

Understanding Resilience through International Collaboration for Open Mapping

Seminar of Prof. Patricia Solis, Arizona State University

Politecnico di Milano, Building 5, Beltrami Room
Thursday 19th July 2018, 10:00 am-12:00 am

This seminar will explore various approaches to resilience across disciplines and between academic and practitioner sectors. We will reflect on the need for communication, collaboration and innovation to realize humanitarian and development advances, especially in the context of the UN Sustainable Development Goals. Whereas practitioners bemoan lack of data as one of the biggest obstacles to progress towards improved resilience, especially in world regions of greatest need, vast amounts of new spatial data are in fact created and shared daily through online open platforms by volunteer, humanitarian or crisis mapping actors around the world. These data may be created ad-hoc or for immediate use in response to urgent crises or extreme events, or for persistent development problems related to public health epidemics, food insecurity, education, or lack of basic infrastructure in impoverished places. In our seminar, we will ask, how can we utilize international collaboration on open spatial data creation to better understand and improve resilience? Attendees will exchange ideas around ways that vulnerable populations are identified, characterized and addressed at various scales. Using examples from YouthMappers, we will consider the current and potential role of combining open geospatial technologies and communication technologies in the context of international collaboration for improving understanding of resilience. YouthMappers is a student-led movement organized as chapter groups on more than 115 university campuses in 35 countries, with the aim to expressly link supply and demand for knowledge by addressing specific needs for geographic information to specific development objectives in targeted countries, where sponsor US Agency for International Development works to end extreme poverty. The seminar will include interactive discussion on these topics, and will feature a hands-on training to remotely create open spatial data related to a current YouthMappers mapping task.

The Seminar is organized by the PhD Programme of Environmental and Infrastructure Engineering

Biographical Sketch

Patricia Solís, PhD, is Executive Director of the Knowledge Exchange for Resilience at Arizona State University, a campus-wide effort to link community needs with research innovations, managed in the College of Arts and Sciences. She also holds research faculty privileges in the School of Geographical Sciences and Urban Planning. She is Co-Founder and Director of YouthMappers, a consortium of more than 115 universities in 35 countries that creates and uses open spatial data for humanitarian and development needs in collaboration with the United States Agency for International Development.



Prior to joining ASU, she was Co-Director of the Center for Geospatial Technology at Texas Tech University and Research Associate Professor of Geography in the Department of Geosciences and affiliated with the TTU Climate Science Center. She served Deputy Director and Director of Research at the American Association of Geographers. Dr. Solís received a BS in Physics, BA in German, and MA in Geography from Kansas State University. She earned her Ph.D. in Geography from the University of Iowa where she was a Presidential Fellow.

Solís has developed over fifty competitively funded projects totaling more than \$9 million, promoting innovations in research and education collaboration with support from federal agencies such as the US National Science Foundation, the US State Department, NASA, NOAA, US Geological Survey, USAID, and others. Her international experience includes fostering north-south and south-south academic networks among emerging scholars in sixty countries across Latin America, Africa, the Middle East and Southeast Asia. Her research focuses on designing applications of geospatial technologies to address socially relevant challenges, from water resource conflict to climate change induced hazards to broadening participation in higher education. Her creative leadership has resulted in the development of collaborative research methodologies, new designs for research-centered learning, and the sustained institutionalization of a public-private global partnership centered on digital geographic technologies. These efforts have been recognized by the United Nations Conference on Sustainable Development as a model program. She also serves as the elected and State-Department appointed President of the Geography Commission of the PanAmerican Institute for Geography and History of the Organization of American States, and has been honored with the designation of National Researcher II from Panama and twice the Enlaces Award for academic collaboration with Latin America. She is named as a Specialist on the Fulbright Commissions' Roster of Experts.