# Caleb O'Brien

# Blacksburg, VA, 25060

calebo@vt.edu || 573.239.3084

### **EDUCATION**

PhD: Forest Resource and Environmental Conservation (In Progress)

Virginia Tech

Expected May 2023

GPA: 4.0/4.0

Dissertation Topic- Learning and Action for Place-Based Climate Change Adaptation – advised

by Dr. Marc Stern

**MA: Journalism** 

University of Missouri—Columbia

08/2013 - 12/2015

GPA: 3.657/4.0

Master's Thesis - What we talk about when we talk about climate change: Storytelling in the

Anthropocene – advised by Professor Bill Allen

BS: Philosophy-Neuroscience-Psychology (Minors: Writing and Sculpture)

08/2005 - 05/2009

GPA: 3.62/4.0

Washington University in St. Louis

#### **RESEARCH AND TEACHING INTERESTS**

Climate adaptation, environmental justice, ecological restoration, adaptation planning processes, trust, collaborative governance, human dimensions of conservation, communication, framing, systems thinking, social science theory

#### PEER-REVIEWED PUBLICATIONS

Stern, M. J., Hurst, K. F., Brousseau, J. J., **O'Brien, C.**, & Hansen, L. J. (2023). Ten Lessons for Effective Place-Based Climate Adaptation Planning Workshops. *Climate*, *11*(2), 43.

Fromm, M., & **O'Brien, C.** (2016). Finding consensus: a pilot survey in news literacy education. Journalism Education, 5(1), 123-135.

### MANUSCRIPTS IN PROGRESS/REVIEW

**O'Brien, C**, Brousseau, J, Stern, M., Hull, B., & Hansen, L. (January 2022). What Can Climate Adaptation Workshops Achieve. Manuscript submitted for publication.

Miller, Z., **O'Brien, C.,** Canfield, C., & Sullivan, L. (December 2022). *Show-Me resilience:* Assessing and reconciling expert perceptions of climate resilience in rural Missouri. Manuscript submitted for publication.

## **REVIEWS, WHITE PAPERS**

Reid, J. L., Beall, M., Bellangue, D., Burt, M. A., Coscia, J. T., Lewis, K., ... & **O'Brien, C.** (2021). Nature's Matrix: Linking Agriculture, Biodiversity Conservation and Food Sovereignty. Ivette Perfecto, John Vandermeer, and Angus Wright (2019) Routledge, Abingdon, Oxon, UK

Stern, M. J., Brousseau, J., **O'Brien, C.**, Hurste, K., & Hansen, L. (2020). Climate adaptation workshop delphi study report: Facilitators' viewpoints on effective practices. *Virginia Tech: Blacksburg, VA, USA*.

#### **CONFERENCE PRESENTATIONS**

- **2022 O'Brien, C.,** Stern, M., Brousseau, J., & Hansen, L. (2022). *Effective Practices in Climate Adaptation Workshops: Comparing Participant and Facilitator Perceptions.* National Adaptation Forum, Baltimore, MD, October 2022.
- **2022** Taylor, J. & **O'Brien, C.,** (2022). *Inclusive Ecological Restoration in the Rappahannock River Watershed: Developing a research agenda*. Rappahannock River Symposium, Fredericksburg, VA, October 2022.
- **2022 O'Brien, C.** *Elusive pathways to adaptation? Perceptions of the catalysts and constraints to climate workshop outcomes.* Interfaces of Global Change Graduate Research Symposium, Blacksburg, VA, April 2022

#### INVITED PRESENTATIONS

**2022** Miller, Z., **O'Brien, C.,** Canfield, C., & Sullivan, L. (2022). *Climate Resilience in Rural Missouri*. Virtual, September, 2022.

#### **POSTERS**

- 2022 Stern, M., Hurst, K., Brousseau, J., O'Brien, C., & Hansen, L. (2022). Facilitators' Perspectives on Effective Climate Adaptation Workshop Practices. National Adaptation Forum, October 2022.
- 2022 Hansen, L., Mielbrecht, E., Hillberg, L., Rudnick, D., Brousseau, J., O'Brien, C., & Stern, M. (2022). Identifying Drivers of Learning and Action in Community Adaptation Workshops. National Adaptation Forum, October 2022.

