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EDUCATION

Ph.D.	Geography	University of Oregon	December 2008
M.Sc.	Geography	University of Utah	May 2002
B.S. (Cum Laude)	Environmental Science	University of Denver	June 1999
	Minors: Geography, French		

DISSERTATION

Natural and Anthropogenic Influences on the Holocene Fire and Vegetation History of the Willamette Valley, Northwest Oregon and Southwest Washington.

Co-Advisors: Drs. Cathy Whitlock and Patrick J. Bartlein

PROFESSIONAL EXPERIENCE

2020-present	(Co-)Director , Cultural and Environmental Resource Management MS Program
2020-present	Professor , Department of Geography, Central Washington University
2015-2020	Associate Professor , Department of Geography, Central Washington University
2010-2015	Assistant Professor , Department of Geography, Central Washington University
2009- 2010	Postdoctoral Research Assistant , Department of Anthropology, University of Oregon
	Adjunct Instructor , Department of Geography, University of Oregon
2002- 2008	Graduate Student, Research Assistant, Teaching Assistant , Department of Geography, University of Oregon
1999-2001	Graduate Student, Research Assistant, Teaching Assistant , Department of Geography, University of Utah
1998	Environmental Protection Assistant , Air Resources Division, National Park Service, Department of the Interior, Denver, CO

RESEARCH INTERESTS

Late Quaternary paleoecology and paleoclimatology; the role of fire in ecosystems of the western United States and Central America; (paleo)human/environment interactions; biogeographical impact of global climate change; application of paleoecological data to land-management policy.

GRANTS, CONTRACTS, AND OTHER FUNDING

Principle Investigator, Idaho Department of Transportation Contract, \$43,278 CWU Paleoecology Subcontract, MacArthur Lake Data Recovery, 2021-2023.

Principle Investigator, Washington Department of Transportation Contract, \$40,995 CWU Paleoecology Subcontract, US 101 Elwha Bridge Data Recovery, 2020-2022.

Principle Investigator, SUNY Albany NSF Grant, \$12,000 CWU Paleoecology Subaward, 2022-2023.

Co-Principal Investigator, National Science Foundation Grant, \$1,599,123 (\$47,552 CWU subaward), *CNH2-L: Climate Change and the Coupled Dynamics of Tropical Forest Ecology and Human Food Production*, January 2020-June 2024.

NSF Research Team Seminar Participant, funded to travel to and participate in seminar entitled *Linking the Past to the future: 2000 Years of Human Resilience and Socioecological Change in the Central American Tropics*, School for Advanced Research, Santa Fe, NM, January 2016

CWU College of the Sciences Faculty Summer Writing Grant, \$4000, *Fire-climate-human interactions during the post-glacial period at Sunrise Ridge, Mt. Rainier National Park, WA (USA)*, summer 2015.

CWU SEED Grant, \$2000, *Post-Glacial Fire Regimes and Vegetation Patterns in the Blue Mountains and their Relationship to Future Climate Change in the Interior Pacific Northwest*, Central Washington University, Summer 2014

CWU Cascadia Hazards Institute Award, \$5114, *Funding to write an NSF Proposal: A Long-Term Perspective on Wildfire Hazard in the Pacific Northwest: Linkages to Past, Present, and Future Climate Variability and Human Activity*, Central Washington University, Summer 2014

CWU College of the Sciences Faculty Summer Research Grant, \$3000, *Fire activity in the Pacific Northwest during the last 3500 years: climate or human-driven?*, Central Washington University, Summer 2011

Association of American Geographers Research Grant, \$990, *Fire and Vegetation History of the Sinlahekin Wildlife Area, Okanogan County, Washington*, February 2011

CWU SEED Grant, \$880, *Fire History of the Sinlahekin Wildlife Area, Okanogan County, Washington*, November 2010

Denise Gaudreau Award for Excellence in Quaternary Studies, Honorable Mention, American Quaternary Association, August 2006

Summer Research Grant (\$500), Department of Geography, University of Oregon, 2003

FELLOWSHIPS AND SCHOLARSHIPS

2007-2008 **Research Assistant Fellowships, Departments of Geography and Anthropology, University of Oregon**

- Worked with Dr. Patrick Bartlein (University of Oregon, Geography) on a National Science Foundation grant, PIs C. Whitlock (Montana State University) and P.J. Bartlein, "Collaborative Research: Holocene Fire-Climate Linkages In Southern South America: Explaining Regional Responses To Large-scale Climate Forcing."
- Worked with Dr. Douglas Kennett (University of Oregon, Anthropology) to reconstruct the fire history of study sites in Central American; carried out charcoal,

- pollen, and sedimentological analyses and radiocarbon date pre-processing; a publication is in review at *Quaternary Research* (Walsh et al., in review)
- 2004-2007 **Research Assistant Fellowship, Department of Geography, University of Oregon**
- Dissertation research: reconstructed the Holocene fire and vegetation history of the Willamette Valley using macroscopic charcoal, pollen, and other analyses
 - Joint Fire Sciences Program grant, PIs C. Whitlock (Montana State University), E. Heyerdahl (US Forest Service), J. Kertis (US Forest Service): "Historical Fire Regimes of the Willamette Valley, OR: Providing a Long-Term, Regional Context for Fire and Fuels Management"
 - Lead author on papers in *Quaternary Research* (Walsh et al., 2008), *Quaternary Science Reviews* (Walsh et al., 2010a), and *Palaeogeography, Palaeoclimatology, Palaeoecology* (Walsh et al., 2010b)
- 2003-2004 **Teaching Assistant Fellowship, Department of Geography, University of Oregon**
Research Assistant Fellowship, Department of Geography, University of Oregon
- Worked with Dr. Cathy Whitlock (Montana State University) on a high-resolution macroscopic charcoal analysis of lake-sediment cores from Argentina
 - National Science Foundation grant, PIs C. Whitlock (Montana State University) and P.J. Bartlein (University of Oregon): "Holocene Fire-Climate-Vegetation Linkages in the Western Mid-Latitude Forests of North and South America"
 - Co-authorship on a paper in *Quaternary Research* (Whitlock et al., 2006).
- 1999-2001 **Teaching Assistant Fellowship, Department of Geography, University of Utah**
 1995-1999 **Provost Scholarship, Four-Year Merit Scholarship, University of Denver**

PEER-REVIEWED RESEARCH PUBLICATIONS

(Student co-authors highlighted. Publications can be found at <https://meganwalshpaleoecology.weebly.com/publications-and-cv.html>.)

Brown, K.J., Dietz, E., Walsh, M.K., Hennebelle, A., Power, M.J. (2024) Charred particles and other paleofire proxies. In: *Encyclopedia of Quaternary Science, 3rd Edition*. Elsevier.

Walsh, M.K., Haydon, K.C., Swedberg, D. (2023). Postglacial fire and vegetation history from Doheney Lake in the Sinlahekin Wildlife Area, Okanogan County, Washington (USA). *Northwest Science* 96(1-2): 1-21.

