

Dr. Shaina Sadai

Pronouns: she/her | [ORCID: 0000-0002-6723-6531](https://orcid.org/0000-0002-6723-6531) | [linkedin.com/in/shaina-sadai](https://www.linkedin.com/in/shaina-sadai)

KEY RESEARCH AREAS AND EXPERTISE

I am a climate and sea level scientist, and critical physical geographer. My research focuses on integrated Earth system science, climate attribution, and climate justice. I use climate, ice sheet, sea level, and solid Earth models to develop socially-relevant climate and sea level projections. As a professor, I teach inclusive and accessible Earth science and geography classes helping students apply their knowledge to their personal academic interests and their lives on our changing Earth. I apply my knowledge to science policy, such as analyzing climate justice under the United Nations Framework Convention on Climate Change, and providing scientific support for climate litigation, including for cases at the International Court of Justice and International Tribunal for the Law of the Sea. I am committed to diversity, equity, and inclusion work and to partnering with local and global communities on scholar-activism projects.

EXPERIENCE

Research Engineering/ Scientist Associate III

University of Texas Austin Department of Earth and Planetary Sciences, Jackson School of Geosciences 2026–present

- Research lead for the Penn State University ice sheet model submission to the Ice Sheet Model Intercomparison Project

Visiting Assistant Professor

Mount Holyoke College

2024–2025

- Design and teach courses in the Department of Geology and Geography
- Collaborate with colleagues across campus on research, event organizing, and accessibility initiatives

Hitz Fellow for Litigation Relevant Climate Science

Union of Concerned Scientists

2022–2024

- Researching attribution of temperature and sea level rise to fossil fuel greenhouse gas emissions
- Writing legal briefs and educating lawyers on climate science through the Science Hub for Climate Litigation

Research Assistant

University of Massachusetts Amherst Department of Earth Geographic & Climate Science 2015 - 2022

- Conduct original research into climate change, sea level rise, and climate justice using the Community Earth System Model

Teaching Assistant

University of Massachusetts Amherst Department of Earth Geographic & Climate Science

2022

- Taught original class on climate justice

Teaching Fellow

University of Massachusetts Amherst College of Natural Sciences

2018 - 2020

- Taught original classes on climate science and climate justice during fall semesters

Research Computing Facilities Technical Assistant

University of Massachusetts Amherst Mathematics Department

2014-2015

- Assisted with technical support

Teaching Assistant

University of Massachusetts Amherst Mathematics Department

2013-2014

- Taught discussion sections for mathematics and statistics courses

EDUCATION

Ph.D. Geosciences

University of Massachusetts Amherst 2022

- *Dissertation*: The global impact of the Antarctic Ice Sheet in a warming world: using numerical modeling and critical physical geography to assess climate change, sea level rise, and climate justice
- *Committee*: Dr. Robert DeConto, Dr. Eve Vogel, Dr. Regine Spector, Dr. Alan Condron, Dr. Dave Pollard, Dr. Ambarish Karmalkar

M.S. Applied Mathematics

University of Massachusetts Amherst 2015

- *Project*: Modeling solitons and vortices in Bose-Einstein condensates
- *Project*: Using uncertainty quantification to model the spread of Dengue Hemorrhagic Fever
- *GPA*: 3.867

B.S. Astronomy/Astrophysics

University of Massachusetts Amherst 2010

- *Thesis*: Spectroscopic evidence of a gaseous outflow in star-forming galaxy NGC 4631
- *Minor*: Mathematics
- *GPA*: 3.779, Magna Cum Laude, Commonwealth College Honors Scholar

B.S. Physics

University of Massachusetts Amherst 2010

Manchester Community College

GPA: 3.88 2004–2006

TECHNICAL SKILLS

Programming Languages: Python including Jupyter Notebooks; Matlab; Fortran; LaTeX; Unix/Linux Command Line

Models and Tools: Community Earth System Model (CESM); Penn State University Ice Sheet Model (PSU-ISM); MAGICC7 simple climate model; basic ArcGIS and QGIS; Globus File Transfer system; Experienced with high performance computing on Yellowstone and Cheyenne supercomputers; basic NVivo

PUBLICATIONS

- **Sadai, S.**, Karmalkar, A., Pollard, D., Dong, Y., Lucas, E., Gomez, N., DeConto, R., Condron, A. Antarctic meltwater alters future projections of climate and sea level. *Nature Communications*, 16, 9271 DOI: 10.1038/s41467-025-64438-3 [Link](#)
- Robinson, S-a., **Sadai, S.**, Evins-Mackenzie, H. (2025). The expanding role of climate assessments as legal evidence. *Nature Climate Change*, 15, 1130–1132. DOI: 10.1038/s41558-025-02434-7 [Link](#)
- **Sadai, S.**, Ranganathan, M., Nauels, A., Nicholls, Z., Merner, D., Dahl, K., Licker, R., Ekwurzel, B. (2025). Estimating the sea level rise responsibility of industrial carbon producers. *Environmental Research Letters*, 20(4), 044012. DOI: 10.1088/1748-9326/adb59f [Link](#)
- Gomez, N., Yousefi, M., Pollard, D., DeConto, R., **Sadai, S.** Lloyd, A., Nyblade, A., Wiens, D.A., Aster, R.C. and Wilson, T. (2024). The influence of realistic 3D mantle viscosity on Antarctica's contribution to future global sea levels. *Science Advances* 10, eadn1470. DOI: 10.1126/sciadv.adn1470 [Link](#)
- Karmalkar, A. V., **Sadai, S.**, Chaughule, A., Staudinger, M. 2024. Chapter 1: Climate Change in the Northeast United States. In: A regional synthesis of climate data to inform the 2025 State Wildlife Action Plans in the Northeast U.S. [Staudinger, M.D., A. Karmalkar, K. Terwilliger, K. Burgio, A. Lubeck, H. Higgins, T. Rice, T. Morelli, A. D'Amato (eds.)]. DOI Northeast Climate Adaptation Science Center Cooperator Report, 2024 [Link](#)

