William T. Struble

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APPOINTMENTS

Assistant Professor 2024-present
Department of Earth and Atmospheric Sciences, University of Houston

Postdoctoral Research Associate I 2021-2024
Department of Geosciences, University of Arizona
Supervisor: Dr. Luke McGuire

Graduate Employee 2016-2020
Department of Earth Sciences, University of Oregon

Undergraduate Research Assistant 2012-2016
Departments of Geological Sciences and Engineering, Physics, & the Nevada Seismological Laboratory

EDUCATION

Ph.D. **University of Oregon**, Earth Sciences 2020
Advisor: Dr. Josh Roering
Dissertation title: "Evolution of Cascadia Landscapes: Drainage Reorganization Inferred from Topographic Transformations and Dendrochronological Dating of Landslide-Dammed Lakes"

B.S. **University of Nevada, Reno**, Geology 2016
Magna cum laude, Honors Program
minors in Mathematics, Hydrogeology, and Geophysics
Advisor: Dr. Scott McCoy
*Thesis title: "*Tectonics from Topography: Utilization of Normal Fault Bedrock Facet Slopes as a Quantitative Predictor of Slip Rate"

PUBLICATIONS

Manuscripts in review or in revision
**dual first-author paper*

1. *****Robinson, M.J. & ***Struble, W.T.**, Sweeney, K.E., Scheingross, J.S. (in revision), The pace and direction of drainage-divide migration recorded in hilltop asymmetry, *Journal of Geophysical Research: Earth Surface*

2. **Struble, W.T.**, McGuire, L.A., McCoy, S.W., Barnhart, K.R. (in revision), Debris-flow dominated valley morphology records uplift and erosion, *Geophysical Research Letters*.

3. Robinson, M.J., Scheingross, J.S., McCoy, S., **Struble, W.** (in revision), Equilibrium ridgeline morphology records external forcing, *Journal of Geophysical Research: Earth Surface*.

4. Harris, M., Carlson, B., Moodie, A., Dong, T.Y., Vachula, R., **Struble, W.**, Cardova, B. (in review), Sedimentary charcoal records poorly preserve the stratigraphic signal of grassland fire as informed by the 2024 Windy Deuce Fire, Texas Panhandle.

Peer Reviewed Publications

5. Morgan, P.M., Grant, A., **Struble, W.T.**, LaHusen, S., Duvall, A. (accepted), The damability function: A probabilistic approach to regional landslide dam susceptibility analysis applied to the Oregon Coast Range, USA, *Natural Hazards and Earth System Sciences*, https://doi.org/10.5194/egusphere-2025-580.

6. **Struble, W.T.**, McCoy, S.W., Tucker, G.E., Hobley, D.E.J., Gregory, L.C., (2025), Dip angles of mountain-front facets encode long-term slip rates along the Wasatch Normal Fault, USA, *Geophysical Research Letters 52*, https://doi.org/10.1029/2025GL117713.

7. **Struble, W.T.**, Clubb, F.J., Roering, J.J. (2024), Regional-scale, high-resolution measurements of hilltop curvature reveal tectonic, climatic, and lithologic controls on hillslope morphology, *Earth and Planetary Science Letters 647*, https://doi.org/10.1016/j.epsl.2024.119044.

8. Gavin, D.G., **Struble, W.T.**, Fonstad, M. (2024), Holocene Lake Sediments Reveal Alluvial Fan History with Links to Climate, Wildfire, and Earthquakes, *Journal of Geophysical Research: Earth Surface 129*, https://doi.org/10.1029/2024JF007778.

9. Liu, T., McGuire, L.A., Youberg, A.M., Prescott, A.B., Gorr, A.N., **Struble, W.T.**, Beers, R., (2024), A pre-fire approach for probabilistic assessments of postfire debris-flow inundation, *Earth's Future 12*, https://doi.org/10.1029/2023EF004318.

10. Balco, G., Hidy, A., **Struble, W.**, Roering, J., (2024), Cosmogenic Noble Gas Depletion in Soils by Wildfire Heating, *Geochronology 6*, 71-76, https://doi.org/10.5194/gchron-6-71-2024.

