CURRICULUM VITAE

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May 15, 2026

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1 Academic Training

- Stanford University
  Ph.D. Geological and Environmental Sciences, 1995, supervised by Prof. David D. Pollard.
  Dissertation title: "Coupled Tectonic Deformation and Geomorphic Degradation along the San Andreas Fault System."
  National Science Foundation Graduate Fellowship (1989-1993)

- Whittier College
  B.A. (Summa Cum Laude) in Geology and Spanish, 1989, supervised by Dr. Dallas D. Rhodes.
  Senior Thesis: "Geomorphic Responses in Ephemeral Channels to Strike-slip Faulting along the San Andreas Fault, Carrizo Plain, San Luis Obispo County, California."
  Presidential Scholarship at Whittier College (full tuition 1985–1989).

2 Employment

- Arizona State University, School of Earth and Space Exploration
  Professor of Geology
  July 1, 2010–Present
  Associate Professor of Geology
  July 1, 2006–June 30, 2010

- University of Potsdam (Germany), Institut für Erd- und Umweltwissenschaften
  Visiting Professor (sabbatical) 2001–2002 and 2016–2017

- Arizona State University, Department of Geology *then* Geological Sciences
  Associate Professor of Geology
  July 1, 2001–June 30, 2006
  Assistant Professor of Geology
  August 1, 1995–June 30, 2001

3 Research interests

Active tectonics, structural geology and geomorphology; earthquake geology; the San Andreas Fault system; geologic context for paleoanthropology; high resolution topography; earth observation; cyberinfrastructure and geoinformatics.

4 Honors and awards

- President's Medal (for OpenTopography along with 3 other PIs), Geological Society of America, 2025
- Open Science Recognition Prize (for OpenTopography along with 3 other PIs), American Geophysical Union, 2023
- Faculty Service Achievement Award, Arizona State University Founders' Day, 2022
- Paul G. Silver Award for Outstanding Scientific Service, American Geophysical Union Geodesy, Seismology, and Tectonophysics Sections, 2020
- Fellow, Geological Society of America (elected 2009)
- Arizona State University School of Earth and Space Exploration Undergraduate or Graduate Professor of the Year (from students): 2005, 2007, 2008, and 2013
- Stanford–USGS Fellowship (1993–1994)

5 ASU SESE/Geological Sciences major service

- Interim Director (2025–2026)
- Deputy Director (2017–2020, 2025)
- Associate Director for Operations and Research; Knowledge Enterprise Fellow (2022–2023)
- Associate Director for Operations (2013–2016; 2020–2022)
- Associate Director for Graduate Studies (2010–2013)
- Academic Program Review Committee (2003–2004 chair; 2010–2011; 2017–2018 chair; 2024-2025 chair)
- Geological Sciences Graduate Advisor (2003-2005)
- Geological Sciences Associate Chairman (2003-2005)

6 Publications

Work done primarily as ASU student, Arrowsmith mentee, or post-doc author at the time the work was done indicated with asterisk; double asterisks are visiting students and collaborator work done substantially at ASU. Author order is first by level of effort but also last author or so position is for head of the group/leadership of project in some cases.

6.1 Refereed publications

Chen*, Z., Mahalle, A. S., Saifullah, M. K., Wittich, C., Das, J., Madugo, C., Kottke, A., Arrowsmith, J R., Fragility Modeling of Precariously Balanced Rocks: Calibration, Benchmarking, and Sensitivity, *Seismica*, in review, 2026.

Zuckerman*, M. G., Scott, C. P., Arrowsmith, J R., Adam*, R. N., Madugo, C., Koehler, R., Kottke, A., AbramsonWard, H., Gath, E., González, T., Gray, B., Kozaci, O., Rockwell, T. K., Austin*, T., King., T., Micander, T., Leuchter, E., Pierce, I., Alexander*, E., Gourdeau, A., Laly, M., Ogilvie, I., Rothman, S., Vlaha, D., Young, E. K., Prush, V., Rowe, C., Johnson, B., Schwarz, M. F. G., The impact of mapper experience and data on the quality of geomorphic fault mapping, *Seismica*, in revision, 2026.

Brigham*, C., Scott, C., Arrowsmith, J R., Phan, M., DeWitt, J., Palaseanu-Lovejoy, M., Nandigam, V., Stoker, J., Anderson, S. W., Gesch, D. B., Crosby, C., Beckley, M., Geostatistical error analysis in airborne lidar topographic differencing: Workflow for multi-scale uncertainty estimation of common error sources, *Earth and Space Science*, in review, 2026.

Pierce, I., Williams*, A. M., Koehler, R., Arrowsmith, J R., Paleoseismic history of the causative faults of the 2019 Ridgecrest, California earthquake sequence, *Seismica*, in revision, 2026.

Zuckerman*, M. G., Rodríguez Padilla, A. M., Arrowsmith, J R., Quantifying the erasure of earthquakes in desert landscapes, *Seismica*, in revision, 2026.

Flowers, R. and Arrowsmith, J R., Using strategic micro-awards to train the next generation and grow a cross-disciplinary scientific community. *Earth and Space Sciences*, in revision, 2026.

165) Bersson*, J. J., Clarke, A. B., Arrowsmith, J R., Secondary Explosions on Silicic Lavas: A Case Study from Banco Bonito Rhyolite Lava Flow, New Mexico, *Journal of Volcanological and Geothermal Research*, in press, 2026.

164) Riggs, N.R., Ort, M.H., Anderson, K.C., Licciardi, J., Arrowsmith, J R., Wall, K.T., Broadman*, E., Van Gundy*, D., Alfano*, F., Lapo*, K., Clarke, A.B., Seligman*, A., Weikart*, J., Sotelo*, C., Kurz*, M., Witter Shelleman*, M., Houts*, A., de' Michieli Vitturi, M., Del Vecchio*, J., Zibart*, S., Casares*, H., Gleeman*, E., Distributed Mafic Volcanism in the San Francisco Volcanic Field, Arizona, USA: Syn- and

Post-Eruptive Processes Through a Lens of Diverse Field and Analytical Methods, *USGS Professional Paper on Distributed Volcanic Centers*, in press, 2025.

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153) Chen*, Z., Arrowsmith, J R., Das, J., Wittich, C., Madugo, C., Kottke, A., Virtual Shake Robot: Simulating Dynamics of Precariously Balanced Rocks for Overturning and Large-displacement Processes, https://doi.org/10.26443/seismica.v3i1.692, *Seismica*, 2024

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Chupik, D., Ingersoll, S., Evaluating how well active fault mapping predicts earthquake surface-rupture locations, *Geosphere*, https://doi.org/10.1130/GES2611.1, 2023.

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139) Gattuso, A., Bonadonna, C., Frischknecht, C., Cuomo, C., Baumann, V., Pistolesi, M., Biass, S., Arrowsmith, J R., Moscariello, M., Rosi, M., Lahar Risk Assessment: the case study of Vulcano Island, Italy, *Journal of Applied Volcanology*, 10, 9, https://doi.org/10.1186/s13617-021-00107-6, 2021.

