

# Adam Zoltan Csank, Ph.D.

Associate Professor & Chair  
Department of Geography  
University of Nevada, Reno

1664 N. Virginia St. MS 0154  
Reno, NV 89557 USA  
Tel: +1-907-887-4226  
Email: adam.csank@gmail.com  
<http://www.azcsank.com>

## Education

- 2011 Ph.D. *Geosciences* University of Arizona, Tucson, AZ USA  
Dissertation: “*Deciphering Arctic Climate in a Past Greenhouse World: Multi-Proxy Reconstructions of Pliocene Climate*” Advisor: S. Leavitt
- 2006 MSc. *Geological Sciences* University of Saskatchewan, Saskatoon, SK Canada  
Thesis: “*Pliocene climate change on Ellesmere Island, Canada: annual variability determined from stable isotopes of fossil wood*” Advisor: J. Basinger & W.P. Patterson
- 2003 BSc. *Earth Sciences* Dalhousie University, Halifax, NS Canada

## Academic Appointments

- 2022-Present *Chair* Department of Geography, University of Nevada, Reno
- 2022-Present *Associate Professor* Department of Geography, University of Nevada, Reno
- 2016-2022 *Assistant Professor* Department of Geography, University of Nevada, Reno
- 2014-2016 *Research fellow* Division of Hydrologic Sciences, Desert Research Institute
- 2012-2016 *Assistant Professor* Department of Geography, Nipissing University
- 2010-2012 *Postdoctoral Fellow* ENRI, University of Alaska-Anchorage
- 2010 *Lecturer* Laboratory of Tree-Ring Research, University of Arizona

## Professional Appointments

- 2018-2020 *National Geographic Geography Steward (Nevada)*

## Publications

\*denotes student author, †denotes postdoctoral advisee, ‡authors contributed equally

\*Harris, V.M. & Csank, A.Z. (2023) A new 500-year reconstruction of Truckee River streamflow. *Dendrochronologia*, 79, 126093.

‡Greer, K., ‡Csank, A.Z., Calvert, K., Maddison-MacFadyen, M., Smith, A., Monk, K., & Morrison, S. (2023). Understanding the historic legacies of empire from the timbers left behind: Towards critical dendroprovenancing in the British North Atlantic. *The Canadian Geographer / Le Géographe canadien*, 1– 15. <https://doi.org/10.1111/cag.12831>

Mensing, S., Wang, W., Rhode, D., Kennett, D.J., Csank, A.Z., Thomas, D.H., Briem, C., Harper, T.K., Culleton, B.J., George, R.J., Southon, J. (2023) Temporal and geographic extent of the late Holocene dry period in the central Great Basin, USA. *Quaternary Science Reviews*. 300, 107900. <https://doi.org/10.1016/j.quascirev.20>