11. McGuire, L.A., McCoy, S.W., Marc, O., **Struble, W.T.**, Barnhart, K., (2023), Steady-state forms of channel profiles shaped by debris flow and fluvial processes, *Earth Surface Dynamics* 11, 1117-1143, https://doi.org/10.5194/esurf-11-1117-2023.

12. **Struble, W.T.**, McGuire, L.A., McCoy, S.W., Barnhart, K.R., Marc, O., (2023), Debris-flow process controls on steepland morphology in the San Gabriel Mountains, California, *Journal of Geophysical Research: Earth Surface* 128, e2022JF007017, https://doi.org/10.1029/2022JF007017.

13. Grant, A., **Struble, W.T.**, LaHusen, S.R. (2022), Limits to coseismic landslides triggered by Cascadia Subduction Zone earthquakes, *Geomorphology* 418, https://doi.org/10.1016/j.geomorph.2022.108477.

14. George, S.W.M., Perez, N.D., **Struble, W.T.**, Curry, M.E., Horton, B.K. (2022), Aseismic ridge subduction focused late Cenozoic exhumation above the Peruvian flat slab, *Earth and Planetary Science Letters* 600, https://doi.org/10.1016/j.epsl.2022.117754.

15. **Struble, W.T.**, Roering, J.J. (2021), Hilltop curvature as a proxy for erosion rate: Wavelets enable rapid computation and reveal systematic underestimation, *Earth Surface Dynamics* 9, 1279-1300, https://doi.org/10.5194/esurf-9-1279-2021.

16. Wetherell, L.R., **Struble, W.T.**, LaHusen, S.R. (2021), Developing landslide chronologies using landslide-dammed lakes in the Oregon Coast Range, *in* From Terranes to Terrains: Geologic Field Guides on the Construction and Destruction of the Pacific Northwest, Field Guide 62, Geological Society of America, Boulder, CO, https://doi.org/10.1130/2021.0062(01).

17. **Struble, W.T.**, Roering, J.J., Burns, W.J., Calhoun, N.C., Wetherell, L.R., Black, B.A. (2021), The Preservation of Climate-Driven Landslide Dams in Western Oregon, *Journal of Geophysical Research: Earth Surface* 126, e2020JF005908, https://doi.org/10.1029/2020JF005908.

18. Wetherell, L.R., Ely, L.L., Roering, J.J., Walsh, M.K., Burchfield, M., Nace, K., Wetherell, M., **Struble, W.** (2021), Quantifying sedimentation patterns of small landslide-dammed lakes in the central Oregon Coast Range, *Earth Surface Processes and Landforms*, https://doi.org/10.1002/esp.5106.

19. **Struble, W.T.**, Roering, J.J., Dorsey, R.J., Bendick, R. (2021), Characteristic scales of drainage reorganization in Cascadia, *Geophysical Research Letters* 48, https://doi.org/10.1029/2020GL091413.

20. LaHusen, S.R., Duvall, A.R., Booth, A.M., Grant, A., Mishkin, B.A., Montgomery, D.R., **Struble, W.**, Roering, J.J., Wartman, J., (2020), Rainfall triggers more deep-seated landslides than Cascadia earthquakes in the Oregon Coast Range, USA, *Science Advances* 6, https://doi.org/10.1126/sciadv.aba6790.

21. Tucker, G.E., Hobley, D.E., McCoy, S.W. **Struble, W.T.**, (2020), Modelling the Shape and Evolution of Normal-Fault Facets, *Journal of Geophysical Research: Earth Surface* 125, https://doi.org/10.1029/2019JF005305.

22. **Struble, W.T.**, Roering, J.J., Black, B., Burns, W.J., Calhoun, N., Wetherell, L. (2020), Dendrochronological dating of landslides in western Oregon: searching for signals of the Cascadia 1700 AD earthquake, *Geological Society of America Bulletin* 132 (7-8), 1775-1791, https://doi.org/10.1130/B35269.1.

23. Perkins, J.P., Roering, J.J., Burns, W.J., **Struble, W.T.**, Black, B., Schmidt, K., Duvall, A., and Calhoun, N. (2018), Hunting for landslides from Cascadia's great earthquakes, *Eos,* 99, https://doi.org/10.1029/2018EO103689.

