

Rebecca G Orrison

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OBJECTIVE

I am a scientist-activist with experience in collaborative and strategic campaign development. I aim to leverage my skills to directly engage with legislative and executive channels of policy development on the national stage. My career goal is to work at the nexus of science and policy where I will build the urgently needed social and scientific foundation upon which climate solutions can be developed to address the magnitude of the crisis we face.

EDUCATION

University at Albany; State University of New York 9/2018 – present

Dept of Atmospheric and Environmental Sciences (DAES)

Ph.D.; Atmospheric Science, *qualification exam: Dec 2020*

Advisor: Dr. Mathias Vuille

University of Minnesota; Twin Cities 2016

B.Sc.; Environmental Science, Policy and Management

Emphasis: *Earth Systems and Atmospheric Science*

Minor: *Climatology*

ADVOCACY EXPERIENCE

Coordinator 1/2021 – present

Public Power Working Group; Capital District Democratic Socialists of America

Public Power NY Coalition

- Current steering member and sole climate scientist of a strategic statewide campaign to fight for renewable energy, high-paying jobs, and environmental justice through the expansion of public power in the state of New York, and to pass the New York Build Public Renewables Act (A1466A/S6453).
- Ongoing relationship development with key stakeholders, including organized labor, elected officials, and social justice organizations.
- Ongoing recruitment and training to support a local team of activists engaged in statewide efforts and team collaboration on written communications (press releases and articles).
- Planned seven legislative lobbying days in 2020–2021 legislative session and a regionally coordinated rally (June 2021).

Co-convenor 4/2018 – 12/2021

Climate Change Working Group

Science for the People

- Facilitated national working group meetings across various member chapters.
- Developed a campaign for a “People’s Green New Deal” to combat the climate crisis with widespread democratic input, including support for events across the United States and the development of materials and resources for local efforts.
- Member of publication collective for the Science for the People Magazine ‘People’s Green New Deal’ issue.
- Coordinated a seven-part online teach-in series on a People’s Green New Deal to promote our magazine issue with international guests and attendees, reaching more than 500 participants.

RESEARCH EXPERIENCE

Graduate Research Assistant 9/2018 – present

Research Foundation for SUNY at the University at Albany

Supervisor: Dr. Mathias Vuille

- Investigating the last millennium South American Monsoon System variability using oxygen isotope proxies and isotope-enabled climate models.
- Funded by NSF-Project for International Research and Education (PIRE)

Guest Research Scientist

9/2017 – 12/2017

Climate Dynamics Group, Max Planck Institute for Meteorology; Hamburg, Germany

Supervisor: Dr. Thorsten Mauritsen

- Compared the Bjerknes feedback strength in reanalyses and observations across multiple data sets (surface and satellite) with estimates in current literature derived from CMIP model simulations.

Undergraduate Research Assistant

6/2014 – 10/2016

Dept of Soil, Water and Climate; University of Minnesota

Supervisors: Dr. Peter Snyder, Dr. Stefan Liess

- Evaluated the North American hydroclimate response to global ocean-atmosphere interactions.

SELECTED TEACHING AND FACILITATION

Guest Lecture

7/27/2021

A Paleoclimatic Perspective on Climate Variability / Science and Activism; Grassroots Science - STSH/S 4961; Rensselaer Polytechnic Institute

- Gave a presentation on paleoclimatology and the climate crisis, my research, and participated in a guided Q&A about science and activism with upper-level science and technology studies undergraduate students.

PIRE Workshop Instructor

5/25/2021

Introducción a la Dendrocronología en R (Introduction to Dendrochronology in R)

- Helped to organize and facilitate a workshop on an introduction to R in Spanish for 20 students from all over the world, primarily Latin America.

PIRE Academy Instructor

Spring 2019

SUNY Purchase

- Helped to organize and facilitate weekend program focused on paleoclimatology for students from backgrounds under-represented in earth science.

Workshop Organizer and Facilitator

11/2019

Climate Change and Justice: Reimagining Food Systems; Albany, NY

- A community-driven discussion joined by a panel of experts for conversations around food, agriculture, social justice and climate change. Approximately 70 people in attendance, childcare provided.

