



UNIVERSIDAD  
**NACIONAL**  
DE COLOMBIA  
SEDE MANIZALES

# Academic Expertise



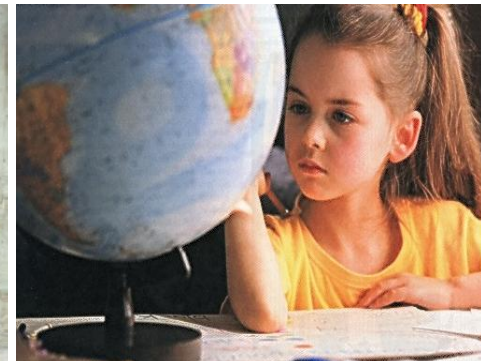
# IRDR ICoE

Integrated Research on Disaster Risk  
International Centre of Excellence

**IRDR Center of Excellence in  
Understanding Risk & Safety  
ICoE:UR&S**

**Institute of Environmental Studies (IDEA)  
National University of Colombia  
Disaster Risk Management Task Force (DRM-TF)**

Omar-Dario Cardona





# Partnerships



International Centre for Numerical Methods in Engineering  
Centro Internacional de Métodos Numéricos en Ingeniería

**RISK NEXUS  
INITIATIVE**



**RIOCC-ADAPT**



# Connections to IRDR Projects

## **RECENT PAST ACTIVITIES**

*Development of the Holistic Evaluation of Disaster Risk at global level using physical/economic risk metrics and indicators of social fragility and lack of resilience of the countries (DATA)*

*Implementation of the Index of Disaster Risk Implications for Development, based on the average annual loss and economic flow indicators of the countries, such as the capital stock, social expenditure, capital formation, saves and reserves (RIA, DATA)*

*Development of the UN Atlas-GAR: Unveiling Global Disaster Risk (200+ countries based on the GAR's Global Multi-hazard Risk Assessment. Launch during the 2017 Global Platform on DRR, May 2017 (RIA, DATA)*

# Connections to IRDR Projects

## **ACTIVITIES IN PROCESS**

*Development of a Global Drought Probabilistic Hazard and Risk Model in the framework of the CAPRA platform improvement for UNISDR Risk Knowledge Section (RIA)*

*Collective review of the drought hazard and risk assessment of Northeast of Brazil, NOAA, Boulder, February 2017 (FORIN, RIA)*

*Evaluation of risk using the Drought Risk Model in Central America (Trifinio Region) and Uruguay (FORIN, RIA)*

*Contribution to the Ibero-American report on climate change adaptation for the IPCC-AR6, project RIOCCADPAT (2017-2019), (RIA)*

*Participation on the Risk Nexus Initiative: Risk modeling and metrics, Indicators and knowledge for sustainability and resilience, and enhancing risk governance (RIA, DATA)*

## Expectations

### **FROM BEING PART OF THE IRDR ICoE FAMILY**

*Research and experience from the partners to reach “effectiveness” regarding disaster risk management and adaptation to climate change*

### **NEXT STEPS TO CONTRIBUTE TO THE IRDR ICoE FAMILY**

*Research to “assess prevention”... how to measure resilience, the avoided deaths and losses? ...how much safety is enough safety?*

*All abovementioned issues are unsuspectedly related to the robustness of risk modeling, understanding, interpretation and communication*