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EDUCATION

- Dec. 2024 (expected) **University of North Carolina – Chapel Hill**, Chapel Hill, NC
PhD, Environmental Sciences and Engineering
- May 2020 **University of North Carolina – Chapel Hill**, Chapel Hill, NC
MS, Environmental Sciences and Engineering
- December 2016 **Georgetown University, Walsh School of Foreign Service**, Washington DC
BSFS, Science, Technology, and International Affairs | Arabic Minor | GPA: 3.82/4.0
Awards/Honors: Cum Laude; SIPS 2017 Grant Awardee; Walter and Leonore Annenberg Fellow for the Council of American Ambassadors; Alpha Sigma Nu; Krogh Honors Scholar
- Fall 2015 **Princess Sumaya University for Technology**, Amman, Jordan

RELEVANT EXPERIENCE

- August 2018-present **Center for Financial Risk Analysis in Environmental Systems**, Chapel Hill, NC
Graduate Research Assistant
- Quantify the linkages between food-energy-water systems and their financial implications
 - Use stochastic simulation methods to create synthetic time series of weather conditions
 - Design and validate instruments to manage hydropower suppliers' financial risk
 - Contribute to modelling efforts on the energy-water nexus in the Columbia River Basin
- August 2017-July 2018 **Global Water Intelligence**, Oxford, UK
Research Analyst
- Collected and analyzed data and information from published sources, proprietary sources, and conducted interviews with industry experts to identify trends for water utilities
 - Produced quarterly publications including analysis of and forecasts for the water industry
- July-August 2017 **Dilasa Janvikas Pratishthan NGO**, Aurangabad, India
Social Innovation in Public Service Grantee
- Produced materials for a five day workshop on innovation in village-level water use
 - Led a design thinking program attended by over 30 farming women in Waghola village
- January-March 2017 **The International Centre for Water Resources and Global Change**, Koblenz, Germany
Visiting Scientist, Water Diplomacy
- Acted as the Centre's liaison with the Stockholm Water Institute and the German Agency for International Development for the production of a joint report on water diplomacy
 - Independently crafted two policy briefs analyzing water cooperation versus water diplomacy

June-August 2016 **The United States Department of State**, Washington, DC
Zika Team Intern, Office of International Health and Biodefense

- Helped to organize the Public-Private Sector Roundtable on Zika by editing resources for participants, acting as an office point of contact, and providing day-of support
- Tracked the spread of and responses to Zika virus through cables from US missions abroad and prepared materials to respond to domestic transmission of Zika

OTHER

2022-present **The Daily Beer Bar**, *co-owner*, Durham, NC

2018- present **Corte Capitani Lucca, Bed & Breakfast**, *co-owner, social media manager*, Lucca, Italy

2016 **American Enterprise Institute for Public Policy Research**, *Research Intern, Office of Vice President for Foreign and Defense Policy Studies Danielle Pletka*, Washington, DC

2013-2016 **Office of Advancement, Annual Giving**, *Supervisor and Student Caller*, Georgetown University, Washington DC

2015 **Education for Nature - Vietnam**, *Digital Media Intern*, remote

2013-2015 **The Early Learning Project**, *Research Assistant*, Georgetown University, Washington DC

SKILLS

Languages: Native English and Italian (spoken and written), Professional Proficiency Spanish (spoken and written), Intermediate Proficiency Arabic (spoken and written), Elementary German (spoken and written)

Computer: Python, R, Google Earth Engine, ArcGIS, Microsoft Office, Matlab, CPLX

PUBLICATIONS

Cuppari, R.I., Denaro, S., Su, Y., Kern, J.D. & Characklis, G. W. (*in review*). Improvements in Managing Weather-driven Financial Risk for Hydropower Producers. *Journal of Water Resource Planning and Management*.

Cuppari, R.I., Fernandez-Bou, A.S., Ramirez, M., Samuels, A., Characklis G.W., Nocco, M., Abou-Najm, M. (*in review*). Understanding Drivers for Favorable Agrivoltaic Perception in California and North Carolina. *Environmental Research: Food Systems*

Macpherson, E., **Cuppari, R.I.**, Kagawa-Viviani, A., Brause, H., Brewer, W., Grant, W., Herman-Mercer, N., Livneh, B., Neupane, K., Petach, T., Peters, C., Wang, H.H., Pahl-Wostl, C., Wheeler, H. (2024) Setting a Pluralist Agenda for Water Governance: Why Power and Scale Matter. *WIREs Water*.

Cuppari, R. I., Branscomb, A., Graham, M., Negash, F., Smith, A. K., Proctor, K., ... & Abou Najm, M. (2024). Agrivoltaics: Synergies and trade-offs in achieving the sustainable development goals at the global and local scale. *Applied Energy*, 362, 122970.

Fisher, C. K., Benami, E., Dolk, M., Baldwin, J. W., Becker-Reshef, I., **Cuppari, R. I.**, Dalhaus, T., Hobbs, A., Leckebusch, G., Lacovara, P., Sobel, A. H., & Tellman, E. (2024). Bridging science and practice to en(in)sure sustainable development in a changing climate. *Journal of Catastrophe Risk and Resilience*.