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136) Bello**, S., Scott*, C. P., Ferrarini**, F., Brozzetti, F., Scott*, T., Cirillo, D., De Nardis, R., Arrowsmith J R., Lavecchia, G., A high-resolution surface faulting database from key-areas of the Lost River Fault (Idaho, USA), *Scientific Data*, https://www.nature.com/articles/s41597-021-00838-6, 2021.

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6.2 Data Publications

Sherman*, E., Schwarz*, M., Coelho, T., Kerber, L., Greenberger, R., Clarke, A., Arrowsmith, J R. (2025). Digital Elevation Model of Crater Elegante, Sonora, Mexico, November 2022. Distributed by OpenTopography. https://doi.org/10.5069/G9N58JM8.

Patyniak*, M., Williams*, A., Arrowsmith, R. (2024). Survey of the 2008 Nura earthquake surface rupture, Kyrgyzstan, 2018. Distributed by OpenTopography. https://doi.org/10.5069/G9ZW1J4C.

Bello, Simone; Scott*, Chelsea P; Ferrarini, Federica; Brozzetti, Francesco; Scott*, Tyler; Cirillo, Daniele; de Nardis, Rita; Arrowsmith, J Ramón; Lavecchia, Giusy (2020): Database of vertical separation measurements along the Lost River Fault (Idaho - USA) from 1983 Mw 6.9 earthquake ruptures and Quaternary fault scarps. PANGAEA, https://doi.org/10.1594/PANGAEA.921027

Bello, S., Scott*, C., Arrowsmith, R., Scott*, T. (2020). High Resolution Topography along the Lost River Valley, Idaho 2019. Distributed by OpenTopography. Accessed: 2020-07-19. https://doi.org/10.5069/G94M92Q1

Scott*, C., Lao Davila, D., Manighetti, I., Scott*, T., Arrowsmith, R., Leclerc, F., Matteo, L., Dominguez, S., Malavieille, J.: Topography of Normal Faults in the Volcanic Tablelands, CA 2018. Distributed by OpenTopography. Accessed 2020-07-01. https://doi.org/10.5069/G9SF2TC5

Scott*, C.P., Scott*, T., Lao-Davila, D.A., Clarke, A.B., Arrowsmith, J R., and Lynch, D. (2018): Photogrammetric model of the Tecolote Volcano, Pinacate Volcanic Field, Sonora, Mexico (point cloud [563M points], orthophoto [4 cm/pix], and DEM [8 cm/pix]). Distributed by OpenTopography. Accessed May 30, 2018. https://doi.org/10.5069/G9028PFR

Arrowsmith, J R., DiMaggio, E. N., Garello*, G. I., Villmoare, B. and Ledi Geraru Research Project (2018): Photogrammetric model of a portion of the Lee Adoyta Basin, Afar, Ethiopia (point cloud [122M points], orthophoto [2 cm/pix], and DEM [25 cm/pix]). Distributed by OpenTopography. Accessed October 23, 2018. https://doi.org/10.5069/G95X271W

Arrowsmith, J R., Pisciotta, F. and CERG-C (2018): Photogrammetric model of a portion of the Faraglione–a rock outcropping in the Vulcano Town area, Vulcano Island, Sicily, Italy (point cloud [17M points] and DEM [6 cm/pix]). Distributed by OpenTopography. Accessed October 29, 2018. https://doi.org/10.5069/G9WD3XPD

6.3 Additional scientific contributions since 2020

6.3.1 Blogging and other public comments

Scientific blogging (0.1 to a few per month): http://activetectonics.blogspot.com/

Abdrakhmatov, K. E., Arrowsmith, J R., Elliott, J., Grutzner, C., Mukambayev, A., Rizza, M., Shnizai, Z., Walker, R., Weldon, R., Wilkinson, R., Urgent need for greater earthquake resilience in continental Asia, *Nature Geoscience (Correspondence)*, https://doi.org/10.1038/s41561-024-01531-0, 2024

Scott, C., Arrowsmith, J R., Koehler, R., Remote teaching collaboration on mapping active faults for probabilistic fault displacement hazard. Southern California Earthquake Center December 2020 newsletter https://www.scec.org/article/638.

Koehler, R., Arrowsmith, J R., In the trenches—Paleoseismic studies of the 2019 Ridgecrest ruptures. Southern California Earthquake Center December 2020 newsletter https://www.scec.org/article/637.

Arrowsmith, J R. and Oskin, M. E., Earthquake geology and the Ridgecrest earthquake. Southern California Earthquake Center July 2020 newsletter on the one year anniversary of the 2019 Ridgecrest Earthquake Sequence https://www.scec.org/article/585.

6.3.2 Advisory reports

Arrowsmith, J R., Brodsky, E. E., Cooper, C. M., Elliott, J. L., Fee, D., Fischer, K.M., Hammond, W. C., La Femina, P., Lekic, V., Wang, H., and Worthington, L. L., Recommendations for Enabling Earth Science Through NSF's Geophysical Facility – A Portfolio Review of EAR Seismology and Geodesy Instrumentation, Report to the US National Science Foundation, April 2021. https://www.nsf.gov/geo/adgeo/ear-instrumentation-review/AC-GEO-EAR-Instrumentation-Portfolio-Review-April-2021

6.3.3 School Administrative reports

Arrowsmith, J R., Bose, M., Bowman, J., Hardgrove, C., Till, C. B., Hartnett, H. E., Wadhwa, M., Academic Program Review Self-Study Report (2018-2024) for the School of Earth and Space Exploration, Arizona State University, 2025.

7 Other scientific activities

7.1 Meeting and Short course organization since 2020

Numerous High Resolution Topography Courses: See `http://www.opentopography.org/community/workshops`, lead organizer and lecturer.

523. AGeS Geochronology Workshop; Co organizer. October 8-9, 2022, Geological Society of America Annual Meeting, Boulder, Colorado.

Virtual AGeS Community Symposia; Co organizer and co leader. May 7-8, 2025, and May 7-8, 2024

7.2 Colorado River Trips in the Grand Canyon

1. 1992ish–Private trip (18 days)
2. 1996–ASU Geology of the Grand Canyon Trip assistant leader with Prof. T. L. Péwé (6 days)
3. 1998–ASU Geology of the Grand Canyon Trip trip leader for Prof. T. L. Péwé (6 days)
4. 2008–Geology leader Prof. T. L. Péwé Memorial Trip (6 days)
5. 2011–Geology leader Prof. T. L. Péwé Memorial Trip (6 days)
6. 2019–ASU Institute of Human Origins Geology of the Grand Canyon co leader (with C. J. Campisano) (6 days)
7. 2021–ASU Institute of Human Origins Geology of the Grand Canyon co leader (with C. J. Campisano) (6 days)
8. 2023–ASU Institute of Human Origins Geology of the Grand Canyon co leader (with C. J. Campisano) (6 days)
9. 2025–ASU Institute of Human Origins Geology of the Grand Canyon co leader (with C. J. Campisano) (6 days)

7.3 International field research

- Pamir–Alai region of Kyrgyzstan: 1996, 1999, 2017, 2018, 2021, 2023.
- Tien Shan region of Kyrgyzstan and Kazakhstan: 2004, 2005, 2007, 2016, 2021, 2022.
- Altyn Tagh Fault system, southern Xinjiang (China): 1998, 1999, 2000, 2007, 2012.
- Northwestern Himalaya, Himachal Pradesh (India): 2001, 2017.
- Ladakh Himalaya, Karakoram (India): 2010.