Walsh, M.K., Anderson, K., Deardorff, E., Johnson, S., Kim, D., Mitre, R., Morrey, T., Nurmi, S., Ojeda, D., Telfer, L., Tumin-Roberts, J. (2021). Evaluating best practices for macroscopic charcoal-based fire history reconstructions through a research experience for undergraduates. *Yearbook of the Association of Pacific Coast Geographers* 83: 98-119.

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

Rushton, Z.A. and Walsh, M.K. (2021). Holocene fire history reconstruction of a mid-elevation mixed-conifer forest in the eastern Cascades, Washington (USA). *The Holocene* 31(5): 478-490.

Walsh, M.K., Duke, H.J., Haydon, K.C. (2018). Toward a better understanding of climate and human impacts on late Holocene fire regimes in the Pacific Northwest, USA. *Progress in Physical Geography* 42(4): 478-512.

Walsh, M.K., Lukens, M.L., McCutcheon, P.T., Burtchard, G.C. (2017). Fire-climate-human interactions during the postglacial period at Sunrise Ridge, Mount Rainier National Park, Washington (USA). *Quaternary Science Reviews* 177: 246-264.

Walsh, M.K., Marlon, J.R., Goring, S., Brown, K.J., Gavin, D.G. (2015). A regional perspective on Holocene fire–climate–human interactions in the Pacific Northwest of North America. *Annals of the Association of American Geographers* 105, 1135-1157. DOI: 10.1080/00045608.2015.1064457.

Walsh, M.K., Prufer, K.M, Culleton, B.J., and Kennett, D.J. (2014). A late Holocene paleoenvironmental reconstruction from Agua Caliente, southern Belize, linked to regional climate variability and cultural change at the Maya polity of Uxbenká. *Quaternary Research* 82, 38-50.

Walsh, M.K. (2014). Teaching geographic field methods using paleoecology. *Journal of Geography* 113, 97-106.

Marlon, J.R., Bartlein, P.J., Long, C., Gavin, D., Anderson, R.S., Briles, C.E., Colombaroli, D., Brown, K.J., Hallett, D.J., Power, M.J., Scharf, E., Walsh, M.K. (2012). A long-term perspective on wildfires in the western US. *Proceedings of the National Academy of Sciences* 109, 3203-3205.

Power, M.J., Mayle, F.E., Bartlein, P.J., Marlon, J.R., Anderson, R.S., Behling, H., Brown, K.J., Carcaillet, C., Colombaroli, D., Gavin, D.G., Hallett, D.J., Horn, S.P., Kennedy, L.M., Lane, C., Long, C., Moreno, P.I., Paitre, C., Robinson, G., Taylor, Z., Walsh, M. 2012. Climatic control of the biomass-burning decline in the Americas after AD 1500. *The Holocene*, 23: 3-13.

Marlon, J.R., Cui, Q., Gaillard, M. -J., McWethy, D., Walsh, M. (2010). Humans and fire: Consequences of anthropogenic burning during the past 2 ka. *PAGES News* 18, 80-82.

Walsh, M.K., Whitlock, C., Bartlein, P.J. (2010). 1200 years of fire and vegetation history in the Willamette Valley, Oregon and Washington, reconstructed using high-resolution macroscopic charcoal and pollen analysis. *Palaeogeography, Palaeoclimatology, Palaeoecology* 297, 273-289.

Kennett, D.J., Piperno, D.R., Jones, J.G., Neff, H., Voorhies, B., Walsh, M.K., Culleton, B.J. (2010). Pre-pottery agriculturalists on the Pacific Coast of Southwest Mexico. *Journal of Archaeological Science* 37, 3401-3411.

Walsh, M.K., Pearl, C.A., Whitlock, C., Bartlein, P.J., Worona, M. (2010). An 11,000-year-long fire and vegetation history from Beaver Lake, central Willamette Valley, Oregon. *Quaternary Science Reviews* 29, 1093-1106.

Reynolds, R.L., Mordecai, J.S., Rosenbaum, J.G., Ketterer, M.E., Walsh, M.K., Moser, K.A. (2010). Compositional changes in sediments of subalpine lakes, Uinta Mountains (Utah): evidence for the effect of human activity on atmospheric dust inputs. *Journal of Paleolimnology* 44, 161-175.

Marlon, J.R., Bartlein, P.J., Walsh, M.K., Harrison, S.P., Brown, K.J., Edwards, M.E., Higuera, P.E., Power, M.J., Anderson, R.S., Briles, C., Brunelle, A., Carcaillet, C., Daniels, M., Hu, F.S., Lavoie, M., Long, C., Minckley, T., Richard, P.J.H., Shafer, D.S., Tinner, W., Umbanhowar, Jr., C.E., Whitlock, C. (2009). Wildfire responses to abrupt climate change in North America. *Proceedings of the National Academy of Science* 106, 2519-2524.

Power M.J., et al. (2008). Changes in Fire Regimes Since the Last Glacial Maximum: An Assessment Based on a Global Synthesis and Analysis of Charcoal Data. *Climate Dynamics* 30, 887-907.

Walsh, M.K. (2008). Natural and Anthropogenic Influences on the Holocene Fire and Vegetation History of the Willamette Valley, Northwest Oregon and Southwest Washington. PhD Dissertation, University of Oregon, Eugene.

Walsh, M.K., Whitlock, C., Bartlein, P.J. (2008). A 14,300-year-long record of fire-vegetation-climate linkages at Battle Ground Lake, southwestern Washington. *Quaternary Research* 70, 251-264.

Whitlock, C., Bianchi, M.M., Bartlein, P.J., Markgraf, V., Marlon, J., Walsh, M., McCoy, N. (2006). Postglacial vegetation, climate, and fire history along the east side of the Andes (lat 41-42.5°S), Argentina. *Quaternary Research* 66, 187-201.

Whitlock, C., Bartlein, P.J., Bianchi, M.M., Briles, C., Brunelle, A., Long, C., Markgraf, V., Marlon, J., Meeker, C., Power, M., Walsh, M. (2003). Disturbance frequency changes in western North and South America during the Holocene. *EOS Transactions* 84.

Walsh, M.K. (2002). Fire History of Two Selected Sites in the Spruce-Fir Life Zone of the Uinta Mountains, Utah, Determined Using Macroscopic Charcoal Analysis. Master's Thesis, University of Utah, Salt Lake City, Utah.

OTHER PUBLICATIONS

Walsh, M. (2016). Fire and disturbance ecology. McGraw Hill AccessScience Online Encyclopedia of Science and Technology, <https://doi.org/10.1036/1097-8542.258200>.

Walsh, M. (2014). Publishing in open-access journals: is there a risk? *Northwest Science* 88, 266-268.

