Key role and objectives

- Support the implementation of the Safe Water Optimization Tool (SWOT).
- Prepare and deliver content for the Humanitarian Water Engineering Course (planned for mid-2021).

Background

The Safe Water Optimization Tool (SWOT) is an initiative of Dahdaleh Institute for Global Health Research (DIGHR), in partnership with Médecins sans Frontières (MSF/Doctors Without Borders), to build, refine, and scale a web-based data analytics platform that helps humanitarian field workers ensure that water is safe to drink and public health is protected in emergency responses. The Technical Advisor will contribute to R&D, field implementation, training and outreach, and administrative activities of the SWOT Project.

The Humanitarian Water Engineering Course is a new training offering from the Dahdaleh Institute which has two high-level objectives:

- To mobilize engineering researchers and practitioners to improve the technical effectiveness and public health impact of humanitarian response.
- To cultivate, through training and mentorship, a cadre of Canadian engineers for technical and organizational leadership in humanitarian response and global health organizations.

The course will be an online learning event which will take place in mid-2021. Pre-course content will also be delivered to participants asynchronously online and aims to cover the basics of humanitarian action and provide a full technical baseline on safe water supply in emergency contexts. The synchronous online course component will build on this content through online lectures and a major group problem-based learning activity focused on the design of a safe water intervention for a contemporary humanitarian crisis. The Technical Advisor will contribute to course content development and delivery for this course.

Areas of responsibility and tasks

The SWOT (under the guidance of academic faculty and fellows):

- Lead new partnership development with implementing agencies; provide technical guidance and support to field implementers; on-going relationship management.
- Subject to COVID-19 travel restrictions, travel to international project sites to support SWOT field implementations and evaluations and/or remote management of field implementations.
- Lead and support the development of training, dissemination, and outreach content and campaigns (i.e., instructional videos, guidance documents, technical memoranda, policy briefs, webinars, and other outputs).
- Support R&D activities from an operational perspective (i.e., user feedback documentation, new feature development and testing, inputting on forward planning, and other R&D support activities).
- Support the analysis, write-up, and dissemination of SWOT-related research including scientific publications and conference presentations.
- Support administrative and reporting activities for the SWOT Project including those for York University, project funders, and external partners.

**The Humanitarian Water Engineering Course** (under the guidance of academic faculty and fellows):

- Support the development of curriculum and content, including the development of a problem-based learning approach to content delivery.
- Support all other presenters to develop their topic content and delivery, ensuring it is in line with the objectives of the course.
- Deliver course content (likely to be online).
- Carry out post-course evaluation, gathering all feedback and writing a summary and recommendation report.

**Other areas:**

- Regular reporting and update meetings with DIGHR supervisors.
- Participate in scholarly and community activities of the Dahdaleh Institute (i.e., seminars, conferences, publications, and other outputs and activities).
- Support DIGHR staff in implementing the Institute communications strategy as it relates to the SWOT Project and the Humanitarian Water Engineering Course by providing written (blogs, project summaries, etc.) and verbal outputs (presentations, videos, etc.).
- Support the development of other research, educational/training, and scholarly initiatives relating to Humanitarian Water Engineering.
- Be an active member of the DIGHR team – attending meetings and discussing other research and ideas.

**Qualifications and experience**

- A Bachelor's Degree (or equivalent) or, ideally, a Masters in a relevant discipline.
- Experience in the humanitarian sector, preferably with water supply projects.
- A solid understanding of the humanitarian sector.
- Good written and communication skills.
- A good understanding of water quality measurement, monitoring and treatment.
- The ability to plan and organize own workload.
- Competent user of Microsoft Word, Excel. AutoCAD and GIS software a bonus. Coding experience a bonus.
- Experience delivering presentations and trainings.
- Experience designing and executing research an asset.
- Must be currently eligible to work in Canada (we are not able to assist with obtaining work permits, etc.).

Working conditions

Currently the institute is closed due to COVID-19 restrictions and all staff are working from home. Remote office hours are standard working hours (9 AM to 5 PM) in the Eastern Standard Time (EST) time zone. Regular contact will be via email, instant messaging (e.g., Slack), and tele- and internet conferencing (e.g., Zoom).

When these restrictions are lifted, the Technical Advisor will be expected to work on-site at DIGHR offices at York University Keele Campus (Toronto). Some limited work may take place off-site. All regularly scheduled meetings will be held at DIGHR offices. Fieldwork at international field sites is likely to constitute an essential component of this appointment (pending the lifting of COVID-19 travel restrictions).

Accountability

The position is hierarchically and functionally accountable to the supervisor, Dr. Syed Imran Ali – Research Fellow at DIGHR. Official supervision by Dr. James Orbinski, DIGHR Director.

Duration of Position:

Jan 1, 2021 to Dec 31, 2021, 100% FTE (extendable)

For more information and to apply:

To apply, please submit your résumé and cover letter via the link at https://www.yorku.ca/dighr/opportunity-technical-advisor-swot/. Review of applications will begin on January 7th, 2021. For more information, please contact dighr@yorku.ca with Attention to Dr. Syed Imran Ali