- **Sadai, S.**, Spector, R. A., DeConto, R., Gomez, N. 2022. The Paris Agreement and Climate Justice: Inequitable Impacts of Sea Level Rise Associated with Temperature Targets, *Earth's Future*, 10, e2022EF002940. [Link](#)
- **Sadai, S.**. 2022. The Global Impact of the Antarctic Ice Sheet in a Warming World: Using Numerical Modeling and Critical Physical Geography to Assess Climate Change, Sea Level Rise, and Climate Justice, *University of Massachusetts Amherst Scholarworks*, Dissertation, DOI: 10.7275/30726179 [Link](#)
- Dong, Y., Pauling, A. G., **Sadai, S.**, Armour, K. C. 2022. Antarctic ice-sheet meltwater reduces transient warming and climate sensitivity through the sea-surface temperature pattern effect. *Geophysical Research Letters*, 49(24). DOI: 10.1029/2022GL101249 [Link](#)
- DeConto, R., Pollard, D., Alley, R.B., Velicogna, I., Gasson, E., Gomez, **Sadai, S.**, Condron, A., Gilford, D., Ashe, E.L., Kopp, R.E., Li, D., Dutton, A. 2021. The Paris Climate Agreement and future sea-level rise from Antarctica, *Nature*, 598, 83-89. DOI: 10.1038/s41586-021-03427-0 [Link](#)
- **Sadai, S.**, Condron, A., DeConto, R., Pollard, D. 2020. Future climate response to Antarctic Ice Sheet melt caused by anthropogenic warming, *Science Advances*, 6(39), 1–9. DOI: 10.1126/sciadv.aaz1169 [Link](#)
- Yun, M., et al. 2015. Early Science with the Large Millimeter Telescope: CO and [C II] Emission in the z=4.3 AzTEC J095942.9+022938 (COSMOS AzTEC-1), *Monthly Notices of the Royal Astronomical Society*. 454 (4): 3485-3499. DOI: 10.1093/mnras/stv1963 [Link](#)
- LIGO Scientific Collaboration. 2014. Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO600, LIGO, and Virgo detectors, *Physical Review D*, 89: 122004. DOI: 10.1103/PhysRevD.89.122004 [Link](#)
- LIGO Scientific Collaboration. 2010. Predictions for the Rates of Compact Binary Coalescences Observable by Ground-based Gravitational-wave Detectors, *Classical Quantum Gravity*. 27: 173001. DOI: 10.1088/0264-9381/27/17/173001 [Link](#)

MANUSCRIPTS IN PROGRESS

- **Sadai, S.**, Sharpe, A., Crisfield, R., Rankin, E. Multispecies Climate Justice and Sea Level Rise. Chapter 7 in *Multispecies Climate Justice: Liberatory Futures for Human and More-than-Human Worlds*. In press at Springer Climate, forthcoming 2026.
- Cifuentes, S., **Sadai, S.**, Rutherford, S. (editors). *Multispecies Climate Justice: Liberatory Futures for Human and More-than-Human Worlds*. In press at Springer Climate, forthcoming 2026.
- **Sadai, S.** Integrating climate science and sociopolitical context aids student learning in an introductory climate change course. In prep, 2026.
- Williams, E., Abatzoglou, J., Philips, C., Khan, F., **Sadai, S.**, et al. Increasing Constraints on Western US Water Attributable to Carbon Majors Emissions. In review, 2026.

PUBLISHED DATASETS

- **Sadai, S.**, Karmalkar, A., Pollard, D., Dong, Y., Lucas, E., Gomez, N., DeConto, R., Condron, A. (2025). Data corresponding to “Antarctic meltwater alters future projections of climate and sea level.” *University of Massachusetts Amherst ScholarWorks*. [Link](#)
- **Sadai, S.** and Ranganathan, M. (2025). Estimating the sea level rise responsibility of industrial carbon producers. *Open Science Framework* [Link](#)
- **Sadai, S.**, Gomez, N, DeConto, R. (2022). Model data for “The Paris Agreement and climate justice: inequitable impacts of sea level rise associated with temperature targets”. *University of Massachusetts Amherst Scholarworks* [Link](#)
- Condron, A. (2021). Data for Sadai et al., 2020: “Future climate response to Antarctic Ice Sheet melt caused by anthropogenic warming”. *U.S. Antarctic Program (USAP) Data Center* [Link](#)

AWARDS AND ACKNOWLEDGMENTS

Climate Specialty Group Paper of the Year , American Association of Geographers, awarded for my 2025 publication in <i>Nature Communications</i>	2026
Editor's Choice Award 2025 – Letter , <i>Environmental Research Letters</i> editorial recognition of my 2025 publication “Estimating the sea level rise responsibility of industrial carbon producers”	2026
Earth Science Editor's Highlight , <i>Nature Communications</i> editorial recognition of my 2025 publication “Antarctic meltwater alters future projections of climate and sea level”	2025
Distinguished Teaching Award , University of Massachusetts Amherst, university-wide, student-nominated award for exemplary teaching	2021
Highly Commended Student Oral Presentation , UK Antarctic Conference	2021
Best Graduate Student Paper , Northeast Regional American Association of Geographers Meeting	2020
Chang Transfer Student Award in Physics , University of Massachusetts Amherst	2008

GRANTS

American Geophysical Union Chapman Travel Grant , (\$2,200.00 grant)	2026
Hitz Family Foundation via the Union of Concerned Scientists , (\$200,000.00 grant)	2022
Culture and Animals Foundation , (\$3,639.60 grant)	2022
Massachusetts Space Grant Consortium Fellowship , (\$4,000 grant)	2009
Massachusetts Space Grant Consortium Fellowship , (\$4,000 grant)	2008
Massachusetts Space Grant Consortium Fellowship , (\$4,000 grant)	2007
David J. Van Blerkom Research Scholarship in Astronomy , (\$1,000 grant)	2008

SCIENCE AND LAW EXPERIENCE

Submission to the call for inputs for the study of the United Nations Human Rights Council Advisory Committee on the implications of sea-level rise for the full enjoyment of human rights <i>The Global Network for Human Rights and the Environment</i>	2026
<ul style="list-style-type: none"> Co-author on joint submission to the United Nations Human Rights Council Advisory Committee, providing expert scientific support 	
Science Perspectives to Inform the ICJ Advisory Opinion on Climate Change <i>International Institute for Sustainable Development Sustainable Development Goals Knowledge Hub</i>	2025
<ul style="list-style-type: none"> Invited guest article on evidence submitted to the ICJ climate change advisory opinion case, co-written with Elisabeth Holland Link 	
Global Perspectives on Climate Change Litigation: Climate Science <i>British Institute of International and Comparative Law</i>	2023–2025
<ul style="list-style-type: none"> Invited guest lecture in the Short Course on Climate Litigation 	
International Court of Justice <i>Union of Concerned Scientists Science Hub for Climate Litigation</i>	2024
<ul style="list-style-type: none"> Scientific support and writing for State submission legal briefs in the case: ‘Obligations of States in respect of Climate Change (Request for Advisory Opinion)’ 	
Judicial Training Program Sea Level Science Module Reviewer <i>Environmental Law Institute</i>	2024
<ul style="list-style-type: none"> Provided expert peer review ELI's Judicial Training Program 	

