**PhD Position Community Engagement and Urban Infrastructure Resilience in the Face of Climate Change**

The School of Architecture, Planning and Environmental Policy at UCD has an opening for an outstanding individual interested in pursuing a PhD on community engagement, nature- based solutions and urban infrastructure, under the supervision of Dr. Chiara Cocco. The PhD project is funded by EU Horizon 2020 as part of the NBSINFRA project and will be run in collaboration with the activities of the Spatial Dynamics Lab and Geodesignhub Pvt. Ltd. a SME based in Dublin.

**Background.** Climate change is one of the greatest challenges of our times that Earth needs to face decisively and fast, exploiting every possible existing or cutting-edge imaginative way. Nobody can escape from climate change implications that include tremendous costs and funds for protection and restoration, extreme threats to communities’ prosperity and growth, and tough policies to apply with a significant impact on international relations. At the same time, an enormous bulk of knowledge has been produced on fundamental issues climate change raises for societies and governments, from the micro to the macro level scale. This knowledge needs to be enacted, transferred, translated and incorporated in new individual and institutional practices that revolve around fostering the technoscientific-human-natural relationship. Urban infrastructure, such as energy, water supply systems, wastewater systems, health, financial, and transportation networks are extremely vulnerable to climate change and make an essential role in the functioning of society. Moreover, critical infrastructure systems are interdependent, which means that climate change impacts on one critical infrastructure asset can cascade through the system. In a moment when cities become gravitational centres, this effect is even extremely higher in urban areas due to the dense spatial concentration of infrastructures and people. This project contributes to further develop mechanisms and solutions for increasing local infrastructure resilience that are socially embedded and culturally negotiated, produced and accepted.

The proposed PhD project aims at increasing our understanding of how new technologies can foster community participation and empowerment in relation to nature-based solutions (NBS) for critical infrastructure protection.

In addition to the focus on developing processes for engagement, the PhD position also has opportunities to develop digital technologies for interconnecting nature-based solutions in the context of planning and impact analysis. This position offers opportunities to develop your technical skills working with advanced technologies for planning and management. It will provide opportunities for impact and to build tools and processes that can be deployed and used immediately and scaled.

The PhD position is funded for 3 years and the start date for this position will be September 2023. The successful candidate may choose to begin the position remotely before relocating to in-person working at UCD.

**Studentship details:** Stipend of min €18500/year plus tuition fees for 3 years

**Start date:** 1st September 2023

**Supervisor details**: Dr Chiara Cocco UCD School of Architecture, Planning and Environmental Policy, University College Dublin, Ireland.

<https://people.ucd.ie/chiara.cocco>

**Duties and Responsibilities:**

Conduct self-directed and mentor guided research program to address methodologies for community engagement, co-creation and adoption of NBS.

Contribute periodic scientific reports along with promoting and disseminating results of the project through abstracts, manuscripts, presentations and outreach events.

**Qualifications/Skills required:**

* Masters in engineering, geography, architecture, computer science, statistics, or other related fields
* Experience in handling geospatial data and GIS
* Experience in data analysis
* Interest in Public Administration/ Public policy and the use of Technology in that context
* Interest in technology in the urban planning / management context
* Basic coding skills desired but not necessary.
* An interest in engagement processes, communication with multiple stakeholders.
* A demonstrated commitment to research and publications
* An understanding of the operational requirements for a successful research project
* Evidence of research activity (publications, conference presentations, awards) and future scholarly output (working papers, research proposals, and ability to outline a research project.
* Excellent Communication Skills (Oral, Written, Presentation etc).
* Excellent organisational and administrative skills including a proven ability to work to deadlines.
* Candidates must demonstrate an awareness of equality, diversity, and inclusion agenda.

**How to Apply**: Interested candidates should contact Dr. Chiara Cocco (e-mail: chiara.cocco@ucd.ie) and Hrishikesh Ballal (e-mail: hrishi@geodesignhub.com) with a cover letter and CV, including the names of two academic references. Closing date 31st August 2023.