

Dr. Manuel Eduardo Mendoza Cantu

Brief biography

Dr. Mendoza got a bachelor's degree in Geography (**UNAM**), a Master's in Ecology and Natural Resource Management (**ITESM**), and a Ph.D. in Earth Sciences (**UNAM**). He is currently a Senior Researcher at the **Centre of Research in Environmental Geography (CIGA-UNAM)**; he is a member of **the National Research System** (SNII III; Area 1, Earth Sciences). Dr. Mendoza is part of the **Interinstitutional Laboratory for Hazard and Risk Analysis (LIAR)** at **UNAM**, and the **Centre for Natural Hazard Research (CNHR)** located at **Simon Fraser University** (Canada). His work contributes to solving problems of proper use of the national territory at various scales. He has published 55 articles in indexed journals in Web of Knowledge, 24 articles indexed in SCOPUS, and 6 in journals indexed in LATINDEX, he has published 7 books and 43 book chapters. He has developed research stays at the ITC- of the **University of Twente**, Holland; **University of Trento**, Italy; the CLAS of the **Universidad Mayor de San Simón**, Bolivia; **Texas Agricultural and Mechanical University**, USA; **Simon Fraser University**, Canada. Dr. Mendoza carried out a sabbatical in the Department of Geography at the **University of British Columbia**, Canada, currently his on sabbatical stay in the Department of Earth Science at the **Simon Fraser University**. Dr. Mendoza has supervised **42** theses: 18 bachelor's thesis, 18 master's thesis, and 6 Ph.D. thesis. He has supervised 7 Postdoctoral Researchers. Currently, he supervises **9** PhD students (7 in Geography, 1 in Water Science, 1 in Earth Science) y 2 undergraduate students (Geosciences), he also supervises **1** Postdoctoral Researcher. Dr. Mendoza teach 3 undergraduates (Geosciences) and one postgraduate (Geography) courses per year. Dr. Mendoza actively participates in evaluation committees of domestic journals of the CONACYT, and international peer-reviewed ones. Dr. Mendoza is an international editor of *Journal of Nature and Spatial Science*. He has organized four scientific events on Geomorphology, watershed management, landscape connectivity, and natural hazards. Dr. Mendoza was the Technical and Academic Secretary of the CIGA, he is a member of the Evaluation Commission of PRIDE of the CIGA and IIES, and a representative of the Academic staff of the CIGA in the Academic Council of the Area of Social Sciences (CAACS) and in the Technical Council of Scientific Research (CTIC) of UNAM. He is the president of the Mexican Society of Geomorphology and member of the Science Mexican Academy. He belongs to the Technical Committee of the Mexican Network of Disasters Associates to Hydrometeorological and Climatic Phenomena (REDESClim), also belongs to the Networks of Mexican Basins (REMEXCU), Landscapes Connectivity (REMECP), and TAMU-UG-CIGA. He is member of the Advisory Committee of the Flora and Fauna Protection Area Pico Tancitaro.

Research lines.

Spatial planning and natural resources management from the physical geography perspective, based on knowledge of Geomorphology, Hydrology, Dendrochronology and Landscape Ecology, and supported by the intensive use of remote sensing technologies, geographic information systems and statistical analysis. This implies doing:

- 1) Land cover and use change analysis
- 2) Analysis of the hydrological and pedological effects of the change in vegetation cover and land use

- 3) Analysis of spatial connectivity
- 4) Analysis of climate change trends and variations
- 5) Analysis and evaluation of hydro-geomorphological hazards

Featured publications

Publications in peer-reviewed international scientific journals (ISI-SSCI or SCOPUS; * with Master's student, ** with Ph.D. student, *** with Post-doctorate researcher, Ω corresponding author).

1. **MENDOZA, M.E.**^Ω, G. BOCCO y M. BRAVO (2002). Spatial prediction in hydrology: status and implications in the estimation of hydrological processes for applied research. **Progress in Physical Geography** **26 (3)**: 319- 338. (ISI Factor 2.728; Q1)
2. **MENDOZA, M.E.**^Ω, G. BOCCO, M. BRAVO, E. LÓPEZ-GRANADOS y W.R. OSTERKAMP (2006). Predicting water surface fluctuation of continental lakes. A GIS and RS based approach in Central Mexico. **Water Resources Management** **20 (2)**: 291 – 311. (ISI Factor 2.437, Q1)
3. **MENDOZA, M.E.**^Ω, E. LÓPEZ GRANADOS, D. GENELETTI, D.R. PÉREZ-SALICRUP y V. SALINAS (2011). Analysing land cover and land use change processes at watershed level: A multitemporal study in the Lake Cuitzeo Watershed, Mexico (1975-2003). **Applied Geography** **31**: 237-250 (ISI Factor 2.565, Q1)
4. VALDÉS CARRERA, C.A^{**}., **M.E. MENDOZA**^Ω, T. CARLÓN ALLENDE y J.L. MACÍAS (2023). A review of recent studies on landslide hazard in Latin America. **Physical Geography** **44(3)**: 243:285 (ISI Factor 2.086; Q2). DOI:10.1080/02723646.2021.1978372
5. SÁENZ-CEJA^{****} J.E y **M.E. MENDOZA** (2023). Priority areas for the conservation of the genus *Abies* Mill. (Pinaceae) in North America. **Journal for Nature Conservation** **73** **126407**. (ISI Factor 2.575; Q1). <https://doi.org/10.1016/j.jnc.2023.126407>.

Current research projects

1. **Dendrogeomorphology: development and implementation of a scheme to map and assess geomorphological hazards in intertropical mountainous areas of Mexico.** funded by DGAPA-PAPIIT IN110222
2. **Reconstrucción de flujos de detritos de Chilliwak, Canadá.** funded by DGAPA-PASPA.