

Luke Juran, Ph.D.

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APPOINTMENTS

- Co-Director, Geospatial & Environmental Analysis Ph.D. Program (2025-Present)
- Affiliate Faculty, Fralin Life Sciences Institute, Virginia Tech (2020-Present)
- Affiliate Faculty, Center for Emerging, Zoonotic, and Arthropod-Borne Pathogens, Virginia Tech (2020-Present)
- Associate Professor of Geography, Department of Geography, Virginia Tech (2019-Present)
- Associate Professor of Human Ecology of Water, Virginia Water Resources Research Center, Virginia Tech (2019-Present)
- Affiliate Faculty, Center for Coastal Studies, Virginia Tech (2020-24)
- Visiting International Scholar, Chonnam National University, South Korea (Summer 2023)
- Director of Graduate Studies, Department. of Geography, Virginia Tech (2019-22)
- Assistant Professor of Geography, Department of Geography, Virginia Tech (2013-19)
- Assistant Professor of Human Ecology of Water, Virginia Water Resources Research Center, Virginia Tech (2013-19)
- Adjunct Assistant Professor, Department of Geographical & Sustainability Sciences, University of Iowa (2013)

RESEARCH INTERESTS

- Access to Water; WASH; HWTS & PoU Treatment; Toilet Adoption
- Hazards & Disasters; Social Vulnerability; Disaster Reconstruction; Water Sector Recovery
- India; South Asia; Gender; Development

EDUCATION

Ph.D. Geography, Department of Geographical & Sustainability Sciences, University of Iowa, 08/08 - 12/12

- Dissertation: Churning the water after the wave: water components of housing reconstruction in post-tsunami South India
 - · Gilbert F. White Award for best hazards geography dissertation, American Association of Geographers
 - J. Warren Nystrom Award finalist for best geography dissertation chapter, American Association of Geographers
- Appointments: Instructor, Research Assistant, Teaching Assistant
- Distinctions: Fulbright Fellow, Rotary International Ambassadorial Scholar, Crossing Borders Fellow, Collaborative Arts Research Translation for Human Advancement (CARTHA) Fellow

Department of Civil Engineering and Department of Humanities & Social Sciences, Indian Institute of Technology-Madras, India, 06/08 - 06/09

- Ph.D. coursework in Environmental Water Resources Engineering and Sociology on a full scholarship
- Organized forum on disaster reconstruction attended by government officials, nonprofit leaders, academics and students

Interdisciplinary M.A. in International Studies, University of Iowa, 08/06 - 05/08

- Thesis: A critical assessment of microfinance in theory and practice: lessons from the field in Tamilnadu, India
- Appointment: Teaching Assistant

B.A. Social Science Secondary Education, College of Education, University of Northern Iowa, 08/99 - 12/03

• Minors: Geography, Economics, and U.S. History

PROFESSIONAL EXPERIENCE

Higher Education Partnership for Disaster Resilient Infrastructure, India, 05/24 - 02/25 [permanently suspended due to federal government/USAID transitions]

- Five-year USAID-funded project to facilitate disaster resilience as a core component of education and workforce development
- Team includes faculty and staff at Virginia Tech (lead institution) and IIT-Roorkee, IIT-Kanpur, IISC-Bengaluru, and VT-India
- All activities integrate gender, equity, and social inclusion aspects of resilience

Sustaining Human Societies & the Natural Environment in New Zealand, Winters 2016-17 & 2024-25

- Co-Instructed field-based study abroad course on endemic species, conservation, and sustainability in New Zealand
- Supervised service learning projects to plant endemic flora and remove invasive species for the New Zealand Department of Conservation

Mapping Geogenic Contaminants in Virginia Private Drinking Water Wells, Virginia Department of Health, 05/24 - 08/24

- Co-mentored a funded grad research assistant on a project to map contaminants in private wells used for drinking water
- Mapped concentrations and clusters of arsenic, manganese, sodium, and fluoride detected in >25,000 samples from every Virginia county

<u>Deploying a Silver-Ceramic Technology to Disinfect Drinking Water in School & Community-Based Settings</u>, India, 03/22 - 07/23

- Led interdisciplinary team of faculty, staff, and funded grad research assistants at Virginia Tech, University of Virginia, and S.M. Sehgal Foundation
- Disinfected drinking water using silver ionization (MadiDrop) at 3 schools in rural Haryana
- Tested total coliform, E. wli, silver concentrations, and other water quality parameters

Analysis of the Impacts of a WASH Behavior Change Program in Bihar, India, 12/20 - 05/23

- Providing external analysis (S.M. Sehgal Foundation) on the effectiveness of a WASH behavior change intervention in 5 rural communities
- Baseline data and SWOT analysis used to identify intervention points, and impacts analyzed using statistical methods, focus group discussions, and key informant and participant interviews
- Supports an M.S. thesis project and a high school student's STEM research experience

Simulating the Upscaled Use of a Silver-Ceramic Technology to Improve Drinking Water Quality in Schools, 01/22 - 06/22

- Modeled silver concentrations released from MadiDrop in community-scale water tanks
- Simulations used to disinfect drinking water in public schools in rural Haryana, India
- Mentored and funded an undergrad research assistant who presented at a conference

Best Practices to Support K-12 STEM-Based Remote Learning in Underserved Communities, 05/20 - 12/20

- Delivered 600 water science and water sustainability project-based kits to at-risk K-12 students to supplement missed educational opportunities from COVID-19
- Mentored and funded undergrad and grad research assistants who developed STEM-based activities, curriculum according to Virginia Standards of Learning, and deployed assessments across Virginia

What's in your Water, Kids? Developing Student Citizen Scientists through the Virginia Household Water Quality Program, 06/19 - 06/20

- Organized workshops for 6 high schools (109 students) across rural Virginia
- Participants tested water quality of their private wells and were assessed on comprehension
- Mentored and funded undergrad research assistants who delivered content according to Virginia Standards of Learning

An Examination of Access to WASH Services among Refugees in the New River Valley, 01/18 - 01/19

- Documented and analyzed primary accounts of water, sanitation, and hygiene conditions experienced by refugees and their families as they traveled from their home to asylum
- Mentored and funded undergrad research assistant who presented at a conference

The Introduction of Aquaponics Systems in the Educational Setting in Virginia, 01/18 - 01/19

- Implemented aquaponics system and associated curricula in Blacksburg New School
- Mentored and funded undergrad research assistant who presented at a conference

USDA-Research & Extension Experiential Learning for Undergraduates, 05/18 - 07/18

- Mentored three students from across USA on project titled *Ecosystem & cultural impacts of the Mountain Valley Pipeline using a mixed methods approach* at Virginia Tech Stream Lab
- Students presented research at a conference

Social, Economic & Cultural Barriers to Latrine Adoption in Coastal India, 12/16 - 12/17

- Deployed household surveys and interviews to assess latrine usage across 14 villages that were provided latrines free-of-cost after a major disaster
- Mentored and funded undergrad research assistant who presented at two conferences and published original article in a major peer reviewed journal

Development & Application of a Multi-Scalar Water Security Index in India, 04/15 - 05/16

- PI of NASA-Virginia Space Grant Consortium project
- Developed a participatory index using household surveys, water quality tests, and GIS
- Mentored, funded, and presented at conferences with two undergraduate research assistants

NSF-Research Experience for Undergraduates, 05/14 - 08/14

- Mentored three students from across USA on project entitled Valuing the urban hydroscape: perceptions and importance of urban water at Virginia Tech Stream Lab
- Students presented research at two conferences

Social Media & Related Technologies for Emergency Readiness (SMARTER), 08/12 - 12/13

- Co-PI of US Dept. of State grant to popularize disaster preparedness in India
- Delivered 10 disaster preparedness workshops in Kolkata, Chennai, Andaman, and Odisha

Intern, Centers for Disease Control and Prevention, 02/13 - 05/13

- Developed Emergency Operations Plan (EOP) training materials for government hospitals in Republic of Mauritius according to the Incident Command System (ICS)
- Project team comprised of scholars, health professionals, and CDC Emergency Medicine staff

Fulbright Fellow, Indian Institute of Technology-Madras, India, 08/11 - 02/12

• Examined post-disaster reconstruction using surveys, water quality tests, primary documents, and photographic and ethnographic approaches

• Developed a framework for water sector reconstruction and modified Water Poverty Index (WPI)

Crossing Borders Faculty-Student Travel Seminar, Mexico, 06/11

- Team of faculty and graduate students explored issues of Mayan sub-nationalism
- Interviewed scholars, met with stakeholders, visited universities and sites of cultural significance

Research Assistant, City of Des Moines, Iowa, 08/10 - 06/11

- Project: Mapping Hazards and Mitigation Infrastructure for the City of Des Moines, Iowa
- Submitted a geo-database, spatial data support system, and GIS maps of infrastructure to FEMA as part of Des Moines' disaster preparedness and mitigation plan

Fulbright-Hays Group Project Abroad Grant, Bangladesh, 07/07 - 08/07

- Participated in curriculum development grant awarded to Geographic Alliance of Iowa
- Project: Natural Hazards and Related Health Issues in Bangladesh: Standards and Issues-Based Geography Curricular Project for Grades K-16
- Interviewed university, government, and nonprofit officials on disaster preparedness & mitigation