Walsh, M.K. (2005). Vegetation history of the southern Willamette Valley. In: Mount Pisgah Arboretum Guidebook: A Natural History of the Southern Willamette Valley, Oregon, 11th Edition, (Rhoda M. Love, ed.), pp. 140-146.

CONFERENCE PAPERS AND POSTERS

“Freshwater lagoon and coastal mangrove sediments as repositories of ecological change during the Holocene in the tropical lowlands of southern Belize.” Paper presented at the American Association of Geographer Annual Conference (virtual), March 2022.

“Coastal mangrove sediments as unconventional repositories of ecological change during the Holocene in the tropical lowlands of southern Belize.” Accepted abstract for the Association of American Geographers annual conference, Denver, CO, April 2020 (cancelled due to Covid-19).

“Combining paleoecology and archaeology: what interdisciplinary research can teach us about Holocene human-landscape interactions in the Pacific Northwest.” Plenary speaker for the Northwest Science Association annual meeting, Eugene, OR, March, 2020 (cancelled due to Covid-19).

“Climatic and Human Influences on Changing Wildfire Regimes of the Eastern Washington Cascades.” Paper presented at the 10th annual Northwest Climate Conference, Portland, OR, October 2019.

“Too wet to burn?: A paleoenvironmental perspective on the changing fire regimes of high-elevation landscapes in Mount Rainier National Park, Washington.” Poster presented at the 29th Biennial Pacific Climate Workshop, Monterrey, CA, February 2019.

“Climatic and Human Influences on the Post-Glacial Fire History of the Eastern Washington Cascades: A Preliminary Regional Assessment.” Paper presented at the Association of Pacific Coast Geographers Annual Meeting, Reno, NV, October 2018.

“Paleoenvironmental reconstruction of the post glacial fire and vegetation history at Mount Rainier National Park, Washington (USA).” Poster presented at the Association of American Geographers annual conference, New Orleans, LA, April 2018.

“A Regional Assessment of the Post-Glacial Fire History of the Eastern Washington Cascades, USA.” Paper presented at the Association of American Geographers annual conference, San Francisco, CA, April 2016.

“Reconstruction of the Post-Glacial Fire and Vegetation History of Sunrise Ridge, Mount Rainier National Park, Washington.” Paper presented at the Association of American Geographers annual conference, Chicago, IL, April 2015.

“Late Holocene Human-Fire Relationships at Sunrise Ridge, Mt. Rainier National Park, Washington.” Paper presented at the Northwest Anthropological Conference, Eugene, OR, March 2015.

“Toward a better understanding of Holocene fire-climate-human interactions in the Pacific Northwest: the usefulness of macroscopic charcoal and pollen analysis of lake sediments.” Paper presented at the Northwest Anthropological Conference, Eugene, OR, March 2015.

“A Regional Perspective on Holocene Fire Regimes in the Pacific Northwest.” Paper presented at the Northwest Science Association annual meeting, Pasco, WA, March 2015.

“A Late Holocene Paleoenvironmental Reconstruction from Agua Caliente, Southern Belize, Linked to Regional Climate Variability and Cultural Change at the Maya Polity of Uxbenká.” Paper presented at the Association of American Geographers annual conference, Tampa, FL, April 2014.

“The Post Glacial Fire and Vegetation History of Sunrise Ridge, Mount Rainier National Park, Washington.” Paper presented at the Northwest Science Association annual meeting, Missoula, MT, March, 2014.

“East versus West: Climatic and Human Influences on the Fire and Vegetation History of Two Low-Elevation Sites in the Pacific Northwest?” Paper presented at the Association of American Geographers Annual Meeting, Los Angeles, CA, April, 2013.

“A Paleoperspective on the Role of Fire in Low-Elevation Ecosystems of the Pacific Northwest.” Paper presented at the Northwest Science Association annual meeting, Portland, OR, March, 2013.

“Holocene Fire Regimes of the Pacific Northwest Reconstructed using Macroscopic Charcoal Analysis of Lake Sediments.” Paper presented at the Northwest Science Association annual meeting, Boise, ID, March, 2012.

“Late Holocene Fire Activity in the Pacific Northwest Determined from Charcoal Records: Climate or Human-Driven?” Paper presented at the Association of American Geographers Annual Meeting, NYC, NY, February, 2012.

“Holocene Fire Records of the Willamette Valley: Insights from Paleoecological Records.” Paper presented at the Traditional Ecological Knowledge in Ecosystem Sustainability Conference, Corvallis, OR, May, 2011.

“Paleoecological Reconstruction of Human-Landscape Interactions in the Uxbenká Region of Southern Belize, Central America.” Paper presented at the Association of American Geographers Annual Meeting, Seattle, WA, April, 2011.

“Did Native Americans Burn the Willamette Valley? Insight from the Paleoecological Record into Climatic and Anthropogenic Influences on Fire Activity over the Past 1200 Years.” Paper presented at the Northwest Scientific Association Annual Meeting, Centralia, WA, March 2010.

“Natural and Anthropogenic Influences on the Fire and Vegetation History of the Willamette Valley, Northwest Oregon and Southwest Washington.” Paper presented at the PAGES Young Scientist Meeting, Corvallis, OR, July 2009.

“Climatic Variability and the Fire and Vegetation History of the Pacific Northwest during the Last 2000 Years.” Paper presented at the Association of American Geographers Annual Meeting, Las Vegas, NV, March 2009.

“Reconstructing the Last 1000 Years of Fire History in the Willamette Valley of Oregon and Washington using High-Resolution Macroscopic Charcoal and Pollen Analysis.” Paper presented at the

International Association of Wildland Fire 9th Biennial Scientific Conference on the Greater Yellowstone Ecosystem, Jackson Hole, WY, September 2008.

“From Native-American Habitation to European-American Settlement: Reconstructing the Last 5000 years of Landscape Change in the Willamette Valley, Oregon and Washington.” Paper presented at the Association of American Geographers Annual Meeting, Boston, MA, April 2008.

“Reconstructing the Holocene Fire and Vegetation History of the Willamette Valley, Oregon and Washington, Using High-Resolution Macroscopic Charcoal and Pollen Analysis.” Paper presented at the Association of American Geographers Annual Meeting, San Francisco, CA, April 2007.

“Using Macroscopic Charcoal to Reconstruct the Holocene Fire Activity of the Willamette Valley, Oregon and Washington.” Poster presented at the American Geophysical Union Meeting, San Francisco, CA, December 2006.

“The Holocene Landscapes of the Willamette Valley, Oregon: Reconstructing Prehistoric Fire Activity through Macroscopic Charcoal Analysis,” Poster presented at the Association of Pacific Coast Geographers 69th Annual Meeting, Eugene, OR, September 2006.

“The Holocene Fire and Vegetation History of the Willamette Valley: Results from Battle Ground Lake, Washington, Beaver Lake, Oregon, and Warner Lake, Oregon,” Poster presented at the American Quaternary Association 19th Biennial Meeting, Bozeman, MT, August 2006.