- \*Manning, A., Harpold, A., Csank, A.Z. (2022) Spruce beetle outbreak increases streamflow from snow-dominated basins in southwest Colorado, USA. e2021WR029964.
- McAfee, S.A., Csank, A.Z., Lachniet, M., Mensing, S.A., Millar, C.I., Rhode, D.H., Thomas, D. (2022) Understanding Nevada's current drought in historical and paleoclimate context. *Journal of the Nevada Water Resources Association*, Winter 22, 10-52.
- Hardage, K., Wheelock, S.J., Gaffney, R., O'Halloran, T., Serpa, B., Grant, G., Coppoletta, M., Csank, A., Tague, C., Staudacher, M., Tyler, S. (2022) Soil moisture and micrometeorological differences across reference and thinned stands during extremes of precipitation, southern Cascade Range. *Frontiers in Forests and Global Change*. 28,
- Keen, R., Voelker, S., Wang, S.-Y., Bentz, B.J., Goulden, M., Dangerfield, C., Reed, C., Hood, S., Csank, A., Dawson, T.E., Merschel, A., Still, C. (2022) Changes in tree drought sensitivity provided early warning signals to the California drought and forest mortality event. *Global Change Biology*, 28, 1119-1132.
- Porter, T.J., Anhäuser, T., Halfar, J., Keppler, F., Csank, A.Z., Williams, C.J. (2022) Canadian Arctic Neogene temperatures from hydrogen isotopes of lignin-methoxy groups from sub-fossil wood. *Paleoceanography and Paleoclimatology*. e2021PA004345.
- Woodhouse, C.A., Smith, R.M., McAfee, S.A., Pederson, G.T., McCabe, G.J., Miller, W.P., Csank, A.Z. (2021) Upper Colorado River Basin 20th century droughts under 21st century warming: Plausible scenarios for the future. *Climate Services*, 21, 100206.
- \*Chellman, N., Csank, A.Z., Gustin, M.S., Arienzo, M.M., Estrada, M.V., McConnell, J.R. (2020) Comparison of co-located ice-core and tree-ring mercury records indicates potential radial translocation of mercury in whitebark pine. *Science of the Total Environment*, 743, 140695.
- McCabe, G.J., Wolock, D.M., Woodhouse, C.A., Pederson, G.T., McAfee, S.A., Gray, S. Csank, A.Z. (2020) Basinwide hydroclimatic drought in the Colorado River Basin. *Earth Interactions*, 24, 1-20.
- Schook, D.M., Friedman, J.M., Stricker, C.A., Csank, A.Z., Cooper, D.J. (2020) Short- and long-term responses of riparian cottonwoods (*Populus* spp.) to flow diversion: Analysis of tree-ring radial growth and stable carbon isotopes. *Science of the Total Environment*, 139523.
- Lavergne, A., Voelker, S., Csank, A., Graven, H., de Boer, H.J., Daux, V., Robertson, I., Dorado-Liñán, I., Martínez-Sancho, E., Battipaglia, G., Bloomfield, K.J., Still, C.J., Meinzer, F.C., Dawson, T.E., Camarero, J.J., Clisby, R., Fang, Y., Menzel, A., Keen, R.M., Roden, J.S., Prentice, I.C. (2020) Historical changes in the stomatal limitation of photosynthesis: empirical support for an optimality principle. *New Phytologist*, 225, 2484-2497.  
doi:10.1111/nph.16314

- Csank, A.Z., Czimeczik, C., Xu, X., Welker, J.M. (2019) Seasonal patterns of riverine carbon sources and export in NW Greenland. *JGR-Biogeosciences*, 124 (4), 840-856.
- Khider, D., Emile-Geay, J., McKay, N.P., Gil, Y., Garijo, D., Ratnakar, V., Alonso-Garcia, M., Bertrand, S., Bothe, O., Brewer, P., Bunn, A., Chevalier, M., Comas-Bru, L., Csank, A.Z., et al. (2019) PaCTS 1.0: A crowdsourced reporting standard for paleoclimate data. *Paleoceanography and Paleoclimatology*. <https://doi.org/10.1029/2019PA003632>
- Bice, D., Csank, A., Macalady, A., Montanari, A., Tierney, D., Baldanza, A. (2019) Paleoclimate implications of earliest Pleistocene tree rings from the Dunarobba Fossil Forest, Umbria, Italy. *250 Million Years of Earth History in Central Italy: Celebrating 25 Years of the Geological Observatory of Coldigioco, Geological Society of America Special Paper*. 542. <https://doi.org/10.1130/SPE542>
- †Fletcher, T.L., Csank, A.Z., Ballantyne, A.P. (2019) Identifying bias in cold season temperature reconstructions by beetle mutual climatic range methods in the Pliocene Canadian Arctic. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 514, 672-676.
- Friedman, J.M., Stricker, C.A., Csank, A.Z., Zhou, H. (2019) Effects of age and environment on stable carbon isotope ratios in tree rings of riparian *Populus*. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 524, 25-32.
- Nicklen, E.F., Roland, C.A., Csank, A.Z., Wilmking, M., Ruess, R.W., \*Muldoon, L.A. (2019) Competition and solar radiation amplify white spruce climate sensitivity in interior Alaska: evidence from carbon isotopes and tree rings. *Global Change Biology*. 25, 911-926.
- Luczaj, J., Leavitt, S., Csank, A.Z., Panyushkina, I., Wright, W. (2018) Comment on “Non-mineralized fossil wood” by George E. Mustoe (*Geosciences*, 2018). *Geosciences* 8 (12), 462.
- Greer, K., Hemsworth, K., Csank, A.Z., Calvert, K. (2018) Interdisciplinary research on past environments through the lens of historical-critical physical geographies. *Historical Geography* 46 (1), 32-47.
- Maddison-MacFadyen, M., Csank, A.Z. (2018) Mary Prince, enslavement, Cavendish, and historic timber. *Historical Geography* 46 (1), 79-102.
- \*Chellman, N., McConnell, J., Arienzo, M., Peterson, G.T., Aarons, S.M. and Csank, A.Z. (2017) Reassessment of the Upper Fremont Glacier ice-core chronologies by synchronizing of ice-core water isotopes with a nearby tree-ring chronology. *Environmental Science & Technology*. 51, 4230-4238.
- Gosse, J.C., Ballantyne, A.P., Barker, J.D., Csank, A.Z., †Fletcher, T.L., Grant, G.W., Greenwood, D.R., MacPhee, R.D.E., Rybczynski, N. (2017) PoLAR-FIT: Pliocene Landscapes and Arctic Remains- Frozen in Time. *Geoscience Canada*, 44, 47-54. [doi:10.12789/geocanj.2017.44.16](https://doi.org/10.12789/geocanj.2017.44.16)

