

## **Integrated Research on Disaster Risk**

# **Expression of Interest**

## **United States National Committee: IRDR-USA**

## Introduction

The University of Colorado Natural Hazards Center (NHC) is pleased to offer this expression of interest for taking the lead in organizing the U.S. Committee for IRDR. For the past 38 years, the NHC, which is part of the Institute of Behavioral Science at the University of Colorado Boulder, has engaged in several activities that are directly relevant the IRDR mission: serving as a clearinghouse for knowledge on the societal dimensions of hazards, disasters, and risk; convening an annual workshop, which is attended by hazards and disaster researchers, students, public officials, and practitioners from the U. S. and around the world; conducting research on hazards and disasters; and training graduate and undergraduate students. The NHC receives sustaining funding from the National Science Foundation and from other federal government agencies whose missions focus on the reduction of losses from disasters, including the Federal Emergency Management Agency, the U. S. Geological Survey, and the National Oceanic and Atmospheric Administration.

The NHC's resources and information products include a library containing over 30,000 items, many of which are being digitized for wide distribution; a newsletter, *The Natural Hazards Observer*, which is published on line and in print (by request) every other month; a biweekly electronic newsletter; and up-to-date information provided through social media. The annual workshop strives to enlarge and enrich the disaster risk community nationally and internationally and takes this mission seriously by encouraging new attendees (averaging slightly less than 40% of all workshop participants during the past few years). The NHC regularly provides small grants for quick response research in the aftermath of disasters; to date nearly 300 quick-response projects have been funded.

While not yet formally organized as IRDR-USA, the NHC and other U. S.-based centers already provide the foundation that is necessary to meet all the objectives of IRDR: to enhance

domestic coordination and cooperation for integrated disaster risk; improve national capacity for disaster risk research; enhance links with the international research programs and activities; and work collaboratively to pursue the goals of IRDR. The establishment of a formal U.S. committee is long overdue.

### **Composition and Organizational Structure**

IRDR-USA is envisioned as a distributed "center of centers," taking advantage of the research capacities of university-based centers that specialize in different aspects of hazards and disasters and that represent diverse disciplines. The proposed founding centers include:

Natural Hazards Center, University of Colorado Boulder (Kathleen Tierney); Disaster Research Center, University of Delaware (James Kendra); Hazard Reduction & Recovery Center, Texas A&M University (Walter Peacock); Hazards & Vulnerability Research Institute, University of South Carolina (Susan Cutter); Center for Disaster and Risk Analysis, Colorado State University (Lori Peek); Center for Hazards Assessment Response and Technology (CHART), University of New Orleans (Monica Farris); Center for Public Health and Disasters, UCLA (Kim Shoaf); Coastal Hazards Center, University of North Carolina (Gavin Smith); Resilience Institute, Western Washington State University (Scott Miles); Pacific Earthquake Engineering Research Center, University of California, Berkeley (Steven Mahin); The Multidisciplinary Center for Earthquake Engineering Research, SUNY Buffalo (Andrew Whittaker); and the National Center for Disaster Preparedness, Columbia University (Irwin Redlener, David Abramson).

As time progresses and IRDR-USA becomes more established, additional centers will be added. IRDR-USA will also invite the participation of scholars who are not affiliated with centers, but who can contribute in significant ways to the IRDR mission.

The Natural Hazards Center at the University of Colorado Boulder will be the host institution for IRDR-USA, given its leadership role in the community. The NHC has demonstrated its scientific research capacity and leadership in fostering the interdisciplinary community and its interests and often speaks on behalf of the US disaster research community to policy makers. When joined with other USA hazards and disasters centers, the "center of centers" represents the most comprehensive amalgamation of disaster risk research capacity in North America, if not the world. All USA centers are independently funded, with institutional support and extramural funding from sources including the National Science Foundation, National Institutes of Health, Department of Homeland Security/FEMA, NOAA, and USGS among others. While not an official part of the USA's UNISDR National Platform committee, IRDR-USA will work closely with that federal committee to ensure that the integrated knowledge base produced by the researchers is informed by and communicated to policy makers at all levels of government. Kathleen Tierney, Professor in the Department of Sociology and Institute of Behavioral Science at the University of Colorado Boulder, and Director of the NHC, will chair IRDR-USA. Tierney's long career in disaster research has included extensive collaboration with researchers from other social science, physical science, and engineering disciplines, as well as ongoing relationships with funding agencies and policy bodies, making her a logical choice to serve as IRDR-USA chair.