“An 11,000-Year-Long Record of Fire and Vegetation History from Battle Ground Lake, Washington,” Paper presented at the 22nd Biennial Pacific Climate Workshop, Monterey, CA, March 2006.

“Reconstructing the Holocene Fire Regimes of the Willamette Valley through the Use of Macroscopic Charcoal and Pollen Analysis,” Paper presented at the Oregon Academy of Science Annual Meeting, Eugene, OR, February 2006.

“Holocene Climate, Vegetation, and Fire History at Battle Ground Lake, Washington,” Paper presented at the Geological Society of America Annual Meeting, Salt Lake City, UT, October 2005.

“Natural and Anthropogenic Influences on the Holocene Fire Regimes of the Willamette Valley: Preliminary Results from Battle Ground Lake, Washington,” Poster presented at the Fire and Climate Conference, Flagstaff, AZ, May 2005.

“Natural and Anthropogenic Influences on the Holocene Fire and Vegetation Regimes of the Willamette Valley, Oregon: Study Overview,” Poster presented at the American Quaternary Association 18th Biennial Meeting, Lawrence, KS, June 2004.

INVITED RESEARCH TALKS

- “Shrub Steppe in Central Washington: Past, Present, and Future.” Get Intimate with the Shrub-Steppe, Cornerstone Pizza, Ellensburg, WA, May 2022.
- “Water, Fire, and Climate Change in North-Central Washington.” Virtual EarthGen presentation for Washington State educators, April 2022.”
- “Combining paleoecology and archaeology: what interdisciplinary research can teach us about Holocene human-landscape interactions in the Pacific Northwest.” Pacific Northwest Archaeological Society Speaker Series, February 2022.
<https://www.youtube.com/watch?v=jiKb7gEYb8>
- “Wildfires in our Backyard: Past and Future Trends in Fire Activity in Eastern Cascade Forests.” Mid-Columbia Fisheries Speaker Series, February 2022.
<https://www.youtube.com/watch?v=9DGQB2ZYV10>
- “Combining Paleoecology and Archaeology: What Interdisciplinary Research Can Teach Us About Holocene Human-Landscape Interactions in the Pacific Northwest.” Northwest Scientific Association, Seminar Series, March 2021.
- “Combining paleoecology, geology, and archaeology: what interdisciplinary research can teach us about Holocene human-landscape interactions in the Pacific Northwest.” Boise State University Biological Science Speaker Series, October 2020.
- “Wildfires in our Backyard: Trends in Fire Activity in Eastern Cascade Forests.” Science in a Pint, Cornerstone Pizza, Ellensburg, WA, April 2019.
- “Postglacial Fire History in the Pacific Northwest: Understanding Changing Fire Regimes Using Paleoecology, Geology, and Archaeology.” Graduate Student Seminar, Washington State University, Pullman, WA, March 2018.
- “Fire and Ice: Understanding Climate-Environment-Human Relationships in the Pacific Northwest.” Museum of Culture and Environment, CWU, Ellensburg, WA, November 2017 (co-presenter Dr. Susan Kaspari).
- “The Role of Fire on the Landscapes of the Eastern Cascades.” Kittitas Audubon Society, Ellensburg, WA, May 2016 (co-presented with graduate student Dusty Pilkington).
- “A Long-Term Perspective on the Fire History of Cascade Forests: Disentangling Climatic and Anthropogenic Influences.” North Cascades West Side Fire Symposium, Western Washington University, Bellingham, WA, May 2016.
- “Paleoenvironmental Reconstruction from Southern Belize Linked To Regional Climate Variability and Cultural Change at The Maya Polity Of Uxbenká.” School for Advanced Research, Santa Fe, NM, January 2016.
- “Putting Things into Perspective: How Paleorecords Can Help!” Rep. Klippert’s Wildfire Panel Discussion, Kennewick, WA, December 2015.
- “Putting Things into Perspective: How Paleorecords Can Help!” Cascadia Hazards Institute Fire Conference, Central Washington University, November 2015.
- “Climatic and Human Influences on Post-Glacial Fire Activity of the Pacific Northwest.” Geology Department Speaker Series, Central Washington University, October 2014.
- “Forests, Fires, and Climate: 10,000 Years of Environmental Change in the Sinlahekin Wildlife Area.” Sinlahekin Wildlife Area 75th Anniversary Celebration, Loomis, WA, July 2014.
- “10,000 Years of Fire History and Vegetation Change in the Sinlahekin Wildlife Area.” Washington State DOT Cultural Resource Training, Central Washington University, April 2014.
- “Climatic and Human Influences on the Fire History of the Pacific Northwest.” Museum of Culture and

Environment, Central Washington University, November 2013.

“Fires, Forests and Climate Change: Understanding the Dynamic Landscapes of the Pacific Northwest,” *Science is Central*, Central Washington University, September 2013.

“A 14,000-Year Record of Mt. Rainier Environmental and Fire History,” *Mt. Rainier Tribal Meeting*, Mt. Rainier National Park, June 2013.

“Paleoenvironmental Research at Mt. Rainier National Park,” research update given to park staff and researchers, Mt. Rainier National Park, April 2013.

“Holocene Fire and Vegetation History of the Pacific Northwest: Lessons from the Past,” *Biology Department Darwin Day*, Central Washington University, February 2011.

“Vegetation Change and Fire History in the Pacific Northwest since the Missoula Floods,” *Ellensburg Ice Age Flood Society*, Central Washington University, December 2010.

“Climate Variability and Anthropogenic Activity: Reconstructing the Holocene Fire History of the Willamette Valley Using Macroscopic Charcoal Analysis,” *Oregon Archaeology Month*, Portland State University, October 2006.

TEACHING EXPERIENCE

Course Instructor: (full-teaching responsibilities)

Cultural and Environmental Resource Analysis (CERM 522), Cultural and Environmental Resource Management Program, Central Washington University (co-taught with Dr. Toni Sipic and Dr. Steve Hackenberger)

Introduction to Sustainability (SUST 301), Sustainability Certificate, Environmental Studies Program, Central Washington University (co-taught with Dr. Casey Mace Firebaugh, CWU Public Health)

Energy, Environment, and Climate Change (IEM 302), Integrated Energy Management Program, Central Washington University

Geography of the Pacific Northwest (GEOG 355), Department of Geography, Central Washington University

Introduction to Physical Geography (Online) (GEOG 107), Department of Geography, Central Washington University

Pyrogeography (GEOG 455), Department of Geography, Central Washington University

Topics in Physical Geography Seminar: Methods in Paleoecology (GEOG 407), Department of Geography, Central Washington University

Introduction to Graduate Research (REM 505), Cultural and Environmental Resource Management Program, Central Washington University

Geography Field Experience: Mt. Rainier (GEOG 493), Department of Geography, Central Washington University