International Tribunal for the Law of the Sea*Union of Concerned Scientists Science Hub for Climate Litigation* 2023

- Scientific support and writing for State submission legal briefs in the case: ‘Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law, Written Statement of the Republic of Sierra Leone’ [Link](#)

International Tribunal for the Law of the Sea*Union of Concerned Scientists Science Hub for Climate Litigation* 2023

- Scientific support and writing for State submission legal briefs in the case: ‘Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law, Written Statement of the Republic of Mozambique’ [Link](#)

European Court of Human Rights*Union of Concerned Scientists Science Hub for Climate Litigation* 2022

- Co-author on ‘Interveners brief filed by the Center for International Environmental Law, Greenpeace International and the Union of Concerned Scientists’ submitted in the case Duarte Agostinho et al. v Portugal et al. [Link](#)

Climate Change and Oceans*University at Buffalo School of Law* 2021

- Invited guest lecture for LAW 315: Climate Change Interdisciplinary Perspectives and International Law

SCIENCE POLICY EXPERIENCE**Submitted public testimony in favor of S.2612 – An Act providing utility shutoff protections during periods of extreme heat***Massachusetts State Senate* 2025**Co-author for public comment on DOE’s “Critical Review of Greenhouse Gas Emissions on the US Climate”***Independent Scientists* 2025

- Participated in an organized campaign of climate scientists who collectively wrote a public comment to correct the scientific misinformation contained in the DOE’s draft report [Link](#)

Scientific support for public comment campaign on methane emissions*Food Empowerment Project* 2023–2024

- Submitted co-written comments, and did outreach for a broader public comment campaign, for CPUC case A2304005 on dairy methane biodigesters installed under California’s SB 1383 [Link](#)

Scientist letter in support of expanding national sea level rise research budget*Coastal Flood Resilience Project* 2023

- Submitted to Congressional Subcommittee on Commerce, Justice, Science, and Related Agencies [Link](#)

COP26 Attendance*UNFCCC* 2021

- Early career scientist volunteer and presenter in the pavilion space

Voices for Science Policy Fellow*American Geophysical Union* 2020–2021

- Year long training program for scientists to advocate for science based public policy

Diversity Equity Inclusion Congressional Advocacy Days*American Geophysical Union* 2020

- Advocate for inclusive science-based policy at congressional offices

Connecting with Any Audience about Climate Change: Speaking with Legislators*American Geophysical Union*

2020

- Virtual panelist discussing my experiences in policy advocacy as a Voices for Science Policy Fellow [Link](#)

Energy transition op-ed published in a local newspaper*Daily Hampshire Gazette*

2020

- ‘Holyoke’s shortsighted decision on energy transition grant’ discusses a local city council decision to reject a grant which would have funded the energy transition in an environmental justice community [Link](#)

Climate Science Congressional Visits Day*American Association for the Advancement of Science*

2019

- Training on communicating with policy makers by developing and delivering specific action asks
- Visits with congressional offices for Massachusetts and New York

TEACHING EXPERIENCE: UNIVERSITY COURSES**Instructor of Record, Original Syllabi***Mount Holyoke College*

- GEOG 312CJ: Geographies of Climate Justice Spring 2025
- GEOG 224: Atmosphere and Weather Fall 2024, Spring 2025
- GEOL 342EA: Sea Level Science Fall 2024

Instructor of Record, Original Syllabi*University of Massachusetts Amherst*

- GEOG 397: Geographies of Climate Justice Spring 2022
- NATSCI 191CNS70: Climate Change: It’s a Hot Mess Fall 2018, 2019, 2020

Co-Instructed Courses*University of Massachusetts Amherst*

- GEO-SCI 705: Graduate Research Seminar Spring 2022
- GEO-SCI 595P: Diversity Inclusion Pedagogy Seminar [Link](#) Fall 2019, Spring 2020, Fall 2020, Spring 2021
- GEO-SCI 763: Intergovernmental Panel on Climate Change Seminar Spring 2020

Teaching Assistant*University of Massachusetts Amherst*

- STAT 240: Introduction to Statistics Spring 2014
- MATH 121: Linear Methods and Probability for Business Fall 2013
- ASTRO 100: Exploring the Universe Spring 2007–Fall 2009
- ASTRO 101: The Solar System Spring 2007–Fall 2009

TEACHING EXPERIENCE: GUEST LECTURES**Applied Climate Science to Support Climate Litigation***University of Rhode Island*

- GEO422: Applied Climate Science 2025

Corporate climate accountability for fossil fuels*University of Idaho*

- Working for the Climate Speaker Series 2024

Using climate modeling and sea level science to inform climate litigation and advance climate justice*Woodwell Climate Research Center*

- Climate Justice Speaker Series 2024
- Climate Justice, Sea Level Rise, and the Paris Agreement**
Mount Holyoke College
- GEOL-342CC Seminar in Geology: Global Effects of Climate Change 2024
- Climate Justice and Sea Level Rise**
University of Rhode Island
- Intro to Climate Change 2022
- Climate Justice, Climate Litigation, and Attribution Science**
University of Massachusetts Amherst
- POLISCI 383: Energy Policy 2022
- My Academic History and Journey to Geography**
University of Massachusetts Amherst
- GEOG 604: Geographic Theory and Analysis 2022
- Climate Change in the Media**
University of Massachusetts Amherst
- NATSCI 191: Catastrophic Clickbait: Natural Hazards in Media 2021
- Rising Emissions and Climate Destabilization**
University of Massachusetts Amherst
- POLISCI 383: Energy Policy 2019–2021
- Agriculture and Climate Change**
University of Massachusetts Amherst
- NATSCI 191: What am I Eating? The Evolution of the Human Diet 2020, 2021
- Climate Justice**
Brigham University
- GEOL 282A: Mass Extinctions Through Time 2020
- Diversity and Inclusion in STEM**
University of Massachusetts Amherst
- NATSCI 191: Antarctica: The Coolest Continent 2020
- Computer Programming in Matlab**
University of Massachusetts Amherst
- GEO-SCI 591CM: Introduction to Climate and Environmental Modeling 2019
- Ocean Data Analysis in Matlab**
University of Massachusetts Amherst
- GEO-SCI 595D: Physical Oceanography 2019
- Navigating Academia: Working in STEM and Looking for Justice**
Holyoke Community College
- Environmental Science 2020, 2021

TEACHING EXPERIENCE: WORKSHOPS

Fostering an Inclusive Classroom Community

University of Massachusetts Amherst

- Workshop Facilitator for the Office of Professional Development 2020

Agriculture and Climate Change

Mass Audubon & Hitchcock Center for the Environment

- Instructor for the Western Mass Youth Climate Summit 2019

Universal Design for Instruction

University of Massachusetts Amherst

- Center for the Integration of Research, Teaching & Learning Instructor Training 2019