American International School of Jeddah, Saudi Arabia, 03/04 - 07/06

- Full-time teacher at international school with 45+ nationalities represented
- Co-ed softball coach and girls basketball coach with tournament trip to Egypt
- Private English tutor

American Overseas School of Rome, Italy, 08/03 - 12/03

- Fulfilled B.A. Education requirements at international school with 50+ nationalities represented
- Co-Instructor of study abroad trip to Greece

Fulbright-Hays Group Project Abroad Grant, India, 07/03 - 08/03

- Participated in curriculum development awarded to Geographic Alliance of Iowa
- Project: Creating a Sense of Place through India's Diversity: Geography Curriculum Development
- Met with scholars and visited sites of social and ecological significance

Courses Instructed:

- · Water, Hazards & Development
- · Water, Environment & Society
- · Natural Disasters & Humanitarian Aid
- · Environmental Impact Analysis
- The Contemporary Global System
- · The Environment & Human Life
- · Practicing Sustainability
- · Environmental Problems, Population & Development
- · Globalization & Geographic Diversity
- · Introduction to Human Geography
- · The Global Economy
- Interdisciplinary Issues & Ethics in Water Resources
- · Sustaining Human Societies & the Natural Environment in New Zealand (study abroad)
- · Watershed Assessment, Management & Policy

SCHOLARLY PUBLICATIONS

Iournal Articles

- 22. Juran, L., E. Wilcox,* M. Albritton,* J.A. Smith, J. Harris,* A. Cohen, L.M. Sharma, Y. Gautam (2024). Effectiveness of the upscaled use of a silver-ceramic (silver ionization) technology to disinfect drinking water in tanks at schools in rural India. Journal of Water & Health 22(11): 2233-2245.
- 21. Geffroy, D.,* R. Oliver, L. Juran, T. Skuzinski (2021). <u>Projecting the metropolis: Paris 2024 and the (re)scaling of metropolitan governance</u>. *Cities* 114: doi.org/10.1016/j.cities.2021.103189
- 20. Prince, B.C.,* L. Juran,* V. Sridhar, A. Bukvic, M.C. MacDonald (2021). A statistical and spatial analysis of water poverty using a modified Water Poverty Index. International Journal of Water Resources Development 37(2): 339-356.
- 19. Scott, V.,* L. Juran, E.J. Ling, B. Benham, A. Spiller (2020). <u>Assessing strontium and vulnerability to strontium in private drinking water systems in Virginia</u>. *Water* 12(4): doi:10.3390/w12041053 [15 pp.].
- 18. Aksha, S.K.,* L.M. Resler, **L. Juran**, L.W. Carstensen (2020). A geospatial analysis of multi-hazard risk in Dharan, Nepal. Geomatics, Natural Hazards & Risk 11(1): 88-111.
- 17. Read, D.C., P.J. Fisher, **L. Juran** (2020). <u>How do women maximize the value of mentorship?</u> <u>Insights from mentees, mentors, and industry professionals</u>. *Leadership & Organization Development Journal* 41(2): 165-175.
- 16. **Juran, L.**, E.A. Adams, S. Prajapati[^] (2019). <u>Purity, pollution, and space: barriers to latrine adoption in post-disaster India</u>. *Environmental Management* 64(4): 456-469.
- 15. Aksha, S.K.,* **L. Juran**, L.M. Resler, Y. Zhang (2019). <u>An analysis of social vulnerability to natural hazards in Nepal using a modified Social Vulnerability Index</u>. *International Journal of Disaster Risk Science* 10(1): 103-116.
- 14. Sherry, J.,* **L. Juran**,^φ K.N. Kolivras, L.H. Krometis, E.J. Ling (2019). Perceptions of water services and innovations to improve water services in Tanzania. Public Works Management & Policy 24(3): 260-283.
- 13. Adams, E.A., **L. Juran**, I. Ajibade (2018). <u>'Spaces of exclusion' in community water governance: a feminist political ecology of gender and participation in Malawi's urban water user associations</u>. *Geoforum* 95: 133-142.
- 12. Aksha, S.K.,* L. Juran, L.M. Resler (2018). <u>Spatial and temporal analysis of natural hazard mortality in Nepal</u>. *Environmental Hazards* 17(2): 163-179.
- 11. MacDonald, M.C., **L. Juran**, S. Srinivasan, J. Jose, S.I. Ali, P. Rajagopalan, K. Hall (2018). <u>Assessing participant compliance with point-of-use water treatment: an exploratory investigation</u>. *Public Works Management & Policy* 23(2): 150-167.
- 10. Sehgal, V.,* V. Sridhar, L. Juran, J.A. Ogejo (2018). <u>Integrating climate forecasts with the Soil and Water Assessment Tool (SWAT) for high-resolution hydrologic simulations and forecasts in the Southeastern U.S. Sustainability 10(9): doi:10.3390/su10093079 [27 pp.].</u>
- 9. **Juran, L.**, M.C. MacDonald, N.B. Basu, S. Hubbard, R. Rajagopal, P. Rajagopalan, L. Philip (2017). <u>Development and application of a multi-scalar, participant-driven Water Poverty Index in post-tsunami India</u>. *International Journal of Water Resources Development* 33(6): 955-975.
- 8. **Juran, L.** & K. Lahiri-Dutt (2017). Waterscapes in transition: changing uses and perceptions of water in middle class homes in Kolkata, India. Water History 9(4): 433-451.

- 7. **Juran, L.**, J. Trivedi, * K.N. Kolivras (2017). <u>Considering the 'public' in public health: popular resistance to the Smallpox Eradication Programme in India</u>. *Indian Journal of Medical Ethics* 2(2): 104-111.
- 6. Bandzuh, J.T.,* L. Juran, K.N. Kolivras, A.B. Wallis (2017). <u>Local perceptions of measures to control Aedes mosquitoes and mosquito-borne diseases in Puntarenas and San José, Costa Rica.</u> *Journal of Latin American Geography* 16(2): 139-162.
- 5. MacDonald, M.C., **L. Juran**, J. Jose, S. Srinivasan, S.I. Ali, K.J. Aronson, K. Hall (2016). <u>The impact of rainfall and seasonal variability on the removal of bacteria by a point-of-use drinking water treatment intervention in Chennai, India</u>. *International Journal of Environmental Health Research* 26(2): 208-221.
- 4. Juran, L. (2015). A framework for integrating water projects in disaster reconstruction processes in the international context. Public Works Management & Policy 20(4): 305-321.
- 3. **Juran, L.** & J. Trivedi (2015). Women, gender norms, and natural disasters in Bangladesh. *Geographical Review* 105(4): 601-611.
- 2. **Juran, L.** & M.C. MacDonald (2014). An assessment of boiling as a method of household water treatment in South India. *Journal of Water & Health* 12(4): 791-802.
- 1. **Juran, L.** (2012). The gendered nature of disasters: women survivors in post-tsunami Tamil Nadu. *Indian Journal of Gender Studies* 19(1): 1-29.

Books

- 2. **Juran, L.** & B.K. Paul (eds.) (Under Contract). The Routledge handbook of disaster mitigation & preparedness. New York: Routledge Press.
- 1. Paul, B.K. & **L. Juran** (eds.) (2025). *The Routledge handbook of disaster response & recovery*. New York: Routledge Press.

Book Chapters

- 8. Naseri, M.Y.* & L. Juran (2025). Computer modeling to inform post-disaster recovery: the case of Hurricane Matthew in North Carolina. In The Routledge handbook of disaster response & recovery, B.K. Paul, L. Juran (eds.), pp. 397-412. New York: Routledge Press.
- 7. Chand, A. & L. Juran (2025). The role of households and communities in disaster response and recovery: the case of the Pacific and small island developing states. In The Routledge handbook of disaster response & recovery, B.K. Paul, L. Juran (eds.), pp. 348-357. New York: Routledge Press.
- 6. Chishiri, C.D.S. & **L. Juran** (2025). <u>Disaster recovery and businesses</u>. In *The Routledge handbook of disaster response & recovery*, B.K. Paul, L. Juran (eds.), pp. 414-424. New York: Routledge Press.
- 5. Paul, B.K & **L. Juran** (2025). <u>Introduction</u>. In *The Routledge handbook of disaster response & recovery*, B.K. Paul, L. Juran (eds.), pp. 1-9. New York: Routledge Press.
- 4. Paul, B.K. & L. Juran (2025). Conclusions and futures. In The Routledge handbook of disaster response & recovery, B.K. Paul, L. Juran (eds.), pp. 468-472. New York: Routledge Press.
- 3. **Juran, L.**, R. Oliver, D.C. Read (2022). Water sector reconstruction for post-disaster housing settlements: a tale of two governance models. In <u>Resilient water management strategies in urban settings: innovations in decentralized water infrastructure systems</u>, T. Younos, J. Lee, T. Parece (eds.), pp. 227-243. Switzerland: Springer Water.
- 2. Olson, E., * R. Oliver, **L. Juran** (2020). <u>Bidding trepidation: Stockholm's uncertain relationship with the Olympic Games</u>. In *Mega events: place-making, regeneration & city-regional development*, G. Evans (ed.), pp. 127-139. London: Routledge.

