

# CURRICULUM VITAE

JULIE EDWARDS

- CONTACT University of Arizona  
School of Geography, Development, and Environment  
email: [julieedwards@arizona.edu](mailto:julieedwards@arizona.edu)  
internet: <https://julieedwardspaleo.github.io>
- EDUCATION UNIVERSITY OF ARIZONA Tucson, AZ  
**2024 (anticipated)** Ph.D., Geography  
Primary Advisor: Dr. Kevin Anchukaitis  
Dissertation: *High-resolution temperature reconstruction from the North American treeline using quantitative wood anatomy*  
**2020** M.A., Geography  
Thesis: *The enigmatic northwestern North America climate response to the 1783 Laki eruption*  
UNIVERSITY OF CALIFORNIA, LOS ANGELES Los Angeles, CA  
**2015** B.A., Geography/Environmental Studies  
Minor: GIS&T, and Art History  
Henry Samueli School of Engineering and Applied Science Dean's Honor List
- RESEARCH INTERESTS  
Paleoclimate, high-latitude climate change, climate modeling, and climate extremes
- PUBLICATIONS **Edwards, J.**, Anchukaitis, K. J., Gunnarson, B. E., Pearson, C., Seftigen, K., von Arx, G., & Linderholm, H. W. The origin of tree-ring reconstructed summer cooling in northern Europe during the 18th century eruption of Laki. *Paleoceanography and Paleoclimatology*, 37, e2021PA004386. doi: [10.1029/2021PA004386](https://doi.org/10.1029/2021PA004386), 2022.  
**Edwards, J.**, Anchukaitis, K. J., Zambri, B., Andreu-Hayles, L., Oelkers, R., D'Arrigo, R., & von Arx, G. Intra-annual climate anomalies in northwestern North America following the 1783-1784 CE Laki eruption. *Journal of Geophysical Research: Atmospheres*, 125, 2020JD033544. doi: [10.1029/2020JD033544](https://doi.org/10.1029/2020JD033544), 2021.  
Meko D., Panyushkina, I., Agafonov, L., **Edwards, J.**, Impact of high flows of an Arctic river on ring widths of floodplain trees, *The Holocene*, 2020;30(6):789-798. doi:[10.1177/0959683620902217](https://doi.org/10.1177/0959683620902217), 2020.
- RESEARCH UNIVERSITY OF ARIZONA Tucson, AZ  
**2018** – Graduate Research Assistant  
School of Geography and Development, Laboratory of Tree-Ring Research  
Advisor: Dr. Kevin Anchukaitis  
High-resolution climate reconstructions of the last millennium and the effect of high latitude volcanic eruptions on climate and tree growth.  
**2021** – Graduate Research Assistant  
School of Geography and Development, Laboratory of Tree-Ring Research  
Principal Investigator: Dr. Connie Woodhouse  
Climate signals in the quantitative wood anatomy of Rocky Mountain bristlecone pine  
**2018 – 2019** Graduate Research Assistant  
Laboratory of Tree-Ring Research  
Principal Investigator: Dr. Dave Meko  
Quantitative and qualitative wood anatomical data as hydroclimate proxies in California and Russia

UNIVERSITY OF CALIFORNIA, LOS ANGELES  
2017 – 2018 Research Assistant  
Department of Geography  
Principal Investigator: Dr. Kyle Cavanaugh  
Classified health of shallow coral reef ecosystems from underwater photography. Los Angeles, CA

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE  
2017 – 2018 Research Assistant  
Department of Geological Sciences  
Principal Investigator: Dr. Jennifer Cotton  
Spatially modeled isotopic composition of small mammal species to track landscape changes over time. Los Angeles, CA

#### PROFESSIONAL EXPERIENCE

INTERNATIONAL MEDICAL CORPS  
2016 – 2017 GIS Technician  
Created maps related to emergency medical relief logistics and international program operations. Los Angeles, CA

#### TEACHING

UNIVERSITY OF ARIZONA  
Laboratory of Tree-Ring Research  
**Teaching Assistant**  
ANTH 204 *Cultures, Catastrophe and Climate* (Fall 2020)  
Tucson, AZ  
School of Geography and Development  
**Teaching Assistant, Guest Lecturer**  
GEOG 170A1 *Introduction to Physical Geography* (Fall 2018, Spring 2019, Fall 2019, Spring 2020)