Intro to Climate Change

University of Massachusetts Amherst

- Eureka! Girls Inc. Workshop Instructor for STEM Summer Camp 2019

Climate Communication

Mass Audubon & Hitchcock Center for the Environment

- Instructor for the Western Mass Youth Climate Summit 2018

Intro to Climate Change and Sea Level Rise

University of Massachusetts Amherst

- Eureka! Girls Inc. Workshop Instructor for STEM Summer Camp 2018

TEACHING EXPERIENCE: MENTORSHIP

Recent graduates Ava Sharpe, Rory Crisfield, Caitlin Bolzan

Independent research collective

- Topic: Multispecies Climate Justice and Sea Level Rise; systematic review techniques 2025

Undergraduate Independent Study Mentor for Arya Chaughule

University of Massachusetts Amherst

- Topic: Temperature and precipitation extremes in the northeast United States, co-advised with Dr. Karmalkar 2020

Undergraduate Honors Thesis Committee Member for Ashley Arroyo

University of Massachusetts Amherst

- Topic: Decadal Predictions of the Atlantic Meridional Overturning Circulation Strength 2019–2020

AP Research Project Content Advisor for Grace-Marie Gounin

Wilbraham and Monson Academy

- Topic: To what extent can a plant-based diet help to mitigate the damaging effects of global warming, deforestation, air and water pollution on Earth's environment? 2020

TEACHING EXPERIENCE: INTENSIVE TRAININGS AND CERTIFICATIONS

Scholar Certification, Center for the Integration of Research, Teaching and Learning 2020

Practitioner Certification, Center for the Integration of Research, Teaching and Learning 2020

Associate Certification, Center for the Integration of Research, Teaching and Learning 2020

Teaching on a Precipice: Empowering Student-Teacher Partnerships for Climate Justice
University of Massachusetts Amherst History Department Teacher Training Program 2020–2021

PRESS

- **The Trump administration’s assault on science feels eerily Soviet**, Quotes included in article published by Grist, 2025 [Link](#)
- **AFP Fact Check: Pictures of Australian landmark misused to deny sea-level rise**, Quotes included in article published by AFP, 2025 [Link](#)
- **Drought, wildfire, floods: “Climate whiplash” hits western Mass**, Quotes included in article published by The Shoestring, 2025 [Link](#)
- **Past greenhouse gas emissions may raise sea levels by nearly two feet, study finds**, The New Lede, 2025 [Link](#)
- **Study uncovers troubling fallout from harm caused by major companies: ‘Every delay ... will burden future generations’**, The Cool Down, 2025 [Link](#)
- **Prospect Hill brush fire sparks amid Red Flag Warning for Western Mass**, Quotes included in article published by Mount Holyoke News, 2024 [Link](#)
- **Meet Your Neighborhood Greenhouse Gas Emitters**, Quotes included in article published by The Shoestring, 2024 [Link](#)
- **International Tribunal for the Law of the Sea Issues Historic Guidance on Climate Change in International Law**, Statement included in press release from Union of Concerned Scientists, 2024 [Link](#)
- **How scientists are grappling with the uncertain future of Antarctica’s melting ice**, Interview quotes published by Nature, 2023 [Link](#)
- **‘Off-the-charts records’: has humanity finally broken the climate?**, Interview quotes published by The Guardian, 2023 [Link](#)
- **Exxon’s Own Science Was Scary Accurate About Global Warming. So It Covered It Up.**, Interview quotes published by The Daily Beast, 2023 [Link](#)
- **ExxonMobil scientists accurately predicted catastrophic fossil fuel-driven global warming nearly half a century ago**, Press release from Union of Concerned Scientists including my quotes, 2023 [Link](#)
- **Paris Agreement Temperature Targets May Worsen Climate Injustice for Many Island States**, Press release from UMass Amherst, 2022 [Link](#)
- **Climate science and justice**, Interview for Climate Crisis Enviro Show on Valley Free Radio, 2021
- **The threats caused by ‘pure trash’ lies**, Interview with Dr. Marty Nathan, 2021 [Link](#)
- **Climate change and Antarctica**, Interview for Undercurrents Radio WMUA, 2021
- **Big Life, Small Footprint**, Interview and article in Laika Magazine, Issue 8, 2020
- **Global warming may lead to practically irreversible Antarctic melting**, Interview and article in Science News, 2020 [Link](#)
- **Climate change and Antarctic ice melt**, Interview WBUR All Things Considered, 2020
- **How climate change affects us: A local look at a global issue**, Interview and article in the Daily Hampshire Gazette, 2019

ART AND SCIENCE

Weather and Atmosphere Art Show

Mount Holyoke College

2024-2025

- Produced art shows at the Mount Holyoke College Museum featuring original art work by the students in my Weather and Atmosphere class during fall 2024 and spring 2025 semesters

Natural Gas: The Bridge to Climate Disaster

just wondering...

2024

- Science advisor for educational artistic video on the dangers of methane gas, video produced by the collective just wondering [Link](#)

Multimedia Art Piece on Climate Change

Union of Concerned Scientists

2024

- Artist direction of multimedia artistic collaboration combining dance, photography, fabric arts, lighting design, and projection

Art Sustainability Activism: Interdisciplinary Discussion

University of Massachusetts School of Earth and Sustainability

2023

- Panelist along with musician Sirintip, artist Sandy Litchfield, historian Kevin Young and moderator Malcolm Sen to discuss the intersection of climate change, science, literature, performing arts and social justice [Link](#)

I Was A Kid

Science communication through art by Karen Romano Young

2021

- Karen uses multimedia to map paths to STEAM careers for today's kids
- Site link features interview clips, a drawing of me in my workspace with quotes from the interview and an illustrated version of my path from childhood to being a professional scientist [Link](#)

Earth 2120

Collaboration with Lisa Liang

2021

- Digital artist Lisa Liang interviewed me about my research simulating possible futures for the Antarctic Ice Sheet and created digital art of her interpretation of the Southern Ocean in 2120

Professional Dancer, Business Owner

Self Employed, Sole Proprietor

2010–2020

- Developed and taught a wide range of dance and music classes and workshops for teens and adults
- Specialist in Southwest Asian and North African styles of dance and music with experience as a member of multiple Arabic music ensembles
- Planned and hosted large community events featuring dozens of dance performers and live music
- Maintained website, spreadsheets, finances, and advertising materials

SERVICE

Climate Action Standing Committee Member (formerly Climate Action Task Force)

