**BRIAN K. HORTON**
J. Nalle Gregory Chair in Sedimentary Geology
Professor, Jackson School of Geosciences
University of Texas at Austin, Austin, Texas 78712 USA
www.jsg.utexas.edu/researcher/brian_horton
horton@jsg.utexas.edu

**Education**

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| 1998 | Ph.D., Geosciences, University of Arizona |
| 1994 | M.S., Earth Sciences, Montana State University |
| 1992 | B.S. *cum laude*, Geology, University of New Mexico |

**Professional Appointments**

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| 2020 - present | J. Nalle Gregory Chair in Sedimentary Geology, University of Texas at Austin |
| 2025 | Visiting Professor, Universidade de São Paulo, Brazil |
| 2021 | Visiting Professor, Universidad de Chile, Santiago, Chile |
| 2016 - 2017 | Visiting Professor, Yachay Tech University, School of Geological Sciences, Ecuador |
| 2014 - 2020 | Alexander Deussen Professor of Energy Resources, University of Texas at Austin |
| 2012 - present | Professor, University of Texas at Austin |
| 2006 - 2012 | Associate Professor, University of Texas at Austin |
| 2001 - 2006 | Assistant Professor, University of California Los Angeles (tenured, 2006) |
| 1999 - 2001 | Assistant Professor, Louisiana State University |
| 1998 - 1999 | Postdoctoral Research Fellow, University of California Los Angeles |
| 1994 - 1998 | Graduate Research Fellow and Teaching Assistant, University of Arizona |
| 1996 | Exploration Geologist Intern, British Petroleum Exploration, Anchorage, Alaska |
| 1995 | Exploration Geologist Intern, Amoco Production Company, Houston, Texas |
| 1992 - 1994 | Graduate Research Fellow and Teaching Assistant, Montana State University |
| 1990 - 1992 | Undergraduate Research Assistant (hydrology, paleomagnetism), University of New Mexico |

**Professional Awards**

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| 2022 | Best Paper, Society of Exploration Geophysicists: Sánchez et al., *Interpretation*, v. 9. |
| 2018 | Award for Excellence in Sedimentary Geology by a Mid-Career Scientist, William R. Dickinson Medal, SEPM Society for Sedimentary Geology |
| 2010 | Exceptional Reviewer, *Lithosphere* |
| 2007 | Exceptional Reviewer, *Geological Society of America Bulletin* |
| 2006 - 2007 | Humboldt Research Fellowship, Alexander von Humboldt Foundation, Germany |
| 2005 | Fellow, Geological Society of America |
| 2004 | Young Scientist Award, Donath Medal, Geological Society of America |
| 1998 - 1999 | NSF Postdoctoral Research Fellowship |
| 1993 - 1996 | NSF Graduate Research Fellowship |
| 1993 | Geological Society of America Outstanding Student Research Award |
| 1992 | NSF Graduate Research Fellowship, Honorable Mention |

**University Awards**

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|---|---|
| 2025 | Faculty Research Assignment (sabbatical research fellowship), UT |
| 2025 | UTIG (UT Institute for Geophysics) Director's Circle of Excellence |
| 2024 | UTIG Director's Circle of Excellence |
| 2021 | Knebel Teaching Award, UT: GEO 420K Introduction to Field & Stratigraphic Methods |
| 2019 | University of Arizona Geosciences Distinguished Alumni Award |
| 2019 | UTIG Outstanding Researcher |
| 2017 | JSG Outstanding Educator, Jackson School of Geosciences, UT |
| 2017 | UTIG Director's Circle of Excellence |
| 2016 - 2017 | Faculty Research Assignment (sabbatical research fellowship), UT |
| 2013 | UTIG Outstanding Researcher |
| 2013 | UTIG Director's Circle of Excellence |
| 2012 - 2013 | Faculty Research Assignment (sabbatical research fellowship), UT |

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|---|---|
| 2012 | UTIG Director's Circle of Excellence |
| 2011 | JSG Outstanding Researcher, Jackson School of Geosciences, UT |
| 2011 | UTIG Director's Circle of Excellence |
| 2004 | Faculty Career Development Award, UCLA |
| 1998 | Outstanding Teaching Assistant, University of Arizona Department of Geosciences |
| 1998 | Award for Meritorious Performance in Teaching, University of Arizona Foundation |
| 1997 | Best Talk, University of Arizona Geosciences Symposium |
| 1992 - 1993 | Presidential Graduate Scholarship, Montana State University |
| 1992 | Albuquerque Petroleum Association Victor Salazar Memorial Scholarship |
| 1992 | Estwing Outstanding Geology Student, University of New Mexico |
| 1992 | Stuart A. Northrop Outstanding Geology Senior, University of New Mexico |
| 1991 | Sherman A. Wengerd Outstanding Geology Junior, University of New Mexico |
| 1990 | J. Paul Fitzsimmons Outstanding Geology Sophomore, University of New Mexico |
| 1988 - 1992 | Excel Scholarship (full scholarship), University of New Mexico |

**Research Interests**
- Modern and ancient clastic depositional systems
- Tectonic and climatic signatures in stratigraphic sequences
- Sedimentary geochronology, provenance, and sediment routing systems
- Geodynamics of sedimentary basins and orogenic systems
- Interactions of tectonics, climate, and erosion in fold-thrust belts and foreland basins

**Research Platforms**
- UT-Austin: www.jsg.utexas.edu/researcher/brian_horton
- ResearchGate: www.researchgate.net/profile/Brian-Horton-4
- ORCID: www.orcid.org/0000-0002-1402-3524
- Scopus: www.scopus.com/pages/authors/7006721107
- LinkedIn: www.linkedin.com/in/brian-k-horton-48230280
- Google Scholar: https:scholar.google.com/citations?user=FcXBsz4AAAAJ&hl=en

**Research Grants**

*Total: 44 awards: 27 National Science Foundation (NSF), 1 American Chemical Society (Petroleum Research Fund), 2 National Geographic Society, 1 NASA, 1 Alexander von Humboldt Foundation, 1 International Ocean Discovery Program, 1 International Continental Scientific Drilling Program, 10 energy industry research grants: $10,364,267 to PI institution (total to all institutions: $26,086,968)*

[44] NSF Tectonics EAR 1946700. *Collaborative Research: Internal and external drivers of orogenic episodicity in the Ecuadorian Andes.*
PI (UT), with co-PI Jay Chapman (U. Wyoming).
$232,247 ($468,923 total) [2020 – 2025]

[43] NSF Frontier Research in Earth Sciences (FRES) Program EAR 1925898. *Collaborative Research: Consequences of flat slab subduction on the chemical, structural, and dynamic evolution of continental lithosphere.*
Co-PI (UT), with PI Lara Wagner (Carnegie Institution for Science), co-PI Thorsten Becker (UT), co-PI Christy Till (Arizona State U.).
$1,265,890 ($2,698,000 total) [2019 - 2025]

[42] NSF Tectonics EAR 191854. *Shortening, extension, and drainage reorganization in the Andean fold-thrust belt and broken foreland basin of northern Patagonia, Argentina.*
Sole PI (UT).
$440,314 [2019 – 2024]

[41] NSF Integrated Earth Systems (IES). *Collaborative Research: Trans-Amazon Drilling Project.*
Co-PI (UT), with PI Paul Baker (Duke U.), 4 others.
$132,343 ($3,112,173 total) [2018 – 2024)

[40] IODP (International Ocean Discovery Program). *Expedition 387 (Amazon Margin)*
Participant (Sedimentologist), with Chief Scientists Paul Baker (Duke U.), Cleverson Silva (Federal U. Fluminense, Brazil)
$103,082 [2019 - 2022]

[39] International Continental Scientific Drilling Program (ICDP). *Trans-Amazon Drilling Project.*
Co-PI (UT), with PI Paul Baker (Duke U.), 16 others.
$1,500,00 total [2017 – 2019]

[38] NSF Frontiers in Earth System Dynamics (FESD) EAR 1338694. *The dynamics of mountains, landscapes and climate in the distribution and generation of biodiversity of the Amazon/Andean forest.*
PI (UT), with PI Paul Baker (Duke U.), 3 others.
$112,839 [2017 – 2020]

[37] Andes Petroleum Ecuador Ltd. Contract UTA18-000207. *Provenance, geochronology and geological synthesis of the M1 and basal Tena sandstones, Oriente Basin, Ecuador.*
Subcontractor (UT), with PI Ron Steel (UT).
$375,445 [2018 – 2020]

[36] NASA Biodiversity Program 15-BIODIV15-0013. *Mapping linkages between geophysical and biological diversity across space and time in the Andes, Amazon, and Chocó of Perú, Ecuador, and Colombia.*
Co-PI (UT), with PI Sherilyn Fritz (U. Nebraska), 6 others.
$60,170 total [2016 – 2018]