Manuscripts in prep

24. **Struble, W.T.**, Roering, J.J., Balco, G., Dorsey, R., Aguilar, J. (in prep), Cosmogenic ^{21}Ne dating of landsliding in Oregon Coast Range constrains timing of drainage reorganization in the Willamette Valley, Oregon.

INVITED INSTITUTIONAL TALKS

University of Texas at Austin, Institute for Geophysics Discussion Hour Seminar	November 2025
Cascadia Region Earthquake Science Center (CRESCENT) Annual Meeting	October 2025
U.S. Geological Survey, Landslide Hazards Program Seminar	July 2025
University of Houston, EAS Student Research Day Keynote	May 2025
University of Houston, Structure & Tectonics Seminar	April 2025
Washington University in St. Louis, EPPS Colloquium	April 2025
University of Washington, Earth & Space Sciences Seminar	February 2025
University of Texas at Austin, Institute for Geophysics Seminar	March 2024

University of Houston, Earth & Atmospheric Sciences Seminar	February 2024
University of Nevada, Reno, Graduate Program in Hydrologic Sciences Seminar	September 2023
Utah State University, Geosciences Seminar	January 2023
University of Arizona, Geosciences Colloquium	November 2022
Southern Methodist University, Earth Sciences Seminar	October 2022
University of California, Berkeley, EPS Seminar	March 2022
Texas A&M University, Geography Seminar	February 2022
U.S. Geological Survey, Landslide Hazards Program Seminar	February 2022
University of Arkansas, Geosciences Colloquium	October 2021
Central Washington University, Geosciences Seminar	May 2020
Association of Environmental and Engineering Geologists, Oregon Chapter	April 2019
University of Oregon, Seismology Seminar	November 2018
University of Arizona, Geomorphology Group	October 2018

GRANTS AND AWARDS

Pending Proposals

Lead PI, submitted to National Science Foundation–Structure and Physics of the Solid Earth, 2026-2029.
with Co-PI Alison Duvall (U. Washington), *Collaborative Research: Analyzing topographic form along the Cascadia Subduction Zone to constrain megathrust earthquake coseismic subsidence* (total budget $600,417 | **requested UH budget of $504,261**).

Funded Proposals

Lead PI, Pacific Gas and Electric (PG&E), 2024-2026.
with Co-PIs B. Leshchinsky, J. Marshall, V. Sahakian, and J. Roering, *Forests as Seismic Mass Dampers: Proposal Development,* (**$13,000**).

Co-PI, National Science Foundation – Geomorphology and Land-use Dynamics (GLD), 2023-2027.
with PI K. Sweeney (U. Portland), *Collaborative Research: RUI: Investigating the role of hillslope processes in modulating topologic change of upland drainage basins,* ($335,163 | **UA/ UH portion: $74,226**).

Contributor, National Science Foundation (NSF), 2020-2024.
L. McGuire & K. Barnhart, *Collaborative Research: Steepland dynamics and steady-state forms resulting from debris flows*, (**$315,385**).

Co-PI, Lewis and Clark Fund, American Philosophical Society, 2020-2021.
with Co-PI J. Roering, *Characteristic scales of drainage reorganization in Cascadia*, (**$5,000**).

Contributor, National Earthquake Hazards Reduction Program (NEHRP), 2020-2021.
J.J. Roering & B.A. Black. *Collaborative Research: Building a high-resolution landslide chronology for Cascadia megathrust earthquakes*, (**$76,958**, UO portion).

PI, Lokey Doctoral Research Fellowship, University of Oregon, 2019-2020.
W.T. Struble, *Oregon Coast Range Landslide-Dammed Lake Geochronology and Drainage Network Reorganization*, (**$34,000**).

Co-PI, EDMAP Program, United States Geological Survey, 2019-2020.
with Co-PI J. Roering, *Importance of shear on crustal faults in the Cascadia forearc: Examining tectonics and seismic hazard in the southern Willamette Valley*, *Oregon*. (**$17,473**).