- Sullivan, P.F. and Csank, A.Z. (2016) Contrasting sampling designs among archived datasets: implications for synthesis efforts. *Tree Physiology*, 36, 1057-1059.  
doi:10.1093/treephys/tpw067
- Csank, A.Z., Miller, A., Sherriff, R., Berg, E., Welker, J.W., (2016). Tree-ring isotopes reveal drought sensitivity in trees killed during south-central Alaska spruce beetle outbreaks. *Ecological Applications*. 26, 2001-2020.
- \*Brownlee, A., Sullivan, P.F., Csank, A.Z., Sveinbjornsson, B., Ellison, S.B.Z. (2016) Drought-induced stomatal closure probably cannot explain divergent white spruce growth in the Brooks Range, Alaska. *Ecology*. 97, 145-159
- Csank, A.Z., Fortier, D., Leavitt, S.W. (2013). Annually resolved temperature reconstructions from a late Pliocene-early Pleistocene polar forest on Bylot Island, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 369, 313-322.
- \*Sharp, E.D., Sullivan, P.F., Steltzer, H., Csank, A.Z., Welker, J.M. (2013). Complex carbon cycle responses to multi-level warming and supplemental summer rain in the high Arctic. *Global Change Biology*, 19 (6), 1780-1792.
- Wolfe, A.P., Csank, A.Z., McKellar, R.C., Muehlenbachs, K., Reyes, A.V., Tappert, R. (2012). Pristine early Eocene wood buried deeply in kimberlite from northern Canada. *PLoS ONE*, 7, e45537.
- Csank, A.Z., Tripathi, A., Patterson, W.P., Eagle, R. Rybczynski, N., Ballantyne, A.P. and Eiler, J. (2011). Estimates of Arctic land surface temperatures during the early Pliocene from two novel proxies. *Earth and Planetary Science Letters*, 304, 291-299.
- Hill, D.J., Csank, A.Z., Dolan, A.M., Lunt, D.J. (2011). Pliocene climate variability: Northern Annular Mode in models and tree-ring data. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 309, 118- 127.
- Csank, A.Z., Patterson, W.P., Eglington, B.M., Rybczynski, N., Basinger, J.F. (2011). Climate variability in the Early Pliocene Arctic: Annually resolved evidence from stable isotope values of sub-fossil wood, Ellesmere Island, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 308 (3-4), 339-349.
- Bale, R.J., Robertson, I., Leavitt, S.W., Loader, N.J., Harlan, T.P., Gagen, M., Young, G.H.F., Csank, A.Z., Froyd, C.A. and McCarroll, D. (2010) Temporal stability in bristlecone pine tree-ring  $\delta^{18}\text{O}$  chronologies over the last two centuries. *The Holocene*, 20, 3-6.
- Ballantyne, A.P., Greenwood, D.R., Sinnighe-Damsté, J.S., Csank, A.Z., Eberle, J.J. and Rybczynski, N. (2010). Significantly higher Arctic surface temperatures during the Pliocene indicated by multiple independent proxies. *Geology*, 38, 603-606.