[35] National Geographic Society Research and Exploration Grants Program 990916. *Continental-scale drainage reversal of the Amazon River.*
Sole PI (UT).
$20,700 [2016 – 2017]

[34] NSF Frontiers in Earth System Dynamics (FESD) EAR 1338694. *The dynamics of mountains, landscapes and climate in the distribution and generation of biodiversity of the Amazon/Andean forest.*
PI (UT), with PI Paul Baker (Duke U.), 3 others.
$203,443 [2015 – 2018]

[33] ExxonMobil, UTA12-000741. *Deformational and thermal history of the Iranian Zagros fold-thrust belt (thermochronometric analysis of legacy samples).*
Co-PI (UT), with PI Daniel Stockli (UT).
$109,821 [2015 – 2016]

[32] Petro Matad (Ulaanbaatar, Mongolia). *Field work, petrographic studies, and reservoir characterization of blocks IV and V, central Mongolia.*
Subcontractor (UT)
$22,425 [2015 – 2016]

[31] National Geographic Society. *The Pampean desert: reconstructing the largest Quaternary sand sea in South America.*
Project Member (UT), with PI: Edgardo Latrubesse (UT).
$20,000 [2015 – 2016]

[30] NSF Tectonics EAR 1450976. *Exhumation history of the Indian Lesser Himalaya: Discriminating tectonic models with implications for the Neogene isotopic composition of seawater.*
Co-PI (UT), with PI N. Ryan McKenzie (Yale U.), co-PI Daniel Stockli (UT).
$361,772 [2015 – 2018]

[29] NSF Tectonics EAR 1348031. *Rapid Miocene thrust propagation and wholesale basin partitioning along the central and southern Andes, Argentina.*
PI (UT), with co-PI N. Ryan McKenzie (Yale U.).
$298,480 [2014 – 2017]

[28] Statoil, subcontract UT 201102398. *Exploring source-to-sink linkages between Laramide basins and the Gulf of Mexico*.
PI (UT), with graduate fellow Meredith Bush (UT).
$78,327 [2014 – 2015]

[27] NSF Frontiers in Earth System Dynamics (FESD) EAR 1338694. *The dynamics of mountains, landscapes and climate in the distribution and generation of biodiversity of the Amazon/Andean forest.*
Co-PI (UT), with PI Paul Baker (Duke U.), 3 others.
$343,689 ($2,440,000 total) [2013 – 2015]

[26] NSF Tectonics EAR 1250512. *Thrust belt response to rapid surface uplift of the Altiplano: A field test of Cordilleran cyclicity in southern Bolivia.*
PI (UT), with co-PI Sean Long (U. Nevada Reno).
$130,499 [2013 – 2016]

[25] Pacific Rubiales Energy, UT 201301464–001. *Structural and hydrologic evaluation, Andean Cordillera and foreland basin, Colombia.*
Subcontractor (UT), with PI Brad Wolaver (Bureau of Economic Geology, UT).
$559,086 [2013 – 2015]

[24] ExxonMobil, UTA12-000741. *Depositional and deformational history of the Zagros fold-thrust belt and foreland basin.*
PI (UT), with co-PI Daniel Stockli (UT).
$415,000 ($845,409 total) [2012 – 2014]

[23] NSF Sedimentary Geology and Paleobiology EAR 0958704. *Late Cenozoic vertebrate paleontology and paleoenvironments of the Tibetan Plateau (China*).
Subcontractor (UT), with PI Xiaoming Wang (Los Angeles County Museum of Natural History).
$11,754 [2012 – 2013]

[22] Ecopetrol (Instituto Colombiano del Petróleo), UTA11-000356. *New perspectives on the tectonic and paleoelevation history of the northern Andes.*
PI (UT), with co-PI Tim Shanahan (UT).
$180,831 [2011 – 2012]

[21] NSF Tectonics EAR 1019857. *Evaluating along-strike variations in surface uplift of the Andes: Constraints from molecular paleoaltimetry in the Eastern Cordillera of Colombia.*
PI (UT), with co-PIs Tim Shanahan, Joel Saylor (UT).
$246,578 [2010 – 2013]

[20] NSF Continental Dynamics EAR 1009845. *St. Elias Erosion-tectonics Project (STEEP).*
Co-PI (UT), with PI Terry Pavlis (UTEP), co-PI Sean Gulick (UT), 12 others.
$325,940 ($1,390,736 total) [2010 – 2013]

[19] Petro Matad (Ulaanbaatar, Mongolia). *Field work, petrographic studies, and reservoir characterization of blocks IV and V, central Mongolia.*
Subcontractor (UT)
$47,500 [2010 – 2012]

[18] NSF Continental Dynamics EAR 0908518. *CAUGHT: Central Andean Uplift and the Geodynamics of High Topography.*
Co-PI (UT), with PI Carmala Garzione (U. Rochester), 8 others.
$326,327 ($2,545,969 total) [2009 – 2013]

[17] Ecopetrol (Instituto Colombiano del Petróleo), UTA08-711. *Basin evolution and structural history of a regional transect through the Middle Magdalena Valley, Eastern Cordillera, and western Llanos basin of Colombia.*
Sole PI (UT).
$1,500,000 [2008 – 2010]

[16] NSF Tectonics EAR 0809425. *Development of extensional systems in regions of hot, thick crust: Insight from Tibet.*
Co-PI (UT), with PI Michael Taylor (U. Kansas), co-PI Paul Kapp (U. Arizona).
$75,163 ($317,212 total) [2008 – 2010]

[15] NSF Continental Dynamics EAR 0708105. *How is rifting exhuming the youngest HP/UHP rocks on Earth?*
Co-PI (UT), with PI Suzanne Baldwin (Syracuse U.), 8 others.
$334,353 ($3,659,908 total) [2007 – 2012)

[14] NSF Tectonics EAR 0710793. *Stratigraphic signatures of orogeny: Assessing the timing of initial Andean crustal shortening.*
Co-PI (UT), with PI Peter DeCelles (U. Arizona), co-PI Barbara Carrapa (U. Wyoming).
$128,931 ($343,375 total) [2007 – 2010]

[13] NSF Instrumentation and Facilities EAR 0732500. *Acquisition of a solid-state 193-nm laser-ablation system*.
Co-PI (UT), with PI William Carlson (UT), 3 others.
$97,500 [2007 – 2008]

[12] Alexander von Humboldt Foundation, Humboldt Research Fellowship. *Orographic barriers and climate change in the northern Puna plateau, central Andes, Argentina.*
PI (UT), with host Manfred Strecker (Universität Potsdam, Germany).
$50,000 [2006 – 2007]

[11] NSF Tectonics EAR 0510441. *Tectonic and climatic controls on rapid exhumation along the Altiplano-Eastern Cordillera boundary, Bolivia.*

Sole PI (UT).
$172,667 [2005 – 2008]

[10] NSF Tectonics EAR 0337775. *Kinematic linkages among extrusion, fold-thrust shortening, and foreland basin evolution during early continental collision, Zagros Mountains, Iran.*
Co-PI (UCLA), with PI Gary Axen (UCLA).
$387,621 [2004 – 2007]

[9] NSF Tectonics EAR 0201937. *Detachment faulting and basin development in a convergent setting: The Cordillera Blanca, Peru*.
Co-PI (UCLA), with PI Brendan McNulty (California State U. Dominguez Hills).
$94,000 ($266,769 total) [2002 – 2004]

[8] NSF Tectonics EAR 0106677. *Investigation of timing and strain magnitude of Late Cretaceous-Tertiary thrusting in central and northern Tibet.*
Co-PI (UCLA), with PI An Yin, co-PI T. Mark Harrison (UCLA).
$248,466 [2001 – 2004]

[7] American Chemical Society (Petroleum Research Fund) ACS-PRF 37207-G8. *Linking basin development and growth of continental plateaus: Controls on stratigraphic architecture in western China.*
Sole PI (UCLA).
$25,000 [2001 – 2003]

[6] NSF Sedimentary Geology EAR 9908003, EAR 0231543. *Paleogene sedimentary basin development in the Bolivian Altiplano and implications for initial mountain building in the central Andes.*
Sole PI (LSU, UCLA).
$98,367 [2000 – 2002]

[5] NSF Tectonics EAR 993222, EAR 0296176. *3-D kinematic evolution of the Charleston-Nebo salient, Sevier fold-thrust belt.*
Co-PI (LSU, UCLA), with PI Peter DeCelles, co-PI Kurt Constenius (U. Arizona).
$48,291 ($163,809 total) [1999 – 2003]

[4] NSF Tectonics EAR 9804680. *Late Cretaceous-Tertiary foreland basin evolution in the Eastern Cordillera of southern Bolivia.*
Subcontractor (LSU), with PI Peter DeCelles (U. Arizona), co-PI Peter Copeland (U. Houston).
$9,997 [1999 – 2000]

