

Caroline Beckman

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School for Environment and Sustainability

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RESEARCH INTERESTS

Human response to environmental hazards, wildfire, community-based research, climate vulnerability, climate adaptation, air quality

EDUCATION

University of Michigan

School for Environment and Sustainability, *PhD Candidate*; GPA 4.0/4.0
Diversity, Equity, & Inclusion Certificate, 2024
Community Engaged Course Design Certificate, 2025

Ann Arbor, MI

2023-2028

Stanford University

Earth Systems Program, *Bachelor of Science with Honors*; GPA 4.156/4.0
Phi Beta Kappa, 2020

Stanford, CA

2017-2021

PUBLICATIONS

Beckman, C., Lovelace, I. M., Santana, F., Czerwinski, M., Bell, S.A., Fischer, A. P. (2026). A systematic review of human behavioral response to wildfire smoke. *Environmental Research Letters*, 21(1), 013001.

Herbert, N., **Beckman, C.**, Vera, K., Coles, E., Kim, T., Cho, S., & Wong-Parodi, G. (2025). Bridging incremental to transformative hazard management strategies on the Tule River Indian Reservation. *Environmental Research: Health*, 3(1), 011002.

Beckman, C., Wheaton, M., Sawe, N., & Ardoin, N. M. (2023). Incorporating justice, equity, and access priorities into land trusts' conservation efforts. *Biological Conservation*, 279, 109926.

Herbert, N., **Beckman, C.**, Cannedy, C., Cao, J., Cho, S. H., Fischer, S. L., Huang, S., Kramer, S.J., Lopez, O., Lopez, S.S., Ouyang, D., Suckale, J., Wulf-Saena, V., Zhang, Z., & Wong-Parodi, G. (2023). Improving adaptation to wildfire smoke and extreme heat in frontline communities: Evidence from a community-engaged pilot study in the San Francisco Bay Area. *Environmental Research Letters*, 18(7), 074026.

Submitted

Wong-Parodi, G., Herbert, N., Ng, M., Avendano, A., **Beckman, C.**, Cannedy, C., Chong, S., Fischer, S., Huang, S.M., McConnell, K., Ouyang, D., Suckale, J., Wolf, C., Wulf-Saena, V. (submitted to *Journal of Environmental Psychology*) How housing quality and home experience relates to climate change views.

HONORS & AWARDS

External (National)

National Science Foundation (NSF) Graduate Research Fellowship, Honorable Mention 2025

University of Michigan (Ann Arbor, MI)

Rosina M. Bierbaum Award in Climate Adaptation and Mitigation 2024, 2025

- Awarded for innovative graduate research

Ayers-Brinsler Award for Doctoral Excellence in Natural Resource Policy and Management 2024

Stanford University (Stanford, CA)

Phi Beta Kappa (elected as Junior) 2020

Miller-Marsden Prize for Innovative Research on the Environment 2021

Dean's Award for Outstanding Undergraduate Academic Achievement 2021

Award for Outstanding Service to the Earth Systems Program 2021

GRANTS

Catalyst Grant, University of Michigan, \$15,000. 2025

“Translating Extreme Wildfire Smoke Findings for Community Protection”

Graduate Student Research Grant, University of Michigan. \$1,500. 2024

Rackham Public Scholarship Grant, University of Michigan. \$10,000. 2024

MUIR Research Grant, Stanford University. \$7,500 (awarded twice). 2020 & 2021

RESEARCH EXPERIENCE

Research Assistant

Western Forest and Fire Initiative (Dr. A.P. Fischer) Ann Arbor, MI

2023-present

- Member of interdisciplinary research team exploring the social, ecological, and technical aspects of the wildfire challenge in the Western U.S.
- Conducting work on human perception and response to wildfire smoke
- Supervising three undergraduate and two masters-level research assistants

Wong-Parodi Lab (Drs. E. Bower, N. Herbert, & G. Wong-Parodi) Stanford, CA

2022-2025

- Co-led qualitative study with the Tule River Tribe (CA) exploring environmental and community resilience in the face of heat, air quality, and water quality issues
- Led community recruitment of a pilot for the “Our Communities, Our Bay” research study to understand how low-income communities in the Bay Area are impacted by climate hazards; troubleshoot technology and recruitment issues

Stanford Social Ecology Lab (Drs. N. Ardoin & M. Wheaton) Stanford, CA

2018-2022

- Facilitated field data collection and analysis from 250+ participants on whale-watching trips with community partner Oceanic Society, wrote literature review & manuscript
- Led survey development, deployment, analysis, and writing of journal article examining university-land trust partnerships in partnership with the Lincoln Institute of Land Policy