#### **EXPERIENCE**

# Faculty/Center for Leadership in Global Sustainability, Virginia Tech 04/23 - present Duties, accomplishments, and related skills:

- -Curriculum development
- -Teaching
- -Special projects

## PhD Candidate/Virginia Tech Expected Graduation 2023

#### **Graduate Research Assistant:**

- Researcher on a National Science Foundation-funded Advancing Informal STEM Learning (AISL) Research in Service to Practice study of climate change adaptation and resilience workshops' impact and outcomes
- -Conducting mixed methods research, including survey design and administration, semistructured interviews, focus groups, and observational data collection. Qualitative and quantitative analyses including qualitative coding, memoing, t-tests, ANOVA, linear regression.
- -Participating in and studying outcomes of 8 in-depth climate adaptation workshop (online and in-person) case studies with diverse stakeholders including state, federal, private-sector and NGO representatives (in progress)
- -Completed data collection for 32 retrospective climate adaptation workshop case studies, analyses underway
- -Leading a systematic literature review on best practices in communicative framing (in progress)

## Instructor of Record: Strategies for Sustainability (Fall 2021 & Fall 2023)

- -Taught a course of 15 students in the Masters of Natural Resources program highlighting insights from social science for environmental sustainability
- -Updated curriculum to include a greater focus on Environmental Justice/DEI issue
- -Created presentations and other materials for course

## **Graduate Teaching Assistant:** Leadership for Global Sustainability

- -Grading, logistics, tech assistance for Zoom and in-person meetings, and occasional lecture for a large (100+) lecture course
- -Guided students to complete group projects, offered advice and feedback to ensure they met class expectations in a timely manner and worked effectively as teams.

# Farm manager/Mother Farm Orchards 04/17-09/19

Columbia, Missouri Hours: 20-40/week

**Duties, accomplishments, and related skills:** I managed a fledgling, diversified farm and orchard, where I husbanded fruit trees, berries, goats, cows, poultry, vegetables, hay pastures, etc. I built fence, sweltered in a greenhouse, chain-sawed, mapped vegetation w/ GPS, made concoctions and decoctions and engaged in all manner of tractor shenanigans. I managed farm operations to meet objectives and stay within farm budget, oversaw 2-4 seasonal employees per year. I researched and implemented organic practices to maintain farm health.

# Freelance Journalist/O.O. McIntyre Fellowship 01/16-03/17

Asuncion, Paraguay
Hours: 40/week

**Duties, accomplishments, and related skills:** I researched, reported, filmed, photographed, wrote, edited and produced stories about Paraguay, focusing on the intersection of science, society, and the environment. I interacted with Paraguayan stakeholders including federal, state, local, media and public interest groups. I translated from Spanish and Guarani to produce stories in English.

# Volunteer/US Agency for International Development (USAID) Farmer-to-Farmer (F2F) 07/16

Osun State, Nigeria
Hours: 40/week

**Duties, accomplishments, and related skills**: I participated in a F2F volunteer program through the Winrock International nonprofit. As a facilitator of a train-the-trainers program, I helped faculty at a technical college develop a culturally and context appropriate syllabus and training manuals for a new beekeeping program. I trained faculty, staff and community members on hive management, honey production, secondary and value-added hive products, and I led hands-on field-based trainings. I met with politicians, university faculty and local media as a representative of the USAID F2F program and facilitated information exchange in the context of humanitarian assistance capacity building programs.

# Intern/RESOLV and mongabay.com 08/15- 12/15

Washington, DC **Hours**: 40/week

**Duties, accomplishments, and related skills:** As part of a small team, I collaborated with others to report on the use of emerging technology for wildlife conservation, run social media, collect and analyze data about website readership and reach, and develop workflow and standard operating procedures for the small WildTech vertical newsroom. I assisted with and participated in meetings related to RESOLV's conflict-mediation and conservation portfolio and developed press releases for RESOLV initiatives.