Forest Environments (GEOG 454), Department of Geography, Central Washington University

Biogeography (formerly *Ecosystems Geography*) (GEOG 389), Department of Geography, Central Washington University

Climate Change: Biophysical and Human Dimensions (GEOG 441), Department of Geography, Central Washington University

Field Methods in Geography (GEOG 425), Department of Geography, Central Washington University,

Resource Management Colloquium (REM 506), Cultural and Environmental Resource Management Program, Central Washington University

Weather and Climate (formerly *Climatology*) (GEOG 388), Department of Geography, Central

Washington University

Introduction to Physical Geography (GEOG 107: in person and online), Department of Geography,
Central Washington University

Global Environmental Change (GEOG 361), Department of Geography, University of Oregon

Long-Term Environmental Change (GEOG 430/530), Department of Geography, University of Oregon

Graduate Seminar: Paleoecology and Human-Environment Interactions (GEOG 607), Department of
Geography, University of Oregon

Climatology (GEOG 321), Department of Geography, University of Oregon

Advances in Physical Geography (GEOG 410/510), Department of Geography, University of Oregon

Biogeography (GEOG 323), Department of Geography, University of Oregon

Global Environmental Change (GEOG 143), Department of Geography, University of Oregon

Introduction to Physical Geography: Natural Environments (GEOG 141), Department of Geography,
University of Oregon

World Regional Geography (GEOG 130), Department of Geography, University of Utah

Teaching Assistant:

Biogeography (GEOG 323), Department of Geography, University of Oregon, Spring 2004

Geography of Oregon (GEOG 206), Department of Geography, University of Oregon, Winter 2004

Climatology (GEOG 321), Department of Geography, University of Oregon, Fall 2003

Guest Lecturer:

Climate Variability and Climate Change (GEOL 441), Department of Geology, Central Washington
University, Winter 2015, 2017, 2019

Quaternary Geology (GEOL 474), Department of Geology, Central Washington University, Fall 2010,
2012, 2017, 2019, 2021

Environmental Archaeology (ANTH 427), Department of Anthropology, Central Washington
University, Spring 2010

Forest Fires and Society (SOC 410), Department of Sociology, University of Oregon, Fall 2008

Fire in the Environment (GEOG 410), Department of Geography, University of Oregon, Fall 2007

Climatology (GEOG 321), Department of Geography, University of Oregon, Fall 2005-2008

Geography of Oregon (GEOG 206), Department of Geography, University of Oregon, Winter 2004

Biogeography (GEOG 327), Department of Geography, University of Utah, Spring 2001

GRADUATE STUDENT ADVISING

Thesis Committee Chair-

Audrey Scott (chair), 2022- present, “Postglacial Fire History at Round Lake in Northern Idaho.”

Grace McKenney (chair), 2021- present, “Late Holocene Fire History Reconstruction at Beaver Lake in the northwest Olympic Peninsula, WA.”

Megan Cline (co-chair), 2020- present, “Historic Climate Change, Climate Variability, and Hydrologic Trends in Kittitas and King Counties.”

Brynn Harrison, 2018-2021 (completed), “A Regional Synthesis of Post-Glacial Fire History in the Eastern Cascades, Washington, using Macroscopic Charcoal Records.”

Shaun Morrison (co-chair), 2017-2020 (completed), “Distribution of Invasive Species on Debris Cones, Mount Rainier National Park.”

Savannah Bommarito (co-chair), 2016-2019 (completed), “Identifying the Effects of Land Use and Policy on Disturbance Regimes in the Teanaway Community Forest, Washington.”

Zoe Rushton, 2014-2019 (completed), “Holocene Fire History Reconstruction of a Mid-Elevation Mixed-Conifer Forest in the Eastern Cascades, Washington.”

Serafina Ferri, 2013-2019 (completed), “Post-Glacial Fire History of Horsetail Fen and Human-Environment Interactions in the Teanaway Area of the Eastern Cascades, Washington.”

Dusty Pilkington, 2014-2018 (completed), “Two Holocene Sagebrush Steppe Fire Records at the Wildland-Urban Interface, Eastern Cascade Mountains, Washington.”

Christopher Goodner, 2013-2017, “Holocene Fire History of a High-Elevation Site in the Wallowa Mountains, Oregon.”

Kevin Haydon, 2011-2018 (completed), “Postglacial Fire, Vegetation, and Environmental Change in the Sinlahekin Wildlife Area, Okanogan County, Washington (USA).”

Tamara Cox, 2011-2016 (completed), “The Role of Fire in Montane Forest Environments in the Willamette National Forest, Oregon.”

Michael Lukens, 2010-2013 (completed), “The Roles of Humans and Climatic Variation on the Fire History of Subalpine Meadows – Mount Rainier National Park (Washington).”

Thesis Committee Member-

Andrew Raulerson (Geology), 2015-2021 (completed), “Tsunami Deposits and Tsunami Modeling of the 900 AD Seattle Fault Event in Northern Puget Sound.”

Luke Stilwater (CERM), 2018 (completed), “Habitat Utilization by Endangered Green Sturgeon (*Acipenser medirostris*), Willapa Bay, Washington.”

Logan Wetherall (Geology), 2017-2018 (completed), “Quantifying Sedimentation Patterns of Small Watersheds in the Central Oregon Coast Range using Landslide-Dammed Lakes.”

Anne Gustafson (Biology), 2015-2018 (completed), “Occupancy of Stream-Associated Amphibians within the Interstate 90 Snoqualmie Pass Corridor.”

Ted Uecker (Geology), 2016-2017 (completed), “Post-Wildfire Black Carbon Deposition on the Snowpack in the Cascade Range, Washington State: Temporal and Spatial Variability with Implications for Accelerated Melt.”

Thomas Wachholder (CERM), 2014-2015 (completed), “Applying Wetland Rating Systems to Assess Functions of Depressional Wetlands Created by a Mass Wasting Feature, Table Mountain, Washington.”

Jamie Cannon (CERM), 2010-2012 (completed), “Using Decision Support and Geospatial Analysis to Prioritize Forest Restoration Treatments Areas on the Okanogan-Wenatchee National Forest.”

Erin Kreutz (CERM), 2010-2011 (completed), “Naneum Ridge State Forest: A Feasibility Study To Market Forest Carbon to Supplement Washington State Timber Losses.”