Csank, A.Z., (2009). An international tree-ring isotope data bank-A proposed repository for tree-ring isotopic data. *Tree-Ring Research*, 65, 163-164.

Falcon-Lang, H.J., MacRae, R.A., Csank, A.Z. (2004). Palaeoecology of late Cretaceous polar vegetation preserved in the Hansen Point volcanics, NW Ellesmere Island, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 212 (1-2), 45-64.

### Conference Presentations (Last 5 years)

\*denotes student author, †denotes postdoctoral advisee

\*Manning, A., Csank, A.Z., Harpold, A.A. (2022) Assessing Feedbacks between Forest Structure, Snowpack, and Tree Drought Sensitivity in Sierra Nevada Forest Gaps. American Geophysical Union Fall Meeting 2022

\*Patterson, N.K., Solis, S.S., Lane, B., Dong, X., Csank, A.Z. (2022) Dendrochronology Reveals the Response of a Riparian Forest to Water Management Policies in an Arid Basin. American Geophysical Union Fall Meeting 2022.

Csank, A.Z., Rhode, D., Mensing, S. (2021) Climate variability in oxygen and carbon isotopes measured in sagebrush rings from central Nevada. American Association of Geographers Annual Meeting 2021.

\*Sadeghpour, M. & Csank, A.Z. (2021) Investigating the climate-growth relationships in red fir *Abies magnifica* in the Sierra Nevada using a multi-proxy approach. American Association of Geographers Annual Meeting 2021.

\*Manning, A., Harpold, A., Csank, A. Z. (2020) Ongoing spruce beetle outbreak in southwest Colorado increases water yields in snow-dominated catchments, American Geophysical Union Fall Meeting 2020.

\*Wade, L., Josifko, K., Matos, A., Hartsook, T., Parra, A., Hart, R., Ramirez, C., Csank, A. Z., Greenberg, J. (2020) Variability in terrestrial laser scanning (TLS) derived allometric equations for northern Sierra Nevada forests. American Geophysical Union Fall Meeting 2020.

Chellman, N., Csank, A. Z., Gustin, M. S., Arienzo, M., Estrada, M., McConnell, J. (2020) Comparison of co-located ice-core and tree-ring records of atmospheric mercury variability since 1800 CE from the Wind River Range, Wyoming. American Geophysical Union Fall Meeting 2020.

Porter, T., Anhauser, T., Csank, A. Z., Halfar, J., Keppler, F., Williams, C. (2020) Late Cenozoic paleotemperatures reconstructed from the lignin-methoxy hydrogen isotope composition of sub-fossil wood in the Canadian Arctic. American Geophysical Union Fall Meeting 2020.

- \*Schmidt-Simard, K., Wise, E., Csank, A. Z., McAfee, S. A., High-resolution dataset reveals complex relationship between storm tracks and oxygen isotopes in precipitation across the U.S. Pacific Northwest. American Geophysical Union Fall Meeting 2020.
- \*Tucker, C., Csank, A. Z., DeRose, J. (2020) Exploring Whitebark Pine Tree Mortality in the Greater Yellowstone Area using Tree-Ring Carbon isotopes. Tree-Ring Society Virtual symposium
- Csank, A. Z., Gosse, J., Fletcher, T. (2020) Past Futures: Reconstructing Fire History of the Pliocene Arctic. American Association of Geographers. Tree-Ring Society Virtual symposium.
- Fletcher, T., Csank, A. Z., Gosse, J., Rybcynski, N. (2020) Fire under ice: Evidence for extensive geographic and temporal range of wildfire in the Pliocene high Arctic. Geological Society of America 2020 Connects Online.
- Csank, A.Z., Fletcher, T., Gosse, J.C. (2019) It was always burning, fire scars from subfossil wood reveal fire return intervals in a mid-Pliocene Arctic forest. American Geophysical Union Fall Meeting 2019. San Francisco, CA.
- Csank, A.Z. (2019) The more things change... Some history of the use of tree-ring science by water resource managers in the western US. American Association of Geographers Annual Meeting 2019. Washington, D.C.
- Wise, E., McAfee, S.A., Csank, A.Z. (2019) Deriving additional precipitation information through the use of multiple tree-ring metrics. American Association of Geographers Annual Meeting 2019. Washington, D.C.
- \*Truettner, C., Biondi, F., Poulson, S., Ziaco, E., Csank, A. (2018) Intra-annual measurement of post drought response in *Pinus ponderosa* tree rings from the northwest edge of the North American Monsoon region. 8th Mountain Climate Conference (CIRMOUNT). Gothic, USA.
- Csank, A.Z. (2018) The more things change...An updated Truckee River streamflow reconstruction and some history of the use of tree-ring data in water resource management. 8th Mountain Climate Conference (CIRMOUNT). Gothic, USA.
- Csank, A.Z. (2018) Exploring the utility of tree-ring isotopes to improve our understanding of hydroclimate in the western US. American Association of Geographers Annual Meeting 2018. New Orleans, USA.
- \*Sadeghpour, M., Monk, K., Csank, A. (2018) Shipwreck timbers as boundary objects: a case study in critical dendroprovenancing. American Association of Geographers Annual Meeting 2018. New Orleans, USA.