American Association of Geographers

2024–present

Peer reviewer

Research on the climate impact of animal agriculture produced by Greenpeace

2024

Founding Member of Disability Justice group

Union of Concerned Scientists

2023–2024

Climate Action Task Force Member

American Association of Geographers

2021–2024

Peer reviewer

Journal of Climate

2022

Unlearning Racism in Geosciences (URGE) Pod Member <i>University of Massachusetts Amherst Geosciences Department</i>	2021–2022
UMass Amherst Environmental and Social Action Movement Member <i>University of Massachusetts Amherst</i>	2021
Panelist for Diversity, Equity, and Inclusion in Your Classroom <i>University of Massachusetts Amherst Office of Professional Development</i>	2020
Scientific Advisory Panel Member <i>Wild Animal Initiative</i>	2020–2021
Science Outreach Collaborator <i>Time Scavengers</i>	2019–2021
Peer reviewer <i>Emerging Voices in Education</i>	2020
Professional Seminar Speaker on Broader Impacts and Outreach Work <i>University of Massachusetts Amherst</i>	2019
College of Natural Sciences Climate Advisory Committee Member <i>University of Massachusetts Amherst</i>	2019–2021
Panelist for New Graduate TA Orientation <i>University of Massachusetts Amherst Graduate School</i>	2019
Interviewer for Researchers Speak Outreach Project <i>University of Massachusetts Amherst Astronomy Department</i>	2009–2010
Science Outreach Club Officer <i>University of Massachusetts Amherst Physics Department</i>	2007–2010
SERVICE: CONFERENCE AND EVENT ORGANIZING	
Session convener, Legal and Political Geographies of International Law <i>Sadai, S., Pettersen, C., Cullen, K.</i>	
• Panel at the American Association of Geographers Annual Meeting	2026
Event co-organizer, Can't Stop Change: Queer Climate Stories from the Florida Frontlines <i>Mount Holyoke College</i>	
• Miller Worley Center for the Environment, Department of Geology and Geography, and GEO Club collaboration	2025
Session convener, Legal and Political Geographies of International Law <i>Sadai, S., Hughes, R., Leme, F.</i>	
• Panel at the American Association of Geographers Annual Meeting	2025
Session convener, Geographies of Climate Litigation, Attribution, and Data <i>Sadai, S., Merner, D.</i>	
• Two sessions at the American Association of Geographers Annual Meeting	2024
Session convener, Geographies of Sea Level Rise <i>Sadai, S., Conway, C., Merner, D.</i>	
• Two sessions at the American Association of Geographers Annual Meeting	2024
Session convener, Advances in Our Understanding of Past, Present, and Future Sea-Level Change and (More Than) Human Impacts <i>Felikson, D., Sadai, S., Adams, K., Hamlington, B.</i>	

- Three sessions at the American Geophysical Union Fall Meeting 2023
 - Session convener, Attributing, Projecting, and Linking Greenhouse Gas Emissions to Sources, Air Quality and Climate Impacts**
Phillips, C., Laughner, J., Wu, D., Sadai, S.
 - Two sessions at the American Geophysical Union 2023
 - Session convener, Geographies of Sea Level Rise**
Sadai, S., Merner, D.
 - American Association of Geographers Annual Meeting 2023
 - Session convener, Climate Litigation for a More Just World**
Sadai, S., Merner, D.
 - American Association of Geographers Annual Meeting 2023
 - Session convener, Multispecies Climate and Environmental Justice**
Cifuentes, S., Sadai, S.
 - American Association of Geographers Annual Meeting 2023
 - Session convener, Multispecies Climate Justice**
Rutherford, S., Sadai, S.
 - Five sessions at the American Association of Geographers Annual Meeting 2022
 - Lead Event Organizer and Moderator for panel on Climate Justice in Palestine**
Scientists for Palestine
 - Webinar on Palestine's environmental conditions and participation in international climate politics 2021
 - Session convener, Climate Modeling for Everyone: Interdisciplinary Research to Address Social Justice and (More Than) Human Impacts**
Sadai, S., Halberstadt, R.
 - American Geophysical Union Fall Meeting 2020
 - Session convener, Developing a Culture of Diversity, Equity, and Inclusion in All Our Work, in All Our Places**
Harris, C., Thompson, L., Bolton, B., Sadai, S.
 - American Geophysical Union Fall Meeting 2020
 - Lead Event Organizer, IPCC Special Report on Oceans and the Cryosphere in a Changing Climate**
University of Massachusetts Amherst
 - Campus event hosted through the School of Earth and Sustainability 2019
- CONFERENCE PRESENTATIONS**
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- Estimating the sea level rise responsibility of industrial carbon producers**
Sadai, S., Ranganathan, M., Nauels, A., Nicholls, Z., Merner, L.D., Dahl, K., Licker, R., Ekwurzel, B.
 - European Geophysical Union Invited Speaker 2026
 - Updating Usable Projections of Future Sea Level Chapman Conference 2026
 - American Association of Geographers Annual Meeting 2025
 - Carbon Emissions Exacerbate the Western US Water Crisis**
Philips, C., Williams, E., Abatzoglou, J., Safeeq, S., Sadai, S., et al.
 - European Geophysical Union 2026

Antarctic Meltwater Alters Future Projections of Climate and Sea Level*Sadai, S., Karmalkar, A., Pollard, D., Gomez, N., Lucas, E., Condrón, A., DeConto, R.*

- Community Earth System Model (CESM) Workshop Land Ice session 2025

How the Past Haunts the Future: Locked-in Sea Level Rise Resulting from Prior Corporate Fossil Fuel Production*Sadai, S., Ranganathan, M., Ekwurzel, B., Merner, L.D., Dahl, K.*

- American Association of Geographers Annual Meeting 2024

Corporate Climate Accountability for High Methane Emissions: Fossil Fuels and Animal Agriculture*Sadai, S.*

- American Association of Geographers Annual Meeting, Panelist for 'Geographies of Corporate Climate Accountability' 2024

Future Climate and Sea Level Projections Using Fully Coupled Ice Sheet and Global Climate Models*Sadai, S., Karmalkar, A., Pollard, D., Dong, Y., Lucas, E., Gomez, N., DeConto, R., Condrón, A.*

- American Geophysical Union Fall Meeting 2023

Using Climate Modeling to Inform Climate Litigation and Advance Climate Justice*Sadai, S.*

- Community Earth System Model (CESM) Workshop Actionable Science session 2023
- American Geophysical Union Fall Meeting 2023

Designing Litigation-Relevant Research: the Attribution of Sea Level Rise to Industrial Carbon Producers*Sadai, S., Merner, D.*

- American Association of Geographers Annual Meeting 2023
- New England/St. Lawrence Valley Division of the American Association of Geographers 2022