[3] NSF Postdoctoral Fellowship EAR 9805655. *Structural-stratigraphic evolution of the Fenghuo Shan and implications for crustal thickening and uplift of the Tibetan plateau*
PI, with mentor An Yin (UCLA).
$144,000 [1998 – 1999]

[2] British Petroleum. *Development of the central Andean foreland basin system, Bolivia.*
Sole PI (University of Arizona).
$5,000 [1997 – 1998]

[1] NSF Graduate Research Fellowship. EAR 4006: Geology. *Tectonics and sedimentation in extensional basins (Nevada) and foreland basins (Bolivia).*
Sole PI (Montana State University, University of Arizona).
$90,000 [1993 – 1996]

**Professional Affiliations**

American Geophysical Union, Geological Society of America (Fellow), Society for Sedimentary Geology (SEPM), American Association of Petroleum Geologists (AAPG), International Association of Sedimentologists

**Professional Activities**

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| 2026 - present | Founding Editor-in-Chief, Stratigraphy and Sedimentology, open-access journal ISSN: 3042-884X. |
| 2026 | Judge, Jackson School of Geosciences Student Research Symposium, UT. |
| 2025 | Judge, Geological Society of America Annual Meeting, student posters. |
| 2024 | Judge, Outstanding Student Presentation Award (OSPA), AGU Annual Meeting. |
| 2023 | Judge, Outstanding Student Presentation Award (OSPA), AGU Annual Meeting. |
| 2022 | Judge, Geological Society of America Annual Meeting, student presentations. |
| 2022 | Judge, SEPM (Society for Sedimentary Geology), student presentations. |
| 2019 | Judge, European Geophysical Union, General Assembly, student presentations. |

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| 2019 | Editor, *Andean Tectonics*, 24 chapters, 711 p., Elsevier, Amsterdam, ISBN: 978-0-12-816009-1, B.K. Horton and A. Folguera. |
| 2018 - 2019 | Editorial Board, *Lithosphere*, journal published by Geological Society of America. |
| 2018 | Field trip co-leader, 11th South American Symposium on Isotope Geology, *Pre-Andean and Andean stratigraphy, sedimentology, and structure: Eastern Cordillera to Subandean Zone, Bolivia.* |
| 2018 | Judge, Jackson School of Geosciences Student Research Symposium, UT. |
| 2017 | Session co-chair, IAS International Meeting of Sedimentology, Sedimentary Basins symposium: *Interactions of Sedimentation and Tectonics*. |
| 2015 | Session co-chair, AGU Fall Meeting, Tectonophysics session: *Building the Andes: From Mantle Geodynamics to Surface Processes*. |
| 2014 | Session co-chair, GSA Annual Meeting, Topical Session: *The Geodynamics of Flat Slab Subduction and its Influence on Upper Plate Deformation, Magmatism, and Basin Evolution*. Co-convened with Jeff Benowitz and Meghan Miller. |
| 2007 - present | Member, Teresa Lozano Long Institute of Latin American Studies, UT. |
| 2006 - 2018 | Co-Supervisor of Paleomagnetics Laboratory, Jackson School of Geosciences, with Dr. Jack Holt. |
| 2014 | Editor, *Toward an Improved Understanding of Uplift Mechanisms and the Elevation History of the Tibetan Plateau*, GSA Special Paper, v. 507, J. Nie, B.K. Horton, G.D. Hoke. |
| 2009 - 2013 | Editor, *Basin Research*, journal published by Wiley. |
| 2008 - 2013 | Editorial Board, *Lithosphere*, journal published by Geological Society of America. |
| 2012 | Guest Editor, *Special Issue: Tectonic and Climatic Shaping of the Northern Andes and Southern Caribbean Margin,* Journal of South American Earth Sciences, v. 39, G. Bayona, B.K. Horton, A. Reyes-Harker. |
| 2010 | Session co-chair, AAPG annual convention, *Regional Interaction of Tectonics and Sedimentation: Examining Relationships Between Deformation and Basin Evolution.* |
| 2009 | Short Course Instructor, Ecopetrol, Instituto Colombiano del Petróleo, Bucaramanga, Colombia, *Basin Analysis.* |
| 2009 | Session co-chair, AGU Fall Meeting, *Cenozoic Mountain Building in Asia and South America: Impact on Surface Processes, Erosion, Climate Change, and Deep Earth Processes.* |
| 2008 | Short Course Instructor, Universidad Industrial de Santander, Bucaramanga, Colombia, *Basin Analysis.* |
| 2007 | Session co-chair, AAPG annual convention, *Tectonic Controls on Sedimentation.* |
| 2004 - 2006 | Member, technical committee, GSA Special Conference, April 2006, Mendoza, Argentina, *Backbone of the Americas from Patagonia to Alaska.* |
| 2005 | Session co-chair, GSA Annual Meeting, *Orogenic Plateaus from Top to Bottom.* |
| 2002 - 2004 | Member/chair, nominations committee for division president, GSA Sedimentary Geology Division. |
| 2002 | Session co-chair, AGU Fall Meeting, *Tectonics and Structure of Tibet and China.* |
| 2001 | Session co-chair, AGU Fall Meeting, *Andean Tectonics: Subduction, Deformation, and Volcanism.* |
| 2001 | Judge, Earth & Space Sciences Student Organization Symposium, UCLA. |
| 2001 | Judge, Outstanding Student Presentation Award, AGU Fall Meeting. |
| 1995 | Field trip co-leader, GSA Rocky Mountain section meeting, *Sedimentology and tectonics of the Bannack-McKnight Canyon-Red Butte area, southwest Montana: New perspectives on the Beaverhead Group and Sevier orogenic belt.* |
| 2000 - present | Reviewer of proposals to National Science Foundation, American Chemical Society, NASA, European Science Foundation, National Geographic Society, Natural Environmental Research Council (UK), German Science Foundation, Netherlands Organization for Scientific Research, Swiss National Science Foundations, Czech Science Foundation, National Fund for Scientific and Technological Research (Chile), and other organizations. |
| 2000 - present | Reviewer of manuscripts submitted to *Andean Geology, Basin Research, Earth and Planetary Science Letters, Earth Science Reviews, Geochemistry Geophysics Geosystems, Geological Society of America Bulletin, GSA special publications, Geological Magazine, Geology, Geological Society of London special publication, Geomorphology, Geosciences, Geosphere, International Journal of Earth Sciences, Journal of Asian Earth Sciences, Journal of Geology, Journal of Geophysical Research, Journal of Sedimentary Research, Journal of South American Earth Sciences, Lithosphere, Marine and Petroleum Geology, Nature, Nature Geoscience, Palaeogeography Palaeoclimatology Palaeoecology, Science, Scientific Reports,* |

*Sedimentary Geology, Sedimentary Geology, Sedimentology, Stratigraphy and Sedimentology, Tectonics, Tectonophysics, Terra Nova.*

**Invited Lectures**

*Total: 82 presentations (45-60 minutes each)*

2026 Miami University, Oxford, Ohio
2025 Instituto de Investigaciones Geológicas, Bolivia
Universidad Mayor de San Andrés, La Paz, Bolivia
Universidade de São Paulo, Brazil
University of Arizona, Department of Geosciences
2024 Institute of Geological Sciences, Jagiellonian University, Krakow, Poland
2023 Universidad Nacional de San Juan, San Juan, Argentina
Escuela Politécnica Nacional, Quito, Ecuador
2022 Texas A&M University, Department of Geology and Geophysics
Arizona State University, School of Earth and Space Exploration
Carnegie Institution for Science, Earth & Planets Laboratory
University of Washington
2021 University of Texas at Arlington, Department of Earth and Environmental Sciences
Universidade de São Paulo, Instituto de Geociências
Duke University, Nicholas School of the Environment
2020 The Geology of Colombia Symposium, Servicio Geológico Colombiano Bogota, Colombia
Miami University, Oxford, Ohio
2019 Université Grenoble Alpes, Grenoble, France
Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China
School of Geosciences and Resources, China University of Geosciences, Beijing, China
University of Houston, Department of Earth and Atmospheric Sciences
Workshop on Ecuadorian Geology, Escuela Politécnica Nacional, Quito, Ecuador
Istanbul Technical University, Istanbul, Turkey
Plates Symposium, Institute for Geophysics, UT-Austin
Universidade de São Paulo, São Paulo, Brazil
2018 Congreso Geológico Chileno, Universidad de Concepción, Concepción, Chile
Colegio de Geólogos de Bolivia, Cochabamba, Bolivia
Stanford University, Department of Geological Sciences
2017 Escuela Politécnica Nacional, Facultad de Geología y Petroleos, Quito, Ecuador
2016 Yachay Tech University, School of Geological Sciences, Urcuquí, Ecuador
UT-Austin, Department of Geological Sciences, Tectonics Seminar
Servicio Geológico Colombiano, 100 Years of Scientific Production, Bogotá, Colombia
2015 Escuela Politécnica Nacional, Facultad de Geología y Petroleos, Quito, Ecuador
Duke University, Nicholas School of the Environment
2014 Yachay Tech University, Urcuquí, Ecuador
University of Houston, Department of Earth and Atmospheric Sciences
Pacific Rubiales Energy, Bogotá, Colombia
2013 Hocol Petroleum Company, Bogotá, Colombia
University of Arizona, Department of Geosciences
ExxonMobil Exploration Company, Colombia Operations Team, Houston, Texas
Research School of Arid Environment and Climate Change, Lanzhou University, Lanzhou, China
Escuela Politécnica Nacional, Instituto de Ciencias Biológicas, Quito, Ecuador
2012 Duke University, National Evolutionary Synthesis Center
2011 UT-Austin, Department of Geological Sciences, Departmental Colloquium
UT-Austin, Department of Geological Sciences, Tectonics Seminar
Petro Matad, Ulaanbaatar, Mongolia
2010 University of North Carolina, Department of Geological Sciences
UT-Austin, Institute for Geophysics
2009 Ecopetrol, Instituto Colombiano del Petróleo, Bucaramanga, Colombia
2008 Universidad Industrial de Santander, Bucaramanga, Colombia
University of Wyoming, Department of Geology and Geophysics

