# **CURRICULUM VITAE**

# JULIE EDWARDS

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EDUCATION UNIVERSITY OF ARIZONA

Tucson, AZ

**2024** (*anticipated*) Ph.D., Geography Primary Advisor: Dr. Kevin Anchukaitis

2020 M.A., Geography

Thesis: The enigmatic northwestern North America climate response to the 1783 Laki eruption

UNIVERSITY OF CALIFORNIA, LOS ANGELES **2015** B.A., Geography/Environmental Studies

Los Angeles, CA

Minor: GIS&T, and Art History

Henry Samueli School of Engineering and Applied Science Dean's Honor List

#### RESEARCH INTERESTS

Paleoclimate, high-latitude ecosystem vulnerability, climate modeling, and climate extremes

# PUBLICATIONS Peer-Reviewed Papers

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., I. Panyushkina, L. Agafonov, **J. Edwards**, 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.**, T. Anderson, M. Rochner, 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.**, K. Anchukaitis, L. Andreu-Hayles, R. Oelkers, R. D'Arrigo, G. von Arx, B. Zambri, H. Linderholm, B. Gunnarson, The enigmatic climate response to the 1783-1784 CE Laki eruption, American Association of Geographers meeting, 2021

**POSTERS** 

- **Edwards J.**, K. Anchukaitis, L. Andreu-Hayles, R. Oelkers, R. D'Arrigo, G. von Arx, B. Zambri, 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.**, K. Anchukaitis, L. Andreu-Hayles, R. Oelkers, R. D'Arrigo, G. von Arx, B. Zambri, 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., K. Morino, E. Shamir, **J. Edwards**, R. Touchan, R. Campbell, Snowpack Signal in Cell Anatomy of Sierra Nevada Tree Rings, American Geophysical Union fall meeting, 2019, San Francisco, CA.
- Meko D., L. Agafonov, I. Panyushkina, **J. Edwards**, Ob River Flood History From Tree Rings, American Geophysical Union fall meeting, 2018, Washington D.C.

## **AWARDS & FELLOWSHIPS**

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

University of Arizona Graduate College Fellowship, 2018 & 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

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

SERVICE 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 GALS (Girls on outdoor Adventures for Leadership and Science) mentor

WISE (Women in Science and Engineering) panel organizer

National Geographic GeoChallenge Appraiser (2019)

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

PRESS "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