Contributor, National Earthquake Hazards Reduction Program (NEHRP), 2018-2019.
J.J. Roering, B.A., Black, & W.J. Burns, *Collaborative Research: Using Landslide-dammed lakes to identify coseismic slope instability in Cascadia*, (**$64,851**, UO Portion).

PI, National Center for Airborne Laser Mapping (NCALM) Seed Program, NSF, 2018.
W.T. Struble (J. Roering, supervising faculty), *Control of steepland landscape morphology by debris flows in the Idaho Batholith*.

PI, Experimental Program to Stimulate Competitive Research (EPSCoR), NSF, 2015-2016.
W.T. Struble (Scott McCoy, supervising faculty), *Determination of normal fault slip rate for improved seismic hazard prediction*, (**$4,000**).

HONORS AND RECOGNITION

Research Excellence Award, Department of Earth Sciences, University of Oregon	2020
Lokey Doctoral Science Fellowship, University of Oregon	2019-2020
Ewart Baldwin Memorial Scholarship, Department of Earth Sciences, University of Oregon	2018-2020
Young Researcher Spotlight, American Geophysical Union, Earth and Planetary Surface Processes Section	2018
National Science Foundation Graduate Research Fellowship Honorable Mention	2017
Outstanding Bachelor of Science Student in Geology, Mackay School of Earth Sciences and Engineering	2016
Honors Undergraduate Research Award, Honors Program, University of Nevada, Reno	2016
James Cashman III Scholarship, Mackay School of Earth Sciences and Engineering	2015-2016
Presidential Scholarship, University of Nevada, Reno	2012-2016
Governor Guinn Millennium Scholarship, Nevada System of Higher Education	2012-2016
KGHM International Ltd. Scholarship, Mackay School of Earth Sciences and Engineering	2013-2015
Phi Kappa Phi Honor Society, University of Nevada, Reno Chapter	2014
Philmont Staff Scholarship, Philmont Scout Ranch	2014
Newmont Mining Scholarship, Mackay School of Earth Sciences and Engineering	2013
Rio Tinto Minerals Scholarship, Mackay School of Earth Sciences and Engineering	2012-2013
John Mackay III Scholarship, Mackay School of Earth Sciences and Engineering	2012-2013
Kerri Oxoby Memorial Scholarship	2012
Eagle Scout	2009

TEACHING, SERVICE, AND OUTREACH

Instructor of Record

GEOL 1303: Physical Geology, University of Houston	Fall 2025
GEOL 4350: Geomorphology, University of Houston	Spring 2025

Guest Lecturer

New Graduate Student Seminar Department of Earth & Atmospheric Sciences, University of Houston	Fall 2025
Geological Hazards (with landslides activity) University of Arizona (primary instructor: Luke McGuire)	Fall 2022
Geomorphology and Landscape Evolution (with hilltop curvature activity) University of Arizona (primary instructor: Luke McGuire)	Spring 2022
Geomorphology, University of Arizona (primary instructor: Luke McGuire)	Spring 2021
High Resolution Topographic Analysis (with wavelet transform activity) Colorado School of Mines (primary instructor: Danica Roth)	Spring 2021

Teaching Assistant, University of Oregon

Earth Surface and Environment	Spring 2019
Tectonic Geomorphology	Winter 2019
Field Methods	Spring 2018

Hillslope Geomorphology Fall 2017
Geology of Oregon and the Pacific Northwest Spring 2017
Neotectonics Fall 2016

Postdoc mentoring

Vivian Grom, Ph.D. 2025, Louisiana State University 2026-present

Student mentoring

Ilia Tarasevich, Ph.D., University of Houston, Geology 2025-present
Bradley King, M.S., University of Houston, Geology 2025-present
Abram Riggs, B.S., University of Houston, Geology 2025-present
Corinne Hopkins, B.S., University of Houston, Geology 2025-present
Alicia Godoy, B.S., University of Houston, Geology 2025-present

Graduate Committee Member

Anuska Pudasaini, Ph.D., University of Houston, Geology 2026-present
Sarah Garcia, M.S., University of Houston, Geology 2025-present
Aizhan Zhakupova, Ph.D., University of Houston, Civil/Env Engineering 2025-present
Asmara Lehrmann, Ph.D., University of Houston, Geology 2024-present
Michael Robinson, Ph.D., University of Nevada, Reno, Hydrology 2024-present
Makenna Harris, M.S., University of Houston, Geology 2024-present
Lucille Baker-Stahl, M.S., University of Houston, Geology 2024-2025

Completed Students

Wiley Kohler, South Eugene High School graduate, student at Princeton University 2021-2023
Hilltop curvature and lidar analysis at various North American field sites.
After UO: Undergraduate student at Princeton University.