- 1. **Juran, L.** (2018). <u>Disaster, development, and water: the reconstruction and (re)fabrication of hazardous waterscapes in post-tsunami India</u>. In *The Asian tsunami and post-disaster aid*, S. Reddy (ed.), pp. 79-99. Singapore: Springer Nature.
 - ^ = Undergraduate student
 - * = Graduate student
 - φ = Corresponding author

OTHER SCHOLARLY CONTRIBUTIONS

• Book Review:

• Juran, L. (2012). Women, gender and disaster: global issues and initiatives. Indian Journal of Gender Studies 19(2): 341-344.

• Encyclopedia Entries:

- · Clark, B., I. MacNaughton, L. Juran (2020). Bhola Cyclone, Bangladesh, 1970. In <u>Natural hazards & disasters: from avalanches & climate change to water spouts & wildfires</u>, B.K. Paul (ed.), pp. 14-18. Broomfield: ABC-CLIO.
- Juran, L. (2020). Indian Ocean tsunami, 2004. In <u>Natural hazards & disasters: from avalanches</u> & climate change to water spouts & wildfires, B.K. Paul (ed.), pp. 197-202. Broomfield: ABC-CLIO.
- · Stevens, A., K. Compton, L. Juran (2020). BP Deepwater Horizon oil spill, United States, 2010. In *Natural hazards & disasters: from avalanches & climate change to water spouts & wildfires*, B.K. Paul (ed.), pp. 27-32. Broomfield: ABC-CLIO.

• White Papers:

- Allen, T., B. Badgley, A. Bukvic, M. Covi, T. Crawford, M. Flint, A. Gordon, L. Juran, B. McFarlane, M. Mitchell, C. Neale, M. Rippy, J. Roe, T. Schenk, S. Stafford (2019). Key priorities and university roles to address coastal resilience in Virginia. Fralin Life Science Institute, Virginia Tech.
- Weiss, R., A. Bukvic, A. Dayer, J. Fraser, S. Karpanty, D. Catlin, L. Juran, R. Wynne, J. Gohlke, K. Boyle, J. Irish, R. Leon, C. Zobel, L. Rees, Y. Zhang, T. Schenk, P. Dixit (2017). https://doi.org/10.103/journal.com/stability-in-coastal systems: sustaining prosperity, increasing diversity, and achieving resilience.
 VTechWorks, Virginia Tech.

• Extension Publication:

· Largen, I., `L. Juran, E. Bonnett, E.J. Ling, L.H. Krometis, M.E. Schreiber (2025). <u>Water rights and ethics: who really owns the water?</u> Virginia Cooperative Extension, Virginia Tech and Virginia State University.

• Photos:

- Frankland, E. (ed.) (2009). *Global studies: Europe, tenth edition*. Photo credit p. 145 in "Greece (Hellenic Republic)." Dubuque: McGraw-Hill.
- · Shinn, S. (2007). Photo credit p. 6 in "From the editors." BizEd Magazine 6(3).
- Frankland, E. (ed.) (2006). *Global studies: Europe, ninth edition*. Photo credit p. 130 in "Greece (Hellenic Republic)." Dubuque: McGraw-Hill.
- · Husain, M. (ed.) (2006). *Global studies: Islam and the Muslim world*. Photo credit p. 121 in "Egypt (Arab Republic of Egypt)." Dubuque: McGraw-Hill.

• Poetry:

- Juran, L. (2018). <u>Area (colonial) studies: academic concerto No. posture</u>. *Taj Mahal Review: International Journal Devoted to Arts, Literature, Poetry & Culture* 17(1): 83-84.
- Juran, L. (2016). Chennai; it's like that, only. Taj Mahal Review: International Journal Devoted to Arts, Literature, Poetry & Culture 15(2): 91-92.

• Open Source Lectures:

- Juran, L., 'Unnatural' nature-society relationships: the intersection of gender, the environment, and social systems. Centre for the Study of Social Exclusion & Inclusive Policy, University of Hyderabad, India (2021)
- Juran, L. (2019). <u>Human-environment genderscapes in South Asia: suffering for water, suffering from disaster</u>. VTechWorks, Virginia Tech.
- Juran, L. (2015). Women, gender norms, and natural disasters: examples from South Asia. VTechWorks, Virginia Tech.
- **Consultant:** Asia Disaster Preparedness Center (2015). <u>Handbook for disaster recovery practitioners:</u> <u>disaster recovery toolkit</u>. Bangkok: Tsunami Global Lessons Learned Project, ADPC.
- Acknowledgement: Article selected as essential reading for meeting United Nations Sustainable Development Goal #6 (ensure availability and sustainable management of water and sanitation for all)
- Endorsement: Cover endorsement for *Disaster relief aid: changes & challenges* (B.K. Paul, 2019, Palgrave Macmillan)
 - ^ = Undergraduate student
 - φ = Corresponding author

CONFERENCE & INVITED PRESENTATIONS

- Bednar, K., L. Handley, L. Juran, "Tsunami genesis, risk reduction, warning systems, and evacuation," *Dennis Dean Undergraduate Research & Creative Scholarship Conference*, Virginia Tech (2025)
- Chakraborty, P.,* L. Juran, E.J. Ling, Y. Shao, M.E. Schreiber, "An examination of manganese contamination in Virginia private drinking water systems," *Annual Meeting of the Southeastern Section of the Geological Society of America*, Harrisonburg, VA (2025)
- Patel, A.,* S.P. Rai, R. Singh, L. Juran, R. Dixit, N. Puthiyottil, A.K. Singh, S.K. Singh, R. Rai, "Control of aquifer material on groundwater mineralization and mapping contaminants in a multi-aquifer system of the Central Ganga Plain, India," *Annual Meeting of the Southeastern Section of the Geological Society of America*, Harrisonburg, VA (2025)
- Chakraborty. P,* Juran. L, Ling. E, Shao. Y, Schreiber E. M, "Assessing Manganese (Mn) Contamination in Private drinking water systems in Virginia," Office of GIS & Remote Sensing Research Symposium, Virginia Tech (2025)
- Akyemfori, W.,* R. Oliver, D.C. Read, L. Juran, E. Galappaththi, P.I. Korah, "The 'gates' of transformations: exploring the intersection of policy, private development, and urban living in Accra," SEDAAG Annual Conference, Greenville, SC (2024)
- Chakraborty, P.,* L. Juran, E.J. Ling, "An assessment of manganese contamination in Virginia private drinking water systems," *Virginia Tech Water Colloquium*, Virginia Tech (2024)

- Juran, L., E. Wilcox,* M. Albritton,* J.A. Smith, L.M. Sharma, Y. Gautam, "Deploying silver ionization to disinfect drinking water at schools in India," AAG Annual Meeting, Honolulu, HI (2024)
- Juran, L., "Disaster and development: perceptions of 'failure' and 'success' in disaster planning," School of Public & International Affairs, Virginia Tech (2024)
- Juran, L., "Deploying a novel silver-ceramic technology to disinfect drinking water in storage tanks at public schools in India," *American Water Resources Association Student Chapter*, Virginia Tech (2023)
- Wilcox, E.* & L. Juran, "Assessing the impact of a water, sanitation, and hygiene (WASH) intervention on changing behavior in Bihar, India," AAG Annual Meeting, Denver, CO (2023)
- Juran, L., "Disaster, development, and water: perceptions of 'failure' and 'success' in disaster planning," School of Public & International Affairs, Virginia Tech (2022)
- Mungle, D., L. Juran, J.A. Smith, J. Harris, L.M. Sharma, "Simulating and deploying the upscaled use of a novel silver-ceramic technology to disinfect drinking water in schools in India," SEDAAG Annual Conference, Atlanta, GA (2022)
- Wilcox, E.* & L. Juran, "Determining relationships between demographic variables and their impacts on access to water in India," SEDAAG Annual Conference, Atlanta, GA (2022)
- Juran, L., "Assessment of boiling as a method of point-of-use water treatment: efficacy, barriers, and caveats in the field," Biomedical & Veterinary Sciences Colloquium, Virginia Tech (2022)
- Juran, L., "Critiquing the results of top-down vs. collaborative reconstruction planning after a major disaster," School of Public & International Affairs, Virginia Tech (2021)
- Juran, L., "A critical investigation of disaster vulnerability: gender dimensions of mortality," Dept. of Public Health Sciences, Clemson University (2021)
- Juran, L., "Unnatural' nature-society relationships: the intersection of gender, the environment, and social systems," Centre for the Study of Social Exclusion & Inclusive Policy, University of Hyderabad, India (2021)
- Krometis, L., H. Patton,* E. Bonnett, E.J. Ling, M.E. Schreiber, **L. Juran**, D. Scott, L. Wind,* T. Torrisi, M. Hackley, "Bridging the gap: creating community connections to develop and deliver effective remote K-12 learning opportunities in water and agriculture," *Annual International Meeting of the American Society of Agricultural & Biological Engineers* Virtual (2021)
- Rodriguez, V.* & L. Juran, "A critical assessment of gender mainstreaming in Central American climate change policies: the case of Panama, Belize, and Guatemala," Women & Gender in Development Conference 2021 Out of the Theory & Into the Field: A Dialogue on Gendered Approaches to Inclusive Rural Development, Virginia Tech (2021)
- Juran, L., "Top-down vs. collaborative planning in the water sector: evidence from the field," School of Public & International Affairs, Virginia Tech (2021)
- Juran, L., "Success' and 'failure' in water sector reconstruction: through whose eyes matters," Dept. of Biological Systems Engineering, Virginia Tech (2021)
- Krometis, L., H. Patton,* E. Bonnett, E.J. Ling, T. Torrisi, M. Hackley, M.E. Schreiber, L. Juran,
 D. Scott, "Supporting K-12 STEM Using Remote Learning Kits in Virginia," Virginia Association of Science Teachers (VAST) Virtual Professional Development Institute Virtual (2020)
- L. Juran, "Geographies of post-disaster reconstruction: failure, success, and the trappings of build back better," SEDAAG Annual Conference Virtual (2020)
- Kern, J.,* L. Resler, **L. Juran**, "An approach for basin scale analysis of changing paraglacial water budgets," *SEDAAG Annual Conference* Virtual (2020)