## Invited Presentations

Csank, A.Z., (2018). Days of future past: What can Pliocene polar forest deposits tell us about past climate and what can they tell us about the future of the Arctic. University of Toronto, Mississauga.

Csank, A.Z., (2017). Reading the rings: Reconstructing the climate of the Pliocene Arctic using mummified wood. Dalhousie University, Halifax, Canada

Csank, A.Z. (2017) Linking Environmental and Watershed Histories with Western Development in the Truckee-Tahoe Basin. Challenging Canada 150: Decolonializing Environmental Histories workshop, North Bay, Ontario, Canada.

## Active Funding

2022-2025. *Collaborative Research: Investigating tree rings as archives for atmospheric Hg concentrations using Hg, carbon isotopes, and comparisons to other proxies*. PI: A. Csank (Nevada); Co-PIs: M. Gustin (Nevada); P. Weisberg (Nevada); M. Arienzo (DRI). NSF-Geo. (\$757,272 UNR portion)

2021-2024. *Collaborative Research: High-resolution reconstruction of last millennium North American Arctic temperatures using quantitative wood anatomy*. PI: K. Anchukaitis (Arizona); Co-PIs A. Csank (Nevada), S. McAfee (Nevada). NSF-P2C2. \$571,404 (\$99,707 UNR portion)

2021-2024. *Quantifying the historical impacts of natural events on lake conditions, hydrologic input, and fire history to assist in Summit watershed and lake management*. PIs: A. Csank (Nevada), R. Youmans (Summit Lake Paiute) Co-PIs: P. Noble (Nevada), S. Poulson (Nevada), E. Ziaco (Nevada), S. Chandra (Nevada). National Fish and Wildlife Foundation (NFWF). \$148,797.

2019-2022. *Reassembling Ontario's "Near North": Reparation through university-museum-Indigenous research partnerships*. PI: K. Greer (Nipissing); Co-PI: K. Hemsworth (Nipissing), C. Peltier (Nipissing), N. Basiliko (Laurentian); Collaborator: A. Csank (Nevada), A. Couchie (Nipissing FN), J. Kovacs (Nipissing), K. Srigley (Nipissing), L. Cameron (Queen's); M. Rogalsky (Queen's), S. Naylor (Glasgow), W. Geniusz (Wisconsin-Eau Claire). Social Sciences and Humanities Research Council of Canada (SSHRCC) Partnership Development Grant, \$189,920.

2019-2023. *Combining historic and ecological archives to understand past environmental change*. PI: S. Mensing (Nevada), Co-PIs A. Csank (Nevada), E. Schoolman (Nevada). NSF-GSS, \$396,955.

## Completed Funding

2016-2021. *Magnitude, extent and impact of a pre-historical multi-century drought in the western US*. PI: S. Mensing (Nevada), Co-PIs A. Csank (Nevada), D. Kennett (Penn. State), D. Rhode (DRI). NSF-GSS, \$350,000.