#### MENTORING

Francisca Molina, B.A., Environmental Studies and Law (2023–)  
Ana Isabel González Mendez, M.A., Geography, University of Arizona (2022–)  
Ellie Neifeld, M.S., Geosciences, University of Arizona (2022–2023)  
Zanubia Sethuraju, B.A. Environmental Studies, University of Arizona (2021-2022)

#### TALKS

**Edwards, J.,** Tintor, W., Nolin, A.F., Anchukaitis, K. J., Woodhouse, C., & von Arx, G. Climate signals in wood anatomy of Rocky Mountain bristlecone pine: unraveling temperature stability and multiple climate influences. Birmensdorfer Tree-Ring Lecture, 2023  
**Edwards, J.,** Anchukaitis, K. J., McAfee, S., Csank, A., Andreu-Hayles, L., D'Arrigo, R., & von Arx, G. Records of past temperatures in wood anatomy of high-latitude trees. Tree Rings in Archaeology, Climatology and Ecology meeting, 2023.  
**Edwards, J.,** Tintor, W., Anchukaitis, K. J., Woodhouse, C., & von Arx, G. Temperature signal stability in wood anatomical measurements of Rocky Mountain bristlecone pine. Laboratory of Tree-Ring Research Tree Ring Day, 2023  
**Edwards, J.,** Anchukaitis, K. J., McAfee, S., Csank, A., Andreu-Hayles, L., D'Arrigo, R., & von Arx, G. Records of past temperatures in wood anatomy of high-latitude trees. American Association of Geographers meeting, 2023.  
**Edwards, J.,** Anchukaitis, K. J., Gunnarson, B. E., Pearson, C., Seftigen, K., von Arx, G., & Linderholm, H. W. The origin of tree-ring reconstructed summer cooling in northern Europe during the 18th century eruption of Laki. Laboratory of Tree-Ring Research Tree Ring Day, 2022.  
**Edwards, J.,** Tintor, W., Anchukaitis, K. J., Woodhouse, C., & von Arx, G. Multiple climate signals in quantitative wood anatomical measurements of Rocky Mountain bristlecone pine. American Association of Geographers meeting, 2022.

**Edwards, J.**, Anchukaitis, K. J., Gunnarson, B. E., Pearson, C., Seftigen, K., von Arx, G., & Linderholm, H. W. The origin of tree-ring reconstructed summer cooling in northern Europe during the 18th century eruption of Laki. American Geophysical Union meeting, 2021. \*\* *Outstanding Student Presentation Award*

**Edwards, J.**, Anderson, T., Rochner, M. Dendrogeomorphology of an Avalanche Chute, Rock Creek Valley, Montana, North American Dendroecological Fieldweek, 2021

**Edwards, J.**, Quantitative wood anatomy: using tree-ring cell measurements to understand climate response to volcanic eruptions, Dendrochronology Intensive Summer Course, 2021

**Edwards, J.**, Anchukaitis, K. J., Andreu-Hayles, L., Oelkers, R., D'Arrigo, R., von Arx, G., Zambri, B., Linderholm, H. W., & Gunnarson, B. E. The enigmatic climate response to the 1783-1784 CE Laki eruption, American Association of Geographers meeting, 2021

#### POSTERS

**Edwards, J.**, Anderson, T., Rochner, M. Avalanche and landslide event history of an avalanche chute, Rock Creek Valley, Montana using Dendrogeomorphology. University of Arizona EarthWeek, 2022

**Edwards, J.**, Anderson, T., Rochner, M. Avalanche and landslide event history of an avalanche chute, Rock Creek Valley, Montana using Dendrogeomorphology. Geological Society of America Cordilleran and Rocky Mountain Joint Section Meeting, 2022

**Edwards, J.**, Anchukaitis, K. J., Andreu-Hayles, L., Oelkers, R., D'Arrigo, R., von Arx, G., Zambri, B. The impact of the 1783 Laki eruption on North American climate using quantitative wood anatomy of Alaskan white spruce, Women in Science and Engineering Excellence Banquet, 2020, Tucson, AZ.