Sea Level Rise and Climate Litigation: One Scientist's Journey into Litigation Relevant Research*Panelist for a Town Hall on 'Scientific Engagement in Climate Litigation: From Research to Expert Witness'*

- American Geophysical Union Fall Meeting 2022

Future Climate Projections Using Fully Coupled Ice Sheet and Global Climate Models*Sadai, S., Pollard, D., DeConto, R., Karmalkar, A., Condrón, A.*

- American Geophysical Union Fall Meeting 2022

Why we need to crip the classroom (and the lab and the field...)*Cooke, M. L., Callahan, C., Marshall, A. M., Piatek, J. L., Sadai, S., Sibert, E. C.*

- American Geophysical Union Fall Meeting 2022

Antarctic Ice Sheet Meltwater Reduces Climate Sensitivity and Transient Warming through the Sea-Surface Temperature Pattern Effect*Dong, Y., Pauling, A., Sadai, S., Armour, K.*

- American Geophysical Union Fall Meeting 2022

Antarctic Ice Sheet Meltwater Drives Lower Effective Climate Sensitivity through the Pattern Effect*Dong, Y., Pauling, A., Sadai, S., Armour, K.*

- US Climate Variability and Predictability Program Pattern Effect Workshop 2022

Sea Level Rise and Multispecies Climate Justice

Sadai, S.

- New England/St. Lawrence Valley Division of the American Association of Geographers 2021
- American Association of Geographers Annual Meeting 2022

Sea Level Rise, Climate Justice, and the Paris Agreement

Sadai, S., Spector, R. A., DeConto, R.

- American Geophysical Union Fall Meeting 2021

Investigating Antarctic Ice Sheet Feedbacks with Coupled Ice Sheet and Climate Models

Sadai, S., Pollard, D., DeConto, R., Condrón, A.

- American Geophysical Union Fall Meeting 2021

Initiating New Efforts to Track & Improve DEI within the Department of Geosciences at UMass Amherst

McKeon, K., Allen, J., Baranes, H., Boutt, D., Bowlick, F., Brown, L., Cooke, M., Fattaruso, L., Griswold, F., Hatch, C., Lehnigk, K., Sadai, S., Smith, R. (UMass Geosciences URGE Pod)

- American Geophysical Union Fall Meeting 2021

Unlearning Racism in Geoscience (URGE) Drives Institutional Change at UMass Geoscience: A Timeline of Perturbations to the Steady State

Allen, J., Lehnigk, K., Baranes, H., Bowlick, F.J., Brown, L. L., Fattaruso, L., Griswold, F., McKeon, K., Sadai, S. and Smith, R. (UMass Geosciences URGE Pod)

- Geological Society of America Annual Meeting 2021

Using Climate Modeling and Interdisciplinary Theory to Analyze Climate Justice Impacts of the Paris Agreement

Sadai, S., Spector, R. A., DeConto, R.

- American Association of Geographers Conference 2021
- American Geophysical Union Fall Meeting 2020
- New England/St. Lawrence Valley Division of the American Association of Geographers 2020
- Applied Geography Conference 2020
- Graduate Climate Conference 2020

Investigating Antarctic Ice Sheet–Climate Feedbacks Under High Emissions

Sadai, S., Condrón, A., DeConto, R., Pollard, D.

- UK Antarctic Conference 2021

Perspectives on Teaching Climate Science to First–Year Undergraduate Students by Integrating Sociopolitical Contexts of Climate Change

Sadai, S.

- American Geophysical Union Fall Meeting 2020

Antarctic Ice Sheet–Climate Feedbacks Under High Future Carbon Emissions

Sadai, S., Condrón, A., DeConto, R., Pollard, D.

- American Association of Geographers Conference 2020
- American Meteorological Society Conference 2020

A Critical Political Geography Perspective on Temperature Targets as a Climate Metric: A Case Study of Antarctica

Sadai, S.

- New England/St. Lawrence Valley Division of the American Association of Geographers 2019

Climate Feedbacks from Antarctic Ice Sheet Discharge under High Future Carbon Emissions

Sadai, S., Condron, A., DeConto, R., Pollard, D.

- Graduate Climate Conference 2019
- American Meteorological Society Atmosphere & Ocean Fluid Dynamics 2019

Assessing the Response of Sea Ice, Ocean Circulation, & Climate to Projected Increases in Antarctic Ice Sheet Melt

Sadai, S., Condron, A., DeConto, R., Pollard, D.

- American Geophysical Union Fall Meeting 2018

Perspectives on the use of Active Learning Techniques in Teaching Climate Science to First-Year Undergraduate Students

Sadai, S.

- American Geophysical Union Fall Meeting 2018

Assessing the Global Climate Response to Freshwater Forcing from the Antarctic Ice Sheet Under Future Climate Scenarios

Sadai, S., Condron, A., DeConto, R., Pollard, D.

- Department of Geosciences Bromery Poster Session 2019
- American Geophysical Union Fall Meeting 2017

SCIENCE COMMUNICATION: INVITED PROFESSIONAL SEMINARS

Antarctic Meltwater Alters Future Projections of Climate and Sea Level

International Glaciological Society Global Seminar Series

2026

Sea Level Rise and Multispecies Climate Justice

Salem State University

2026

Antarctic Meltwater Alters Future Projections of Climate and Sea Level

University of Rhode Island's Graduate School of Oceanography Seminar Series

2025

Sea Level Rise and Multispecies Climate Justice

Animals and Society Colloquium Series [Link](#)

2025

Multispecies Climate Justice: Sea Level Rise and International Law

Sadai, S.

- Invited Panelist at the Mount Holyoke College Summit on Feminist Leadership in Climate Justice 2025

Tracing Tides: How Major Carbon Producers Drive Sea Level Rise and Climate Injustice

Union of Concerned Scientists [Link](#)

2025

Advancing Coupled Modeling to Understand Sea Level Change and Inform Climate Action Through the Courts