- Krometis, L., H. Patton,* E. Bonnett, E.J. Ling, T. Torrisi, M. Hackley, D. Scott, M.E. Schreiber,
 L. Juran, "Supporting K-12 STEM Using Remote Learning Kits in Virginia," Virginia
 Partnership for Out-of-School Time (VPOST) 11th Annual Conference Virtual (2020)
- Aksha, S.,* L. Resler, L. Juran, L.W. Carstensen, "Multi-hazard risk assessment in Dharan, Nepal using geospatial techniques," AAG Annual Meeting, Washington DC (2019)
- Juran, L., "Human-environment genderscapes in South Asia: suffering for water, suffering from disaster," Women & Gender in Development Conference: Out of the Theory & into the Field, Virginia Tech (2019)
- Juran, L., "Humanitarian aid in the water, sanitation, and hygiene sector: what works and what doesn't," Dept. of Biological Systems Engineering, Virginia Tech (2019)
- Juran, L., "Disaster, reconstruction, and urban planning after the 2004 tsunami: did we actually 'build back better'?," School of Public & International Affairs, Virginia Tech (2019)
- Juran, L., "Reconstruction 'success' and 'failure': the case of post-disaster South India," Dept. of Biological Systems Engineering, Virginia Tech (2019)
- Juran, L., "An introduction to the geography, culture, and political economy of the Middle East," Pamplin College of Business, Virginia Tech (2019)
- Habeebah, S.[^] & L. Juran, "An analysis of access to water, sanitation, and hygiene services among refugees in the New River Valley, Virginia," SEDAAG Annual Conference, East Tennessee State University (2018)
- Scott, V.* & L. Juran, E.J. Ling, "Assessing strontium contamination in private drinking water supplies in Virginia," SEDAAG Annual Conference, East Tennessee State University (2018)
- Maione, A.[^] & L. Juran, "The introduction of aquaponics in the educational setting," Annual Conference of the National Aquaponics Association: Putting Up Shoots, National Aquaponics Association, Hartford, CT (2018)
- Juran, L., "Top-down vs. bottom-up water sector planning: evidence and implications from India," *Advancing the Human Condition Symposium*, Virginia Tech (2018)
- Juran, L., "The blue revolution and aquaponics," Industrial Design Program, School of Architecture + Design, Virginia Tech (2018)
- Scott, V.* & L. Juran, E.J. Ling, "Strontium in private well drinking water in Virginia," WaterSmart
 Innovations Conference, Universities Council on Water Resources, Las Vegas, NV (2018)
- Prince, B.* & L. Juran, "Water access in coastal India: measurements and links among water poverty, socioeconomic status, and space," Office of GIS & Remote Sensing Research Symposium, Virginia Tech (2018)
- Aksha, S.,* L. Resler, B. Carstensen, **L. Juran**, "Application of general linear models for landslide susceptibility mapping using GIS and remote sensing in Dharan, Nepal," Office of GIS & Remote Sensing Research Symposium, Virginia Tech (2018)
- Juran, L., "The geography of failure and hope in post-disaster reconstruction: planning problems and planning progress," AAG Annual Meeting, New Orleans, LA (2018)
- Prince, B.* & L. Juran, "An analysis of human-environment waterscapes using a modified Water Poverty Index," AAG Annual Meeting, New Orleans, LA (2018)
- Aksha, S.,* L. Juran, L. Resler, "How resilient are Himalayan communities? An assessment of disaster resilience in Nepal," AAG Annual Meeting, New Orleans, LA (2018)
- Juran, L., "Ethical dimensions of humanitarian aid for infrastructure and land use development," Real Estate Program, Virginia Tech (2017)

- Bandzuh, J.,* L. Juran, K. Kolivras, A. Wallis, "Local perceptions of measures to control Aedes mosquitoes and mosquito-borne diseases in Puntarenas and San José, Costa Rica," Annual Meeting & Exposition of the American Public Health Association, Atlanta, GA (2017)
- Olson, E.,* R. Oliver, L. Juran, K. Kolivras, "Rescinding a bid: Stockholm's uncertain relationship with the Olympic Games," SEDAAG Annual Conference, University of Southern Mississippi (2017)
- Prajapati, S.^ & L. Juran, "Of space and purity, cost and convenience: barriers to latrine adoption in coastal South India," *Water Research: Building Knowledge & Innovative Solutions*, Mid-Atlantic Regional Water Centers, Shepherdstown, WV (2017)
- Prince, B.* & L. Juran, "Construction and application of a contextualized, multiscalar Water Poverty Index in coastal India," *Water Research: Building Knowledge & Innovative Solutions*, Mid-Atlantic Regional Water Centers, Shepherdstown, WV (2017)
- Prajapati, S.^ & L. Juran, "Social, economic, and cultural factors of latrine adoption in coastal South India," AAG Annual Meeting, Boston, MA (2017)
- Aksha, S.,* L. Juran, L. Resler, "Assessment of social vulnerability to natural hazards in Nepal," AAG Annual Meeting, Boston, MA (2017)
- Juran, L., "Artificial hazardscapes: the social construction of gendered disaster vulnerability," Office of International Research, Education & Development, Virginia Tech (2017)
- Sherry, J.* & L. Juran, "Perceptions of water services and the introduction of technologies to improve water services in Dar es Salaam, Tanzania," WaterSmart Innovations Conference, Universities Council on Water Resources, Las Vegas, NV (2016)
- Juran, L. & B. Prince, ""My energy first goes to water, then I worry about the rest of my day": water security among households with access to improved sources in India," AAG Annual Meeting, San Francisco, CA (2016)
- Aksha, S.,* L. Juran, L. Resler, "Spatial patterns of natural disaster mortality in Nepal," AAG Annual Meeting, San Francisco, CA (2016)
- Bandzuh, J.,* K. Kolivras, L. Juran, "Actions to prevent Aedes mosquitoes and mosquito-borne diseases in Costa Rica," AAG Annual Meeting, San Francisco, CA (2016)
- Juran, L., "An introduction to social science and mixed methods approaches to water resources research," *American Water Resources Association Student Chapter*, Virginia Tech (2016)
- Bandzuh, J.,* L. Juran, K. Kolivras, "Investigating actions versus perceptions of *Aedes* mosquito control in Costa Rica," *UTK Geography Symposium*, University of Tennessee-Knoxville (2016)
- Bandzuh, J.,* K. Kolivras, **L. Juran**, "Attitudes and perceptions of mosquito control and disease prevention in Costa Rica," *Graduate Student Assembly Research Symposium*, Virginia Tech (2016)
- Blumenthal, K.,* M. Lang, J. Galbraith, L. Juran, J. Campbell, "Predicting soil variability in soil organic carbon among Delmarva bays," CSES Graduate Student Research Symposium, Virginia Tech (2016)
- Juran, L., "Improving the 'improved sources' metric: the construction of a modified Water Poverty Index in coastal South India," Water & Health Conference 2015: Where Science Meets Policy, University of North Carolina-Chapel Hill (2015)
- Bandzuh, J.,* L. Juran, K. Kolivras, "Policies, programs, and measures in Costa Rica to combat diseases transmitted by the Aedes mosquito," Annual Meeting of the American Society of Tropical Medicine & Hygiene, Philadelphia, PA (2015)
- Lumpkin, M.^ & L. Juran, "Measuring waterscape complexities at several scales: the implementation of a Water Poverty Index in post-disaster India," SEDAAG Annual Conference, University of West Florida (2015)