**Edwards, J.**, Anchukaitis, K. J., Andreu-Hayles, L., Oelkers, R., D'Arrigo, R., von Arx, G., Zambri, B. The impact of the 1783 Laki eruption on North American climate using quantitative wood anatomy of Alaskan white spruce, American Geophysical Union fall meeting, 2019, San Francisco, CA.

#### AWARDS & FELLOWSHIPS

P.E.O. Scholar Award, 2023

Raphael and Jolene Gruener Research Travel Award, 2023

Andrew Ellicott Douglass Memorial Scholarship, 2023

ThinkSwiss Research Scholarship, 2023

University of Arizona Galileo Circle Scholar, 2022

AAG Biogeography, Climate, and Paleoenvironmental Change Specialty Groups Student Awards, 2022

North American Dendroecological Fieldweek Graduate Fellow, 2021

Association for Tree-Ring Research Masters Thesis Award, 2021

Carson Scholars Program Fellowship, 2021

Laboratory of Tree-Ring Research Thomas P. Harlan Award, 2021

Alsie French & Edmund Schulman Memorial Scholarship, 2020

University of Arizona College of Science Scholarship Award, 2019, 2023

#### GRANTS

SBSRI Dissertation Research Grant, 2023

Geological Society of America Graduate Student Research Grant, 2021

University of Arizona CSW Mini Grant (on behalf of the Southern Arizona chapter of AWG), 2021

American Association of Geographers Climate Specialty Group Student Grant, 2020

E-an Zen Fund Geoscience Outreach Grant (on behalf of the Southern Arizona chapter of AWG), 2020

University of Arizona Graduate & Professional Student Council Travel Grant, 2019 2020, & 2021

University of Arizona Women in STEM Student Council Travel Grant, 2019

SERVICE            Session co-organizer for American Association of Geographers 2022 & 2023 meeting  
Reviewer for *Climate of the Past*, and *Paleoceanography and Paleoclimatology*, and *You Are Here: The Journal of Creative Geography*  
Graduate Student Representative for the Laboratory of Tree-Ring Research  
Southern Arizona chapter of AWG (Association for Women Geoscientists) fundraising chair

OUTREACH           Carson Alumni Liverman Scholars Mentor  
Laboratory of Tree-Ring Research tour assistant  
GALS (Girls on outdoor Adventures for Leadership and Science) mentor  
WISE (Women in Science and Engineering) panel organizer

PRESS                "Study of wood cells helps bring past climates to life" PNAS Front Matter, July 14, 2022  
"How Hot Was the Summer of 1783 Really? Trees Tell Tales" Eos, April 20, 2022  
"Iceland and Alaska entangled: Ph.D. student combats uncertainties regarding the 1783 Laki volcanic eruption" Daily Wildcat, February 28, 2021  
"Alaska white spruce tell a tale of a cold summer" Fairbanks Daily News-Miner, January 19, 2020  
"Das Klima-Gedächtnis" Natur, December 2019 (in German)

TRAINING            University of California, Irvine Keck Carbon Cycle Accelerator Mass Spectrometer Facility, March 2023  
Paleoclimate Data Assimilation Workshop, October 2022  
North American Dendroecological Fieldweek, July 2021  
LinkedEarth PaleoHack Workshop, February 2021  
Network on Quantitative Wood Anatomy Virtual Workshop, November 2020  
NCAR Community Earth System Model Tutorial, Boulder, CO, August 2019  
6th International Training School in Quantitative Wood Anatomy, San Vito di Cadore, Italy, June 2019

TECHNICAL SKILLS

MATLAB, R, Python, JavaScript, FORTRAN  
ArcGIS, QGIS, Leaflet, ENVI  
Adobe Creative Suite, Agisoft Photoscan, ROXAS

PROFESSIONAL AFFILIATIONS

**Member** of *American Geophysical Union* and *American Geographical Society* and *Tree Ring Society* and *AAAS* and *American Association of Geographers* and *Geological Society of America* and *Association for Women Geoscientists*