Oral History Interviewer

Stanford, CA

Stanford Historical Society

2017-2019

- Conducted oral history interviews with Bayview-Hunters Point residents regarding nuclear contamination, environmental pollution, and gentrification in their community
- Interviewed female activists for “The Movement Oral History Project: Antiwar Protest and Allied Activism in the Stanford Community, 1963-1973”

TEACHING EXPERIENCE

Graduate Student Instructor (GSI)

Ann Arbor, MI

EAS 567: Social Vulnerability & Adaptation to Environmental Change (Dr. A.P. Fischer) 2024

EAS 639: Intro to R (Dr. B. Weeks) 2024

EAS 559: Interviewing & Qualitative Data Analysis (Dr. A.P. Fischer) 2024, 2025

Teaching Assistant & Digital Ambassador

Stanford, CA

FEMGEN 63N: The Feminist Critique 2021

CHEMENG 65Q: Chemical Engineering for Sustainability 2021

PSYCH 21N: How to Make a Racist 2020

SLAVIC 15N: Dostoevsky, Dickinson, and the Question of Freedom 2020

RELEVANT WORK EXPERIENCE

Lead Community Partnership Graduate Consultant Ginsberg Center for Community Service and Learning

Ann Arbor, MI

2024-present

- Support Ginsberg’s relationships with community by consulting with partners in check-in meetings, scoping partnership projects, and updating priorities in Salesforce database
- Advocate community partner priorities in matching projects with university resources
- Supervise five graduate student staff working with the Community Engagement team

Resilient Homes Program Manager Climate Resilient Communities (CRC)

East Palo Alto, CA

2020-2023; 2025-present

- Second employee at a community-based organization: led grant writing (over \$1.6 million in grants secured), hiring (8 employees), strategic planning, project coordination, grades 8-12 education programming, and grant administration
- Worked one-on-one with income-qualified residents with free home repairs, weatherization services, and energy efficiency upgrades; managed two staff for program
- Coordinated groups of students from Stanford, UC Berkeley, and UC Davis to implement community-based academic projects on a range of topics (duration one term to full year)
- Currently serving as a grant-writing consultant (\$350,000 in successful grants in 2025)

Student Advisor Stanford Earth Systems Program

Stanford, CA

2020-2021

- Worked with team of fellow student advisors to plan events and advise students
- Represented the major in the development of a DEI action plan and committee; contributed to the development of a new Environmental Justice minor

SERVICE

Chair of the SEAS Doctoral Organizing Committee (DOC), Ann Arbor, MI, 2024-2026

PhD representative to School for Environment & Sustainability Faculty Business Meetings, Ann Arbor, MI, 2024-2026

PhD representative to SEAS faculty search focusing on global environmental policy, Ann Arbor, MI, 2025-2026

Co-coordinator of Rackham Interdisciplinary Workshop (RIW) *Social Science and the Climate Crisis*, Ann Arbor, MI, 2024-2026

Peer Reviewer for journals including *Climate Policy*, *Ecology and Society*, *Environmental Research: Health*

SELECTED RESEARCH PRESENTATIONS

“Wildfire Smoke Decision-Making in Rural US Communities,” Human Dimensions of Wildland Fire Conference. Calgary, AB, Canada, October 2025.

“Navigating the Haze: Understanding Wildfire Smoke Decision-Making in Rural Communities,” Natural Hazards Workshop, Researchers Meeting. Broomfield, CO, July 2025.

“Human behavior and wildfire smoke: a systematic review,” American Association of Geographers Annual Meeting, Human Dimensions of Environmental Change Symposium. Detroit, MI, March 2025.

“Foundations of behavior: risks, hazards, and climate change,” Rocky Mountain Wildfire Smoke Symposium. Missoula, MT, October 2024.

“Community-University Networks for Learning, Research, and Collective Action across Institutions,” Santa Clara University Climate and Environmental Justice Conference. Santa Clara, CA, April 2023.

“Community Voices for Equitable Climate Solutions,” Stanford Atmosphere and Energy Seminar. Stanford, CA, April 2022.

“A Case for Academia’s Role in Advancing Conservation and Biodiversity to Address Climate and Human Health,” AASHE Live Educational Session. Virtual, October 2021.

“Our Communities, Our Bay,” Stanford Research with Impact Series. Stanford, CA, September 2021.

“Universities and Land Trusts Collaborating for Solutions,” ALPINE Webinar Series. Virtual, October 2020.

SKILLS

Community engagement: relationship building; data & project management; communication; organizational research

Mixed methods social science research: qualitative interviewing; quantitative survey design, implementation, and analysis; research design; project and budget management

Software and tools: Airtable, Salesforce, R, ArcGIS, QGIS, NVivo, Dedoose, Atlas.ti, Rev, Dovetail, Java, Qualtrics, Mplus, Adobe Photoshop

updated January 2026