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| 2007 | Instituto Asociación Colombiana de Geologos y Geofísicos del Petroleo, Bogotá, Colombia |
| | Hocol Petroleum Company, Bogotá, Colombia |
| | Ecopetrol, Instituto Colombiano del Petróleo, Bucaramanga, Colombia |
| | University of Edinburgh, School of Geosciences, Scotland, UK |
| | Universität Potsdam, Department of Geosciences, Germany |
| | Friedrich Schiller University of Jena, Department of Geosciences, Germany |
| 2006 | Universidad Mayor de San Andrés, La Paz, Bolivia |
| | UCLA, Department of Earth & Space Sciences, Tectonics Seminar |
| | UT-Austin, Department of Geological Sciences |
| | UT-Austin, Institute for Geophysics |
| 2005 | Stanford University, Department of Geological and Environmental Sciences |
| | University of Oregon, Department of Geological Sciences |
| | Montana State University, Department of Earth Sciences |
| | University of Kansas, Department of Geology |
| 2004 | UCLA, Department of Earth & Space Sciences, Departmental Colloquium |
| | Oregon State University, Department of Geosciences |
| 2003 | California Institute of Technology, Division of Geological and Planetary Sciences |
| | University of New Mexico, Department of Earth and Planetary Sciences |
| | California State University Northridge, Department of Geological Sciences |
| 2002 | Purdue University, Department of Earth and Atmospheric Sciences |
| | Massachusetts Institute of Technology, Department of Earth, Atmospheric, and Planetary Sciences |
| | University of Southern California, Department of Earth Sciences |
| | UCLA, Department of Earth & Space Sciences, Tectonics Seminar |
| 2000 | UCLA, Department of Earth & Space Sciences, Departmental Colloquium |
| | UCLA, Department of Earth & Space Sciences, Tectonics Seminar |
| 1999 | Northwestern University, Department of Geological Sciences |
| | University of Houston, Department of Geosciences |
| 1998 | Rice University, Department of Earth Sciences |
| | Lehigh University, Department of Earth and Environmental Sciences (2) |
| | Case Western Reserve University, Department of Geological Sciences |
| | Louisiana State University, Department of Geology & Geophysics |

**Outreach Activities**

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| 2026 – present | Collaborative Research Agreement with Universidad Mayor de San Andrés, (UMSA), La Paz, Bolivia, including field training, collaborative research, and international exchange visits with UMSA professors and advanced geology students. |
| 2026 – present | Agreement of Cooperation with Institute of Geological Sciences of the Polish Academy of Sciences, Warsaw, Poland, to promote interest in the teaching and research activities of the respective institutions, and to deepen the understanding of the economic, cultural and social environment of the respective institutions. |
| 2021 - present | Consultant, science experimental design, Physics and Engineering courses, St. Stephen's Episcopal School, Austin, Texas. |
| 2021 - 2024 | Consultant, Subduction Zone 4D (SZ4D) scientific initiative. Strategic communications and international community building for implementation of a community research focus site in South America. |
| 2020 - 2025 | Designer and Co-Leader, MUSICA Teacher Training Initiative, Carnegie Institution for Science, Arizona State University, University of Texas at Austin. |
| 2020 - 2025 | Collaborative research agreement with Escuela Politécnica Nacional, Facultad de Geología y Petroleos, Quito, Ecuador: "Internal and external drivers of orogenic episodicity in the Ecuadorian Andes" including field and laboratory research. |
| 2023 - 2024 | Participant, Jackson School of Geosciences G2S2 (Gateway to Graduate Studies in Science). graduate student recruiting event: M.S. and Ph.D. degree planning. |
| 2022 - 2023 | EDGE panel discussion speaker. Jackson School of Geosciences EDGE (Enhancing Geoscience Education) graduate student recruiting event: M.S. and Ph.D. degree planning. |
| 2019 - 2022 | Member, Unnamed Committee, Jackson School of Geosciences, UT. |

2019 – 2022 Contributor, planning and proposal submissions to American Geophysical Union (AGU) Bridge Program, to increase opportunities for students from historically marginalized populations to obtain graduate degrees in the geosciences.
2019 Invited speaker, Undergraduate Geological Society, Jackson School of Geosciences, UT.
2019 Judge, European Geophysical Union, General Assembly, Vienna, Austria.
2016 - 2017 External reviewer, collaborative Ph.D. degree program between Université Grenoble Alpes, France, and Universidad Nacional de Bogotá, Colombia.
2015 - 2020 Collaborative research agreement with Escuela Politécnica Nacional, Facultad de Geología y Petroleos, Quito, Ecuador: "Levantamiento de los Andes y los Cambios en el Origen y la Evolucion Biológica en los Andes y la Amazonia," including field and laboratory research.
2013 - 2021 Collaborative research agreement with Universidad Mayor de San Andrés, (UMSA), La Paz, Bolivia, including field training, collaborative research, and international exchange visits with UMSA professors and advanced geology students.
2011 - present Presenter, "Field research and travel safety" lecture (2 hrs) in required graduate course "Supervised Teaching in Geological Sciences" (GEO 298T), ~75 students/yr, UT.
2007 - present Member, Teresa Lozano Long Institute of Latin American Studies, UT.
2013 Panelist and presenter, "Introduction to Graduate School Culture, Professors' Expectations, and Working with Advisors" colloquium, UT International Office, Academic English Program (http://world.utexas.edu/esl/programs/aep), 8 week summer program for ~80 ESL students.
2009 Field-trip leader, GeoFORCE Texas, an outreach program at UT-Austin that encourages high school students to pursue STEM careers.
2009 Instructor, Basin analysis short course, Ecopetrol, Instituto Colombiano del Petróleo, Bucaramanga, Colombia.
2008 - 2009 Faculty sponsor and mentor, UT Graduate School Mentoring Fellowship.
2008 Instructor, Basin analysis short course, Universidad Industrial de Santander, Bucaramanga, Colombia.
2004 - 2006 Mentor and science technical advisor to graduate students integrating science and technology in their screenwriting and directing, Alfred P. Sloan Foundation Fellowship Program, UCLA Department of Film and Television.
2004 - 2006 Science-fair consultant for Mathematics Engineering Science Achievement, UCLA Center for Excellence in Engineering program, Emerson middle school, Los Angeles.
2003 - 2004 Speaker and field-trip leader, Center for Excellence in Education, Role Models and Leaders Project: encourages disadvantaged high-school students to pursue higher education and careers in science and technology.
2002 - 2006 Collaborative research agreement with Sergeotecmin (Bolivian geological survey), La Paz, Bolivia.

**University Service, UT and UT Jackson School of Geosciences**

2022 - 2024 Faculty Development Leave Committee.
2018 - 2024 Endowment Review Committee.
2019 - 2022 Chair, Graduate Studies Committee, Geosciences program, Office of Graduate Studies.
2019 - 2022 Graduate Advisor, Jackson School of Geosciences.
2019 - 2022 Unnamed Committee.
2018 - 2022 Appointments Committee.
2015 - 2018 Awards Committee.
2014 - 2017 Endowments Committee.
2014 - 2015 Research Scientist Search Committee, Clastic Sedimentology, Bureau of Economic Geology.
2013 - 2014 Graduate Admissions and Support Committee.
2009 - 2011 Chair, Sedimentology-Stratigraphy Education and Research Group.
2009 - 2011 Graduate Admissions and Support Committee.
2008 - 2009 Faculty Search Committee, Crust-Mantle-Core position.
2007 - 2010 Opportunity Hires Committee.
2007 - 2008 Internal Change of Appointment Committee.
2006 - 2018 Co-Supervisor of Paleomagnetics Laboratory, with Dr. Jack Holt.