2018-2019. *Seeing the forest through the soil: Do soil chemical and physical characteristics explain variance in the response of Pinus ponderosa growth to climate?* PI: B. Johnson (Washington), Co-PIs: A. Csank (Nevada), B. Sullivan (Nevada). Sponsored by McIntyre-Stennis Program (USDA) \$50,837.

2016-2019. *Anticipating Future Impacts on Streamflow using Multi-Century Climate Records and Applied Hydrologic Models*. PI: C. Woodhouse (Arizona), Co-PIs A. Csank (Nevada), S. McAfee (Nevada), G. Pederson (USGS), G. McCabe (USGS), S. Gray (USGS). USGS Southwest Climate Adaptation Science Center, \$135,000

2017. *Paleoclimate Arctic Research Program*. PI: J. Gosse (Dalhousie), Co-PI: A. Csank (Nevada). Polar Continental Shelf Program, in-kind logistical support worth \$152,000.

2013-2017. *Detection of long-term variability in storm tracks using seasonally resolved tree-ring isotope records: Implications for hydroclimatic change in the U.S. Pacific Northwest* PI: E.K. Wise (North Carolina), Co-PIs A. Csank (Nevada), S McAfee (Nevada). NSF Paleo Perspectives on Climate Change. \$639,946

2013-2017. *Climate sensitivity in white spruce as indicated by  $\delta^{13}C$  and  $\delta^{18}O$  in tree rings, Southwest Alaska Network*. PI: R. Sherriff (Humboldt State), Co-PI: A. Csank (Nevada). NPS CESU. \$69,848.

2014-2016. *Disentangling the influence of antecedent temperature and soil moisture on Colorado River Water Resources*. PI: C Woodhouse, (Arizona), Co-PI: A. Csank (Nevada), G. Pederson (USGS), Partners: S. McAfee (Nevada), G. McCabe (USGS), S. Gray (USGS-Alaska Climate Science Center). USGS Southwest Climate Science Center. \$135,248

2014-2016. *Empire, trees, and climate in the North Atlantic: towards critical dendro-provenancing*. PIs: K. Greer (Nipissing), A. Csank (Nipissing), Co-PIs: K. Calvert (Guelph), M. Maddison-Macfadyn (Memorial). Social Sciences and Humanities Research Council of Canada Insight Development Grant. \$75,000.

2014-2016. *Pliocene tree-ring width and isotopic composition: deciphering Arctic climate variability in a past greenhouse world*. PI: A. Csank (Nipissing). Natural Sciences and Engineering Research Council of Canada, Discovery Grant. \$140,000.

2013-2016. *Establishing a stable isotope mass spectrometry facility for environmental research in Northern Ontario*. PI: A. Csank (Nipissing). Canadian Foundation for Innovation, John R. Evans Leaders Fund. \$327,152.



2011-2014. *Reconstructing winter temperatures in the Rockies using tree-ring oxygen isotopes*.  
PI: C. Woodhouse (Arizona), Co-PIs: A. Csank (Alaska-Anchorage), S. Leavitt (Arizona). NSF  
Paleo Perspectives on Climate Change. \$239,050.

### Teaching

#### **University of Nevada-Reno**

Physical Geography of Earth's Environments (GEOG 103); Understanding Climate (GEOG 321)  
Earth Resources and the Environment (GEOG/GEOL 335); Geography of Past Environments  
(GEOG 437/637); Conservation of Natural Resources (GEOG 435/635); Geography Colloquium  
(GEOG 490/690); Graduate Seminar in Paleoclimatology (GEOG 701); Graduate Seminar in  
Dendrochronology (GEOG 793)

#### **Nipissing University**

Introduction to Physical Geography; Climatology; Earth Resources

#### **University of Arizona**

Introduction to Global Change

### Student/Postdoctoral Advisee's

#### *Postdoctoral Fellow*

2023-Present Dr. Heather Haines  
2018 Dr. Tamara Fletcher

#### *Graduate Students*

2023-Present	Mehvish Majeed	Ph.D., Geography
2023-Present	Melissa Schwan	MS, EECB
2022-Present	Manuel Rodriguez Carracedo	MS, EECB
2019-2023	Aidan Manning	Ph.D., Hydrologic Sciences
2019-2021	Victoria Harris	MS, Geography
2016-2021	Mahsa Sadegehpour	Ph.D., Geography
2016-2020 (Co-Advisor)	Charles Truettner	Ph.D., EECB
2017-2019	Jehren Boehm	MS, Geography
2015-2018	Laurel Muldoon	MESc, Environmental Sciences
2013-2015	Zach Rawluk	MESc, Environmental Sciences