- Afar region (Ethiopia): 2002, 2004, 2005, 2006, 2008, 2012, 2013, 2014, 2015, 2018, 2019, 2020, 2024, 2025, 2026.
- Southern Baja California (Mexico): 2006.
- Lake Malawi: 2011.
- Eastern Bolivian foreland: 2011, 2024.
- Indonesia (Java): 2011, 2012, 2024.
- Abruzzo Region (Italy): 2019

8 Research funding

Funded grants–Principal Investigator	Sponsor	Duration	$
Historic and paleoseismic behavior of the south–central San Andreas Fault between Cholame and the Carrizo Plain	Southern California Earthquake Center	1/1/97–12/31/01	$130,400
Thrust fault slip rates determined from coupled tectonic and geomorphic models of active faults and folds in the San Francisco Bay area: Collaborative research with ASU and UC Davis	US Geological Survey, National Earthquake Hazards Reduction Program	3/1/97–2/28/99	$87,380
Geologic mapping of Cave Creek and vicinity, central Arizona, with the aid of advanced remote–sensing methods	US Geological Survey, Educational Mapping Program	8/1/97–7/31/98	$7,500
Collaborative Research: Magnitude of slip, slip rate, and slip distribution along the Cenozoic Altyn Tagh Fault system	National Science Foundation–Continental Dynamics	7/1/98–6/30/01	$179,990
Active faults in zones of continental collision: Quaternary deformation in the Pamir–Tien Shan region, central Asia	National Science Foundation–Tectonics	7/1/98–6/30/00	$120,243
The effects of tectonic processes and climatic fluctuations on landscape development (with G. Hilley)	NASA Earth Systems Science Fellowship Program	9/1/99–8/31/02	$44,000
Collaborative Research: Arizona State University and University of Texas El Paso: Creation of a Geospatial data system for the transition between the Colorado Plateau and Basin and Range provinces	National Science Foundation–Information Technology Research	10/1/01–9/30/04	$200,000
ITR Collaborative Research: GEON: A Research Project to Create Cyberinfrastructure for the Geosciences	National Science Foundation–Information Technology Research	9/1/02–8/31/07	$400,000
Characterization of paleoseismic data resolution using Monte Carlo statistics (with J. Young)	Southern California Earthquake Center	1/1/03–12/31/03	$20,000
Geological mapping of the San Andreas Fault near Parkfield California: A proposal for support of M.S. student Lela Prashad at Arizona State University	US Geological Survey, Educational Mapping program	3/1/03–2/28/04	$13,881
Kilometer-scale fault zone structure and kinematics along the San Andreas Fault near Parkfield, California	National Science Foundation–Tectonics	07/01/03–06/30/05	$187,955

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
Integrated investigation of active deformation in the northern Tien Shan, Kyrgyz Republic: neotectonics, earthquake geology, and seismology	Civilian Research and Development Foundation	8/1/03–7/31/05	$12,700
Rupture history of the San Andreas Fault at Van Matre Ranch, Carrizo Plain, California: Collaborative Research with University of California, Irvine and Arizona State University	US Geological Survey, National Earthquake Hazards Reduction Program	2/1/04–1/31/05	$20,000
Multi-cycle rupture history of the San Andreas Fault in the Carrizo Plain: Collaborative Research with UC Irvine	National Science Foundation–Tectonics	07/1/04–06/30/06	$90,987
Collaborative Research: Neotectonics across an active oblique-divergent plate margin, southwestern Gulf of California	National Science Foundation–Margins	08/01/05–07/31/08	$164,152
Application of LiDAR data to constraining a late Pleistocene slip rate and vertical deformation of the Northern San Andreas fault, Fort Ross to Mendocino, California: Collaborative research between Arizona State University and the U. S. Geological Survey	US Geological Survey, National Earthquake Hazards Reduction Program	01/01/06–12/31/06	$60,000
Tectonic geomorphology and earthquake geology of the 1857 reach of the San Andreas Fault: a new look from Airborne Laser Swath Mapping	Southern California Earthquake Center	05/01/06–04/30/07	$19,000
Collaborative research: Is the Holocene slip rate along the Altyn Tagh Fault 10 mm/yr, 30 mm/yr, or both? Infilling a 2-6 ka gap using ^{14}C, OSL, and stream reconstructions	National Science Foundation–Tectonics	06/01/06–5/31/09	$195,494
Renewal: Integrated investigation of active deformation in the northern Tien Shan, Kyrgyz Republic: neotectonics, earthquake geology, and seismology	Civilian Research and Development Foundation	12/1/06–12/31/08	$13,935
Paleoseismological characterization of earthquakes at Parkfield	US Geological Survey, National Earthquake Hazards Reduction Program	01/01/07–12/31/07	$43,000
Supplement to: Rupture History of the San Andreas Fault in the Carrizo Plain prior to 1200 AD	Southern California Earthquake Center	02/01/07–1/31/08	$25,000
Collaborative Research: Slip-per-event rupture history of the San Andreas fault in the Carrizo Plain: Was the 1857 earthquake characteristic?	National Science Foundation–Tectonics	07/01/07–6/30/09	$158,387

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
GeoEarthScope LIDAR Project LiDAR point cloud data processing and delivery workflow	GeoEarthscope subcontract from UNAVCO	1/1/07–12/31/08	$150,441
Geomorphic and Geologic Characterization of Precarious Rock Zones in Low Seismicity Regions	Southern California Earthquake Center	02/01/08–12/31/09	$29,270
Collaborative Research: Facility Support: Building the INTERFACE facility for cm-scale, 3D digital field geology (includes supplement)	National Science Foundation–EAR Instrumentation and Facilities	09/01/07–8/31/10	$186,840
Slip Along the San Andreas Fault Associated With the Great 1857 Earthquake and Preceding Earthquakes Derived From "B4" LiDAR High Resolution Topographic Data	Southern California Earthquake Center	02/01/09–12/31/09	$28,000
Rupture history of the San Andreas Fault in the Carrizo Plain: Supplemental excavations, geochronology, and intern support	Southern California Earthquake Center	02/01/09–12/31/09	$18,000
The effect of structural complexity and fault roughness on fault segment size and multi-segment rupture probability	Southern California Earthquake Center	02/01/09–12/31/09	$15,000
A Collaborative Project: Comparison and Validation of Earthquake Simulators	Southern California Earthquake Center	02/01/09–12/31/11	$39,000
Tectonic geomorphology of California's active faults from high resolution topography: ACCESS-G fellowship	Southern California Earthquake Center	02/01/09–12/31/09	$53,503
Facility Support: OpenTopography - A National Hub for High Resolution Topographic Data, Tools, and Knowledge	National Science Foundation–EAR/IF	09/15/09–09/14/12	$307,463
RAPID: Airborne Lidar Scan of the 4 April 2010 Sierra El Mayor, Baja California Earthquake Rupture	National Science Foundation–EarthScope and International Programs	04/19/10–04/18/11	$112,381
Repeatability, accuracy, and precision of surface slip measurements from high-resolution topographic data Collaborative Research with Arizona State University and San Diego State University	US Geological Survey, National Earthquake Hazards Reduction Program	1/1/2011–12/31/2011	$40,015