- Ren, J.,* J. Campbell, Y. Shao, L. Juran, "Predicting sediment and nutrient loads from an agricultural watershed in Iowa," Water Resources Conference of the Virginias: Water, Energy, and Agriculture, West Virginia Water Research Institute & Virginia Water Resources Research Center, Roanoke, WV (2015)
- Juran, L., "Development and application of a contextualized, multiscalar Water Poverty Index in post-tsunami South India," AAG Annual Meeting, Chicago, IL (2015)
- Juran, L., "Women, gender norms, and natural disasters: examples from South Asia," Women & Gender in International Development Series, Virginia Tech (2015)
- Boza, K., N. Carter, E. Davis, L. Juran, M. Steele, "Valuing the urban hydroscape: perceptions and importance of urban water," *Annual Undergraduate Research and Creative Achievement Fair*, Manhattanville College (2015)
- Juran, L., "Water and disasters: a conceptual model for incorporating the water sector in reconstruction and recovery processes," *Annual Natural Hazards Research & Applications Workshop*, University of Colorado-Boulder (2014)
- Juran, L., "Water infrastructure challenges in the Mid-Atlantic region: perspectives from Virginia," The Future of Mid-Atlantic Infrastructure: Challenges & Solutions, Mid-Atlantic Regional Water Centers, Shepherdstown, WV (2014)
- Schoenholtz, S., L. Juran, K. McGuire, A. Raflo, J. Walker, "Fifty years of water research, education, and outreach at the Virginia Water Resources Research Center," AWRA Annual Conference, Washington DC (2014)
- Juran, L., "Water, disasters, & reconstruction: a conceptual human-environment framework for sustainable water sector reconstruction," SEDAAG Annual Conference, University of Georgia (2014)
- Juran, L. & M.C. MacDonald, "Point-of-use water treatment among affected populations in post-tsunami South India," Dept. of Geography and Gamma Theta Upsilon, Kansas State University (2014)
- Juran, L., "A framework for integrating water resources in disaster reconstruction processes," AAG Annual Meeting, Tampa, FL (2014)
- Juran, L., "A critique of boiling as a method of household water treatment in South India: efficacy, barriers, caveats," Environmental Water Resources Engineering colloquium, Virginia Tech (2014), and *Iowa Global Health Symposium*, University of Iowa (2012)
- Juran, L., "Water, disaster and disease: recovery and health after the 2004 Asian tsunami," Dept. of Health Sciences, James Madison University (2013)
- Juran, L., "Water sector recovery after the 2004 Indian Ocean tsunami in Southern India," Dept. of Integrated Science & Technology, James Madison University (2013)
- Juran, L., "Humanitarian aid for reconstruction processes: theoretical and pragmatic considerations," *Natural Disasters and Humanitarian Aid*, University of Iowa (2012)
- Juran, L., "Reconceptualizing the intersection of water and disaster: a framework for analyzing water components of post-disaster housing projects," *Conference on Post-Disaster Recovery*, Syracuse University (2011)
- Juran, L., "Critiques of microcredit as a tool for poverty alleviation," *Mitigating Rural Poverty in India*, India Development Coalition of America, Indiana State University (2010)
- Juran, L., "Permanent housing reconstruction in post-tsunami South India: a case of 'build back better' or *tabula rasa* spoiled?," Forum on Disaster Reconstruction, IIT-Madras, India (2009)
- Juran, L., "A social science understanding of water quality and quantity: examples from South Asia," Dept. of Environmental Water Resources and Engineering, IIT-Madras, India (2009)

- Juran, L., "Post-disaster processes in India and Bangladesh," Voices of the Tri-States radio program (2009)
- Juran, L., "Community development finance: the sustainability and scalability of microcredit institutions," Dept. of Urban and Regional Planning, University of Iowa (2009)
- Honey, R. & **Juran, L.**, "Coping with natural disasters in Bangladesh," *Kohn Colloquium*, University of Iowa (2008)
- Juran, L., "Vulnerabilities to natural disasters in Bangladesh," *International Mondays*, Iowa City Public Library (2008)
- Juran, L., "A critical examination of microcredit in theory and practice," *Surviving the Monsoon:*Natural Disasters in Bangladesh, Geographic Alliance of Iowa and University of Northern Iowa (2008)
- Juran, L., "Human rights aspects of microfinance: towards the Millennium Development Goals," Leadership Summit on Microfinance, Gandhigram Rural Institute, India (2007)
- Juran, L., "The 2004 Indian Ocean tsunami: impacts and response," *Dubuque Rotary Club*, Dubuque, IA (2006)
- Juran, L., "The 2004 Indian Ocean tsunami: what happened and why?," *Balltown Lion's Club*, Balltown, IA (2006)
 - ^ = Undergraduate student
 - * = Graduate student
 - φ = Presenting author

GRANTS & AWARDS

- Higher Education Partnership for Disaster Resilient Infrastructure (HEP-DRI), United States Agency for International Development (USAID) - \$5,000,000 (Co-PI, 2024 - Permanently suspended in 2025 due to federal government/USAID transitions)
- Pathways to Civic Learning Grant, Virginia Tech \$5,000 (2024-2025)
- Institute for Society, Culture & Environment Scholars Program, Virginia Tech \$29,998 (2022-23)
- Stephen H. Schoenholtz Water Undergraduate Research Fund, Virginia Tech \$2,750 (2022)
- COVID-19 Rapid Response Fund, Office of the Vice President for Research & Innovation, Virginia Tech - \$34,192 (Co-PI, 2020)
- COVID-19 Rapid Response Seed Grant, Institute for Creativity, Arts & Technology, Virginia Tech
 \$10,000 (Co-PI, 2020)
- New Program Development Grant, Global Education Office, Virginia Tech \$2,500 (2019-20)
- Freshwater Systems Seed Grant, Fralin Life Sciences Institute, Virginia Tech \$7,200 (Co-PI, 2018-19) and \$9,300 (2019-20)
- Sustainable Water Undergraduate Research Fellowship, Virginia Tech \$3,557 (2016-17), \$2,710 (2018-19), and \$3,000 (2018-19)
- India Faculty Travel Grant, Manodharma \$5,900 (2018)
- New Investigator Program, NASA-Virginia Space Grant Consortium \$10,000 (2015-16)
- Curriculum Globalization Grant, Virginia Tech \$5,000 (2015)
- Finalist, J. Warren Nystrom Dissertation Award, American Association of Geographers (2014)
- 4VA Mini-Grant, Commonwealth of Virginia \$5,000 (Co-PI, 2013-14)

- CARTHA and Johnson County Community Foundation \$3,000 (2013-2014)
- Faculty Mentoring Grant, Virginia Tech \$1,500 (2013)
- Gilbert F. White Dissertation Award, American Association of Geographers \$250 (2013)
- Alumni Engagement Innovation Fund, US Dept. of State \$25,000 (Co-PI, 2012-13)
- Fulbright-Nehru Fellowship \$18,000 (2011-12)
- T. Anne Cleary International Dissertation Research Fellowship \$3,000 (2011-12)
- Crossing Borders Fellowship \$5,000 (2008-12)
- Graduate College Summer Fellowship \$3,000 (2011)
- Executive Council for Graduate and Professional Students Research Grant \$750 (2011)
- Graduate Student Senate Travel Award \$300 (2011)
- Center for Global & Regional Environmental Research (CGRER) Dissertation Research Grant -\$2,344 (2011), \$1,950 (2010), and \$2,000 (2008)
- CARTHA Fellowship \$500 (2007)
- Joan Lara Scholarship for International Research \$500 (2011) and \$500 (2006)
- Rotary International Ambassadorial Scholarship \$25,000 (2008-09)
- Graduate Incentive Fellowship \$1,150 (2008)
- Fulbright-Hays Group Project Abroad Grant to Bangladesh \$64,000 (Participant, 2007)
- Stanley Foundation Graduate Award for International Research \$2,000 (2007)
- CGRER Graduate Student Travel Grant \$750 (2007)
- International Programs Graduate Student Travel Grant \$500 (2007)
- University of Iowa Student Government (UISG) Research Grant \$500 (2007)
- International Programs M.A. Thesis Research Grant \$500 (2006)
- UISG Scholarly Presentation Grant \$200 (2006)
- Fulbright-Hays Group Project Abroad Grant to India \$58,000 (Participant, 2003)

MENTORING

Current Mentoring:

- Joshua Pill and Anika Tsutsumi, Undergraduate Research Assistants, Virginia Tech (2025-Present)
 - · Project: Reviewer for Routledge handbook of disaster mitigation & preparedness
- Tara Blue, Mentor for Funded Odyssey Fellowship, Virginia Tech (2024-Present)
 - · Project: Promoting sustainable water management practices in Virginia
- Nicole Zdrojewski, Ph.D. Committee, Sociology, Virginia Tech (2021-Present)
 - · Dissertation: Community resilience in the era of accelerated climate change

Completed Mentoring:

Doctoral

- Abhinav Patel, Ph.D. Mentor, Geology, Virginia Tech (2024)
 - · Visiting Fellow from Banaras Hindu University under Government of India International Student Visiting Program
 - Dissertation: Groundwater dynamics of V aranasi using historical water levels and primary collected hydrochemical and environmental isotopes (δ^{18} O, δ^2 H, and δ^3 H) data

- Md. Sariful Islam, Ph.D. Committee, Geospatial & Environmental Analysis, Virginia Tech (2020-23)
 - · Dissertation: Coastal erosion hazard in Bangladesh: space-time pattern analysis and empirical forecasting, impacts on land use/cover, and human risk perception
- Sanam Aksha, Ph.D. Co-Chair, Geospatial & Environmental Analysis, Virginia Tech (2014-18)
 - · Dissertation: Modeling multi-hazard risk and vulnerability in the Nepal Himalaya