# Writer/ U.S. Department of the Interior Natural Resource Damage Assessment and Restoration Program (NRDARP) 05/15-08/15

Columbia, Mo. Hours: 20/week

**Duties, accomplishments, and related skills**: I investigated restoration projects by gathering technical materials such as information from official and documentary sources, synthesizing the findings on NRDARP projects. I helped develop a public-facing informational clearinghouse to share the results in coordination with other team members.

# Science writer and graduate assistant/Bond Life Sciences Center 01/15-08/15

Columbia, Mo. Hours: 20/week

**Duties, accomplishments, and related skills**: As a science writer, I covered research, events and discoveries associated with the center and shared them through video, written narratives and photos. I managed the center's social media presence. I participated in organizing, hosting and promoting a series of high-profile events and talks.

# Research and teaching assistant/Poynter Institute, American Society of News Editors (ASNE), Cross Cultural Journalism Course 08/13-12/14

Columbia, Mo. Hours: 20/week

**Duties, accomplishments, and related skills**: For Poynter and ASNE: I created and ran existing institute websites, conducted a national news literacy survey then analyzed and reported results, wrote press releases and gamely discharged administrative duties. I helped coordinate an intensive training course for Missouri educators and responded to participant requests for information in the lead-up to the event.

# Reporter-editor-writer/The Columbia Missourian, Vox Magazine 08/13-8/15

Columbia, Mo. **Hours**: 20-40/week

Duties, accomplishments, and related skills:

I served as an enterprise reporter for the daily newspaper *The Columbia Missourian* covering stories including deer incinerators, contaminated soil in downtown Columbia, city council meetings and tomato festivals. I also served as an editor and contributing writer for the weekly arts and culture rag *Vox Magazine*. I collaborated with writers, designers, and editors to conceive, assign, write, fact-check, edit and publish a broad range of stories and articles in print and online.

## Agribusiness specialist/Peace Corps Response 2013

Panama.

Hours: 40/week

**Duties, accomplishments, and related skills**: I facilitated sustainable agriculture practices, promoted small business development, co-facilitated coffee-growing and small-business management short courses, built a hot sauce processing facility with a farmers' group, assisted with nursery maintenance, lived and worked under rugged conditions the Panama Canal watershed. I worked across linguistic, educational, and cultural barriers to exchange information, convey best practices, direct resources to my community and build capacity. I coordinated among community groups, Panama Canal officials, Peace Corps, and Engineers Without Borders to help manage the construction of a suspension bridge in a neighboring community.

# Agriculture Extension Agent/Peace Corps 2009-2011

Paraguay

Hours: 40/week

**Duties, accomplishments, and related skills**: I provided culturally- and context-appropriate technical assistance to help beekeepers increase and diversify hive yields; promoted sustainable agriculture; initiated school gardens; conducted weekly radio shows; organized health and education initiatives; tutored English; taught seminars on health, beekeeping, agriculture and equity-related topics; lived and worked near Cerrito, Ñeembucú. I worked across linguistic, educational, and cultural barriers to exchange information, convey best practices, direct resources to my community and build capacity. I participated in the administration of a large development grant in my community that involved the distribution and maintenance of beekeeping tools, materials, and bees, and the utilization of a dedicated honey-harvest facility. For 27 months, I adhered to the Peace Corps' policies for international emergency management, taking appropriate preventative and precautionary steps to insure my own safety and the safety of the host country nationals and other U.S. representatives.

## 3D Workshop Monitor/Sculpture Department; Washington University in St. Louis 08/07-05/09

St. louis, MO

Hours: 20/week

**Duties, accomplishments, and related skills**: I trained and supervised student equipment use, serviced machines, designed and fabricated shop improvements.

# Research Intern/University of Missouri Dept. of Psychological Sciences 05/07-08/07

Columbia, MO

Hours: 20 hours/week

**Duties, accomplishments, and related skills**: I ran experiments for the Nelson Cowan

lab, checked data and ran basic analyses.