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
Bridging Data, New Technologies, and Communities to Enable and Communicate EarthScope Exploration and Discovery (PI with Semken, Garnero, Fouch) (34% RID; with $100k supplements)	National Science Foundation EarthScope National Office	1/1/2012–12/31/2015	$2,450,744
Preliminary Analysis of the El Mayor-Cucapah Earthquake Surface Rupture with Pre- and Post-Event Airborne Lidar Data	Southern California Earthquake Center	1/1/2011–12/31/2011	$23,071
New Slip Rate estimates from Wallace Creek and Phelan Creek Paleoseismic Sites. Re-sampling, Re-dating, and Re-Synthesizing	Southern California Earthquake Center	1/1/2011–12/31/2011	$19,844
Element F4 of the Uniform California Earthquake Rupture Forecast 3: Compile Slip in Last Event Data	California Earthquake Authority	3/4/2011–6/30/2012	$23,502
Collaborative Research: 3-D near-field coseismic deformation from differential LiDAR with application to the El Mayor-Cucapah earthquake (PI with Saripalli)	National Science Foundation–EarthScope Program	1/1/2012–12/31/2014	$99,258 (50% RID)
Paleoseismic investigation along the inferred northernmost extent of the 1857 rupture: Do large southern San Andreas Fault ruptures extend into the creeping section?	Southern California Earthquake Center	1/1/2012–12/31/2012	$17,644
New Slip Rate estimates from Wallace Creek and Phelan Creek Paleoseismic Sites. Re-sampling, Re-dating and Re-Synthesizing	Southern California Earthquake Center	1/1/2012–12/31/2012	$15,000
Centimeter-resolution fault topography and earthquake displacements from UAV photogrammetry (PI with Saripalli)	Southern California Earthquake Center	1/1/2012–12/31/2012	$16,133
Determining the cause of a significant ground deformation event between A.D. 950 and A.D. 1400 at the Dry Lake Valley Paleoseismic Site along the central creeping section of the San Andreas Fault (Lead PI: Nathan Toke)	Southern California Earthquake Center	1/1/2013–12/31/2013	$15,000
Collaborative Research: OpenTopography: A cyberinfrastructure-based facility for high-resolution topography data and tools	National Science Foundation–Geoinformatics	7/1/2012–6/30/2015	$199,221
Collaborative Research: REU Site: Integrative Approach to Landscape Evolution in a Monogenetic Volcanic Field. San Francisco Volcanic Field, Northern Arizona	Northern Arizona Arizona University	5/26/2013–9/1/2014	$40,226

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
Advances in imaging shallow fault zone deformation with differential LiDAR: a VISES Collaboration	Southern California Earthquake Center	1/1/2014–12/31/2014	$12,012
Exploration of two new paleoseismic site locations in the Carrizo Plain National Monument land for testing the variable slip/variable magnitude earthquake hypothesis along the northern section of the southern San Andreas Fault	Southern California Earthquake Center	1/1/2014–12/31/2014	$8,314
Three Dimensional excavation of a 5m offset channel in the Carrizo Plain: Sieh31	Southern California Earthquake Center	1/1/2014–12/31/2014	$10,344
Collaborative Research: EarthScope Geochronology: A Student Research and Training Program and EarthScope Institute	National Science Foundation–EarthScope	7/1/2014–11/30/2016	$238,186
Collaborative Research: Low-cost imaging and analysis of the August 24, 2014 M6.0 South Napa California earthquake surface rupture (RAPID)	National Science Foundation–EarthScope	10/1/2014–9/31/2015	$16,258
The Role of Climate in the Formation of Geomorphic Features Used for Fault Offset Measurement	Southern California Earthquake Center	1/1/2015–12/31/2015	$25,000
Updated Spatial and Temporal Mapping of the Geomorphic Evolution of Wheeler Ridge and Application to Blind Thrusts in California (with DeVecchio)	Southern California Earthquake Center	1/1/2015–12/31/2015	$25,000
Short- and Long-Term Slip Histories Along the South-Central San Andreas Fault: Completing OSL and 14C Geochronology of the Phelan Creeks and Van Matre Ranch Sites, Carrizo Plain, CA	Southern California Earthquake Center	1/1/2016–12/31/2016	$19,006
Testing the shorter and variable recurrence interval hypothesis along the Cholame segment of the San Andreas Fault	Southern California Earthquake Center	1/1/2016–12/31/2016	$28,500
Low cost structure from motion imaging of faults in Southern California	JPL SURP	9/30/2016–9/30/2017	$50,000
Refining the earthquake chronology of the last millennium along the Cholame segment of the San Andreas Fault	Southern California Earthquake Center	1/1/2017–12/31/2017	$32,500

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
Dekameter-scale geologic structure validation of shallow seismic properties along the San Jacinto fault	Southern California Earthquake Center	1/1/2017–12/31/2017	$22,000
Collaborative Research: AGeS2 (Awards for Geochronology Student research) Program: Democratizing access to geochronology and promoting interdisciplinary science	National Science Foundation	9/1/2018–8/31/2021	$687,836
Connecting Plate Boundary Processes to Surface Faulting using Geodetic Imaging	Jet Propulsion Laboratory (JPL)	2/1/2017–2/15/2019	$50,000
Investigating the earthquake chronology of the last millennium along the Cholame segment of the San Andreas fault: Collaborative Research with Arizona State University and San Diego State University	US Geological Survey–National Earthquake Hazard Reduction Program	3/1/2019–2/28/2020	$67,692
Rock Traits from Machine Learning: applications to precariously balanced rocks and fault scarps in Southern California	Southern California Earthquake Center	2/1/2019–2/1/2020	$24,352
Time-series analysis of fault creep rates within the Salton Trough of the Southern San Andreas Fault constrained from a decade of repeat-pass NASA UAVSAR radar imagery (Chelsea Scott lead)	Southern California Earthquake Center	2/1/2019–2/1/2020	$25,000
Collaborative Research: Hominin diversity, paleobiology, and behavior at the terminal Pliocene from Ledi Geraru (Afar, Ethiopia)	National Science Foundation Biological Anthropology	1/1/2019–12/31/2021	$108,203
Collaborative Proposal: Community Facility Support for OpenTopography – a Cyberinfrastructure Facility for Topographic Data and Services	National Science Foundation GEO-EAR	1/1/2019–12/31/2023	$61,776
Implementing an Interdisciplinary Space Physics Program at Arizona State University (RIA split 4 ways)	National Science Foundation GEO	10/1/2019–9/31/2024	$1,488,347
Collaborative Research: OpenTopography - A cyberinfrastructure facility for advancing geoscience research and education	National Science Foundation Geoinformatics	5/1/2020–4/30/2025	$286,907
SCEC 5 Research Collaboration	Southern California Earthquake Center	2/1/2020–2/1/2022	$185,000