#### *External examiner*

2018 Elisabeth Thompson D.Phil., Archeological Sciences  
(Oxford)

### Professional Service

2023-Present	Chair, AAG Paleoenvironmental Change Specialty Group
2023-Present	Member, AAG JEDI Committee
2021-Present	Treasurer, Tree-Ring Society
2021-Present	Editorial Board for Global and Planetary Change
2020-Present	Academic Editor for PLOS One
2022-2023	Editor Special Issue of Frontiers in Forests and Global Change
2018-2019	Editor Special Issue of Historical Geography

2018,2019,2022      Group leader for the North American Dendroecological Field week  
2023                      Co-organizer & instructor North American Dendroecological Field week

*Manuscript reviewer for:*

New Phytologist (2021; 2022, 2023), Tree Ring Research (2021) Geophysical Research Letters (2019, 2020), Water Resources Research (2020), Trees (2020, 2023), Arctic, Antarctic and Alpine Research (2020), Global Change Biology (2016, 2017, 2018, 2019, 2021), Journal of Biogeography (2018), Nature Scientific Reports (2018), Palaeogeography, Palaeoecology, Palaeoclimatology (2018, 2019; 2022), Chemical Geology (2017, 2020, 2022), Journal of Climate (2017), Paleoceanography and Paleoclimatology (2017, 2019, 2021, 2023), Journal of Hydrology (2017, 2020), The Holocene (2016), Dendrochronologia (2016, 2017), Climate Dynamics (2016), Quaternary Research (2019), PLoS One (2019)

*External grant reviewer for:* NSF (2017, 2018, 2020, 2021,2023), NSERC (2015, 2017, 2020), DOE (2015), Swiss NSF (2021)

*Grant review panel service:* NSF review panel (2017, 2024)

University Service

*Department of Geography*

2022-Present	Department Chair
2017-2018	Personnel Committee
2017-2023	Internship Coordinator
2020-2022	Undergraduate advisor (BS)
2021-2022	Space Committee

*University of Nevada-Reno*

2018-2022	Bylaws and Codes Committee
2018-2021	Early Career Faculty Committee
2019-2020	Graduate Admissions committee, Graduate Program in Hydrologic Sciences

Selected Outreach and Engagement Activities

*Public lectures*

Developed and taught a module on Dendrochronology to 4<sup>th</sup> & 5<sup>th</sup> graders as part of the Alaska Outdoor School (2023).

Public lectures on tree rings and climate at the Galena Creek Visitor Center (2015, 2016, 2017, 2018)

Public lecture on tree rings and climate given to the Reno Rotary Club (2023)

Presentation on Dendrochronology to Davidson Academy High School in Yakima, WA (2016)

Presentation on Dendrochronology to Osborn Elementary School in Leavenworth, WA (2015, 2016)

Magazine & Newspaper interviews

Quoted in: Sumner, T. “*Petrified tree rings tell tale of sun’s behavior*” sciencenews.org (Jan. 17, 2017) and Augliere, B. “*Fossil forest recorded ancient sunspots*” Earth Magazine (May 5, 2017)

### Web-based public engagement

Greer, K., Prescott, M., Csank, A., Calvert, K., Hemsworth, K., Maddison-MacFadyen, M., Smith, A., Monk, K., Muldoon, L., Morrison, S., Mock, C. (June 2020). Empire, Trees, Climate 1.0: Toward Critical Dendroprovenancing Using HGIS. North Bay: Center for Understanding Semi-Peripheries (CUSP), Nipissing University.

<https://cusp.maps.arcgis.com/apps/MapSeries/index.html?appid=ebafdebd1c5a4c95a24a4ef8bbe34084>

### Honors & Awards

IPY 2012 conference early career researcher 2<sup>nd</sup> place award for best poster presentation (2012)

Galileo Circle Scholarship, University of Arizona (2008)

### Languages

English (native), French (proficient)