Community Earth System Model Workshop Sea Level Science session

2024

The Carbon Majors Database as a Tool for Climate Accountability

Influence Map

2024

Advancing Climate Justice Using Science & Litigation for Corporate Accountability <i>University of Massachusetts Amherst School of Earth and Sustainability</i>	2023
Investigating Antarctic Ice Sheet–Climate Feedbacks and Climate Justice <i>NASA Goddard Sea Level Rise Seminar</i>	2023
The Importance of Multispecies Climate Justice <i>Animal Grantmakers Conference (pre-recorded invited talk)</i>	2023
Sea Level Mapping <i>Union of Concerned Scientists</i>	2023
Investigating Antarctic Ice Sheet-Climate Feedbacks & Climate Justice Implications <i>National Center for Atmospheric Research</i>	2023
Sea Level Rise and Climate Justice <i>United Nations Conference of the Parties (COP26)</i>	2021
Antarctica and Paris Goals: Risks of Massive Sea-level Rise <i>United Nations Conference of the Parties (COP26), Joint Presentation with Dr. DeConto</i>	2021
Investigating Antarctic Ice Sheet-Climate Feedbacks and Climate Justice <i>NASA Goddard Sea Level Rise Seminar</i>	2021
Briefing on Sea Level Rise and the Paris Agreement <i>Union of Concerned Scientists</i>	2021
Climate Change and Multispecies Justice <i>Animals Climate Health Seminar Series at Johns Hopkins & Universitat Bern</i>	2020
Antarctica, Justice, and Our Changing Climate <i>University of Massachusetts Amherst Institute of Diversity Sciences</i>	2020
Antarctica and Global Climate <i>Woods Hole Oceanographic Institution</i>	2020
Antarctica and Our Changing Climate <i>School of Earth and Sustainability Graduate Student Lightning Talks</i>	2019
Future Climate Feedbacks from Antarctic Ice Sheet Discharge and Sea Level Rise in New England <i>Tribal Environmental Conference Co-sponsored by the Mohegan Tribe and US EPA</i>	2019
Current and Projected Changes in Physical Oceanography <i>School of Earth and Sustainability campus event on IPCC Special Report on Oceans and Cryosphere in a Changing Climate</i>	2019
Assessing the Global Climate Response to Freshwater Forcing from the Antarctic Ice Sheet Under Future Climate Scenarios <i>School of Earth and Sustainability Earth Day Celebration</i>	2019
SCIENCE COMMUNICATION: COMMUNITY PRESENTATIONS	
Climate Change and Queer Resilience <i>Boston Museum of Science</i>	2025
• Presentation and interview for the Pride Celebration	
The Global Impact of the Antarctic Ice Sheet in a Warming World <i>Weather and Climate Livestream</i>	2025
• Presentation for the community initiative “Save Our Forecasts”	

Climate Change and Queer Resilience*Boston Museum of Science*

2024

- Presentation and interview for the Pride Celebration

Climate and Environmental Injustice of Animal-Based Dairy*Food Empowerment Project*

2024

- Presentation and panel discussion for The Embodiment of Injustice: The Dairy Industry [Link](#)

The Climate Injustice of Militarism*Climate Action Now Western MA event 'War and the Climate Crisis: Escalating Impacts'*

2024

- Presentation and panel discussion with Ramon Mejía of the Grassroots Global Justice Alliance
- Taught again at the Sojourner Truth School for Social Justice Education

The Paris Agreement and Climate Justice: Inequitable Impacts of Sea Level Rise Associated with Temperature Targets*Climate Action Now Western MA*

2022

Rising Emissions and Climate Destabilization*Climate Action Now Western MA*

2021

Agriculture and Climate Change: A Science Based and Intersectional Perspective*Pulse Cafe*

2021

- Community Forum: Your Food, Your Climate

Climate Change and Climate Action in Massachusetts, emphasis on Boston*Boston MA Atheist Secular Humanist Group*

2019

Climate Science and Social Justice*Youth Climate Strike Amherst*

2019

- Invited speech in support of the Global Climate Strike youth movement

Climate Change and Climate Action in Massachusetts, emphasis on Western MA*Western MA Atheist Secular Humanist Group*

2019

UN Special Report on 1.5°C and Climate Projections in Massachusetts*Franklin County Continuing Political Revolution Community Organizers Open Forum*

2019

Climate Change: Science and Solutions*Northern Connecticut Vegetarian Society*

2018

Climate Change: Science and Solutions*Valley Vegfest*

2018

SCIENCE COMMUNICATION: WRITINGS

- **Sea level doesn't rise at the same rate everywhere – we mapped where Antarctica's ice melt would have the biggest impact**, Co-written with Ambarish Karmalkar. *The Conversation*, 2025 [Link](#); This piece was also published in French [Link](#) and Portuguese [Link](#) and republished on the United Nations Office for Disaster Risk Reduction Prevention Web [Link](#)
- **Investigating Future Climate Using Climate, Ice Sheet, and Solid Earth Models**, Springer Nature Research Communities, 2025 [Link](#)
- **How Major Carbon Producers Drive Sea Level Rise and Climate Injustice**, Union of Concerned Scientists, 2025 [Link](#)
- **The Science Behind Sea Level Rise: How Past Emissions Will Shape Our Future**, Union of Concerned Scientists, 2025 [Link](#)

- **How Do You Talk to Children about Climate Change? One Book Has a Few Ideas**, Union of Concerned Scientists, 2024 [Link](#)
- **Our New Research Says the Solid Earth Can Help Protect the Antarctic Ice Sheet—Only if We Cut Emissions Now**, Co-written with Natalya Gomez. Union of Concerned Scientists, 2024 [Link](#)
- **Fossil Fuel Companies Make Billions in Profit as We Suffer Billions in Losses: 2024 Edition**, Union of Concerned Scientists, 2024 [Link](#)
- **The Fossil Fuel Industry Continues Producing Heat-Trapping Emissions that Drive Climate Change**, Union of Concerned Scientists, 2024 [Link](#)
- **COP28 Global Methane Pledge Efforts Still Not Enough**, Union of Concerned Scientists, 2023 [Link](#)
- **Unrelenting Heat Requires Accountability and Action**, Union of Concerned Scientists, 2023 [Link](#)
- **Rising Seas, Rising Stakes: The Case for an International Court of Justice Advisory Opinion**, Union of Concerned Scientists, 2023 [Link](#)
- **Fossil Fuel Companies Make Billions in Profit as We Suffer Billions in Losses**, Union of Concerned Scientists, 2023 [Link](#)
- **ExxonMobil Accurately Projected Rising Temperatures While Publicly Disparaging Climate Science**, Union of Concerned Scientists, 2023 [Link](#)
- **Do Paris Agreement Temperature Goals Address Sea Level Rise and Climate Justice?**, Union of Concerned Scientists, 2023 [Link](#)
- **COP27 Global Methane Pledge Efforts Are Not Enough**, Union of Concerned Scientists, 2022 [Link](#)
- **Dr. Shaina Sadai Talks About COP27, Climate Justice, Sea Level Rise, and Corporate Accountability**, Union of Concerned Scientists interview with Dr. Delta Merner, 2022 [Link](#)
- **Paris Agreement 101**, Time Scavengers, 2021
- **The projected timing of abrupt ecological disruption from climate change**, Time Scavengers, 2021 [Link](#)
- **The Coasts Are Disappearing. We Need to Protect Them for Everyone**, Co-authored with Jeff Sebo, Sentient Media, 2020 [Link](#)
- **An Alternative Worldview: Anti-Speciesist Climate Perspectives**, Resurgence Ecologist Magazine 2020
- **Western Mass Youth Climate Summit**, Time Scavengers, 2020 [Link](#)
- **The Benefits of Community College: Personal Stories and Examples**, Time Scavengers, 2020 [Link](#)
- **Inclusivity and Sustainability in Conference Food**, Time Scavengers, 2020 [Link](#)
- **Climate Science Day on Capitol Hill, Washington, DC**, Time Scavengers, 2020 [Link](#)
- **More Pollution, Less Accountability: Trump’s New Rules for Agribusiness**, Medium, 2019