**University Service, UT, Department of Earth and Planetary Sciences**

2021 - present Supervisor/Evaluator, EPS Research Associate Professor.

2021 - present EPS Mentoring Program: Mentor to Assistant Professor.
2025 - 2026 Faculty Evaluation Committee, Comprehensive Periodic Review: Full Professor.
2024 - 2026 UTIG Annual Performance Evaluation Committee.
2023 - 2024 Faculty Evaluation Committee, Comprehensive Periodic Review: Full Professor.
2023 - 2024 Faculty Evaluation Committee, Associate Professor promotion review.
2023 - 2024 Faculty Peer Teaching Review: Associate Professor (2).
2021 - 2024 Faculty Mentoring Program: Mentor to EPS Associate Professor.
2021 - 2023 Supervisor/Evaluator, EPS Research Associate.
2022 - 2023 Faculty Peer Teaching Review: Associate Professor.
2022 - 2023 Faculty Peer Teaching Review: Assistant Professor (2).
2022 - 2023 Faculty Evaluation Committee, Associate Professor promotion review.
2022 - 2023 Faculty Evaluation Committee, Comprehensive Periodic Review (CPR) committee; Full Professor.
2021 - 2022 Faculty Peer Teaching Review: Assistant Professor.
2021 - 2022 Faculty Evaluation Committee, Associate Professor promotion review.
2021 - 2022 Faculty Evaluation Committee, Comprehensive Periodic Review (CPR) committee; Full Professor.
2020 - 2026 UTIG Graduate Research Fellowship Committee
2020 - 2026 UTIG Mentoring Program for Research Scientists: Mentor to Research Scientist.
2020 - 2021 Faculty Search Committee, Structural Geology.
2020 - 2021 Faculty Evaluation Committee, Associate Professor promotion review.
2019 - 2020 Chair, Faculty Search Committee, Sedimentary Geology.
2019 - 2020 Faculty Evaluation Committee, Associate Professor promotion review.
2018 - 2019 Chair, Faculty Search Committee, Endowed Chair in Sedimentary Geology.
2018 - 2019 Chair, UTIG Annual Performance Evaluation Committee.
2017 - 2019 Awards Committee.
2017 - 2018 UTIG Annual Performance Evaluation Committee.
2017 - 2018 Faculty Search Committee, Endowed Chair in Structural Geology.
2015 - 2018 Chair (Inaugural), Awards Committee.
2014 - 2015 Faculty Evaluation Committee, Comprehensive Periodic Review (CPR) committees (7 Professors).
2014 - 2015 Faculty Evaluation Committee, Assistant Professor tenure review.
2014 - 2015 UTIG Joint Appointments Committee.
2013 - 2014 Chair, Faculty Evaluation Committee, Research Associate Professor promotion review.
2013 - 2014 Faculty Evaluation Committee, Assistant Professor tenure review.
2012 - 2013 Research Scientist Search Committee, Multicollector ICP-MS facility manager.
2012 - 2013 Faculty Evaluation Committee, Assistant Professor review.
2010 - 2011 Chair, Faculty Search Committee, Structural Geology and Tectonics.
2010 - 2011 UTIG Research Scientist Search Committee, Plate Deformation.
2009 - 2011 Faculty Search Committee, Structure-Tectonics and Geochronology.
2009 - 2010 Research Scientist Search Committee, Multicollector ICP-MS facility manager.
2008 - 2009 Faculty Search Committee, Structure-Tectonics and Geochronology.
2008 - 2009 Ad Hoc Committee, Personnel Action (Structure-Tectonics).

**Courses Taught**

2006 - present Graduate courses, UT: Sedimentary Basin Analysis; Sediment Provenance (new); Tectonic and Climatic Interactions in Foreland Basins (new); Tectonics and Climate of South America (new); Dynamic Field Stratigraphy (new: 8 offerings: southern Argentina, central Argentina, northern Argentina, Ecuador, Romania, Wyoming, Amazon River, Andes Mountains); Fundamentals of Paleomagnetism (new).

2006 - present Undergraduate courses, UT: Earth and Planetary Processes Through Time (new), Introduction to Field & Stratigraphic Methods; Sedimentary Rocks; Field Geology (summer); Advanced Field Geology (new); Tectonics and Climate of South America (new); Fundamentals of Paleomagnetism (new).

1999 - 2006 Graduate courses, UCLA, LSU: Advanced Physical Sedimentology (new), Basin Analysis, Field Geology for Graduate Students (summer).

1999 - 2006 Undergraduate courses, UCLA, LSU: Advanced Sedimentology (new), Basin Analysis, Advanced Field Geology (summer field camp), Historical and Regional Geology, Sedimentary Petrology.

1999 - 2006 Seminars, UCLA, LSU: Arid Land Sedimentology (new), Field Trip: Geological Transect Across the Central Andes (new), Mountain Building Processes (new), Tectonics and Sedimentation (new), Thrust Belts and Foreland Basins (new).

**Field Trip Leader**

2026 Earth and Planetary Processes Through Time: south Texas (1 two-day trip).
2025 Tectonic and Climatic Interactions in Foreland Basins: New Mexico (1 week).
2024 Dynamic Field Stratigraphy: Argentina (2 weeks), with Matt Malkowski.
2023 Introduction to Field & Stratigraphic Methods: central Texas (3 one-day trips).
2022 Dynamic Field Stratigraphy: California (1 week), with trip leader Matt Malkowski.
2022 Basin Architecture: Colorado (1 week), with trip leader Nick Perez (Texas A&M).
2022 Geology of the Grand Canyon (3 days), MUSICA Teacher Training Initiative.
2021 Dynamic Field Stratigraphy: Wyoming (1 week), with Cornel Olariu and Ron Steel.
2021 Introduction to Field & Stratigraphic Methods: central Texas (4 one-day trips).
2020 Introduction to Field & Stratigraphic Methods: central Texas (3 one-day trips, 3 online trips)
2019 Introduction to Field & Stratigraphic Methods: central Texas (3 one-day trips).
2018 Tectonic and Climatic Interactions in Foreland Basins: Utah (1 week), with Ron Steel.
2018 South American Symposium on Isotope Geology: Bolivia (1 week), with Amanda Calle.
2018 Dynamic Field Stratigraphy: Romania (2 weeks), with Cornel Olariu.
2018 Introduction to Field & Stratigraphic Methods: central Texas (6 one-day trips).
2017 Dynamic Field Stratigraphy: Cordilleran foreland basin, Utah, Wyoming (1 week).
2017 Dynamic Field Stratigraphy: Andes: foreland, hinterland, and forearc basins, Ecuador (2 weeks).
2016 Yachay University: Geology of Ecuador: foreland to forearc transect across the Andes (2 weeks).
2016 Sediment Provenance: Cordilleran foreland basin, Utah (1 week), with Edgardo Pujols.
2015 Sedimentary Basin Analysis: San Juan and Mendoza provinces, Argentina (2 weeks).
2015 Introduction to Field & Stratigraphic Methods: central Texas (6 one-day trips).
2014 Tectonic and Climatic Interactions in Foreland Basins: New Mexico-Colorado (1 week).
2014 Dynamic Field Stratigraphy: Andes: Neuquén and Mendoza provinces, Argentina (2 weeks).
2012 Sedimentary Basin Analysis: California, Nevada, Utah (1 week).
2012 Introduction to Field & Stratigraphic Methods: central Texas (6 one-day trips).
2011 Tectonic and Climatic Interactions in Foreland Basins: Utah (1 week).
2011 Introduction to Field & Stratigraphic Methods: central Texas (6 one-day trips).
2010 Introduction to Field & Stratigraphic Methods: central Texas (6 one-day trips).
2008 Introduction to Field & Stratigraphic Methods: central Texas (9 one-day trips).
2006 Advanced Field Geology: Nevada, Utah (5 weeks).
2006 Seminar: Sedimentology: Mojave Desert, California (3 days).
2005 Advanced Field Geology: Nevada, Utah (5 weeks).
2005 Sedimentary Petrology: southern California (4 one-day trips).
2005 Historical and Regional Geology: California, Nevada, Utah (3 days).
2004 Advanced Field Geology: Nevada, Utah (5 weeks).
2004 Basin Analysis: southern California (2 one-day trips).
2004 Sedimentary Petrology: southern California (4 one-day trips).
2004 Advanced Physical Sedimentology: Mojave Desert, California (3 days).
2003 Field Seminar: Geological Transect, Central Andean Plateau: Bolivia (3 weeks).
2003 Advanced Field Geology: Nevada, Utah (5 weeks).
2003 Seminar: Paleotectonics: Thrust belts and foreland basins: Utah (1 week).
2002 Advanced Field Geology: Nevada, Utah (5 weeks).
2002 Field Geology for Graduate Students: California, Nevada, Utah (1 week).
2002 Basin Analysis: southern California (2 one-day trips).
2001 Special Topics: Tectonics and Sedimentation: California (1 week).
2000 Advanced Sedimentology: Baton Rouge, Louisiana region (2 one-day trips).
2000 Special Topics: Arid Land Sedimentology (1 one-day trip).
1999 Basin Analysis: Baton Rouge, Louisiana region (1 one-day trip).