Other Graduate Student Mentoring-

2011-2012, WATERS Program Graduate Student Mentor for Kelsey Johnson

Graduate Student Awards and Accolades-

Grace McKenney, 2022, CWU Graduate Student Summer Fellowship, \$3500

Brynn Harrison, 2019, CWU Graduate Student Summer Fellowship, \$3500

Brynn Harrison, 2019, CWU Graduate Student Research Support Award, \$1000

Zoe Rushton, 2015, 3rd Place Award for Research Poster, Northwest Science Association annual conference, Pasco, WA

Dusty Pilkington, 2015, Kittitas Audubon Society grant, \$2500

Dusty Pilkington, 2015, CWU Graduate Student Research Support Award, \$700

Dusty Pilkington, 2015, CWU Graduate Student Summer, \$2800

Christopher Goodner, 2014, CWU Student Research Support Award, \$700

Michael Lukens, 2012, George Melendez Wright Climate Change Fellowship Recipient, \$17,980

Kevin Haydon, 2012, CWU Student Research Support Award, \$700

Kevin Haydon, 2012, CWU Graduate Student Summer Fellowship, \$2800

Tami Cox, 2012, CWU Master’s Research Fellowship, \$700

Co-Authored Graduate Student Research Presentations-

Grace McKenney, May 2022, poster presented at CWU SOURCE Symposium, “Late Holocene Fire History Reconstruction from Beaver Lake in the Northwest Lowlands of The Olympic Peninsula.”

Megan Cline, May 2022, paper presented at CWU SOURCE Symposium, “Historic Climate Change, Climate Variability, and Streamflow Trends in Kittitas and King Counties.”

Brynn Harrison, May 2021, paper presented at CWU SOURCE Symposium, “A Regional Synthesis of Post-Glacial Fire History in the Eastern Cascades, Washington, using Macroscopic Charcoal Analysis.”

Shaun Morrison, May 2019, paper presented at CWU SOURCE Symposium, “Distribution of Invasive Plants on Debris Cones at Mount Rainier National Park.”

Savannah Bommarito, May 2019, poster presented at CWU SOURCE Symposium, “Identifying the Effects of Land Use Change on Disturbance Regimes in the Teanaway Community Forest, Washington.”

Dusty Pilkington, April 2017, paper presented at the American Association of Geographers annual conference, Boston, MA; “Two Holocene Fire Records at the Sagebrush Steppe/Ponderosa Pine Ecotone in the Wildland-Urban Interface, Green and Campbell Lakes, Okanogan County, WA.”

Dusty Pilkington, May 2016, paper presented at CWU SOURCE Symposium, “Two Holocene Sagebrush Steppe Fire Records at the Wildland-Urban Interface, Eastern Cascades, Washington.”

Dusty Pilkington, April 2016, poster presented at the American Association of Geographers annual

- conference, San Francisco, CA; “Two Holocene Sagebrush Steppe Fire Records at the Wildland-Urban Interface, Eastern Cascades, Washington.”
- Dusty Pilkington, March 2016, paper presented at the Northwest Science Association annual conference, Bend, OR; “Two Holocene Sagebrush Steppe Fire Records at the Wildland-Urban Interface, Eastern Cascades, Washington.”
- Zoe Rushton, March 2015, poster presented at the Northwest Science Association annual conference, Pasco, WA; “Holocene Fire Reconstruction of the Long Lake Area near Rimrock Reservoir in the Eastern Cascades, Washington.”
- Chris Goodner, March 2015, poster presented at the Northwest Science Association annual conference, Pasco, WA; “Fire Regime Dynamics of Fish Lake, Blue Mountains, Oregon.”
- Dusty Pilkington, March 2015, poster presented at the Northwest Science Association annual conference, Pasco, WA; “Holocene Fire History Of Green Lake, Eastern Cascades, Washington, Determined Using High-Resolution Macroscopic Charcoal Analysis.”
- Serafina Ferri, March 2015, poster presented at the Northwest Science Association annual conference, Pasco, WA; “Post-Glacial Fire and Vegetation History of Horsetail Lake in the Teanaway Area of the Central Eastern Cascades, Washington.”
- Christopher Goodner, May 2014, poster presented at CWU SOURCE Symposium, “Vegetation Classification and Fire Activity in the Blue Mountains of Oregon.”
- Christopher Goodner, March 2014, poster presented at the Northwest Science Association annual conference, Missoula, MT; “Vegetation Classification as a Fire Predictor and Post-Glacial Fire History for the Blue Mountains of Oregon, USA.”
- Tami Cox, May 2013, poster presented at CWU SOURCE Symposium, “The Role of Fire in the Persistence of Montane Meadow Environments in the Willamette National Forest, OR.”
- Michael Lukens, April 2012, paper presented to the Northwest Science Association Meeting in Boise, ID; “The Role of Humans and Climatic Variations on the Fire and Vegetation History of Subalpine Meadows-Mt Rainier National Park (Washington).”
- Kevin Haydon, April 2012, poster presented to the Northwest Science Association Meeting in Boise, ID; “Past and Current Wildfire Trends in the Okanogan-Wenatchee National Forest: An Analysis using GIS and Paleoecological Methods.”
- Kevin Haydon, May 2012, poster presented at CWU SOURCE Symposium, “Past and Current Wildfire Trends in the Okanogan-Wenatchee National Forest: An Analysis using GIS and Paleoecological Methods.”
- Tami Cox, May 2012, poster presented at CWU SOURCE Symposium, “Fire and Vegetation History of Upland Meadows, Willamette National Forest, Oregon.”

UNDERGRADUATE STUDENT MENTORING

Individual Instruction and Research Mentoring-

- Haley Duke, Winter 2011-Winter 2012, GEOG 493: Geography Field Experience
- Garrett Scheuerman, Spring 2011, GEOG 493: Geography Field Experience
- Toni Christen, Spring 2011, GEOG 496: Individual Study, Forest Environments
- Mary Eidmann, Summer 2011, ENST 490: Cooperative Education Internship
- Helen Mockel, Fall 2011-Fall 2014, GEOG 493: Geography Field Experience
- Jeff Bortner, Spring 2012 and Fall 2012, GEOG 493: Geography Field Experience
- Lillian Luk, Fall 2012-Spring 2013, GEOG 493: Geography Field Experience
- April Burleson, Fall 2012 and Spring 2013, GEOG 493: Geography Field Experience