SELECTED COURSEWORK

Geosciences and Geography

University of Massachusetts Amherst

- Oceanography, Paleoceanography, Paleoclimatology, Paleomagnetism, Earth Physics, Time Series Analysis, Political Geography, Geographic Theory and Analysis

Research Justice and Science Communication

University of Massachusetts Amherst

- Science Communication, Diversity Inclusion Pedagogy, Adapting to Climate Change, Feminisms and Environmental Justice, Skills and Teaching for First Year Seminar, Indigenous Knowledge and Climate Adaptation Science Seminar

Physics and Astrophysics

University of Massachusetts Amherst

- Galactic & Extragalactic Astronomy, Modern Astrophysics, Statistical Mechanics, Quantum Mechanics, Techniques of Theoretical Physics, Computational Physics, Methods of Applied Statistics, Mathematical Statistics

Mathematics

University of Massachusetts Amherst

- Numerical Analysis, Partial Differential Equations, Nonlinear Dynamics & Chaos, Numerical Algorithms

COMMUNITY PARTICIPATION AND PROFESSIONAL DEVELOPMENT: RESEARCH

American Meteorological Society Boundary Layers and Turbulence Conference	2025
American Meteorological Society 52nd Conference on Broadcast and Digital Meteorology and 21st Conference on Mesoscale Processes	2025
Attribution Science and Law Conference	2025
Ways of Repair: Loss and Damage Symposium	2025
Glacial Isostatic Adjustment Workshop	2025
Introduction to NVivo14	2024
Qualitative Research Design and Methods	2024
Intro to Python and Web-scraping	2024
Community Earth System Model workshop	2023, 2024
Co-creating Useful and Usable Climate Intervention Simulations NSF GCR workshop	2024
Confronting Earth System Model Trends with Observations CLIVAR Workshop	2024
Polar Amplification of Climate Change Across Hemispheres & Seasons: Causes & Constraints Workshop	2024
Jupyter Notebooks for Accessing Ocean Data	2024
Visualizing 2D and 3D Geoscience Data in Python	2023
Introducing the Community Earth System Model (CESM2)	2022
Virtual Island Summit	2021–2023
Deep Dive into QGIS	2021
Mid-Atlantic Marine Debris Summit	2021
Visualization and Analysis Platform for Ocean, Atmosphere, and Solar Researchers) training	2021
Jupyter Notebooks Tutorial	2021
Python Numpy Tutorial	2021

GeoScientists for the People	2021
World Universities Network Early Career Researcher Workshop: SDG 13 Climate Action	2021
Feinberg Series Planet on a Precipice: Histories and Futures of the Environmental Emergency	2020–2021
Yale Oceans and Climate Conference	2020
Animals x Climate x Health Seminar Series	2020
Scientific Committee on Antarctic Research conference	2020
Union of Concerned Scientists Early Career Summit on Clean Energy & Transportation in MA	2020
Union of Radical Political Economists Conference	2018

COMMUNITY PARTICIPATION AND PROFESSIONAL DEVELOPMENT: DIVERSITY AND INCLUSION

“I Don’t Want Allies” by Imani Barbarin at Mount Holyoke’s BOOM!	2025
AAUP Training: The Antidote to Repression is Information	2025
Unpacking Antisemitism in a Solidarity Framework	2025
Palestinian Landscapes & Liberatory Ecologies Autumn School	2024
Negotiating a Racist World: Identity Development, Positionality, and Liberation Training	2024
Understanding the Disability Community and Ableism Training	2024
Environmental Justice Training	2024
White Ally and Accountability Group Member	2022–2023
Pride Month Intersex Inclusion Training	2023
Unlearning Racism in Geosciences	2021
Climate Change from the Perspective of Indigenous People	2021
Renewable Energy in Palestine	2021
Gender, the Body, and Fieldwork Symposium	2020
Confronting the Climate Crisis: Feminist Pathways to Just and Sustainable Futures Conference	2020
Reclaiming STEM Conference	2019, 2020
Third International Meeting for Science in Palestine	2020
Society for Women in Marine Sciences Conference	2017, 2018

COMMUNITY PARTICIPATION AND PROFESSIONAL DEVELOPMENT: TEACHING AND SCIENCE COMMUNICATION

National Weather Service Skywarn Weather Spotter Training	2025
NASA Training: Sea Level Change Tools for Planning and Decision Support	2025
Sustainability Education Forum	2025
Supporting Neurodivergent and Neuroexpansive Learners Advanced Workshop	2025
Putting the “Teacher” in “Teacher-Scholar” Workshop	2025
Sustainability Across the Curriculum Workshop	2025
American Association of University Professors National Day of Action	2025
Teaching about Eyes on the Hydrosphere: Tracking Water Resources	2021
Mid-Atlantic Climate Change Education Conference	2021, 2020
Teaching about Planning for Failure: Landslide Analysis for a Safer Society	2021

Teaching about Our Changing Climate: Data Behind Melting Ice and Changing Sea Level	2021
Teaching about Measuring the Earth with GPS: Plate Motion and Changing Ice-Water	2021
Teaching Online workshop	2021
Teaching Distracted Minds workshop	2021
Rethinking Grades workshop	2021
West Antarctic Ice Sheet Science Communication workshop	2020
Engaging Students Online workshop	2020
Assess Your Students' Learning and the Effectiveness of Your Online Teaching workshop	2020
Teaching at Teaching Intensive Institutions Conference	2019
Inclusive Science Communication Conference	2019
Demystifying Public Engagement: A Two-Day Crash Course in Using Research to Change the World	2019
Accessibility Training for Moodle Online Course System	2019
Engaging With Policy Makers: Strategies and Pitfalls	2019
Public Engagement 101: Goal Setting, Network Mapping, and Message Development	2019
Queering Curriculum workshop	2019
AAAS Climate Science Congressional Visits Day training	2019