**Graduate Student Theses & Dissertations:** name, year, thesis title, degree, institution

[43] Silva, A., 2026, *Cenozoic multiphase basin evolution in the Interandean Valley of Ecuador during arc magmatism and uplift of the northern Andes*: M.S. thesis, UT, 66 p.
[42] Konguthaithip, N., 2025, *Sedimentary basin evolution and structural compartmentalization in the northernmost Andes: Eastern Cordillera and Magdalena Valley, Colombia:* M.S. thesis, UT, 145 p.
[41] Siddall, A.K., 2025, *Provenance, sedimentation, and deformation associated with a mid-Cenozoic hiatus in the Andean foreland basin, west-central Argentina:* M.S. thesis, UT, 125 p.
[40] Regier, N.A., 2024, *Paleozoic basin evolution during tectonic and climatic transitions in the eastern Precordillera of Argentina:* M.S. thesis, UT, 180 p.
[39] Acevedo, E.B., 2024, *Evolución tectónica de la cuenca Neuquina durante el Jurásico Tardío: estudio integral de la Formación Tordillo entre los 32° y 37° de latitud sur:* Ph.D. dissertation, Universidad de Buenos Aires, 165 p.
[38] Butler, K.L., 2022, *Mesozoic-Cenozoic broken foreland basin evolution in northern Patagonia, Argentina (~42-48°S): Integrating sedimentation, magmatism, and subduction dynamics:* Ph.D. dissertation, UT, 365 p.
[37] Gutierrez, J., 2022, *Cenozoic sedimentary response to changing subduction dynamics in the northern Andes of Colombia:* M.S. thesis, UT, 168 p.
[36] Banks, C., 2022, *Sediment dispersal and source-to-sink dynamics in active river systems of the Ecuadorian Andes and foreland basin:* M.S. thesis, UT, 64 p.
[35] Malone, J.R., 2022, *Detrital zircon provenance of Paleozoic strata in the Falkland/Malvinas Islands: Implications for paleogeography and Gondwanan reconstructions:* M.S. thesis, UT, 156 p.
[34] McKeighan, C.A., 2022, *Understanding anthropogenic fault rupture in the Eagle Ford region, south-central Texas:* M.S. thesis, UT, 62 p.
[33] Nix, M.B., 2022, *Late Jurassic-Early Cretaceous shifts in sediment dispersal and accumulation in the proximal segments of the Western Canada foreland basin:* M.S. thesis, UT, 251 p.
[32] Hirtz, J.A.M., 2021, *Geochronology and provenance of the Belt-Purcell Supergroup of Montana, USA and Alberta, Canada: Implications for the early Mesoproterozoic paleogeography of Laurentia:* M.S. thesis, UT, 415 p.
[31] Mackaman-Lofland, C.A., 2020, *Andean deformation and basin evolution during changes in subduction zone geometry (29–33°S):* Ph.D. dissertation, UT, 202 p.
[30] Capaldi, T.N., 2019, *Stratigraphic response to Cordilleran processes along the south central Andean margin:* Ph.D. dissertation, UT, 173 p.
[29] Jackson, L.J., 2019, *Detrital provenance of modern rivers and stable isotope paleoaltimetry of Quaternary volcanic glasses in the northern Andes of Ecuador and Peru:* Ph.D. dissertation, UT, 226 p.
[28] George, S.W.M., 2019, *Basin evolution, deformation, and magmatism during variable tectonic regimes in the region linking the central and northern Andes:* Ph.D. dissertation, UT, 158 p.
[27] Gutierrez, E.G., 2018, *Provenance and geochronological insights into Late Cretaceous-Cenozoic foreland basin development in the Subandean Zone and Oriente Basin of Ecuador:* M.S. thesis, UT, 134 p.
[26] Calle, A.Z., 2017, *Andean and pre-Andean basin evolution along the South American convergent margin: Insights from the central Andes of Bolivia: (19.5-22°S):* Ph.D. dissertation, UT, 219 p.
[25] Ramirez, S.G., 2016, *Interactions between sedimentation and deformation in the Kumano forearc basin (Japan) and the Malargue foreland basin (Argentina):* Ph.D. dissertation, UT, 251 p.
[24] Koshnaw, R.I.M., 2016, *Neogene history of exhumation and deposition in the Zagros fold-thrust belt and foreland basin, Kurdistan region of Iraq:* Ph.D. dissertation, UT, 224 p.
[23] Bush, M.A., 2016, *Stratigraphic signatures of convergent orogenesis from the plate interior: Studies from Tibet and the southern Rocky Mountains:* Ph.D. dissertation, UT, 201 p.
[22] Perez, N.D., 2015, *Cenozoic deformation history of the Andean plateau in southern Peru: Stratigraphic, structural, and geochronologic constraints:* Ph.D. dissertation, UT, 287 p.
[21] Anderson, V.J., 2015, *Uplift and exhumation of the Eastern Cordillera of Colombia and its interactions with climate:* Ph.D. dissertation, UT, 185 p.
[20] Calle, A.Z., 2013, *Neogene sedimentation and provenance record of the Subandean zone and Chaco foreland basin, southern Bolivia:* M.S. thesis, UT, 124 p.
[19] Levina, M., 2013, *Cenozoic sedimentation and exhumation of the foreland basin system in the Precordillera fold-thrust belt (31-32°S), southern central Andes, Argentina:* M.S. thesis, UT, 100 p.
[18] Fitch, J.D., 2012, *Cenozoic evolution of a fragmented foreland basin, Altiplano plateau, southern Peru:* M.S. thesis, UT, 97 p.
[17] Woodruff, W.H., Jr., 2011, *Late Cenozoic growth and exhumation of the northern Lunggar extensional basin, west-central Tibetan plateau:* M.S. thesis, UT, 89 p.

[16] Sanchez, C.J., 2011, *Cenozoic structural evolution of the eastern margin of the Middle Magdalena Valley basin, Colombia: Integration of structural restorations, low-temperature thermochronology, and sandstone petrography:* M.S. thesis, UT, 114 p.
[15] Siks, B.C., 2011, *Sedimentary, structural, and provenance record of the Cianzo basin, Puna plateau-Eastern Cordillera boundary, NW Argentina:* M.S. thesis, UT, 97 p.
[14] Bande, A., 2010, *Foreland basin evolution and exhumation along the deformation front of the Eastern Cordillera, northern Andes, Colombia:* M.S. thesis, UT, 106 p.
[13] Moreno, C.J., 2010, *Paleogene sedimentation patterns and basin evolution during Andean orogenesis, Middle Magdalena Valley basin, Colombia:* M.S. thesis, UT, 49 p.
[12] Cardona, P.A., 2009, *Depositional history of the Taranaki Basin, New Zealand: Linking sediment accumulation and subsidence rates to tectonic processes:* M.S. thesis, UT, 106 p.
[11] Mackey, G.N., 2009, *Provenance of the south Texas Paleocene-Eocene Wilcox Group, western Gulf of Mexico basin: Insights from sandstone modal compositions and detrital zircon geochronology:* M.S. thesis, UT, 155 p.
[10] Perez, N.D., 2009, *Late Miocene sedimentation in the central Andean foreland basin, southern Bolivia: Constraints from magnetostratigraphy*: Undergraduate Honors thesis, UT, 58 p.
[9] Giovanni, M.K., 2007, *Tectonic and thermal evolution of the Cordillera Blanca detachment system, Peruvian Andes: Implications for normal faulting in a contractional orogen:* Ph.D. dissertation, UCLA, 236 p.
[8] Mosolf, J.G., 2007, *The detrital record of rapid Neogene exhumation of the Cordillera Real, Bolivia*: M.S. thesis, UCLA, 65 p.
[7] Murray, B.P., 2007 *Sedimentology, provenance, and basin development of the synorogenic Peñas and Aranjuez formations, northern Altiplano, Bolivia:* M.S. thesis, UCLA, 68 p.
[6] Gavillot, Y.G., 2007, *Tectonics of the High Zagros fold-thrust belt, Iran: Constraints on spatial and temporal distribution of thrust activity using (U-Th)/He thermochronometry*: M.S. thesis, UCLA, 53 p.
[5] Shirvell, C.R., 2006, *Pliocene exhumation along the west Salton detachment system and tectonic evolution of the Fish Creek-Vallecito supradetachment basin, Salton Trough, southern California*: M.S. thesis, UCLA, 133 p.
[4] Bourke, M.B., 2005, *Sedimentological and paleoenvironmental analysis of middle Eocene strata of the southeastern Kishenehn basin, northwestern Montana*: M.S. thesis, UCLA, 124 p.
[3] Gillis, R.J., 2005, *Two-phase exhumation of the Cordillera Real, Eastern Cordillera, Bolivia: Inferences from thermochronology and regional structural mapping*: M.S. thesis, UCLA, 150 p.
[2] Fink, R.J., 2002, *Sedimentology and stratigraphy of the Upper Cretaceous-Paleocene El Molino Formation, Eastern Cordillera and Altiplano, central Andes, Bolivia: Implications for the tectonic development of the central Andes*: M.S. thesis, Louisiana State University, 116 p.
[1] Hampton, B.A., 2002, *Early-middle Tertiary deposition in the Corque syncline, Altiplano plateau, Bolivia*: M.S. thesis, Louisiana State University, 124 p.