A small executive committee (two members from the founding centers, in addition to one government representative) will provide oversight and governance for IRDR-USA activities. The chair will serve a three-year renewable term. The executive committee members will serve a two-year term, with one renewal.

#### **Overview of Activities**

The hazards and disasters community within the USA is diverse and flourishing. Rather than trying to capture all the activities of the individual entities in this expression of interest, we focus primarily on NHC activities, since the NHC will be the chief convener and coordinator for all IRDR-USA activities. There are four primary programmatic areas that involve integrated research and practice.

- Information dissemination clearinghouse. The NHC provides the main forum for communication among USA researchers through two newsletters, *Natural Hazards Observer* (a printed product) and *Disaster Research* (electronic); a *Disaster Grads* e-mail discussion list; knowledge synthesis through the *Natural Hazards Informer* series; cosponsorship with the American Society of Civil Engineers (ASCE) of the peer-reviewed journal *Natural Hazards Review*; and the world-renowned NHC Library and Information Services. The NHC is also present on Twitter as HazCenter, and it maintains a Facebook page. All of these are available on the NHC Web Site (www.colorado.edu/hazards) which is the #1 listing for Google searches using the term "natural hazards."
- 2. Annual workshop. The invitation-only workshop is designed for face-to-face networking and therefore kept intentionally small so conversations can occur among interested participants. Participants are generally academics, government representatives, students, private and non-profit organizations. In recent years, international attendance has increased and in the most recent Workshop (July 2013) 20 countries were represented, including the U.S. Striving for the involvement of new ideas and researchers and expanding the hazards network, the workshop maintains a balance of disciplines as well new invitees, which in recent years constituted around 40% of all attendees. Attendees in 2012 and 2013 numbered 450 and 425, respectively.
- 3. Quick Response program. This program enables researchers to travel to disaster locations immediately after an event to collect perishable data that would otherwise be

lost. Prospective researchers submit short proposals, which are then reviewed on an expedited basis. The resources (less than US\$3,000) provide seed money for travel for the initial field work. Quick response grants and the field data they collect often help investigators to develop and carry out larger and longer-term research projects. All quick response grants require a research report, and the results are posted on the Natural Hazards Center webpage.

4. Research. All centers in the IRDR-USA collaboration, including the NHC, maintain active extramural research programs. The core IRDR membership represents a broad range of disciplines including sociology, geography, public health, psychology, various engineering disciplines, and urban planning. Research activities span the entire "hazards cycle," from pre-event mitigation and preparedness through disaster response and short- and long-term recovery.

### Vision of IRDR-USA

The US disaster community has already been operating as a national committee, with an annual meeting, and the designation of these efforts as IRDR-USA is in many ways, long overdue. The longevity of the Natural Hazards Center as well as its well-established leadership role within the hazards and disasters community within the U.S. will facilitate the formation of IRDR-USA. Meeting the objectives of IRDR—to characterize hazards, vulnerability and risk; understand decision-making in complex and changing risk contexts; and reducing risk and curbing losses through knowledge-based actions—requires no substantive change in the mission or core activities of either the NHC or its sister centers across the country. Rather, the IRDR-USA designation will increase synergy across centers and build productive connections to the broader international community. The vision for IRDR-USA is to maintain the activities that are presently underway (mentioned above), maintain productive ties with IRDR committees around the world, and continue to provide a forum for the exchange of knowledge through the annual NHC workshop, a venue that will also serve as the annual meeting of IRDR-USA.

The NHC and the other centers that will form the core of IRDR-USA already have extensive ties with members of IRDR committees in other nations and with IRDR centers of excellence. Many IRDR members from outside the U. S. already attend annual NHC workshops on a regular basis. These longstanding relationships will ensure that IRDR-USA is successfully launched and will facilitate the kinds of research collaboration and education and training exchanges that are essential elements of IRDR.