Masters

- Paramita Chakraborty, M.S. Chair, Geography, Virginia Tech (2023-25)
 - · Thesis: Manganese (Mn) in private drinking water systems: a statewide assessment of Virginia
- Williams Akyemfori, M.S. Committee, Geography, Virginia Tech (2023-25)
 - · Thesis: Global transformations: exploring the intersection of policy, private development, and urban living in Accra, Ghana
- Caroline Sorenson, M.S. Committee, Geography, Virginia Tech (2023-25)
 - · Thesis: Coastal flood risk of older adults living in a group setting
- Paramita Chakraborty, Co-Mentor for Project Funded by Virginia Department of Health, Virginia Tech (2024)
 - · Project: Assessment and mapping of arsenic, fluoride, sodium, and manganese in private drinking water wells in Virginia
- Md. Sariful Islam, M.S. Committee, Data Analysis & Applied Science, Virginia Tech (2022-23)
 - · Thesis: Erosion experience, geophysical vulnerability, and coastal erosion risk perceptions in Bangladesh
- Emily Wilcox, M.S. Chair, Geography, Virginia Tech (2021-23)
 - · Thesis: Assessing the impacts of a water, sanitation, and hygiene (WASH) intervention on changing behavior in Bihar, India
- Jen Kern, M.S. Co-Chair, Geography, Virginia Tech (2019-21)
 - · Thesis: Modelling hydrologic system change in a paraglacial catchment in the Northern Rocky Mountains
- Veronica Scott, M.S. Chair, Geography, Virginia Tech (2017-19)
 - · Thesis: Strontium in drinking water: assessing strontium as a drinking water contaminate in Virginia private wells
- Damien Geffroy, M.S. Committee, Geography, Virginia Tech (2017-19)
 - · Thesis: A city of projects: Grand Paris, the 2024 summer Olympics, and the jurisdictional negotiation of contemporary Paris
- Breeanna Prince, M.S. Chair, Geography, Virginia Tech (2016-18)
 - · Thesis: Access to water: advancement of multidimensional, multiscalar, and participatory methods of measurement in the Global South
- Kaitlyn Spangler, M.S. Committee, Geography, Virginia Tech (2016-18)
 - · Thesis: "When he comes home, then he can decide": male out-migration, the feminization of agriculture, and integrated pest management in the Nepali mid-hills
- Erik Olson, M.S. Committee, Geography, Virginia Tech (2016-18)
 - · Thesis: Rescinding a bid: Stockholm's uncertain relationship with the Olympic Games
- Julia Sherry, M.S. Chair, Geography, Virginia Tech (2015-17)

- · Thesis: Perceptions of water services and innovations to improve water services in Tanzania
- Vinit Sehgal, M.S. Committee, Biological Systems Engineering, Virginia Tech (2015-17)
 - · Thesis: Near real-time seasonal drought forecasting and retrospective drought analysis using simulated multilayer soil moisture from hydrological models at sub-watershed scales
- John T. Bandzuh, M.S. Co-Chair, Geography, Virginia Tech (2014-16)
 - · Thesis: Perceptions of measures to control Aedes mosquitoes and mosquito-borne diseases in Costa Rica
- Kinsey Blumenthal, M.S. Committee, Geography, Virginia Tech (2014-16)
 - · Thesis: Predicting spatial variability in soil organic carbon among Delmarva bays
- Ashley Lewis, M.S. Committee, Geography, Virginia Tech (2013-15)
 - · Thesis: Human-wildlife conflict and mobile phone use among Maasai pastoralists near Tarangire National Park, Northern Tanzania
- Haitao Wang, M.S. Committee, Geography, Virginia Tech (2013-14)
 - · Thesis: Monitoring vegetation dynamics in Zhongwei, an arid city of Northwest China

<u>Undergraduate</u>

- Elizabeth Johnson, Funded Undergraduate Research Assistant, Virginia Tech (2025)
 - · Project: Reviewer for Routledge handbook of disaster mitigation & preparedness
- Kora Bednar and Lauren Handley, Funded Undergraduate Research Assistants, Virginia Tech (2024-25)
 - · Project: Tsunami warning systems and evacuation planning
- Dillon Mungle, Funded Undergraduate Research Assistant, Virginia Tech (2022)
 - · Project: Simulating the upscaled use of a silver-ceramic technology to improve drinking water quality in schools
- Arpita Das, Practicum Supervisor, Public Health, Virginia Tech (2022)
 - · Project: Effects of climate change on waterborne diseases in South Asia
- Julia Geiger and Natalie Robertson, Co-Mentor of Undergraduate Research Project, Virginia Tech (2022)
 - · Project: Development of a site suitability index for community gardens in Roanoke, Virginia
- Molly Hackley and Thea Torrisi, Co-Mentor of Funded Undergraduate Research Assistants, Virginia Tech (2020-21)
 - · Project: Bridging the gap: creating community connections to develop & deliver effective K-12 STEM remote learning opportunities in rural Virginia
- Alivia Colón, Undergraduate Research Project, Virginia Tech (2020)
 - · Project: Communicating drinking water quality risk to households with private water supply systems
- Wynnie Avent, Alivia Colón, and Isabelle Largen, Co-Mentor of Funded Undergraduate Research Assistants, Virginia Tech (2019-20)
 - · Project: What's in your water kids? Developing student citizen scientists through the Virginia Household Water Quality Program
- Saalehah Habeebah, Funded Undergraduate Research Assistant, Virginia Tech (2018-19)
 - · Project: An analysis of access to water, sanitation, and hygiene services among refugees in the New River Valley
- Alexa Maione, Funded Undergraduate Research Assistant, Virginia Tech (2018-19)

- · Project: The introduction of aquaponics systems in the educational setting in Montgomery County, Virginia
- Sarah Abrahams (Auburn University), Michael Galeski (Creighton University), and Elise Malvicini (Mount Holyoke College), Co-Mentor for funded USDA-REEU project, Virginia Tech Stream Lab (2018)
 - · Project: Public perceptions of the Mountain Valley Pipeline: a content analysis of media commentary
- Shaifali Prajapati, Funded Undergraduate Research Assistant, Virginia Tech (2017-18)
 - · Project: Social, economic, and cultural factors of latrine adoption in coastal South India
- Jackie Scott, Guided Independent Study, Virginia Tech (2017)
 - · Project: Community resilience to natural disasters in the American context
- Breeanna Prince, Funded Undergraduate Research Assistant (NASA), Virginia Tech (2016-17)
 - · Project: Development and application of a multiscalar Water Security Index
- William Cross, Guided Independent Study, Virginia Tech (2015)
 - · Project: A comparison of sustainability activities in Iceland and the United States
- Malayshia Lumpkin, Funded Undergraduate Research Assistant (NASA), Virginia Tech (2015)
 - · Project: Development and application of a multiscalar Water Security Index
- Adrian Santiago Tate, Co-Mentor for funded Wayne & Claire Horton Fellowship project, Virginia Tech (2014-15)
 - · Project: Post-tsunami hazard mitigation in Sri Lanka, Indonesia, and Hawaii
- Julia Sherry, Undergraduate Honors Thesis Committee, Virginia Tech (2014-15)
 - · Thesis: The sustainability of water, sanitation, and hygiene interventions by humanitarian nonprofit organizations
- Karla Boza (Manhattanville College), Nicole Carter (Oklahoma State University), and Erica Davis (University of Tennessee, Knoxville), Co-Mentor for funded NSF-REU project, Virginia Tech Stream Lab (2014)
 - · Project: Valuing the urban hydroscape: perceptions and importance of urban water

<u>High School</u>

- Sriya Sridhar, Mentor for High School STEM Research Experience, Blacksburg High School (2021-22)
 - · Project: Analysis of the impacts of a WASH behavior change program in rural Bihar, India

PROFESSIONAL & INSTITUTIONAL SERVICE

Manuscript and Book Reviews:

Water (6)

Routledge Press (2 books, 1 monograph)

GeoHealth (2)

International Journal of Disaster Risk Science (2)

Advances in Meteorology

Annals of the American Association of Geographers

Asian Journal of Social Science

Indian Journal of Gender Studies

Geographical Review (3)

Utilities Policy (2)

International Journal of Disaster Risk Reduction (2)

Water History (2)