Bliton, R. J., **Cuppari, R.I.**, Giesbrecht, K., & Smith, A. (2022). Democratizing Sustainable Energy Technology through Collaborative International Spaces. *Journal of Science Policy & Governance*, 20(03).

Denaro, S., **Cuppari, R. I.**, Kern, J. D., Su, Y., & Characklis, G. W. (2022). Assessing the Bonneville Power Administration's Financial Vulnerability to Hydrologic Variability. *Journal of Water Resources Planning and Management*, 148(10), 05022006.

Cuppari, R. I., Higgins, C. W., & Characklis, G. W. (2021). Agrivoltaics and weather risk: A diversification strategy for landowners. *Applied Energy*, 291, 116809. doi:10.1016/j.apenergy.2021.116809

Molnar, K., **Cuppari, R.**, Schmeier, S., & Demuth, S. (2017). *Preventing Conflicts, Fostering Cooperation –The Many Roles of Water Diplomacy*. Koblenz, Germany: UNESCO's International Centre for Water Cooperation (ICWC) at SIWI, Stockholm, Sweden and the UNESCO's International Centre for Water Resources and Global Change (ICWRGC), Koblenz, Germany.

Cuppari, R. (2017). Water Cooperation. *International Centre for Water Resources and Global Change: Policy Brief*, (2).

Cuppari, R. (2017). Water Diplomacy. *International Centre for Water Resources and Global Change: Policy Brief*, (1).

PRESENTATIONS

Cuppari, R.I., Pavelsky, T., Characklis, G.W. (2023, December). A Remote Sensing Approach to Creating a Global Insurance Pool for Weather-Related Risks to Hydropower. In *AGU Fall Meeting 2023*. AGU.

Cuppari, R.I., Pavelsky, T., Characklis, G.W. (2022, December). Remote Sensing to Mitigate Financial Risk for Hydropower Producers in Data-Scarce Regions. In *AGU Fall Meeting 2022*. AGU.

Cuppari, R.I., Singh, S., Denaro, S., Su, Y., Kern, J.D., Amos, A.L., Quirke, D., Quinn, J., Characklis, G.W. (2022, September). From the Willamette to Canada: Water Scarcity and Hydropower Across the Columbia River Basin. In *Chapman Conference: Solving Water Availability Challenges through an Interdisciplinary Framework*. AGU.

Cuppari, R.I., Denaro, S., Su, Y., Kern, J.D., & Characklis, G.W. (2021, December). New financial instruments for managing hydrometeorological risk for hydropower producers. In *AGU Fall Meeting 2021*. AGU.

Nocco., M., Abou-Najm, M., Ramirez, M., Samuels, A., **Cuppari, R.I.** The University of California Agriculture and Natural Resources Water Program Team Annual Meeting. March 10th, 2021. Virtual Oral Presentation.

Cuppari, R.I., Higgins, C.W., & Characklis, G.W. (2020, December). Co-location of Solar Power and Food Production to Improve Economic Resilience of Farmers. In *AGU Fall Meeting 2020*. AGU.

INVITED LECTURES

- February 15, 2022 The Oxford Programme for Sustainable Infrastructure Systems
A Bird's Eye View: Using Remote Sensing to Mitigate Financial Risk for Hydropower Producers
- March 8, 2022 The National University of Asunción (UNA), Paraguay
El riesgo financiero de sequías y olas de calor por hidroelectricidad y como mitigarlo

TEACHING

- Fall 2022 **Instructor:** Problems in Environmental Sciences and Engineering (ENVR 890):
Introduction to Python
- Spring 2022 **Lecturer:** Managing Environmental Financial Risk (ENVR 788). Lectures on
financial derivatives and applications under climate change, with assignment
- Fall 2021 **Co-instructor:** Problems in Environmental Sciences and Engineering (ENVR 890):
Introduction to Python

JOURNAL REVIEWS

Applied Energy
Earth's Future
Environmental Research Letters
Water Resources and Economics

AWARDS

- December 2023 Outstanding Student Presentation Award, American Geophysical Union Fall Meeting
- Spring 2023 Gillings School Service Award, Gillings School of Public Health
- Spring 2022 American Geophysical Union Voice for Science

VOLUNTEER & MEMBERSHIP

- Fall 2023 Co-President, Science Policy and Advocacy Group at UNC-Chapel Hill
- 2022 – present Member of the Durham Participatory Budgeting Steering Committee
- 2022 – present Chair, Georgetown Alumni Association of Central North Carolina
- 2021 – present Geer Street Community Garden
- 2021 – 2023 Mentorship Coordinator, Clean Water Science Network
- 2022 – 2023 Vice President, Science Policy and Advocacy Group at UNC-Chapel Hill
- 2018 – 2021 Mentor, Clean Water Science Network
- 2017 – 2022 Alumni Interviewer, Georgetown Alumni Association of Central North Carolina
- 2020-2021 Tutor, World Relief Durham
- 2019-2020 Co-President, Environmental Sciences and Engineering Student Organization