# Summer Research Fellow/ University of Missouri Dept. of Ophthalmology: Neurodegenerative Diseases Research Laboratory 05/06-08/06

Columbia, MO

Hours: 20 hours/week

**Duties, accomplishments, and related skills**: I conducted literature searches, maintained mouse brain sections, ran gel electrophoresis, maintained lab equipment.

## **Stable Hand/Equine Medical Services** 05/05-08/05

Columbia, MO

Hours: 20 hours/week

**Duties, accomplishments, and related skills**: I mucked stalls; exercised, fed and administered medicine to horses; drove tractor pulling feed wagon, manure spreader, etcetera

# Gym worker/Bouldering Garden Climbing Gym 05/03-08/03

Columbia, MO

Hours: 20 hours/week

**Duties, accomplishments, and related skills**: I introduced clients to the basics of rock-climbing safety and techniques, sold gear, ran birthday parties, set routes, handled cash.

### LEADERSHIP, RECOGNITION, SERVICE

#### 2022/2023

Recipient: Interfaces of Global Change Fellowship

Professional development co-chair: Virginia Tech Interfaces of Global Change

Actions and accomplishments:

- -Recruited keynote speaker for Graduate Research Symposium
- -Organized informal meetings with graduate fellows and faculty affiliates

#### Other activities:

- -Trail Maintainer: Roanoke Appalachian Trail Club
- -Volunteer: Virginia Master Naturalist
- -Organizer: Blacksburg Food Cycle (A bike-powered food drive that secured more than 550 lbs.

of donations)

## 2021/2022

Professional development co-chair: Virginia Tech Interfaces of Global Change

Actions and accomplishments:

- -Recruited keynote speaker for Graduate Research Symposium
- -Organized informal meetings with graduate fellows and faculty affiliates
- -Organized and moderated a professional development panel with COP26 attendees Other activities:
- -Trail Maintainer: Roanoke Appalachian Trail Club
- -Trainee: Virginia Master Naturalist
- -Organizer: Blacksburg Food Cycle (550+ lbs. of donations)

## 2020/2021

<u>Co-president, Forest Resources and Environmental Conservation Graduate Student Association</u> *Actions and accomplishments*:

- -Graduate Student Representative on CNRE College COVID-19 taskforce operationalizing 2020 fall semester
- -College-level environmental justice journal club for graduate students
- -Helped implement a college level Garmin InReach Satellite Messenger and Emergency Beacon Rental Program
- -Organized and facilitated a seminar speaker series featuring 13 speakers from around the U.S. <a href="Other activities">Other activities</a>:
- -Mentor: Friends of Paraguay RPCV mentorship program.
- -Organizer: Blacksburg Food Cycle (1000+ lbs. of donations)

.

**2019** Co-founder, Southwest Virginia RPCVs

2018 Vice President and Advocacy chair, Central Missouri Returned Peace Corps Volunteers

2016: Presidential Volunteer Service Award

2015 E.U. Press visit to Brussels, field reporting trips to Costa Rica and Tanzania

Duffy Fund: Grant for independent journalism projects

Don Romero Prize: Award for outstanding magazine writing

O.O. McIntyre Fellowship: Highest postgraduate award at the Missouri School of Journalism

#### **OTHER SKILLS**

#### Languages:

Proficient in Spanish and Guarani

## Tech:

R, SPSS, NVivo, MySQL, WordPress, JMP, Office suite, etc.

#### REFERENCES

- Marc Stern, Professor, Department of Forest Resources and Environmental Conservation, College of Natural Resources and Environment, Virginia Tech mjstern@vt.edu
- Bruce Hull, Professor, Department of Forest Resources and Environmental Conservation,
   College of Natural Resources and Environment, Virginia Tech <a href="https://hullrb@vt.edu">hullrb@vt.edu</a>
- Danny Axsom, Professor, Department of Psychology, Virginia Tech, <a href="mailto:axsom@vt.edu">axsom@vt.edu</a>
- Susan Nagel, Mother Farm Orchard, 573.268.7041 nagels@health.missouri.edu
- Bill Allen, Asst. Prof. Emeritus of Science & Agricultural Journalism, University of Missouri, Columbia allenwi@missouri.edu