Jerod Aguilar, B.S., University of Oregon 2019-2021
Cougar Pass landslide quartz isolation, landslide dam Douglas-fir snag preparation.
Now: NSF Graduate Research Fellow, Ph.D. candidate at Southern Methodist University.

Aly Erwin, B.S., University of Oregon 2018-2019
Willamette Valley stratigraphy, landslide dam Douglas-fir snag preparation.
After UO: Oregon Department of Fish and Wildlife.

Jeannine Hadid, B.S., University of Oregon 2017
Landslide dam Douglas-fir snag preparation.

Elizabeth Curtiss, B.S., University of Oregon 2016-2017
Landslide dam Douglas-fir snag preparation.
Now: Ph.D. student at Virginia Tech University.

Peer reviews

Proposals: 2022-Present (n=2)
NSF – Geomorphology and Land-use Dynamics; NSF – Water, Landscapes, and the Critical Zone

Manuscripts and Reports: 2020-Present (n=32)
AGU Advances; Bulletin of the Seismological Society of America; Earth and Planetary Science Letters; Earth Surface Dynamics; Earth Surface Processes and Landforms; Geology; Geomorphology; Geophysical Research Letters; GSA Today; Proceedings of the National Academy of Sciences (PNAS); Quaternary Research; Journal of Geophysical Research: Earth Surface; Washington Department of Natural Resources

Departmental Service

Faculty Mentor, Graduate Student Body Committee 2025-present
University of Houston, Department of Earth & Atmospheric Sciences

Chair, Sheriff Lecture Planning Committee 2025-present
University of Houston, Department of Earth & Atmospheric Sciences
Ph.D. Candidacy Committee, Stratigraphy/Paleontology 2025-present
University of Houston, Department of Earth & Atmospheric Sciences
University of Houston Earth and Atmospheric Sciences Community Chat Member 2024-present
Coastal Resiliency Search Committee Member, Presidential Frontier Faculty 2024-2025
University of Houston, Department of Earth & Atmospheric Sciences

Professional Service:

Lead convener, American Geophysical Union, Fall Meeting 2025
From Bedrock to Treetop: Hillslope Processes, Weathering, and the Evolution of the Critical Zone across Scales.
with Nancy Weinheimer, Russell Callahan, Sarah Jonathan, and Brooke Hunter
Lead convener, American Geophysical Union, Fall Meeting 2024
From Ridgelines to Valleys: Hillslope Processes, Morphology, and Evolution across Scales.
with Kristin Sweeney, Tyler Doane, and Danica Roth
Coordinator, University of Oregon Earth Sciences Alumni AGU Reception 2024-present
Judge, Outstanding Student Presentation Award, AGU Fall Meeting 2021-2024
Lead organizer, University of Arizona Geomorphology Reading Seminar 2022-2024
Lead convener, American Geophysical Union, Fall Meeting 2023
From Ridgelines to Valleys: Hillslope Processes and Morphology across Scales
with Danica Roth, Tyler Doane, and Seulgi Moon.
Convener, American Geophysical Union, Fall Meeting 2022
Reorganization of River Basins.
with Helen Beeson and Maya Stokes
Lead convener, American Geophysical Union, Fall Meeting 2021
Geomorphic variability from source to sink: Unraveling the legacy of variability in surface processes and the sedimentary record.
with Danica Roth, Vamsi Ganti, and Tyler Doane.
Field Trip Co-leader, Geological Society of America Meeting 2021
Developing landslide chronologies using landslide-dammed lakes in the Oregon Coast Range
with Logan Wetherell and Sean LaHusen (cancelled due to COVID-19).
American Society of Photogrammetry and Remote Sensing, University of Oregon Chapter
President 2019-2020
Secretary 2016-2018
Co-convener, Geological Society of America Cordilleran Section Meeting 2019
Landscape Evolution and Tectonic Geomorphology in the Greater Pacific Northwest
with Matthew Morriss, Jim O'Connor, Philip Schoettle-Greene, and Lydia Staisch.
Cascadia Earthquake-Landslides workshop, University of Oregon 2017
co-organizer with Josh Roering.