Workshop Facilitator

11/2019

Graduate Climate Conference 2019; Graduate Climate Conference, Woods Hole, MA

- Developed a 90 minute workshop for 30 conference participants entitled “Science and storytelling: The false dualism of the professional climate scientist and the individual living in a changing climate” to engage with the personal and political aspects of conducting science.

SELECTED PRESENTATIONS

Orrison, R., (2022). Climate Change and Us: Beyond Individual Action; *Beverwyck Women’s Luncheon, Beverwyck Independent Seniors, Slingerlands, NY*. [oral]

- *Scheduled public talk for 75 seniors addressing climate change and civic action.*

Orrison, R., Vuille, M., (2021). Mechanisms of South American Monsoon System response to external variability over the last millennium; *Geological Society of London, Climate change in the geological record; virtual*. [oral – ECR flash talk]

- *Public talk for an audience of 250 people from diverse backgrounds.*

Skott, C. M., **Orrison, R.**, (2020). Reaching out to Policy Makers in the PIRE context. *PIRE-CREATE Annual Meeting; virtual*. [oral]

- *Invited talk on evidenced-based policy development for a scientific audience.*

Orrison, R., Vuille, M., (2019). Intercomparison of proxy data and model simulations as key to understanding internal variability of the South American Monsoon System. *US CLIVAR Water Isotopes and Climate Workshop, Boulder, CO*. [poster]

- *Workshop attendance also included participation in strategy sessions for the application of water isotopes to understanding and predicting the water cycle's role in climate variability and change.*

Orrison, R., Vuille, M., (2019). Long-term variability of South American climate. *Dept. visit by Congressman Paul Tonko, University at Albany; Albany, NY*. [poster]

- *The Congressman's visit also included a roundtable discussion on the importance of science and science funding for New York State with graduate students.*

Orrison, R., (2019). Climate Change in context: Science, Policy, and Society. *Climate Group, University at Albany; Albany, NY*. [oral]

- *Interdepartmental presentation on climate change, addressing the current international, federal, and state level policy solutions and discussing issues of climate justice.*

ADDITIONAL TRAINING

American Meteorological Society Summer Policy Colloquium 2020

- Two week virtual intensive program on aspects of federal science policy, federal agency operations, and non-profit/industry engagement with science policy
- Follow-up webinars on special topics and practical exercise on legislative mark-up

PIRE-CREATE Summer School São Paulo, Brazil July 2019

- Theoretical, lab, and field training on fundamentals of paleoclimatology
- International and interdisciplinary experience working alongside students and instructors from across the Americas (United States, Cuba, Mexico, Colombia, Peru, Argentina, Brazil).

SERVICE

Graduate Student Representative: DAES Graduate Program Committee 2020 – present

Editorial Volunteer: Science for the People Magazine 2020 – present

Mentor: DAES Graduate Mentorship Program 2019 – present

Student Representative: Departmental Roundtable Spring 2021

President: DAES Graduate Student Organization 2019 – 2020

Member: DAES Family Earth Day Planning Committee 2019, 2020

Member: DAES Graduate Handbook policy update committee Fall 2018

AWARDS, FUNDING

Distinguished Service Award; DAES, UAlbany (\$200) 2020

AMS Science Policy Colloquium Support; National Science Foundation (\$5300) 2020

Excellence at the Intersection of Science and Life Essay Competition, second place winner;

Women in Health and Science Committee, UAlbany (\$50) 2020

Travel Support; US CLIVAR Water Isotopes and Climate Workshop (\$1,000) 2019

PyCon Scholarship; Python Software Foundation (\$700) 2015

Undergraduate Research Opportunities Program Award; University of Minnesota (\$1,400) 2014

Charles and Myrtle Stroud Scholarship; University of Minnesota (\$3,000) 2013

PROFESSIONAL AFFILIATIONS

American Geophysical Union 2018 – present

American Meteorological Society 2018 – present

American Association for the Advancement of Science 2018 – present