**Graduate Student Research Supervision:** degree, completion date, research field area, current position
*45 graduate students supervised: 15 Ph.D., 30 M.S.*
Leigh Carlson, Ph.D. expected 2031, New Mexico and Argentina
Anthony Chiasson, Ph.D. expected 2031, Bolivia
Silva, Adan, M.S. 2026, now Ph.D. applicant, San Diego, California
Konguthaithip, Natthakorn, M.S. 2025, now Ph.D. student, University of North Carolina
Siddall, Ashlee, M.S. 2025, now Geologist, ExxonMobil, Houston, Texas
Acevedo, Eliana, Ph.D. 2024, now Postdoctoral Fellow, CONICET, Buenos Aires, Argentina
Regier, Nicholas, M.S. 2024, now Geologist, ExxonMobil, Houston, Texas
Butler, Kristina, Ph.D. 2022, now Assistant Professor, University of Wisconsin
Malone, Joshua, M.S. 2022, now Geologist, ExxonMobil, Houston, Texas
Banks, Claudia, M.S. 2022, now Physical Scientist, Environmental Protection Agency, Chicago, Illinois
Gutierrez, Juan, M.S. 2022, now Ph.D. student, University of Texas at Austin
McKeighan, Caroline, M.S. 2022 (co-supervised), now Geology Manager, Wild Basin Energy, Austin, Texas
Nix, Matthew, M.S. 2022, now Geologist II, EOG Resources, Corpus Christi, Texas
Hirtz, Jaime, M.S. 2021, now Geologist, U.S. Geological Survey, Denver, Colorado
Mackaman-Lofland, Chelsea, Ph.D. 2020, now Assistant Professor, University of Tennessee, Knoxville
Capaldi, Tomas, Ph.D. 2019, now Assistant Professor, University of California San Diego (Scripps Institution of Oceanography)

Jackson, Lily, Ph.D. 2019, now Assistant Professor, University of Texas at El Paso
George, Sarah, Ph.D. 2019, now Assistant Professor, University of North Carolina at Chapel Hill
Gutierrez, Evelin Gabriela, M.S. 2018, Ph.D. 2023, now Geologist, EOG Resources, Midland, Texas
Calle, Amanda, Ph.D. 2017, now Geological Interpreter, Bureau of Economic Geology, Austin, Texas
Ramirez, Sebastian, Ph.D. 2016 (co-supervised), now Senior Geologist, Shell Oil Company, Houston, Texas
Koshnaw (Mohammed), Renas, Ph.D. 2016, now Research Associate, University of Göttingen, Germany
Bush, Meredith, Ph.D. 2016, now Geologist, GeoEngineers Inc., Seattle, Washington
Perez, Nicholas, Ph.D. 2015, now Associate Professor, Texas A&M University
Anderson, Veronica, Ph.D. 2015, now Data Scientist, kWh Analytics, Houston, Texas
(Levina) Jones, Mariya, M.S. 2013, now Chemistry Instructor, Student Academic Center, UC Davis, California
Calle, Amanda, M.S. 2013, Ph.D. 2017, now Geological Interpreter, Bureau of Economic Geology, Austin, Texas
Fitch, Justin, M.S. 2012, now Software Engineer, SBE Vision Inc., Providence, Rhode Island
Woodruff, William, Jr., M.S. 2011, now Physical / Data Scientist, Los Alamos National Lab, New Mexico
Sanchez, Javier, M.S. 2011, Ph.D. 2015, University of Houston, now Geoscientist, Ecopetrol, Bogota, Colombia
Siks, Benjamin, M.S. 2011, now Senior Geologist, Hilcorp Energy Company, Anchorage, Alaska
Bande, Alejandro, M.S. 2010, Ph.D. 2017, Universität Potsdam, Germany, now Exploration Geologist, Tecpetrol, Buenos Aires, Argentina
Moreno, Christopher, M.S. 2010, now Senior Consultant, Accordion Salesforce, Portland, Oregon
Cardona, Paola, M.S. 2009 (co-supervised), now Petroleum Geologist, Ecopetrol, Bogota, Colombia
Mackey, Glen, M.S. 2009 (co-supervised), Ph.D. 2019, University of Utah, now Data Science Team Lead, WCG KMR, Minneapolis, Minnesota
Perez, Nicholas, B.S. 2009, Ph.D. 2015, now Associate Professor, Texas A&M University
Gavillot, Yann, M.S. 2007, UCLA (co-supervised). Ph.D. 2014, Oregon State University, now Associate Professor and Research Geologist, Montana Bureau of Mines & Geology, Montana Tech
Mosolf, Jesse, M.S. 2007, UCLA. Ph.D. 2013, UC Santa Barbara, now Professor and Senior Research Geologist, Montana Bureau of Mines & Geology, Montana Tech
Murray, Bryan, M.S. 2007, UCLA. Ph.D. 2014, UC Santa Barbara, now Associate Professor, California Polytechnic State University, Pomona, California
Giovanni, Melissa, Ph.D. 2007, UCLA, now Professor, College of Southern Nevada, Las Vegas, Nevada
(Shirvell) Belgarde, Catherine, M.S. 2006, UCLA (co-supervised), now Exploration Manager, BHP, Denver, CO
Bourke, Matthew, M.S. 2005, UCLA, now Global New Opportunities Manager, ExxonMobil, Houston, Texas
Gillis, Robert, M.S. 2005, UCLA, now Energy Resources Geologist, Alaska Division of Geological and Geophysical Surveys, Fairbanks, Alaska
Fink, Richard, M.S. 2002, LSU, consultant, former Principal in Operations Geology, ExxonMobil, Houston, Texas
Hampton, Brian, M.S. 2002, LSU. Ph.D. 2006, Purdue University, now Associate Professor, New Mexico State University

**Graduate Student Research Committee Service:** committee member

*13 current advisory committees: 13 Ph.D., 0 M.S.*

Xiang He, Ph.D. 2024-present; Elizabeth Horne, Ph.D. 2024-present; Emily Launderville, Ph.D. 2024-present; Jack St. Peter, Ph.D. 2024-present; Josiah Sananda, Ph.D. 2024-present; Olivia Wachob, Ph.D. 2024-present; Jacqueline Epperson, Ph.D. 2023-present; Griffin Clevenger, Ph.D. 2023-present; Vitor Mello, Ph.D. 2022-present; Danqi Jiang, Ph.D. 2021-present; Samuel Martin, University of British Columbia, Ph.D. 2021-present; Daniel Ruiz, Ph.D. 2018-present; Eunsil Jung, Ph.D. 2016-present.

*58 completed advisory committees: 39 Ph.D., 19 M.S.*

Fernando Rey, Ph.D. 2025; Sebastian Gomez, Ph.D. 2025; Rawan Alasad, Ph.D. 2024; Sarp Karakaya, Ph.D. 2024; Jacqueline Epperson, M.S. 2023; Benjamin Rendall, Ph.D. 2022; Yuqian Gan, Ph.D. 2022, Cullen Kortyna, Ph.D. 2022; Zachary Foster-Baril, Ph.D. 2022; Keith Minor, Ph.D. 2022; Sarah Davis, Ph.D. 2022; Huber Rivera Rosado, Ph.D. 2022, Universidad de Chile (external reviewer); Sebastian Ramiro, Ph.D. 2021; Kelly Olsen, Ph.D. 2021; James Gearon, M.S. 2021; Fernando Rey, M.S. 2021; Leland Spangler, M.S. 2021; Logan West, Ph.D. 2020; Kelly Thomson, Ph.D. 2020; Benjamin Gérard, Ph.D. 2019, Université Grenoble Alpes, France (external reviewer & chair); Margo Odlum, Ph.D. 2019; Doug Barber, Ph.D. 2018; Alejandro Piraquive, Ph.D. 2017, Universidad Nacional de Colombia and Université Grenoble Alpes, France (external reviewer); Edgardo Pujols, Ph.D. 2017; Kelly Thomson, M.S. 2016; Cody Colleps, M.S. 2016; Qiqi Wang, M.S. 2016; James Lyons, Ph.D. 2016; Maureen Walton, Ph.D. 2016; Yanadet Sripanich, Ph.D. 2013 (examining member); Daniel Eakin, Ph.D. 2014; Tricia Alvarez, Ph.D. 2014; Lauren English, Ph.D. 2012 (examining member); Julio Leva-Lopez, Ph.D. 2014; Jason