Funded grants–Principal Investigator, continued	Sponsor	Duration	$
Data Synthesis: Fault and surficial geologic mapping along the creeping section of the central San Andreas Fault from lidar topography and topographic differencing	USGS–EDMAP	5/1/2022 – 4/30/2023	$35,000
Collaborative Research: Human Infrastructure for a National Geochronology Consortium: Microfunding an inclusive community grassroot effort to better understand the Earth system (ASU PI, B. Flowers at CU is the lead); DOGE TERMINATED April 25, 2025	National Science Foundation GEO-EAR FRES	09/01/2022–08/31/2027	$1,827,563
High-Resolution Stereophotogrammetry and Analysis for Achieving STV DSI Goals: 3D and 4D topography (ASU PI, A. Donnellan is the lead)	NASA JPL	08/02/2022–09/30/2023	$300,000
Quantifying the erasure of earthquakes from the landscape of Southern California: implications for hazard assessment and Paleoseismology	US Geological Survey–National Earthquake Hazard Reduction Program	9/1/2023–8/31/2024	$70,000
		Total PI	$11,542,050

Funded grants–Co-I	Sponsor	Duration	Total $	JRA $
Geological Mapping of the White Tank Mountains, Arizona with the aid of advanced remote sensing methods (with Stephen J. Reynolds)	US Geological Survey, Educational Mapping program	8/1/96–7/31/97	$17,000	$8,500
Impact of extent of wetting in arid region geotechnical practice (with S. and W. Houston and K. Walsh)	National Science Foundation	10/1/96–9/30/00	$270,000	$29,119
Land–use change and ecological processes in an urban ecosystem of the Sonoran desert (core scientist)	National Science Foundation–LTER	8/1/97–7/31/02	$4.3M	$81,037
Geologic mapping of the Union Hills, central Arizona, with the aid of advanced remote sensing methods (with Edmund Stump)	US Geological Survey, Educational Mapping Program	5/1/98–4/30/99	$10,000	$5,000
Proposal to develop a Geographic Information System (with Jana Fry)	IGA: Ak–Chin Indian Community and ASU	9/1/99–8/31/01	$44,405	$15,600
Multi–Spectral Remote Sensing of Brush Fire Scars in Arid Urban Regions: Analysis of Future Fire and Flooding Hazards	NASA MTPE program (Mike Ramsey, PI)	5/1/00–4/30/03	$160,000	$27,463
Integrative Graduate Education and Research and Training in Urban Ecology (senior faculty)	National Science Foundation	6/1/00-5/31/04	$2.7M	$16,623
Gravity and geophysical study of the Pool 24 subsidence area, Scottsdale, AZ (with Jim Tyburczy)	Central Arizona Project	5/15/05-3/31/03	$25,322	$12,661
Landuse and Landscape Socioecology in the Mediterranean Basin: A Natural Laboratory for the Study of the Longterm Interaction of Human and Natural Systems (C. M. Barton PI and others; Co-I)	National Science Foundation–Biocomplexity	01/15/05-1/14/09	$1,355,253	$203,288
Central Arizona Phoenix LTER: Phase 2 (C. Redman, N. Grimm PIs and others; Co-I)	National Science Foundation–LTER	12/1/04-11/30/10	$4,919,954	$196,798
Integrative Graduate Education and Research and Training in Urban Ecology: renewal (Co-I; 11%RID)	National Science Foundation	6/15/05-5/31/10	$3.2M	$352,000

Funded grants–Co-I	Sponsor	Duration	Total $	JRA $
East Valley Water Forum: visualization for decision-making	East Valley Water Forum	1/11/05-4/31/06	$80,056	$12,000
State of Arizona Seismic Hazard Update (with Fouch)	Federal Emergency Management Agency	06/01/08–05/31/10	$45,613	$22,807
Geoinformatics-based Data Integration for Study of the Pliocene Fossil-bearing Strata of the Hadar Basin (Afar, Ethiopia)	Late lessons from early history: the SHESC transdisciplinary research program	01/01/08–12/31/12	$357,832	$178,916
Collaborative Research: Paleoanthropological investigation of the Ledi-Geraru hominin site (Afar, Ethiopia)	National Science Foundation–Biological Anthropology	1/15/2012–1/14/2014	$239,745	$47,949
Collaborative Research: The Hominin Sites and Paleolakes Drilling Project: Acquiring a high resolution paleoenvironmental context of human evolution	National Science Foundation–Sedimentary Geology and Paleobiology Program	1/1/2012–12/31/2014	$243,888	$48,777
Earth Science Education and Outreach Provider Summit	National Science Foundation–Division of Earth Sciences	1/15/2012–1/14/2013	$33,050	$16,525
FESD Type I: Earth system dynamics and its role in human evolution in Africa: lead PI Andrew Cohen, University of Arizona (ASU lead is Campisano)	National Science Foundation	6/1/2013–5/31/2018	$542,744	$217,097
Collaborative Proposal: Paleoanthropology of the Ledi-Geraru: Filling in a temporal gap in hominin evolution (ASU lead is Reed)	National Science Foundation–Biological Anthropology Program	2/15/2015–2/14/2018	$258,434	$64,609
Collaborative Research: Sustained Resources: OpenTopography - An AI-ready Cyberinfrastructure Facility for Advancing Our Understanding of a Changing Earth (ASU lead is C. P. Scott)	National Science Foundation–Geoinformatics Program	9/1/2024–8/31/2028	$602,223	$301,111
Philanthropic support of PFDHA and FGF projects (joint with C. P. Scott and J. Das)	Pacific Gas and Electric Company	7/27/2020–Present	$850,968	$425,484
		Total Co-I		$2,235,384

JRA $ = % recognition x Total $ or $ spent in Geological Sciences Department/SESE (including overhead)

