

## **UNU-INWEH –FloodNet - Joint Internship Opportunity:**

*Review of the status of and trends in flood early warning systems globally*

### **Background:**

Floods are responsible for thousands of lives and billions dollar losses globally every year, and these losses increase with increasing climatic variability. Intensive efforts and investments go into managing flood risks, alleviating their consequences and predicting them. As part of these, flood early warning systems are being developed, or are in operation in many countries. However, the information on operational effectiveness of these systems, their cost and value for money, availability in various countries - varies. There is a need to analyze of the state-of-the-art of the flood warning systems in the world, from the above angles, including also recent trends in their development, and gaps that need to be filled globally and by individual countries, particularly in the light of the Sustainable Development Goals (SDGs) and emerging Sendai Targets for disaster risk reduction. The focus of this effort shall be primarily on developing countries, but bringing up the lessons from developed world. In developing countries, there are relatively few operational flood warning systems, but there is range of on-going initiatives to establish them. Research will explore how flood early warning systems that reduce exposure to flood risk, would affect the achievement of SDGs. We are looking for an intern to carry out this critical analysis, and to assist with the development of a synthesis report and/or a journal paper on the subject, that can inform the global efforts in reducing the impacts of water related disasters.

### **Requirements:**

- A 4-th year undergraduate student, a postgraduate student, or post-doc
- Specializing or interested in flood hydrology and management
- Analytical mind; ability to undertake comprehensive literature reviews, analyse large volumes of information from on-line sources, and distill the key messages from these
- Excellent computer skills
- Excellent English writing skills
- Understanding of developing countries' context and water problems is an advantage

### **Anticipated Output:**

Synthesis report that examines i) trends in implementation of flood early warning systems since the beginning of the 21 century, globally, with a focus on developing countries, ii) trends in investments that went into this, iii) the impacts (positive or negative), measured in terms of indicators of losses avoided – due to implementation of these systems iv) financial, social, political and technical challenges that remain - to develop a flood-proof world by the end of the SDG period in 2030

### **Duration and Start Date:**

The duration of internship shall be between 4 and 6 months. An estimated optimum of 5 months is required to complete the task. The internship is expected to start at a mutually agreed date in September 2017 or as soon as possible thereafter.

**Location:**

The successful candidate will be based at the United Nations University Institute for Water, Environment & Health (UNU-INWEH) in Hamilton on a full-time basis (40 hours/week).

**Funding and eligibility:**

This is a joint internship with FloodNet. Sponsorship by the NSERC Strategic Network Enhancement Initiative applies for any graduate students or post-docs currently conducting research within the NSERC Canadian FloodNet. The intern will be allowed to claim expenses related to relocation for the duration of the internship up to a maximum amount of \$4000 without special permission.

**Application Procedure:**

Interested applicants should apply before 30 June 2017 by following the application procedure available at: <http://inweh.unu.edu/internships/>

**Important Note:**

Please quote **FloodNet** in the email subject line, when sending your application.