sectoral Cholera Control Plan (MMCCP) 2025–2030, aiming to integrate climate, demographic, health surveillance, and social media data into a structured, interoperable system for cholera risk monitoring and outbreak forecasting.

The interns will support data inventory development, metadata structuring, data processing, analytics, and report development. They will play a key role in ensuring high-quality quantitative outputs, working closely with CODATA and other project partners.

### **Key Responsibilities**

#### **1. Data Analysis and Statistical Support**

- Perform quantitative analyses on cholera-related datasets, including health surveillance, environmental, geospatial, and social media data.
- Prepare datasets for predictive modeling and small area estimation techniques.
- Conduct statistical modeling, trend analysis, and hypothesis testing.

#### **2. Data Inventory and Curation**

- Identify and catalog datasets relevant to cholera preparedness and response.
- Assess data quality, completeness, and consistency across sources.
- Ensure datasets follow FAIR data principles in collaboration with CODATA colleagues.

#### **3. Data Visualization and Reporting**

- Develop charts, dashboards, and GIS maps to support decision-making.

- Assist in creating interactive tools for policymakers using R, Python, or other platforms.
- Produce automated reports summarizing analysis findings.

## Candidate Profile – Qualifications and Skills

### Essential Qualifications:

- Bachelor's degree in Statistics, Data Science, Applied Mathematics, Computer Science, GIS, or related field.
- Strong quantitative skills and experience in statistical analysis, modeling, or data-driven research.
- Proficiency in R, Python, or Stata.
- Familiarity with geospatial analysis tools (QGIS, ArcGIS) or machine learning techniques.
- Ability to work with large, multi-source datasets.

### Desirable Skills:

- Knowledge of FAIR Data principles and research data management.
- Experience with metadata structuring (DDI, SDMX, ISO 19115).
- Prior experience working with national statistics offices, public health agencies, or research institutions.
- Skills in dashboard development and advanced data visualization.

### Soft Skills:

- Strong analytical and problem-solving abilities.
- Excellent written and verbal communication skills.
- Ability to work independently and collaboratively in a multidisciplinary team.
- Attention to detail and ability to manage multiple tasks.

## Benefits and Learning Opportunities

- Hands-on experience in quantitative analysis and predictive modeling.
- Exposure to leading experts from CODATA, UNICEF, and the Ministry of Health.
- Contribution to a high-impact public health preparedness project.
- Professional development opportunities, including training in data science, epidemiology, and visualization.

## Application Process

Interested candidates should submit:

1. CV/Resume highlighting relevant experience.
2. Cover letter explaining interest and suitability for the role.
3. Relevant work samples (e.g., research reports, data analysis outputs).

Deadline for Applications: 15 August 2025

Submit Applications: <https://tinyurl.com/phimresearch>