9 Teaching and Mentoring

9.1 Courses taught at Arizona State University

- GLG 101, Introduction to Geology (Fall, 1995): 220 student lecture course was taught using innovative instructional technology (for its time) and in–class observations.
- GLG 103, Introduction to Geology Laboratory (Fall, 2003): I oversaw ∼30 laboratory sessions (with a total of ∼1100 students) taught by 13 teaching assistants and actually taught one of the laboratories.
- GLG 110, Geologic Disasters and the Environment (Fall, 2002, 2010): 75 person lecture course with two labs emphasizing the interactions between humans and their environment. Significantly revamped course and handed it over to Stan Williams. Taught again with significant updates with Amanda Clarke in 2010.
- GLG 310, Structural Geology (Spring, 1996, 1997, 1998, 1999, 2000, 2001, Fall 2004, 2012, 2013) Investigation and survey of geologic structures and the mechanical processes involved in their formation.
- GLG 362, Geomorphology (Fall, 1996, 1998, 2000, 2002, 2006): This course focuses on the observation and analysis of earth surface processes and the development of landforms and landscape.
- GLG 410, Computers in Geology (Fall, 1997, 1999, 2000, 2007, 2011, 2015, Spring 2009 with Fouch): This course is designed to teach analytical thinking in geology using computing applications. Significantly revamped course for 1999–2000, and again in 2007 and lots of new video content in 2011.
- GLG 416, Field Geophysics (with James A. Tyburczy) (Spring, 1997): This course provides an introduction to field geophysical methods including refraction seismology, gravity, magnetics, electromagnetic methods.
- GLG 451, Field Geology I (Spring 2005, 2006, 2007, 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2020, 2021, 2022, 2023, 2025, 2026): This course provides an introduction to geology in the field.
- GLG 452, Field Geology II (Summer, 2004, assistant in 2003, 2005, 2006): This course provides a capstone to the major with emphasis on geology in the field.
- GLG 455/598, Advanced Field Geology (with Philip A. Pearthree, Arizona Geological Survey in 2001) (Spring, 1998, 2003): Students gain field experience with a variety of environmental and applied mapping problems.
- GLG 490/598, Desert surface processes and Quaternary geology seminar (Fall, 1997): Brought together students and faculty from diverse disciplines for consideration of current and classic research results and field sites.
- GLG 490/598, Tectonic Geomorphology (with Professor Kelin Whipple) (Spring, 2008): This course provided an overview of a broad range of topics in Tectonic Geomorphology varying from earthquake geology to orogenic-scale tectonic and surface process interaction.
- ASM498/GPH591/GLG598/GLG490: Remote Sensing and Quaternary Landscapes (Spring, 2006): Collaborative teaching with Archeology and Geography faculty and students centered on mapping and interpreting landscapes using remote sensing data.
- GLG 510, Advanced Structural Geology (with Stephen J. Reynolds in 1998 and C. Scott in 2019) (Fall, 1998, 2005, 2022, Spring 2009, 2019): Students gain experience with advanced structural geology problems (`http://arrowsmith510.asu.edu/`)
- GLG 494/591 Topic: Mapping Tectonic Faults from Geomorphology (with C. Scott Fall 2020 and Spring 2022)
- GLG 455/598, 3D Geology / Advanced Field Geology (Fall, 2024)

9.2 Student mentoring and collaboration

9.2.1 Postdoctoral scholars and current position if known

- Dr. Edwin Nissen–SESE Exploration Post doctoral scholar co-supervised with Sri Saripalli, September 2011 – August 2012. Associate Professor and Canada Research Chair at the School of Earth and Ocean Sciences at the University of Victoria, Canada.
- Dr. Wendy Bohon–EarthScope National Office Post doctoral scholar, May 2014–June 2015. Seismic Hazards and Earthquake Engineering Branch Chief for the California Geological Survey.
- Dr. Harmony Colella–SESE Exploration Post doctoral scholar co supervised with Steve Semken and Ed Garnero, August 2014–June 2016. Earthquake Early Warning specialist, CalOES/UCB.
- Dr. Chelsea Scott–National Science Foundation Post doctoral scholar, January 1, 2017–June 30, 2020. Assistant Research Professor School of Earth and Space Exploration, Arizona State University.
- Dr. Emily Zawacki–OpenTopography and UNAVCO supported Post doctoral scholar co-supervised with Chelsea Scott, August 2021–July 2023. Science Communication Specialist, EarthScope Consortium.
- Dr. Zhiang Chen–PGE and SCEC postdoctoral scholar co-supervised with Jnaneshwar Das, December 2022–July 2023, April 2026-present.
- Dr. Cassandra Brigham–USGS Powell Center and OpenTopography postdoctoral scholar co-supervised with Chelsea Scott, October 2023–Present.

9.2.2 Graduated students and current position if known

- **Ph.D. Dissertations supervised**

  1. George Hilley, Ph.D., Landscape development of tectonically active areas, Arizona State University, May 2001. Professor of Geological and Environmental Sciences, Stanford University.
  2. Lee Amoroso, Ph.D., Studies in Quaternary geology of Arizona: Active tectonics *and* relationship of soils to surficial geology, Arizona State University, August 2001. Research Geologist (retired), US Geological Survey, Flagstaff, Arizona.
  3. Sarah E. Robinson, Ph.D., (co–advisor with Philip Christensen), Investigation of geomorphic processes on arid piedmonts using field studies, remote sensing analysis and cosmogenic dating, Arizona State University, August 2002. Assistant Professor, Department of Economics and Geosciences United States Air Force Academy.
  4. Jeri Young, Ph.D., Characterization of fault behavior along the central San Andreas Fault, California, Arizona State University, May 2004. Research geologist, Arizona Geological Survey.
  5. Olaf Zielke, Ph.D., How fault geometric complexity and frictional properties affect seismic fault behavior and accumulation of slip along strike-slip faults, December 2009. Senior Research Scientist, King Abdullah University of Science and Technology.
  6. Melanie Busch Coyan, Ph.D. (co–advisor with S. Reynolds), Late Quaternary Normal Faulting and Hanging Wall Basin Evolution of the Southwestern Rift Margin From Gravity and Geology, B.C.S., MX *and* Exploring the Influence of Text-Figure Format on Introductory Geology Learning, May 2011.
  7. Nathan Toké, Ph.D., Earthquake Geology, Hazard, Urban Form, and Social Vulnerability along the San Andreas Fault, August, 2011. Professor, Department of Earth Sciences, Utah Valley University.
  8. Erin DiMaggio, Ph.D., The Geologic History of Central and Eastern Ledi-Geraru, Afar, Ethiopia, December, 2013. Associate Research Professor, Department of Geosciences, Pennsylvania State University.
  9. Wendy Bohon, Ph.D., (co-advised with Kip Hodges), Late Cenozoic-recent tectonics of the southwestern margin of the Tibetan Plateau, Ladakh, northwest India, May, 2014. Seismic Hazards and Earthquake Engineering Branch Chief for the California Geological Survey.

