

## Disaster Research and Response

Effective national and international emergency planning, response, and recovery strategies require syntheses of expertise across disciplines such as emergency administration, disaster planning, information technology, logistics, epidemiology, weather, economics, and disaster sociology. UNT draws on a consortium of faculty leaders from different departments and colleges who bring complementary specialization in a spectrum of emergency management services. The Hazards and Disaster Research to Respond to Global Crises research cluster is the cumulative result of that effort. Individuals practicing at the forefront of their fields employ on-the-ground planning and response in four broad areas: evacuation planning, risk modeling and service delivery, humanitarian logistics, and tourism and disaster relief, with an aim to expand leadership in strategic areas such as risk analysis, economics, and hazards geography. UNT's alliance with local and federal agencies brings unique opportunities for students and faculty to test theoretical approaches in actual emergency situations and leverage these resources to effectively shape policy and better meet the needs of individuals and communities.

- **Comprehensive emergency management program employs cutting edge strategies to address all phases of emergency situations, from planning and response to recovery**
- **The UNT-based Emergency Operations Center works to manage real life crises in tandem with local, regional, and national agencies, including the Federal Emergency Management Agency (FEMA), Denton**
- **Expertise in risk analysis, hazards geography, epidemiology, humanitarian logistics and distribution of goods, and disaster recovery and rehabilitation**
- **Critical research on new and emerging risks, including terrorism and homeland security**
- **Active international field research in critical disaster zones, including the 2004 tsunami in India, the 2010 earthquake in Haiti, and the 2011 floods in Thailand**

### Representative Faculty

**Nicole Dash**, Associate Dean of the College of Public Affairs and Community Service; and Associate Professor of Sociology: *evacuation; housing; long term recovery; and social impacts*

**David McEntire**, Professor of Public Administration: *emergency management theory; vulnerability reduction; and homeland security*

**Sudha Arlikatti**, Associate Professor of Public Administration: *sustainable hazard mitigation; and disaster response and rebuilding*

**Terry Clower**, Director of the Center for Economic Development and Research; and Associate Professor of Economics: *economic development; impact assessment; transportation systems; and housing*

**Pinliang Dong**, Associate Professor of Geography: *remote sensing and geographic information systems*

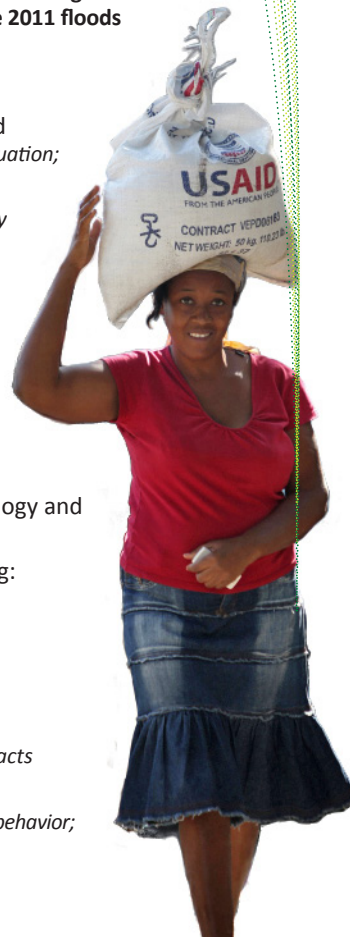
**Shailesh Kulkarni**, Associate Professor of Information Technology and Decision Sciences: *supply chain networks; and operations research*

**Armin Mikler**, Professor of Computer Science and Engineering: *computational epidemiology; and communications networks*

**Terry Pohlen**, Director of the Center for Logistics Education and Research; and Associate Professor of Logistics: *logistics; and distribution of goods*

**Gary Webb**, Associate Professor of Public Administration: *organizational response to extreme events; social and economic impacts of disasters; and improvisation in disaster response*

**Zheng "Phil" Xiang**, Assistant Professor of Merchandising: *tourist behavior; information systems; and social media*



## Select Research Resources

### Emergency Operations Center

[www.unt.edu/features/emergencylab](http://www.unt.edu/features/emergencylab)

UNT's state-of-the-art center serves as a nexus for all disaster communications. It provides faculty and students with an opportunity to apply various technologies in simulation and real emergency settings to understand how individuals and organizations interact during a crisis. Emphasis on learning through practice builds decision-making and critical thinking skills needed for managing low level and catastrophic disasters.

### Center for Economic Development and Research

[www.unt.edu/cedr](http://www.unt.edu/cedr)

Established in 1989, the UNT-based Center conducts economic analysis and public policy research and additionally provides forecasting and strategic planning services to businesses, governments, and non-profit agencies with an interest in economic development.

### Center for Logistics Education and Research

[www.cob.unt.edu/logisticscenter](http://www.cob.unt.edu/logisticscenter)

The Center is a private, not-for-profit foundation committed to excellence in logistics education. Based within the Department of Marketing and Logistics in the College of Business at UNT, the Center establishes partnerships between businesses and the academic community with the aim to advance the study and practice of logistics and supply chain management in Texas, the nation, and around the world.

### SRC: Survey Research Center

[src.unt.edu](http://src.unt.edu)

The UNT-based SRC conducts applied survey projects and offers a complete survey package in areas including research design, sample design and selection, questionnaire design, data collection and analysis, and report preparation and presentation. Its mission is to provide timely, cost-effective, and high quality research services to university, government, and non-profit and business entities by ensuring validity and accuracy in all phases of the research process.

### CERL: Computational Epidemiology Research Laboratory

[cerl.unt.edu](http://cerl.unt.edu)

CERL was established in 2004 to conduct and promote research in computational epidemiology. The primary focus is the application of computational concepts and resources to problems in the domain of public health, providing tools for epidemiologists and scientists that aid in the prediction and analysis of disease manifestation and disease spread through modeling, simulation, and visualization.

### FEMA: Federal Emergency Management Agency (FEMA), Region VI

[www.fema.gov/about/contact/regionvi](http://www.fema.gov/about/contact/regionvi)

FEMA's mission is to support citizens and first responders to ensure that people work together to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, and mitigate all national hazards. FEMA is part of a team that includes federal partners, state, tribal and local officials, the private sector, non-profits and faith-based groups, and the general public.

## Contributing Research Clusters:

### Hazards and Disaster Research to Respond to Global Crises

[disasterresearch.unt.edu](http://disasterresearch.unt.edu)

### Complex Logistics Systems

[logisticsresearch.unt.edu](http://logisticsresearch.unt.edu)