Outreach & Education:

SZ4D Fall Skills Webinar Series (SZ4Grads) October 2023
Mapping erosion rates in soil-mantled landscapes: an application of wavelets in TopoToolbox to rapidly calculate hilltop curvature.
Clouds to the Core (C2C), University of Arizona REU Program 2023
Co-mentored participating Pima Community College student.
TopoToolbox Blog Contributor 2022
Poster Judge, University of Arizona Geosciences Symposium (GeoDaze) 2021

Featured scientist in "The Big One: The Cascadia Earthquakes and the Science of Saving Lives," children's book by Elizabeth Rusch. 2019

University of Oregon Summer Academy to Inspire Learning (SAIL) session host. 2018

University of Oregon Presidential Undergraduate Research Scholar program graduate student panel member. 2017

Philmont Scout Ranch, Cimarron, NM, Program Counselor Summer 2014
Daily meteorological and astronomy programs for youth and young adults in northern New Mexico backcountry.

Senior Project, Carson City, NV, Personal study of seismic wave propagation 2011-2012
used to create a short explanatory video on seismic hazards.
Advisor: Dr. John Louie, University of Nevada, Reno.

Media, Press & Interviews

San Francisco Chronicle, outside scientist, Sep. 2024, *California wildfires lead to significant soil loss, impacting reservoirs and increasing flood risk*: https://www.sfchronicle.com/weather/article/california-wildfire-flood-debris-flows-19728766.php

Wired, outside scientist, Sep. 2021, *The Long-Lost Tale of an 18th-Century Tsunami, as Told by Trees*: https://www.wired.com/story/the-long-lost-tale-of-an-18th-century-tsunami-as-told-by-trees/

SELECTED PRESENTATIONS AND REPORTS

**only first-author conference presentations listed since 2017*

1. **Struble, W.**, Sweeney, K., Talmadge, J., Patton, J., Seeley, M., (2026), Local hilltop and debris-flow morphometrics predict drainage divide migration, presented at European Geosciences Union General Assembly, Vienna, Austria.

2. **Struble, W.**, McGuire, L., McCoy, S., Barnhart, K., (2025), ***Invited Talk:*** Uplift and erosion rates are encoded in the morphology of steep, debris-flow dominated valleys across landscapes, presented at Fall Meeting, AGU, New Orleans.

3. **Struble, W.**, LaHusen, S., Grant, A., Roering, J., Black, B., Burns, W., Calhoun, N., Wetherell, L., Duvall, A., (2024), ***Invited Talk:*** Landscape seismic stenographers: How are Cascadia megathrust earthquakes recorded by western Oregon bedrock landslides?, presented at Fall Meeting, AGU, Washington, D.C.

4. **Struble, W.T.**, McGuire, L., McCoy, S.W., Barnhart, K., Marc, O., (2023), Modeled debris flows reproduce steepland topographic signatures in the San Gabriel Mountains, California, presented at Fall Meeting, AGU, San Francisco.

5. **Struble, W.T.**, McGuire, L., McCoy, S.W., Barnhart, K., (2022), Steepland morphology predicts erosion rate: comparison of debris-flow metrics with established hillslope and fluvial counterparts in the Oregon Coast Range, presented at Fall Meeting, AGU, Chicago.

6. **Struble, W.T.**, McGuire, L., McCoy, S.W., Barnhart, K., (2021), Quantifying the role of debris flows on steepland evolution, presented at Fall Meeting, AGU, New Orleans.

7. **Struble, W.T.**, Roering, J.J., Dorsey, R.J., Bendick, R., (2021), ***Invited Talk:*** Topographic transformations reveal longitudinal lengthening of Oregon forearc rivers, presented at Annual Meeting ("GSA Connects"), GSA, Portland.