Christian Blanchard, Fall 2012-Spring 2013, GEOG 493: Geography Field Experience
Taylor Steele, Winter 2013, GEOG 493: Geography Field Experience
Serafina Ferri, Spring 2013, GEOG 493: Geography Field Experience
Tim Bauer, Spring 2013, GEOG 493: Geography Field Experience
Emilia Henrichs, Spring 2013, GEOG 493: Geography Field Experience
Savannah Bommarito, Spring 2013, GEOG 493: Geography Field Experience
Nick Noble, Summer 2013, GEOG 493: Geography Field Experience
Gaines Williams, Summer 2013-Spring 2014, GEOG 493: Geography Field Experience
Devin Dykes, Fall 2013-Spring 2014, ENST 495: Senior Research
James Lilly, Fall 2013, GEOG 493: Geography Field Experience
Kylie Ishimitsu, Fall 2013-Spring 2014, GEOG 493: Geography Field Experience
Grant Clifton, Winter 2014-Winter 2015, GEOG 493: Geography Field Experience
Michael Garcia, Spring 2014, GEOG 493: Geography Field Experience
Teo Bicchieri, Spring 2015, GEOG 493: Geography Field Experience
Forrest Beard, Winter 2016, GEOG 493: Geography Field Experience
Colin Bloom, Winter 2016, GEOG 493: Geography Field Experience
Megan Cline, Winter-Spring 2016, GEOG 493: Geography Field Experience
Sarah Janssen, Spring 2016, GEOG 493: Geography Field Experience
Noah Westbay, Spring 2016, GEOG 493: Geography Field Experience
Chris Clarke, Spring 2016, GEOG 493: Geography Field Experience
Zach Torrance-Smith, Summer 2016, GEOG 496: Individual Study
Kayla Johnston, Spring 2017, GEOG 493: Geography Field Experience
Nick Poprawski, Spring 2017, GEOG 493: Geography Field Experience
Sally Vlas, Summer 2017, GEOG 490: Cooperative Education
Nick Poprawski, Fall 2017, GEOG 493: Geography Field Experience
Kayla Gallentine, Winter 2018, GEOG 493: Geography Field Experience
Kayla Gallentine, Winter 2018, GEOG 496: Individual Study
Jesse Squibb, Spring 2018, GEOG 493: Geography Field Experience
John Hoggatt, Summer 2018, GEOG 490: Cooperative Education
Derek Thomson, Summer 2018, GEOG 490: Cooperative Education
Hannah Hobbs, Summer 2018, GEOG 496: Individual Study
Tonya Morrey, Spring 2019, GEOG 493: Geography Field Experience
Estan Vargas, Spring 2019, GEOG 493: Geography Field Experience
Tonya Morrey, Fall 2019, GEOG 493: Geography Field Experience
Jennifer Smith, Fall 2019, GEOG 493: Geography Field Experience
Caitlin Ihler, Fall 2019, GEOG 493: Geography Field Experience
Diana Ojeda, Winter 2020, ENST 495: Senior Research
MengYang Chen, Winter 2020, GEOG 493: Geography Field Experience
Estan Vargas, Winter 2020, GEOG 493: Geography Field Experience
Ned Hunt, Winter 2020, GEOG 493: Geography Field Experience
Diana Ojeda, Spring 2020, ENST 495: Senior Research
Jo-Ana Tumin-Roberts, Spring 2020, GEOG 493: Geography Field Experience
Rebecca Mitre, Fall 2020/Winter 2021/Spring 2021, GEOG 493: Geography Field Experience
Jason Day, Winter 2021, GEOG 493: Geography Field Experience
Sean Tanner, Winter 2021, GEOG 493: Geography Field Experience
Ruth Rachel Fenske, Winter 2022/Spring 2022, GEOG 493: Geography Field Experience

Vanessa Hysmith, Spring 2022, GEOG 493: Geography Field Experience
Tre Winchester, Spring 2022, GEOG 493: Geography Field Experience
Hayden Crossland, Fall 2022, ENST 490: Cooperative Education
Logan Brady, Fall 2022, ENST 495: Senior Research
Ruth Rachel Fenske, Fall 2022, ENST 495: Senior Research
LeeAnn Frank, Fall 2022, ENST 495: Senior Research
Hayden Crossland, Winter 2023, ENST 495: Senior Research
Ruth Rachel Fenske, Winter 2023, ENST 495: Senior Research
LeeAnn Frank, Winter 2023, ENST 495: Senior Research
Ben Johnson, Winter 2023, GEOG 493: Geography Field Experience

Other Undergraduate Student Mentoring-

Co-Authored CWU Undergraduate Research Presentations-

Rebecca Mitre, May 2021, poster presented at CWU SOURCE Symposium, “Reconstructing the Post-Glacial Fire History at Waterdog Lake, Oregon, using Charcoal Analysis of a Lake Sediment Core.”
Nick Poprawski, May 2017, poster presented at CWU SOURCE Symposium, “Reconstructing Wildfire History in the Blue Mountains, Oregon, Using Macroscopic Charcoal Analysis.”
Nick Poprawski, November 2017, poster presented at the Murdock College Science Research Conference, Spokane, WA, “Reconstructing Wildfire History in the Blue Mountains, Oregon, Using Macroscopic Charcoal Analysis.”
Grant Clifton, May 2015, poster presented at CWU SOURCE Symposium, “Holocene Fire History of the Area Surrounding Lemanasky Lake, Eastern Cascades, Washington.”
Grant Clifton, March 2015, poster presented at the Northwest Science Association annual conference, Pasco, WA, “Fire History Reconstruction of Lemanasky Lake, Eastern Cascades, Washington.”
Devin Dykes, May 2014, poster presented at CWU SOURCE Symposium, “Variability in Charcoal Deposition into Lake Basins within the Taylor Bridge Fire, Washington.”
Helen Mockel, May 2013, poster presented at the Association of Washington Geographers annual conference and at CWU SOURCE Symposium; “Analysis of Cascadian Forest Resilience Following Volcanic Ash Fall.”
Savannah Bommarito, May 2013, poster presented at CWU SOURCE Symposium, “Reconstructing the Fire History of the Last 6000 Years at Mount Rainier National Park.”
Lillian Luk, May 2013, poster presented at the Association of Washington Geographers Annual Conference and at SOURCE, “Fire History in the Eastern Cascades, Washington.”
Haley Duke, February 2012, poster presented at the Association of American Geographers Annual Conference, New York City, NY; “A Reconstruction of Fire History Using Macroscopic Charcoal Analysis: Pothole 3, Sinlahekin Wildlife Area, North Central Washington, USA.”
Haley Duke, May 2012, poster presented CWU SOURCE Symposium, “A Reconstruction of Fire History Using Macroscopic Charcoal Analysis: Fish Lake, Sinlahekin Wildlife Area, North Central Washington, USA.”

Undergraduate Student Grants and Awards-

Ruth Rachel Fenske, 2022-23, Provost Faculty-Student Research Grant, Central Washington University, \$3000

Rebecca Mitre, 2020-21, Provost Faculty-Student Research Grant, Central Washington University, \$3000

Nick Poprawski, 2017, COTS Undergraduate Research Grant, Central Washington University, \$498

Grant Clifton, 2015, COTS Undergraduate Research Grant, Central Washington University, \$500

Lillian Luk, 2013, COTS Undergraduate Research Grant, Central Washington University, \$500

Lillian Luk, 2013, Best Poster Presented by a Undergraduate Student, Association of Washington Geographers Annual Conference, Central Washington University

Other-

Nick Poprawski, Fall 2016-Fall 2017, STEP Program research mentee

NSF Research Experience for Undergraduates Mentoring-

June-July 2010: Rebecca Mitre (CWU) and Jo-Ana Tumin-Roberts (CWU)

June-August 2019: Darren Kim (Oregon State University), Kiara Anderson (Butte Community College), and Sam Nurmi (Willamette University)

June-August 2018: Sophie Johnson (Willamette University), Emily Deardorf (Western Washington University), and Luke Telfer (Boise State University)

June-August 2017: Keifer Nace (Whitman University) and Molly Burchfield (Whitman University)

Co-Authoring NSF Research Experience for Undergraduates Presentations-

Darren Kim (Oregon State University), poster presented at the Northwest Climate Conference, October 2019, "Testing Site Selection for Macroscopic Charcoal-Based Fire History Reconstruction: Lightning Lake, Eastern Cascades, Washington"

Kiara Anderson (Butte Community College), poster presented at the Northwest Climate Conference, October 2019, "Fire History Reconstruction of a Subalpine Forest, Eastern Cascades, Washington."