American Journal of Tropical Medicine & Hygiene

Applied Geography

GeoJournal

Indian Journal of Medical Ethics

Journal of the American Water Resources Association

Natural Hazards

The Geographical Journal

Journal of Water & Climate Change

Progress in Physical Geography

Urban Water Journal

- Promotion and Tenure Committee, Department of Geography, Virginia Tech (2025-Present)
- CNRE Community Committee, Virginia Tech (2025-Present)
- Research, Extension, and International Policy & Affairs Committee, College of Natural Resources & Environment, Virginia Tech (2023-Present)
- Faculty Supervisor, Period at Virginia Tech (2022-Present)
- Audit Committee, Southeastern Division of the American Association of Geographers (2020-Present)
- Judge, Virginia Waters Photo Contest, Virginia Water Resources Research Center (2020-Present)
- Oversight Committee, Watershed Management Minor, Virginia Tech (2015-Present)
- Internship Selection Committee, Virginia Water Resources Research Center (2015-Present)
- Departmental Representative, Universities Council on Water Resources (2014-Present)
- Selection Committee, William R. Walker Graduate Research Fellow Award, Virginia Water Resources Research Center (2014-Present)
- Reviewer, Competitive Student Research Grants, Virginia Water Resources Research Center (2014-Present)
- Promotion and Tenure Committee, College of Natural Resources & Environment, Virginia Tech (2024-25)
- Academic Resources Committee, College of Natural Resources & Environment, Virginia Tech (2022-25, Chair 2024-25)
- Committee on Diversity, Equity & Inclusion, Dept. of Geography, Virginia Tech (2021-25)
- Named Professorship Committee, College of Natural Resources & Environment, Virginia Tech (2023-24)
- Personnel Committee, Dept. of Geography, Virginia Tech (2022-2024)
- Campus Committee Evaluator for Fulbright Grants, Virginia Tech (2023)
- Judge, Dennis Dean Undergraduate Research & Creative Scholarship Conference, Virginia Tech (2023)
- Steering Committee, Virginia Tech Water Research Colloquium, Virginia Tech (2023)
- Moderator, Virginia Tech Water Research Colloquium, Virginia Tech (2023)
- Usher, Graduate College commencement, Virginia Tech (2022)
- Promotion and Tenure Committee, College of Natural Resources & Environment, Virginia Tech (2021-22)
- Director of Graduate Studies, Dept. of Geography, Virginia Tech (2019-22)
- Faculty Supervisor, Geography Graduate Student Alliance, Virginia Tech (2019-22)
- Reviewer, Water Resources Research National Competitive Grant Program (104g), USGS/NIWR (2021)
- Reviewer, Partnership for Enhanced Engagement in Research (PEER), USAID and National Academies of Science, Engineering, and Medicine (2021)
- Diversity & Inclusion Committee, College of Natural Resources & Environment, Virginia Tech (2018-21)
- Judge, Mr. and Mrs. Agriculture Pageant, Alpha Zeta Agricultural Honors Society, Virginia Tech (2018, 2021)

- Faculty Supervisor, Oxfam America at Virginia Tech (2014-21)
- Selection Committee, Outstanding Dissertation in Water Policy & Socioeconomics, Universities Council on Water Resources (2020)
- Moderator, "Hazards, vulnerability, and resilience," SEDAAG Annual Conference (2020)
- Promotion and Tenure Committee, College of Natural Resources & Environment, Virginia Tech (2019-20)
- Search Committee, Director of Inclusion & Diversity, College of Natural Resources & Environment, Virginia Tech (2019-20)
- Treasurer, Southeastern Division of the American Association of Geographers (2017-20)
- Steering Committee, Virginia Geographic Alliance (2013-20)
- Moderator, "Water, sanitation, hygiene (WASH), and agricultural research and transformation,"

 Innovative & Transformational Ideas to Improve the Development & Policy Response to Forced Displacement,

 US-Jordan University Cooperation Network (2019)
- Reviewer, Grant proposals to US-Jordan University Cooperation Network (2019)
- Faculty Development Committee, Dept. of Geography, Virginia Tech (2018-19)
- Personnel Committee, Dept. of Geography, Virginia Tech (2018-19)
- Faculty Representative, Energy & Sustainability Committee, Virginia Tech (2017-19)
- Reviewer, Pre-proposals for Water Resources Research National Competitive Grant Program (104g), USGS/NIWR (2017-19)
- Moderator and Judge, National Geographic Virginia State Geography Bee (2014-15, 2017-19)
- Abstract Reviewer, UCOWR-NIWR Annual Water Resources Conference (2018)
- Judge, ESRI/VGA Map Competition (2018)
- Marshal, College of Natural Resources & Environment commencement (2017, 2018)
- Equipment and Facilities Committee, Dept. of Geography, Virginia Tech (2016-18)
- Graduate Committee, Dept. of Geography, Virginia Tech (2015-18)
- Conference Co-Organizer, Water Research: Generating Knowledge & Innovative Solutions (2017)
- Moderator, "Using models for watershed management" and "Poster session," Water Research: Generating Knowledge & Innovative Solutions (2017)
- Reviewer, Jacques May Thesis Prize, Health & Medical Geography specialty group of AAG (2017)
- Reviewer, Curriculum Globalization Grants, Virginia Tech (2017)
- Co-Host and Planning Committee, South Asia Symposium, Virginia Tech (2017)
- Reviewer, NSF Geography and Spatial Sciences Program (2016)
- Faculty Design Team for Global Systems Science Destination Area, Virginia Tech (2016)
- Usher, Graduate College commencement, Virginia Tech (2016)
- Conference Co-Organizer, Water Resources Conference of the Virginias: Water, Energy, Agriculture (2015)
- Usher, undergraduate commencement, Virginia Tech (2015)
- Undergraduate Committee, Dept. of Geography, Virginia Tech (2013-15)
- Conference Co-Organizer, The Future of Mid-Atlantic Infrastructure: Challenges & Solutions (2014)
- Session Co-Organizer: "Author Discussion Dancing with the river: people and life on the chars of South Asia," "Water Resources and Sustainable Development I," and "Water Resources and Sustainable Development II," AAG Annual Meeting (2014)
- Moderator, "Planning and Response to Climate Change and Flooding," The Future of Mid-Atlantic Infrastructure: Challenges & Solutions (2014)

- Moderator, "Author Discussion Dancing with the river: people and life on the chars of South Asia," AAG Annual Meeting (2014)
- Reviewer, Junior Faculty Collaborative Grants, Institute for Critical Technology & Applied Science (2014)
- Judge (poster session), Annual Interdisciplinary Research Day, Virginia Tech (2014)
- Reviewer, Student Paper Competition, AAG Water Resources Specialty Group (2013)
- Moderator, Global Health Symposium, Washington & Lee University (2013)
- Moderator and Judge, National Geographic Iowa State Geography Bee (2007-08, 2010-13)
- Established Rex Honey Memorial Lecture Series, Dept. of Geography, University of Iowa (2011)
- Grad student faculty meeting representative, Dept. of Geography, University of Iowa (2010-11)
- Faculty Search Committee, Dept. of Geography, University of Iowa (2010)
- Conference Organizer, Forum on Disaster Reconstruction, IIT-Madras, India (2009)

COMMUNITY ENGAGEMENT

- Service learning component of study abroad course resulted in planting 22 endemic flax and removal of invasives for the Department of Conservation in New Zealand (2024-25)
- Coach, For Inspiration and Recognition of Science and Technology (FIRST) Lego Robotics Competition, Snowville Elementary School (2023)
- Collaborated with S.M. Sehgal Foundation to disinfect drinking water using silver ionization technology at 3 public schools in Haryana, India (2022-23)
- Collaborated with S.M. Sehgal Foundation to assess the impact of a WASH behavior change project in Bihar, India (2020-23)
- Board of Directors, Collaborative Arts Research Translation for Human Advancement (CARTHA) (2019-Present)
- Board of Directors, Sustainable Blacksburg, Town of Blacksburg (2018-20)
- Organized 5 private drinking water quality workshops for rural high schools in Virginia (2019)
- Coordinated 16 service learning projects with Catawba Sustainability Center, Feeding America, Environmental Scavengers, Fajr Beirut, et al. (2019)
- Implemented aquaponics system with curriculum design and delivery, Blacksburg New School (2018-19)
- Organized annual food drive for "Plenty!" food pantry (2015-19)
- Organized official visit and keynote presentation at Virginia Tech by Brian J. Moran, Virginia Secretary of Public Safety and Homeland Security (2018)
- Coordinated 13 service learning projects with Head Start, YMCA/YWCA, Micah's Backpack, Humane Society, Virginia Department of Health, et al. (2017)
- Service learning component of study abroad course resulted in planting 320 endemic trees for Department of Conservation in New Zealand (2016)
- Presented to doctors and nurses of Meenakshi Hospital-Thanjavur on water & sanitation in Tamil Nadu, India (2016)
- Volunteer, Smile Train and Pediatrics ward, Meenakshi Hospital-Thanjavur, India (2016)
- Conducted 24 water quality & post-point contamination workshops, India (2012-16)
- Organized three cleft lip & palate screening camps for Smile Train resulting in 31 free corrective surgeries, India (2012-16)

- Coordinated sustainability service learning projects with Virginia Department of Health, Harding Elementary, and College of Natural Resources & Environment at Virginia Tech (2015)
- Organized 10 disaster preparedness workshops in Kolkata, Chennai, Andaman, and Odisha, India (2012-13)
- Volunteer, Relay for Life, American Cancer Society (2012)
- Fundraised monies for 127 goats, Mahasemam Women's Self-Help Cooperative, India (2007-12)
- Successfully appealed City of Iowa City to recognize United Nations International Day for Disaster Reduction (2010)
- Conducted social programs impact study, Mahasemam Women's Self-Help Cooperative, India (2009)
- Participated in clean water, tree planting, and library projects as Rotary International Ambassadorial Scholar, India (2008-09)
- Delivered 40+ public presentations as Rotary International Ambassadorial Scholar in India, Sri Lanka, and USA (2008-09)
- Volunteer, Mother Teresa and Smile Train wards, Meenakshi Mission Hospital and Research Centre-Madurai, India (2007)
- Conducted survey in six mobile home parks in Iowa City, Habitat for Humanity (2006)
- Tsunami relief volunteer, Galle, Sri Lanka, Red Cross (2005)

