

# Collaborative Effort in Quantitative Research Capacity-Building between UL School of Public Health and Q4D Lab



#### **Terms of Reference**

Part-Time Research	Direct Employer:
Associate (Joint	Quantitative Data for Decision-Making Lab (Q4D Lab)
employment)	B.G. Freeman Building
	Benson & Buchanan Streets
	Monrovia, Liberia
	Website: https://www.q4dlab.org
	Secondary Employer:
	University of Liberia School of Public Health
	College of Health Sciences
	AM Dogliotti College of Medicine Campus
	Catholic Junction, Monrovia, Liberia
	Web site: https://ulsoph.org
Project:	Quantitative Research Capacity-Building
<b>Project Budget:</b>	250 USD per month (Part - time; 24 hours per week)
<b>Duration:</b>	September 15, 2021 – December 15, 2021 (with possibility for paid
	extension)
<b>Number of Positions:</b>	1-2 (Note: the start date for two positions may be phased, with one
	Associate starting before the second)

#### Background Information on Q4D Lab and UL SOPH

**Q4D Lab.** Quantitative-Data for Decision-Making (Q4D) Lab is a Liberia-based non-profit organization established by a team of local and international scientists to promote awareness of, enthusiasm for, and capacity to conduct quantitative global health research at the frontlines. Quantitative research offers opportunities for better exploring data to understand epidemiological disease trends and to evaluate the impact of different intervention approaches. By engaging with quantitative researchers, public health stakeholders will gain exposure to different approaches to the collection and use of data. This will allow for impact beyond immediate projects by instilling new standards or goals for future data-driven activities.

*UL SOPH.* Since the Ebola outbreak ravaged West Africa, Liberia's leaders have been championing efforts to build a more resilient health system focused, in part, on epidemic preparedness, surveillance, and response as well as a fit-for-purpose workforce to drive the system. These efforts have included the development of local public health programs attuned to the evolving workforce needs. In March 2018, the University of Liberia Faculty Senate approved the curriculum for an MPH degree housed within the College of Health Sciences specifically in the School of Public Health (UL SOPH). The program is envisioned to provide students with a foundational understanding of core public health concepts and skills, as well as indepth learning in a concentration area: Applied Epidemiology, Environmental Health, Health Systems Management, or Public Health Laboratory. MPH students engage in practicum experiences as well as oncampus research. This vision diverges from that of other public health academic programs in Liberia due to its focus on leveraging partnerships to provide classroom-based and real-world opportunities for competency training that will prepare graduates to serve in all tiers of the country's public health workforce.

#### **Background Information on the Project**

Q4D Lab, in collaboration with the UL SOPH, has initiated a course series for individuals interested in learning R programming and biostatistics. Additional coursework in mathematical modeling and Environmental Health are being offered as well. These courses are being offered as part of a certificate program for public health and related professionals who may already have Bachelor or Master degree, or be interested in enrolling in the MPH program later. Participants to date have represented institutions in both the private and public health sectors and it is expected that skills gained from the course series may be directly applied in their workplace settings.

### Methodology

The Research Associate will support the project by implementing quantitative research projects, with the supervisor's support. Research Associates will learn new skills and techniques, both through independent learning and regular discussions with the supervisor, to address the objectives of the projects. The goal will be to generate results that can be shared with local and international stakeholders via academic and non-academic presentations and scientific articles. In addition, the Research Associate will be required to attend and co-facilitate classes of the R and Biostatistics course series.

## Responsibilities of the Research Associate

Under the direct supervision of the UL SOPH project team and in compliance with the ToR, the Research Associate is expected to:

- Dedicate two full working days (or 16 total hours) per week during the contract period.
- Be willing to self-learn new concepts and skills that are needed to achieve research objective.
- Attend Beginner R courses (Tuesdays and Thursdays, 2 4 PM) to become familiar with content; the Research Associate will facilitate future sessions of the course when confidence in the material is achieved.
- Communicate progress and challenges.
- Develop PPT presentations and scientific manuscripts, with support from the supervisor, to disseminate research findings.

#### Responsibilities of the Supervisor

- Provide all required background materials in a timely manner.
- Be available to support the Research Associate in achieving research tasks that may be new or less familiar.
- Provide feedback on work shared by the Research Associate.
- Clearly communicate expectations.

## Qualifications or Specialized Knowledge/Experience of the Research Associate

The Research Associate should meet the following requirements:

- Minimum BA or BS degree required; preferred: Completion of or enrollment in a Master degree program in public health or a related field.
- Successful completion of two semesters of graduate-level statistics courses; basic familiarity with statistical concepts; experience working with health-related data
- Strong written and verbal communication skills writing sample will be required
- Attention to detail and excellent organizational skills
- Must be familiar with MS Office
- Foundational understanding of R Statistical Software.
- Previous experience contributing to scientific manuscripts.
- Access to a personal laptop with internet capability and space for downloading new software.
- Willingness to learn challenging new concepts due to a passion for quantitative research.

## **Duty Station, Compensation and Timelines**

Duty station: Works remotely and/or at the Q4D Lab office (Benson & Buchanan Streets) to complete deliverables

Timeline: Approximately 16 hours per week (two days) Indicative assignment dates: September-December 2021.

#### **Deliverables**

The main outputs of the project will be:

- Completion of research tasks, working towards a complete project. Examples include development of reproducible R code, cleaned data sets, and analytical results.
- A PPT presentation highlighting methodology and key results
- Facilitation of at least one Beginner R course session

## **Submission of Applications**

Interested candidates should submit their application (in a single e-mail to <a href="mailto:skripla@ul.edu.lr">skripla@ul.edu.lr</a> and <a href="mailto:info@q4dlab.org">info@q4dlab.org</a>) by close of business, Monday 13th September 2021. Please ensure to include:

- 1. CV that demonstrates the required qualifications.
- 2. Letter with expression of interest.
- 3. Support documents, such as thesis work or manuscripts.