Sam Nurmi (Willamette University), poster presented at the Northwest Climate Conference, October 2019, "Macroscopic Charcoal as Evidence of Fire History in Mid-Elevation Mixed-Conifer Forests, Eastern Cascades, Washington."

Luke Telfer (Boise State University), poster presented at the Northwest Climate Conference, October 2018, "Assessing Method Repeatability for Charcoal-Based Lake Sediment Core Paleofire Reconstruction."

Sophie Johnson (Willamette University), Emily Deardorf (Western Washington University), and Luke Telfer (Boise State University), poster presented at the Northwest Climate Conference, October 2018, "Reconstructing Fire History in the Teanaway Community Forest, Washington."

Molly Burchfield (Whitman College), poster presented at the Northwest Climate Conference, October 2017, "Postglacial Fire History of Mount Rainier National Park: Reconstruction using Macroscopic Charcoal Analysis."

Keifer Nace (Whitman College) and Molly Burchfield, poster presented at CWU SOURCE Symposium, May 2018, "History of Two Landslide-Dammed Lakes in the Central Oregon Coast Range: Macroscopic Charcoal Analysis from Wasson and Klickitat Lakes, Oregon."

ACADEMIC SERVICE AND COMMUNITY OUTREACH

Chair, CWU Graduate Council, September 2022-present

Manuscript Reviewer, *Ethnobiology Letters*, November 2019
Manuscript Reviewer, *The Holocene*, January 2019
Natural Resource Management Certificate Steering Committee Member, Department of Geography, Fall 2018-Spring 2019
Sustainability Certificate Steering Committee Member, Environmental Studies Program, Winter 2018-Spring 2019
Field Trip Co-Organizer/Leader, Association of Washington Geographers annual conference hosted by CWU Geography Department, Ellensburg, WA, May 2019
Manuscript Reviewer, *Vegetation History*, October 2018 and February 2019
Manuscript Reviewer, *Quaternary Research*, August 2018
Environmental Studies Search Committee Member, Senior Secretary, Central Washington University, Summer 2018
Proposal Reviewer, National Science Foundation, February 2018
Exhibition Advisor, Museum of Culture and Environment, CWU, “Fire and Ice.”
Gamma Theta Upsilon (Geography Honor Society) Chapter Advisor, Winter 2011-present
Keynote Speaker, OUR Environment Climate Change March, Ellensburg, WA, March 2017
Manuscript Reviewer, *Journal of Biogeography*, April 2017
Guest Speaker, “A Paleo-Perspective on Climate Change,” Ellensburg High School, February 2012-2015 and 2017-2019
Manuscript Reviewer, *PLOS ONE*, January 2017
Manuscript Reviewer, *Journal of Geography*, 2013, 2015, 2016
Outside Reviewer, Tenure Review, UNC-Charlotte, August 2016
Session Co-Organizer, AAG Annual Meeting, San Francisco, CA, April 2016
Manuscript Reviewer, *Oregon Historical Quarterly*, July 2015
Manuscript Reviewer, *Global Planetary Change*, January, August and November 2015
Geography Department Scholarship Committee Chair, Central Washington University, Winter 2014-present
Environmental Studies Advisory Board Member, Central Washington University, Fall 2013-present
Veterans Advisory Board Member, Central Washington University, Spring 2013-present
Associate Editor of Paleocology, *Northwest Science Journal*, Spring 2013-present
Northwest Science Association Board Member, Spring 2014-Spring 2017
Expanding your Horizons Session Presenter, Central Washington University, May 2012-2015, 2019
SOURCE Judge and Mentor, Central Washington University, May 2012-2016, 2019
Manuscript Reviewer, *Journal of Geography*, 2013, 2015, 2016
AAG Student Paper/Poster Competition Judge, Paleoenvironmental Change Specialty Group, 2013-2016, 2018
Gamma Theta Upsilon (Geography Honor Society) Chapter Advisor, Winter 2011-present
Manuscript Reviewer, *The Holocene*, September 2014
Manuscript Reviewer, *Progress in Physical Geography*, October 2013 and May 2014
Compass 2 Campus Session Organizer/Presenter, Central Washington University, October 2014
Geography Department Curriculum Committee Member, Central Washington University, Fall 2013-2015
Field Trip Co-Organizer/Leader, Association of Washington Geographers annual conference hosted by CWU Geography Department, Ellensburg, WA, May 2013
Geography Department Search Committee Member, Department Chair, Central Washington University, Spring 2012

Session Co-Organizer, Association of American Geographers Annual Meeting, February 2012 and April 2016

Manuscript Reviewer, *Physical Geography*, 2011

Geography Club Faculty Advisor, Central Washington University, Fall 2011-2014

Geography Department Search Committee Member, Energy Geographer, Central Washington University, Fall 2011-Winter 2012

Geography Department Search Committee Member, Planning Geographer, Central Washington University, Fall 2010-Winter 2011

Geography Club Faculty Co-Advisor, Central Washington University, 2010-2011

COTS Promotional Caravan Participant, Central Washington University, December 2010

Manuscript Reviewer, *Climate of the Past*, 2010

Proposal Reviewer, National Science Foundation, 2009

Field Trip Leader, Geography Awareness Week, Department of Geography, University of Oregon, November 2008

Manuscript Reviewer, *Quaternary International*, 2008

Invited Workshop Speaker, "A Paleo-Perspective on Global Climate Change", Thurston Middle School, Springfield, OR, November 2007

Field Trip Leader, "The Ecological History of the Southern Willamette Valley", Association of Pacific Coast Geographers 69th Annual Meeting, Eugene, OR, September 2006.

Graduate Student Representative, Biogeography Faculty Search Committee, Department of Geography, University of Oregon, 2005-2006

Graduate Student Representative, College of Social and Behavioral Science Dean Search Committee, University of Utah, 2001

Field Trip Co-Organizer, Death Valley Field Seminar (led by Dr. Don Currey), University of Utah, March 2000

Graduate Student Representative, College of Social and Behavioral Science Judiciary Committee, University of Utah, 2000-2001

PROFESSIONAL MEMBERSHIPS

American Association of Geographers

Northwest Science Association

American Quaternary Association

Association of Pacific Coast Geographers