8. **Struble, W.T.**, Roering, J.J., Clubb, F.J., (2020), Hillslope morphometrics calculated using continuous wavelet transforms record variable uplift/subsidence and erosion in Oregon Coast Range and Cascadia Forearc Lowland, presented at Fall Meeting, AGU, San Francisco.

9. **Struble, W.T.**, Roering, J.J., (2020), Dikes of the central Oregon Coast Range and southwestern Willamette Valley, Landslide history at Cougar Pass, USGS EDMAP Report and Geologic Map.

10. **Struble, W.T.**, Roering, J.J., Dorsey, R.J., Bendick, R.O., (2019), Continuous wavelet transformed topography reveals geomorphic history and future of Cascadia forearc, presented at Fall Meeting, AGU, San Francisco.

11. **Struble, W.T.**, Roering, J., Black, B., Burns, W.J., Calhoun, N., Wetherell, L., (2019), Temporal clustering of landslide-dammed lakes in western Oregon using dendrochronology, presented at Cordilleran Section Meeting, GSA, Portland, OR.

12. **Struble, W.T.**, Roering, J.J., (2018), Using hilltop curvature to quantify hillslope response timescales of forearc basin aggradation, presented at Fall Meeting, AGU, Washington, D.C.

13. **Struble, W.T.**, Roering, J., (2017), Debris Flow Process and Climate Controls on Steepland Valley Form and Evolution, presented at Fall Meeting, AGU, New Orleans.

14. Gentry, C., Harley, G., Maxwell, S., Hefner, A., Mitchell, T., Mustoe, N., Rachman, R., Scott, J., Spriggs, J., **Struble, W.**, Waldron, J., and Wind, M., (2017), Comparing site specific chronologies of Lodgepole pine and Engelmann spruce in the Shoshone National Forest, Wyoming. In: Speer, J.H. (ed.) Final Report for the 27th Annual North American Dendroecological Fieldweek, 3-26.

15. **Struble, W.**, Roering, J., Burns, W., Black, B., Calhoun, N., Wetherell, L., (2017), Propensity for Deep-seated Landslides in the Oregon Coastal Ranges during Cascadia Megathrust Earthquakes through Dendrochronological Dating of Landslide-dammed Lakes, ***Invited Talk*** presented at Annual Meeting, GSA, Seattle.

16. McCoy, S.W., **Struble, W.T.**, Hobley, D.E.J., Tucker, G.E., (2015), Tectonics from Topography: Strong Correlation Between Mountain Front Steepness and Holocene Slip Rates Along the Wasatch Normal Fault, USA, presented at Fall Meeting, AGU, San Francisco.

17. Darling T., **Struble, W.T.**, TenCate, J.A., and Johnson, P.A., (2014), Elastic Network Models and the Resonance Behavior of Berea Sandstone, presented at Geosciences Models – Where are the Rocks?, Office of Basic Energy Sciences, Gaithersburg: Maryland, U.S.

18. Darling, T., **Struble, W.T.**, (2013), Temperature dependent elasticity and damping in dehydrated sandstone, presented at Fall Meeting, AGU, San Francisco.

19. Darling, T., Miller, R.A., **Struble, W.T.**, (2013), Nonuniformity and anisotropy in the nonlinear resonance response of very dry Berea sandstone, presented at 18th International Conference on Nonlinear Elasticity in Materials, Ticino: Switzerland.

RESEARCH EXPERIENCE

Department of Geosciences, University of Arizona 2021-2024
Debris flow contributions to landscape evolution.
Steepland topographic analysis. Landscape evolution modeling.
Research supervisor: Dr. Luke McGuire.

Department of Earth Sciences, University of Oregon 2016-2020
Oregon Coast Range landslide dam geochronology. Topographic and spectral analysis of the Willamette Valley and Cascadia forearc. Hillslope geomorphometrics.
Under mentorship of Dr. Josh Roering.

Department of Geological Sciences and Engineering, University of Nevada, Reno 2014-2016
Determination of normal fault slip rate when facet angle, fault dip, and erosion rate are known. Focused study of Wasatch Fault Zone.
Under mentorship of Dr. Scott McCoy.