Stephens, Ph.D. 2014; Paul Betka, Ph.D. 2013; W. Ryan Lester, Ph.D. 2013; Allison Ned, M.S. 2013; Kyungwon Chang, Ph.D. 2013 (examining member); Robert Reece, Ph.D. 2012; John Hooker, Ph.D. 2012; Henry Campos, M.S. 2011; Guy Fitz, M.S. 2011; Renas Mohammed, M.S. 2011; Lindsay Lowe Worthington, Ph.D. 2010; Aysen Ozkan, Ph.D. 2010; C. Ryan Elmore, M.S. 2009; Juan Iñigo, M.S. 2009; Jennifer Aschoff, Ph.D. 2008; Eleine Vence, M.S. 2008; Migdalys Salazar, M.S. 2008, Enrique Rosero, Ph.D. 2009 (examining member), Paolo Ballato, Ph.D. 2009, Universität Potsdam, Germany (external reviewer); Sara DiFiori, M.S., UCLA, 2006; Bruce Piscitello, M.A., UCLA Geography, 2006; Mary Kairouz, M.S., UCLA, 2005; Daniel Eastmond, M.S., UCLA, 2004; Bernard Guest, Ph.D., UCLA, 2004; Matthew Spurlin, M.S., UCLA, 2002.

**Undergraduate Student Research Service:** degree, year

*48 undergraduate students mentored*

Enrico De Cesare Leite, B.S. Geology, 2026; Joseph Sennello, B.S. Geology, UT, 2026; Leah Cecchini, B.S. Geology, 2025; Nicola Colossale, B.A. Geology, 2025; Victoria Alvarellos, B.S. Geology, 2022; Lucia Jagoe, B.S. Geology, 2022; Nicolas Peluffo, B.S. Geology, 2022; Regina Padilla, B.S. Geology; Geosystems Engineering & Hydrogeology, 2022; Bailey Glenewinkel, B.S. Geology, 2022; Leigh Mercer, B.S. Environmental Sciences: Geology, 2021; Anthony Edgington, B.S. Geology; Geosystems Engineering & Hydrogeology, 2021; Jamie Hirtz, B.S. Geology, 2019; Scarlette Hsia, B.S. Geology, 2018; Christian Baker, B.S. Geology, 2016; Jasmin Alfaro, B.S. Geology, 2016; Saloni Tandon, B.S. Geology, 2015; Zehao Xue, B.S. Geology, 2015; Andrew Reisdorf, B.S. Geology, 2015; Douglas Phillips, B.S. Geology, 2015; Markus Behnke, B.S. Geology, 2015; Dylan Hampshire, B.S. Geology, 2014; Christina Andry, B.S. Geology, 2015; Missy Null, B.S. Environmental Science, 2015; Regina Manion, B.S. Geology, 2015; Austin Moore, B.S. Geology, 2015; Alejandra Eljuri, B.S. Geology, 2014; Mary K. Bales, B.S. Geology, 2013; Kelly Hansard, B.S. Geosystems Engineering, 2012; Taylor Culpepper, B.S. Environmental Science, 2012; Adam Bowerman, B.S. Geology, 2012; Frank Morgan, B.S. Geology, 2011; Joseph Zimowski, B.S. Geology, 2010; Jennifer Knowles, B.S. Geology, 2010; Guy Fitz, Independent Study, Fall 2009; Bryan Ott, Independent Study, Fall 2009; Keith Nelson, B.S. Geology, 2009; Jose David Tovar, B.S. Geology, 2009; Nicholas Perez, B.S. Geology, 2009; Nataleigh Vann, B.S. Geology, 2009; Andrew Nicholson, B.S. Geology, 2008; Neil Ryan McKenzie, B.S. Paleobiology, UCLA, 2006; David Gingrich, B.S. Geology, UCLA, 2005; Holly Caprio, B.S. Geological Engineering, UCLA, 2004; Christian Pulido, Undeclared, UCLA, 2003; Matthew Bourke, B.A. Geology, Wesleyan University, 2001; Patrick Guillot, B.S. Mechanical Engineering, LSU, 2001; Jason Burns, B.A. Geology, Wesleyan University, 2001; Bobby Kato, B.A. Pre-Law, LSU, 2001.

**Postdoctoral Research Supervision:** appointment dates, research specialty, current position

*12 postdoctoral researchers mentored*

Gomez, Sebastian, Ph.D. 2025, sedimentology, stratigraphy, provenance, thermochronology.
now Postdoctoral Fellow, University of British Columbia, Canada.

Echaurren, Andres, 2024 - 2025, structural geology, geochronology, provenance.
now Assistant Research Scientist, Universidad Nacional de San Juan, Argentina.

Jackson, Lily, 2020 - 2021, provenance, paleoaltimetry, geochronology, geochemistry.
now Assistant Professor, University of Texas at El Paso.

Sickmann, Zachary, 2018 - 2019, provenance, river transport, coastal processes, geochronology.
now Assistant Professor, University of Texas Marine Science Institute.

Calle, Amanda, 2017 - 2018, provenance, basin analysis, sedimentology, geochronology.
now Geological Interpreter, Bureau of Economic Geology, Austin, Texas.

McKenzie, N. Ryan, 2012 - 2014, paleobiology, basin analysis, geochronology.
now Associate Professor, University of Hong Kong.

Cassel, Elizabeth, 2011 - 2013, paleoaltimetry, basin analysis, geochronology.
now Associate Professor, University of Idaho.

Saylor, Joel, 2008 - 2012, basin analysis, geo/thermochronology, paleoaltimetry.
now Associate Professor, University of British Columbia, Canada.

Parra, Mauricio, 2009 - 2010, geo/thermochronology, basin analysis.
now Professor, Institute of Geosciences, Universidade de São Paulo, Brazil.

Nie, Junsheng, 2008 - 2010, paleomagnetism, climate change, geochronology.
now Professor, Lanzhou University, Lanzhou, China.

Zhou, Jiangyu, 2003, sedimentology, basin analysis.
now Professor, China University of Geosciences, Wuhan, China.

Dupont-Nivet, Guillaume, 2002 - 2003, paleomagnetism, basin analysis.

now Professor, Université de Rennes, France.

**Peer-Reviewed Publications** (underlined = graduate student; * = postdoctoral scholar)

*159 articles published: 28 first author (8 sole author); 53 second author; 78 other.*
*(includes 89 first-authored articles by student (77) and postdoc (12) advisees).*

Researcher ID: A-1804-2009
Scopus Author ID: 7006721107
ORCID ID: 0000-0002-1402-3524
Google Scholar h-index = 73 (first author h-index = 28). Total citations = 16,300. (July 2026)

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[157] Fritz, S.C., Sawakuchi, A.O., Noren, A., Baker, P.A., Silva, C., Jaramillo, C., Almeida, R.P., Janikian, L., Bezerra, I.S., Barbosa, M., Bertassoli, D., Blankenship, R., Chiessi, C.M., Feakins, S.J., Garcia, M.G.M., Gautheron, C., Grivna, B., Hartmann, G., Kunkel, C., Marconato, A., Martinez, A., Gomez Marulanda, S., Mazoca, C.E.M., Tsai, S.M., Negri, F., Parra, M., Piller, W.E., Pupim, F.N., Salgado, V., So, R.T., Souza, P.E., Stiles, E., Strömberg, C.A.E., Wahnfried, I., West, J., Adaimé, M.E., Afonso, J., Akabane, T.K., Althaus, C.E., D'Apolito, C., Arujo, K., Azevedo Júnior, R.S., Barcellos, J., Bicudo, T., Bogota, B., Bookhagen, B., Breda, C., Brito, A.P., Carvajal, F., Coppi, D.A., Barbosa Leite da Cruz, C., Figueiredo, F.T., Freeman, K., Gomes, P.V.O., Gross, M., Hartke, E., Heeschen, K., Henrichs, W.M., Henrique, L., Hoorn, C., **Horton, B.K.**, Jaramillo, A.D., Kamrani-Mehni, S., Leite, F., Li, L., Lucena, R.F., Milne, A., Miranda, T., Mota, M., Ochoa, D., Piispa, E., Plata-Torres, A., Punyasena, S.W., Reis, A.D., Rigsby, C., Rodrigues, F.C.G., Romao, R.M.M., Romero, I., Salazar Rios, A.F., Sawakuchi, H.O., Schnurrenberger, D., Shannon, K.B., Silva-Caminha, S., Sousa, C., Tamura, L.N., Wiersberg, T., Xiang, H., and Zamudio, B., 2026, Initial results from a Trans-Amazon Drilling Project core from the Acre Basin of Brazil: *Scientific Drilling,* v. 35, p. 127–157, doi:10.5194/sd-35-127-2026.

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