10. David Haddad, Ph.D., Effects of fault segmentation, mechanical interaction, and structural complexity on earthquake-generated deformation, May, 2014. Geoscience Function Lead at Apache Corporation.
11. Jeffrey Lockridge, Ph.D., (co-advised with Tom Sharp), Using micro-scale observations to understand large-scale geophysical phenomena: Examples from seismology and mineral physics, December 2015. Professor of Earth Science at North Central Michigan College
12. Gayatri Marliyani, Ph.D., Neotectonics of Java, Indonesia: Crustal Deformation in the Overriding Plate of an Orthogonal Subduction System, May 2016. Associate Professor, Gadjah Mada University, Yokyakarta, Indonesia.
13. James Barrett Salisbury, Ph.D., Coupling tectonic geomorphology and paleoseismology for understanding of earthquake recurrence, December 2016. Research Geologist, Alaska Division of Geological and Geophysical Surveys.
14. Dominique Garello, Ph.D., (co-advised with Chris Campisano in ASU's School of Human Evolution and Social Change) Tephrostratigraphy of Pliocene drill cores from Kenya and Ethiopia, and Pleistocene exposures in the Ledi-Geraru Research Project area, Ethiopia: Geological context for the evolution of *Australopithecus* and *Homo*, May 2019. Lecturer, Louisiana State University.
15. Simone Bello, Ph.D., (co-supervisor with Professor Giusy Lavecchia, Corso di dottorato in "Earthquake and Environmental Hazards (EEH)" - Scuola Superiore - Università degli Studi G. d'Annunzio Chieti e Pescara [U'dA], Italy) High-resolution surface faulting data analysis and interpretation of normal active fault earthquakes: case studies from the Apennines of Italy and from the Basin and Range of USA, June 2021. Postdoctoral Scholar, U'dA.
16. Emily Zawacki, Ph.D., (co-advised with Chris Campisano in ASU's School of Human Evolution and Social Change) Plio-Pleistocene Sediment Provenance and Erosion Rates Along the East African Rift System, August 2021. EarthScope.
17. Zhiang Chen, Ph.D., (co-advised with Jnaneshwar Das) Automated Geoscience with Robotics and Machine Learning: A New Hammer of Rock Detection, Mapping, and Dynamics Simulation Analysis, December 2022. Post doctoral Scholar Arizona State University.
18. Magda Patyniak, Ph.D., (co-supervisor with Professor Manfred Strecker, University of Potsdam, Germany) Seismotectonic segmentation, paleoearthquakes, and style of deformation along he northern Pamir Thrust System, South Kyrgyzstan, December 2022. Postdoctoral Scholar, University of Potsdam
19. Daniel Chupik, Ph.D., (co-advised with Chris Campisano in ASU's School of Human Evolution and Social Change) Tectonic, Magmatic, and Sedimentary Interactions in Extensional Settings: Insights from the Afar Depression, Ethiopia and Pinacate Volcanic Field, Mexico, December 2025. Visiting Assistant Professor, Bates College.
20. Madeline Schwarz, Ph.D., Geomorphic-based Mapping and Characterization of Active Faults in the Western United States from High-Resolution Lidar and Stereo Imagery, May 2026. Remote Sensing specialist, US Bureau of Land Management.
21. Malinda Zuckerman, Ph.D., Reading the Broken Ground: Fault Scarps, Displaced Rocks, and the Limits of the Earthquake Record, May 2026.

- **M.S. Theses supervised**

1. Joshua Roering, M.S., (co–advisor with David D. Pollard), Active Tectonics of Buried Thrust Faults, San Francisco Bay Area, Great Valley, and Los Angeles Basin, California, Stanford University, June 1995. Professor, Department of Geological Sciences, University of Oregon.
2. Keenan Murray, M. S., Using Joint and Fault Structures Along the Tortilla Caldera in the Superstition Mountains, Arizona to Infer the Development of the Stress Field with Regional (Basin and Range) and Local (Volcanic) Deformation Sources, Arizona State University, May 1997. Project Manager, Ninyo and Moore, Phoenix, Arizona.

3. Sean McManus, M. S., Digital Elevation Model Analysis Applied to Active Tectonic Study in Central Asia, Arizona State University, December 1998. National Solar Observatory, Tucson, AZ.
4. Heidi D. Stenner, M. S., (co–advisor with Phil Pearthree (AZ Geological Survey) and Stephen J. Reynolds), A Paleoseismic Investigation of a Portion of the Hurricane Fault, Northwestern Arizona and Southwestern Utah, Arizona State University, December 1998. Formerly at US Geological Survey, Menlo Park, CA, now Senior Scientist at GeoHAZ.
5. Stephen Holloway, M. S., (co–advisor with Edmund Stump), Proterozoic through Quaternary Geology of the Union Hills, North Phoenix, Arizona, Arizona State University, May 1999. Research specialist, Dept. Geology and Geophysics, University of Oklahoma.
6. Elizabeth Zima (née Stone), M. S., Geomorphology, Structure, and Paleoseismology of the central Cholame Segment, Carrizo Plain, California, Arizona State University, May 2000. Formerly Project manager, Ninyo and Moore, Phoenix, Arizona.
7. Ken Fergason, M. S., (co–advisor with James A. Tyburczy), Investigation of changes in groundwater elevation associated with Tempe Town Lake, Arizona State University, December 2000. Project manager, AMEC, Flagstaff, Arizona.
8. Zack Washburn, M. S., Quaternary tectonics and earthquake geology of the central Altyn Tagh fault, Xinjiang, China: implications for tectonic setting and process along the northern margin of the Tibetan Plateau, Arizona State University, August, 2001. Project manager, H and K Consultants in Grass Valley, California.
9. Lela Prashad, M. S., Urban materials and temperature: relating ground and air variables to land use, socioeconomics and vegetation in Phoenix, Arizona, Arizona State University, August 2004. Formerly Director, 100 Cities Project at Arizona State University.
10. Mimi Diaz, M. S., Lithology and erosion styles associated with the Rodeo-Chedeski and Aspen fires, Arizona, Arizona State University, August 2004.
11. Nathan Toké, M.S., Paleoseismology, slip budget, and fault behavior along the Parkfield segment of the San Andreas Fault, Arizona State University, December, 2005. Professor, Department of Earth Sciences, Utah Valley University.
12. Amanda Perkins, M.S., (co–advisor with Jim Tyburczy), Analyzing INSAR, bedrock topography, and hydrogeology to interpret land subsidence patterns, Arizona State University, August, 2006. Geologist, Speedie and Associates, Inc.
13. Maurits Thayer, M.S., Structural geology of the San Andreas Fault Zone at Middle Mountain, near Parkfield, Central California, Arizona State University, May, 2006. Geologist, Conoco-Phillips.
14. Christopher Crosby, M. S., A geoinformatics approach to LiDAR data distribution and processing with applications to geomorphology, Arizona State University, August, 2006. EarthScope.
15. Jessica Block, M. S., 3-Dimensional Immersive Visualization For Regional Water Planning, Arizona State University, August, 2007. Research Specialist, CalIT2 Facility, UC San Diego.
16. Erin DiMaggio, M. S., Volcanic and stratigraphic characterization of Pliocene tephra from the Ledi-Geraru region of Afar, Ethiopia, August, 2007. Associate Research Professor, Pennsylvania State University.
17. Paul Ivanich, M. S., Investigation of subsidence using gravity and INSAR in Scottsdale, Arizona, December, 2007. Hydrology Division - Geophysics/Surveying Unit, Arizona Department of Water Resources.
18. Megan Muretta, M. S., Holocene earthquake geology of the central Altyn Tagh fault, Xinjiang, China: Implications for recurrence interval, strain release rate, and fault behavior, May 2009. MS student University of Nevada-Reno.
19. Haddad, D. E., M. S., 2010. Geologic and geomorphic characterization of precariously balanced rocks. MS thesis, Arizona State University, Tempe, Arizona, 207 pp. Conoco-Phillips.
20. Sarah E. Robinson, M. S., Integrating LiDAR Topography Into the Study of Earthquakes and Faulting, 99 pp., August 2011. PhD student, Northern Arizona University.

