CURRICULUM VITAE

JULIE EDWARDS

CONTACT

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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

Peer-Reviewed Papers

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, 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, 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, 2020.

RESEARCH EXPERIENCE

UNIVERSITY OF ARIZONA — Tucson, AZ

2018 – Graduate Research Assistant
School of Geography and Development, Laboratory of Tree-Ring Research
Advisor: Dr. Kevin Anchukaitis
My current research addresses 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
Measuring wood anatomical features to model Sierra Nevada snowpack.
Identifying flood rings in riparian trees from along the Ob River to improve streamflow reconstructions.

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

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE — Los Angeles, CA
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.

PROFESSIONAL EXPERIENCE

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

TEACHING

UNIVERSITY OF ARIZONA — Tucson, AZ
Laboratory of Tree-Ring Research
Teaching Assistant
ANTH 204 *Cultures, Catastrophe and Climate* (Fall 2020)

School of Geography and Development
Teaching Assistant, **Guest Lecturer**
GEOG 170A1 *Introduction to Physical Geography* (Fall 2018, Spring 2019, Fall 2019, Spring 2020)

TALKS

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. ** *Invited Talk*

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 ** *Invited Talk*

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.

Meko, D., Morino, K., Shamir, E., **Edwards, J.**, Touchan, R., Campbell, R. Snowpack Signal in Cell Anatomy of Sierra Nevada Tree Rings, American Geophysical Union fall meeting, 2019, San Francisco, CA.

Meko, D., Agafonov, L., Panyushkina, I., **Edwards, J.** Ob River Flood History From Tree Rings, American Geophysical Union fall meeting, 2018, Washington D.C.

AWARDS & FELLOWSHIPS

University of Arizona Galileo Circle Scholar, 2022

AAG Biogeography Specialty Group Student Presentation Competition Award, 2022

AAG Climate Specialty Group Student Paper Competition Award, 2022

AAG Paleoenvironmental Change Specialty Group Student Paper Competition Award, 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, Laboratory of Tree-Ring Research Scholarship Award, 2019

GRANTS

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 meeting

Reviewer for *Climate of the Past* and *Paleoceanography and Paleoclimatology*

Graduate Student Representative for the Laboratory of Tree-Ring Research

Reviewer for *You Are Here: The Journal of Creative Geography*

Southern Arizona chapter of AWG (Association for Women Geoscientists) fundraising chair

University of Arizona Women in STEM Student Council Travel Grant reviewer

School of Earth and Environmental Sciences EathWeek organizer

Southern Arizona Geographers Association committee member

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

La Brea Tar Pits & Museum Project 23 excavator (2017–2018)

PRESS

"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

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
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*