Department of Physics, University of Nevada, Reno 2013-2014
Resonance frequency modelling and stress/strain analyses of Berea sandstone.
Under the mentorship of Dr. Timothy Darling.

Nevada Seismological Laboratory, University of Nevada, Reno 2011-2013
Basic seismic wave modeling techniques for imaging buried structures and seismic wave amplification in structural basins. Field deployment of geophones for reflection/refraction study along eastern shore of Pyramid Lake, Nevada.
Under the mentorship of Dr. John Louie.

FIELD EXPERIENCE

Postdoctoral Research, 2021-2024

Oregon Coast Range – Collection of stream sediments for ^{10}Be catchment-averaged erosion rates. Grain-size distribution measurements from stream channels and hillslopes (soil pits and field sieving).

Arizona and New Mexico (Pinal, Pinaleños, San Andreas, and Gila Mountains) – Debris flow deposit mapping, water quality sample collection, soil infiltration measurements.

Graduate Research, 2016-2020

Oregon Coast Range/Willamette Valley – Dissertation field work including: extraction of slabs from Douglas-fir snags at landslide-dammed lakes; collection of detrital organics for ^{14}C dating of landslide deposits; mapping debris flow deposits; mapping intrusive gabbroic/diabasic dikes in the southern Willamette Valley and central Oregon Coast Range; auguring of landslide at wind gap between Long Tom and Siuslaw Rivers for ^{21}Ne, ^{3}He, and ^{10}Be analysis; collection of stream sediments for ^{10}Be catchment-averaged erosion rates.

Lost River Range, Idaho – Site evaluation for projects investigating the topographic signature of debris flows, including rock strength measurements using Schmidt Hammer.

Carson Range (Sierra Nevada), Nevada/California – Site evaluation for projects investigating the topographic signature of debris flows.

Absaroka Range, Wyoming – North American Dendro-ecological Fieldweek. Construction of tree ring chronologies of Lodgepole pine and Engelmann spruce in the Shoshone National Forest.

Undergraduate Research, 2012-2016

Pyramid Lake, Nevada – Seismic reflection/refraction of previously unmapped fault.

Various sites in northern Nevada and California – Undergraduate course field projects including seismic reflection/refraction studies; geologic mapping; stratigraphy and sedimentology; geodesy.

Field Courses

Santorini Volcano and Crete, University of Oregon Staples Trip	2018
North American Dendro-ecological Fieldweek (NADEF), Absaroka Range, Wyoming	2017
Pah Rah Range (western Nevada) and various ranges in eastern Basin and Range, Nevada	2016

MISCELLANEOUS

Workshops and Skills

Annual Cascadia Region Earthquake Science Center (CRESCENT) Meeting	October 2025
Early Career Geoscience Faculty: Teaching, Research, and Managing Your Career workshop, St. Paul, MN.	June 2025
Cascading Hazards: Understanding Ground Failure in Cascadia CRESCENT topical workshop, Newport, OR.	March 2025
Annual Cascadia Region Earthquake Science Center (CRESCENT) Meeting	January 2025
USGS Subduction Zone Sciences workshop	January 2023
Integrating Paleoseismology, Geology, and Geophysics, and Modeling in Cascadia, USGS Powell Center workshop.	August 2022
USGS Cascadia Recurrence Project Meeting.	October 2020
DEI Reading Group, Department of Earth Sciences, University of Oregon.	2020
Preparing for an Academic Career, Earth Educators' Rendezvous, Nashville, TN.	July 2019
M9 Final Stakeholders Workshop, University of Washington.	March 2019
Earth Surface Dynamics Summer School, Universität Potsdam.	Summer 2018
North American Dendro-ecological Fieldweek (NADEF), Cody, WY.	July 2017
Community Surface Dynamics Modeling System Meeting, Boulder, CO.	May 2017
M9 Workshop, University of Washington.	November 2016
University of Oregon Teaching Engagement Program.	September 2016

Proficient user of MATLAB and ArcGIS. Beginning user of Python.
Conversational Spanish, four years of academic study.

Professional Memberships

American Geophysical Union	2015-Present
European Geosciences Union	2026-Present
Geological Society of America	2016-2021
American Society of Photogrammetry and Remote Sensing	2016-2020