PROFESSIONAL & INSTRUCTIONAL DEVELOPMENT

- Digital Learning Essentials, Virginia Tech (2025)
- Digital Security Essentials, Virginia Tech (2025)
- IT Security Awareness Training, Virginia Tech (2025)
- READ: Respect, Equity & Anti-Discrimination Compliance Training, Virginia Tech (2024)
- Federal Clery Act Training (2024)
- Employee Safety & Disaster Awareness, State of Virginia (2024)
- State of Virginia: Terrorism & Security Awareness (2024)
- Inclusive Pedagogy Pathway Part II, Virginia Tech (2023)
- Fostering an Inclusive Classroom Environment, Virginia Tech (2023)
- Reducing Implicit Bias in the Classroom, Virginia Tech (2023)
- Having the Conversation: Confronting Underrepresentation in STEM, Virginia Tech (2023)
- Fostering a Growth Mindset, Virginia Tech (2023)
- Inclusive Pedagogy Pathway Part I, Virginia Tech (2022)
- Inclusive VT Summit, Virginia Tech (2022)
- The Road to Cultural Competence, State of Virginia (2022)
- Trauma Competent Caregiving, Virginia Dept. of Social Services and 127 Place (2022)
- Compliance Workshop: Policy 1025, Title IX & Violence Against Women Act (VAWA), EVERFI (2022)
- FERPA Training (2022)
- Tech Trends in Higher Education: Choosing Accessible Learning Materials, Virginia Tech (2021)

- Cyber Security, Virginia Tech (2021)
- Civilian Response for Active Shooter Events, State of Virginia (2020)
- Diversity: Inclusion in the Modern Workplace, EVERFI (2020)
- Campus Security Authority (CSA), Virginia Tech (2020)
- Environmental Health & Safety: Coronavirus Awareness, Virginia Tech (2020)
- The Role of Supervisors in Advancing an Inclusive Workplace, Virginia Tech (2020)
- Practices for Reducing Implicit Bias in Workplace Processes, Virginia Tech (2020)
- Having Difficult Conversations, Virginia Tech (2020)
- Celebrating Employee Differences, Virginia Tech (2020)
- Grief, Loss, and Resilience, Virginia Dept. of Social Services (2019)
- Protecting and Nurturing Trauma, Virginia Dept. of Social Services (2019)
- Addressing Hate on Campus: Strategies for Responding to the Increase in Bias and Hate Incidents on College Campuses, Anti-Defamation League and INSIGHT Into Diversity (2019)
- DiversityEdu Faculty Search (2019)
- Search Committee Charge Workshop, Virginia Tech (2019)
- Conflict of Interest and Commitment Training, CITI Program (2015, 2017, 2019)
- Exploring Built in Accessibility, Virginia Tech (2017)
- Securing the Human: Security Awareness Training, Virginia Tech (2017)
- Altmetrics, Virginia Tech (2017)
- Pathways to Sustainability Workshop, Virginia Tech (2017)
- Proposal Development Institute, Virginia Tech (2016-17)
- Open Access Journals: Choosing a High Quality Publication Venue, Virginia Tech (2016)
- Accessibility Made Conscious: Overview of Basic Accessibility Concepts, Virginia Tech (2016)
- Accessible Documents by Design, Virginia Tech (2016)
- Accessibility: Speech Recognition for Mac, Virginia Tech (2016)
- Accessibility in the Blended Classroom, Virginia Tech (2016)
- Flipping the Classroom, Virginia Tech (2015)
- SafeZone, Virginia Tech (2014)
- Transgender 101, Virginia Tech (2014)

CERTIFICATIONS

- Inclusive Pedagogy Teaching Plan, Virginia Tech
- Creating an Inclusive Workplace, Virginia Tech
- Accessibility Certificate, Virginia Tech
- Human Subjects Protections, CITI Program
- OSHA Bloodborne Pathogens
- Mandatory Child Abuse Reporter (CWS5962), Virginia Department of Social Services

- Cardiopulmonary resuscitation (CPR)
- Heimlich Maneuver
- Teaching Licensure, State of Iowa
- Advanced Placement Economics

MEMBERSHIPS & ACTIVITIES

- Radical Interpretations of Disasters and Radical Solutions (Radix) (2018-Present)
- Social Science Extreme Events Research (2018-Present)
- Chesapeake Research Consortium (2017-Present)
- Scholars of South Asia, Virginia Tech (2017-Present)
- Coastal@VT (2017-Present)
- Gender and Water Alliance (GWA) (2016-Present)
- Gender CC Women for Climate Justice (2016-Present)
- Southeast Division of the American Association of Geographers (SEDAAG) (2014-Present)
- Interdisciplinary Coastal Hazards Research Team, Virginia Tech (2014-Present)
- Southern Region Integrated Water Resources Committee (SERA43) (2014-Present)
- Virginia Geographic Alliance (VGA) (2013-Present)
- Virginia Water Monitoring Council (VWMC) (2013-Present)
- International Alumni Exchange Network, US Department of State (2011-Present)
- International Network on Household Water Treatment & Safe Storage (2010-Present)
- American Association of Geographers (AAG) (2009-Present)
- Gender and Disaster Network (GDN) (2008-Present)
- Global Ambassador for CARTHA (2012-19)
- American Geographical Society (AGS) (2015-16)
- Upper Roanoke River Roundtable (2013-14)
- Geographic Alliance of Iowa (GAI) (2003-13)
- Autonomous Language Learning Network (ALLNet) for Tamil (2010-11)

AWARDS & HONORS

- Diversity and Inclusion Award, College of Natural Resources & Environment, Virginia Tech (2023)
- Fulbright Scholar
- Golden Key International Honour Society
- Phi Eta Sigma National Honor Society
- National Society of Collegiate Scholars
- National Scholars Honor Society
- Omicron Delta Epsilon International Honor Society in Economics
- Kappa Delta Pi International Honor Society in Education

CONFERENCE ATTENDANCE

- Annual Meeting of the Southeastern Section of the Geological Society of America, James Madison University (2025)
- SEDAAG Annual Conference (2013-15, 2018-20, 2022, 2024)
- Not if, When: Teaching with Intentionality & Bravery for All of Our Students, Virginia Tech (2024)
- AAG Annual Meeting (2014-18, 2024)
- Dimensions of Political Ecology Conference, University of Kentucky-Lexington (2021)
- Water & Health Conference 2020: Science, Policy & Practice, UNC-Chapel Hill (2020)
- Innovative & Transformational Ideas to Improve the Development & Policy Response to Forced Displacement, US-Jordan University Cooperation Network (2019)
- Women & Gender in Development Conference: Out of the Theory & into the Field, Virginia Tech (2019)
- Coastal Resilience Roundtable, Virginia Tech (2018)
- Advancing the Human Condition Symposium, Virginia Tech (2018)
- Water Research: Building Knowledge & Innovative Solutions, Mid-Atlantic Regional Water Centers (2017)
- South Asia Symposium: Contemporary Films on Life in South Asia, Virginia Tech (2017)
- Women in Natural Resources: Leading, Mentoring & Connecting, Virginia Tech (2016)
- Water & Health Conference 2015: Where Science Meets Policy, UNC-Chapel Hill (2015)
- Symposium on South Asia: An Interdisciplinary Perspective on Issues & Research, Virginia Tech (2015)
- Coastal Disaster Resilience Symposium, Virginia Tech (2014, 2015)
- The Future of Mid-Atlantic Infrastructure: Challenges & Solutions, Mid-Atlantic Regional Water Centers (2014)
- Annual Natural Hazards Research & Applications Workshop, University of Colorado-Boulder (2014)
- Roanoke River Currents Watershed Conference, Ferrum College (2013)
- Global Health Symposium, Washington & Lee University (2013)
- Technical Consultation to Review the Toolkit for Disaster Recovery Practitioners, Asia Disaster Preparedness Center, India (2012)
- Natural Disasters & Humanitarian Aid, University of Iowa (2012)
- Moynihan Conference on Post-Disaster Recovery, Syracuse University (2011)
- Starving for Water: the Global Water Crisis & its Impact on Food & Health, University of Iowa (2011)
- A Global Exploration of Comparative Studies & Multi-Sited Research, University of Iowa (2011)
- Natural Disasters & Public Memory in South Asia, University of Iowa (2010)
- Mitigating Rural Poverty in India, Indian Development Coalition of America and Indiana State University (2010)
- Celebrating Crossing Borders, University of Iowa (2010)
- Planning for a Disaster-Resistant Community, FEMA and the American Planning Association (2009)
- Forum on Disaster Reconstruction, IIT-Madras, India (2009)
- International Conference on Re-Examining Disaster Recovery & Reconstruction: Social Science Perspectives on the Tsunami, Jawaharlal Nehru University, India (2008)
- Surviving the Monsoon: Natural Disasters in Bangladesh, Geographic Alliance of Iowa (2008)
- Transitions in Modern Muslim Societies, University of Iowa (2008)
- Leadership Summit on Microfinance, Gandhigram Rural Institute, India (2007)

- Vulnerabilities of Labor Migrants, University of Iowa (2007)
- Health Services as an Instrument of International Politics, University of Iowa (2006)