21. Jeff Lockridge, M. S. (co-advisor with Matthew Fouch), Spatial and Temporal Analysis of Seismicity Within Arizona During the Deployment of the EarthScope USArray Transportable Array (April 2006 - March 2009), August, 2011. Professor of Earth Science at North Central Michigan College.
22. Emily Kleber, M.S., Surface Response to Slip Along a Propagating Blind Thrust Fault Wheeler Ridge, California, December 2015, 95 p. Hazards geologist, Utah Geological Survey.
23. Hurien (Hendri) Helmi, M.S., Characterization of Landslide Geometry and Movement Near Black Canyon City, Arizona, May 2016. Lecturer, Geological Engineering Department, Sekolah Tinggi Teknologi Nasional, Yogyakarta, Indonesia.
24. Adam M. Wade, M.S., Geologic and structural characterization of shallow seismic properties along the San Jacinto Fault at Sage Brush Flat, Southern California. Arizona State University, August 2018. Pacific Gas and Electric Geoscientist.
25. Tyler Scott, M. S., Rock Traits from Machine Learning: Application to Rocky Fault Scarps. Arizona State University, August 2020.
26. Hafiz Abdel, M. S., 2-Dimensional Transport and Production Limited Analysis of Fault Scarps: Landlab Implementation and Examples from Western US. Arizona State University, May 2023.
27. Rachel Adam, M. S. (co-advised with Chelsea Scott), Evaluation of Remote Mapping of Active Fault Traces. Arizona State University, August 2023. Geohazards specialist, Utah Geological Survey.
28. Joseph Powell, M. S. (co-advised with Chelsea Scott), Fault Trace Mapping Along the Creeping Section of the Central San Andreas Fault. Arizona State University, December 2023. Geologist, US Geological Survey.

9.2.3 Graduate student advising

- Alana Williams, Ph.D. candidate.

9.2.4 Undergraduate project supervision

- Ryan Swapp, undergraduate research project, post wildfire geomorphic responses, Jemez Mountains, New Mexico, 2020-2021
- Cali Trammel, undergraduate research project and thesis on Tephrachronology of the Eastern Ledi Geraru, 2018-2019: Tephrochronology and correlations of Bagudo outcrop tephra from Ledi Geraru Research Project, Afar, Ethiopia. Co-advised with Chris Campisano in ASU's School of Human Evolution and Social Change).
- Bryan MacFarlane, undergraduate senior thesis, Subsidence and earth fissuring in east Scottsdale, Arizona, December 2007.
- David Haddad, undergraduate senior thesis, Mechanical fault interaction and tectonic geomorphology on the Volcanic Tableland, Owens Valley, California, December 2006.
- Amanda MacLeod, undergraduate senior thesis, Artificial hydrologic controls and the geomorphology of the greater Phoenix area, September 2003. University of Oregon Department of Geological Sciences M.S. program.
- Matthew Baillie, undergraduate senior thesis, Subsidence and Fissuring in the Casa Grande-Maricopa (Arizona) area due to groundwater withdrawal, May 2001. University of Arizona Ph.D. Hydrology 2005.

9.2.5 Visiting colleagues since 2010

- Xu Jianhong, Chinese Earthquake Administration, 2019-2020.
- Simone Bello, University of Chieti, Italy, 2019.
- Federica Ferrarini, University of Chieti, Italy, 2017-2020

- Marta Ferrater Gomez, University of Barcelona, Spain, 2014-2015
- James Muirhead, University of Idaho, 2014.
- Tadashi Maruyama, Japanese Geological Survey, 2014.
- Wei Zhanyu, Chinese Earthquake Administration, 2013-2014.
- Riccardo Civico, Istituto di Geofisica i Volcanologia, Italy, 2013.
- Hyun Tae Kim, Department of Earth Environmental Sciences, Environmental and Marine Sciences and Technology, Pukyong National University, KOREA, 2011-2012.

10 Service

10.1 Department/School service

- Geophysics Faculty Search Committee (2012-2013)
- Remote sensing Faculty Search Committee (2011-2012)
- Annual Review Committee (2007–2009)
- Computing Committee (1996–2009)
- Sedimentary Geology Faculty Search Committee (2004-2005, Chair)
- Graduate Committee (2001, Chair 2002, 2004, 2005, 2006)
- Geodynamics Faculty Search Committee (2003-2004, Chair)
- Geophysics Faculty Search Committees (2000, Chair 1999)

10.2 College and University service

- College of Liberal Arts and Sciences Natural Sciences Dean selection committee (2018)
- School of Earth and Space Exploration Structure and Governance subcommittee member (2004)
- Sustainable Technologies program of Center for Study of Rapidly Urbanizing Regions, Data and visualization group co-leader (2003)
- Proposition 301 Information Sciences/Information Technology committee (2002)
- Vice Provost for Research Greater Phoenix 2100 project `http://www.gp2100.org/` (2000–2005)
- Vice Provost for Research special rock varnish project (1997–1998)

10.3 Professional service since 2020

- 2025-Present Scientific Earthquake Studies Advisory Committee (SESAC), Member and National Earthquake Prediction Evaluation Council (SESAC subcommittee), Chair (appointed by Director of US Geological Survey)
- 2025-Present Associate editor, Big Data and Earth System (https://www.keaipublishing.com/en/journals/big-data-and-earth-system/)
- 2023 EarthScope Consortium CEO search committee
- 2019–present Chair, Arizona Seismic Safety Advisory Council

- 2020–2023 Southern California Earthquake Center Professional Conduct Committee
- 2018–2023 Southern California Earthquake Center Planning Committee member (SAFS)
- 2020-2023 Member, US National Science Foundation Advisory Committee for Geosciences (AC-GEO; https://www.nsf.gov/geo/advisory.jsp)
- 2020–2021 Instrumentation portfolio review subcommittee (Chair) of the Advisory Committee for Geosciences (AC-GEO) for US National Science Foundation
- 2020–2022 Southern California Earthquake Center Committee on Organizational Structure and Center Management
- 2019–2023 Various positions including chair, Management Board, Structural Geology and Tectonics Division of the Geological Society of America
- 2020–2021 Geological Society of America Ad hoc Nominations and Awards Committee
- 2020 Digital Tools for Enhancing Virtual Field Experiences working group co-leader. Working group was part of the Designing Remote Field Experiences project team, and the collaboration between the National Association of Geoscience Teachers and the International Association for Geoscience Diversity. https://nagt.org/nagt/about/workspaces/field_workgroup/index.html
- 2016–2021 Centre for the Observation and Modelling of Earthquakes, Volcanoes and Tectonics Advisory Committee (http://comet.nerc.ac.uk/); chair for two years.