

## Dr. Luke Juran

Department of Geography and Virginia Water Resources Research Center

College of Natural Resources and Environment

125 Major Williams Hall

Virginia Tech

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## APPOINTMENTS

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- Assistant Professor of Geography, Department of Geography, Virginia Tech, 08/13-Present
- Assistant Professor of Human Ecology of Water, Virginia Water Resources Research Center, Virginia Tech, 08/13-Present
- Adjunct Assistant Professor, Department of Geographical & Sustainability Sciences, University of Iowa, 05/13-08/13

## RESEARCH INTERESTS

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- Access to Water; WASH; HWTS & PoU Treatment; Latrine Adoption
- Hazards & Disasters; Reconstruction; Water Sector Recovery; WASH in Emergencies

## EDUCATION

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### Ph.D. Geography, 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 (AAG)
  - J. Warren Nystrom Award finalist for best geography dissertation chapter (AAG)
- Appointments: Instructor, Research Assistant, Teaching Assistant
- Extramural Distinctions: Fulbright Fellow, Rotary International Ambassadorial Scholar, Crossing Borders Fellow, CARTHA Fellow

### Indian Institute of Technology-Madras, India, 06/08-06/09

- Ph.D. coursework in Environmental Water Resources Engineering and Humanities & Social Sciences on full scholarship

### M.A. 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, University of Northern Iowa, 08/99-12/03**

- Minors: Geography, Economics, American History
- Certifications: Iowa Teaching Licensure, Mandatory Child Abuse Reporter, AP Economics, OSHA Bloodborne Pathogens, Human Subjects Protections IRB-02

**PROFESSIONAL EXPERIENCE**

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**Access to WASH Services among Refugees in the New River Valley, 01/18-Present**

- Analysis of primary accounts of water, sanitation, and hygiene conditions experienced by refugees as they move across space
- Mentor a paid undergrad research assistant

**The Introduction of Aquaponics Systems in the Educational Setting, 01/18-Present**

- Partner with Blacksburg New School to implement an aquaponics system and associated educational lesson plans
- Mentor a paid undergrad research assistant

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

- Mentor three students from across the United States on project entitled *Ecosystem and cultural impacts of the Mountain Valley Pipeline using a mixed methods approach* at Virginia Tech Stream Lab
- Undergraduate students presented research at a conference

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

- Project deployed household surveys and interviews to assess latrine usage across 14 villages that were provided latrines free-of-cost
- Mentored, funded, and presented at two conferences with an undergraduate research assistant

**Sustaining Human Societies & the Natural Environment in New Zealand, 12/16-01/17**

- Co-Instructor of field-based study abroad course investigating endemic species, conservation, and sustainability in New Zealand
- Service learning component resulted in planting of 320 endemic trees for the Department of Conservation

**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 the United States on project entitled *Valuing the urban hydroscape: perceptions and importance of urban water* at Virginia Tech Stream Lab
- Undergraduate 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
- Organized 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**

- Investigated post-tsunami reconstruction using household surveys, water quality tests, primary documents, and photographic and ethnographic approaches
- Developed a framework for water sector reconstruction and a modified Water Poverty Index

**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 critical infrastructure to FEMA as part of Des Moines' preparedness and mitigation plan

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

- Participant 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 private 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 private international school with 50+ nationalities represented
- Co-Instructor of class study abroad trip to Greece

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

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

## Courses Instructed

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

## SCHOLARLY PUBLICATIONS

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- Blumenthal, K.,\* M. Lang, J.B. Campbell, J. Galbraith, **L. Juran** (In Press). Effects of analytic strategies and soil condition on hyperspectral-based predictions of soil organic carbon among agriculturally converted Delmarva Bays. *Applied Spectroscopy*.
- **Juran, L.** 2018. [Disaster, development, and water: the reconstruction and \(re\)fabrication of hazardous waterscapes in post-tsunami India](#). In *The Asian tsunami and post-disaster aid*, S. Reddy (ed.), pp. 79-99. Singapore: Springer Nature.
- Adams, E.A., **L. Juran**, I. Ajibade. 2018. [‘Spaces of exclusion’ in community water governance: a feminist political ecology of gender and participation in Malawi’s urban water user associations](#). *Geoforum* 95: 133-142.
- Aksha, S.K.,\* **L. Juran**, L.M. Resler. 2018. [Spatial and temporal analysis of natural hazard mortality in Nepal](#). *Environmental Hazards* 17(2): 163-179.
- MacDonald, M.C., **L. Juran**, S. Srinivasan, J. Jose, S.I. Ali, P. Rajagopalan, K. Hall. 2018. [Assessing participant compliance with point-of-use water treatment: an exploratory investigation](#). *Public Works Management & Policy* 23(2): 150-167.
- Sehgal, V.,\* V. Sridhar, **L. Juran**, J.A. Ogejo. 2018. [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.
- **Juran, L.**, M.C. MacDonald, N.B. Basu, S. Hubbard, R. Rajagopal, P. Rajagopalan, L. Philip. 2017. [Development and application of a multi-scalar, participant-driven Water Poverty Index in post-tsunami India](#). *International Journal of Water Resources Development* 33(6): 955-975.
- **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.
- **Juran, L.**, J. Trivedi, K.N. Kolivras. 2017. [Considering the ‘public’ in public health: popular resistance to the Smallpox Eradication Programme in India](#). *Indian Journal of Medical Ethics* 2(2): 104-111.
- Bandzuh, J.T.,\* **L. Juran**, K.N. Kolivras, A.B. Wallis. 2017. [Local perceptions of measures to control Aedes mosquitoes and mosquito-borne diseases in Puntarenas and San José, Costa Rica](#). *Journal of Latin American Geography* 16(2): 139-162.
- MacDonald, M.C., **L. Juran**, J. Jose, S. Srinivasan, S.I. Ali, K.J. Aronson, K. Hall. 2016. [The impact of rainfall and seasonal variability on the removal of bacteria by a point-of-use drinking water treatment intervention in Chennai, India](#). *International Journal of Environmental Health Research* 26(2): 208-221.
- **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.

- **Juran, L.** & J. Trivedi. 2015. [Women, gender norms, and natural disasters in Bangladesh.](#) *Geographical Review* 105(4): 601-611.
- **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.
- **Juran, L.** 2012. [The gendered nature of disasters: women survivors in post-tsunami Tamil Nadu.](#) *Indian Journal of Gender Studies* 19(1): 1-29.

\* = Graduate student

## OTHER SCHOLARLY CONTRIBUTIONS

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- **Book Review:** Juran, L. 2012. [Women, gender and disaster: global issues and initiatives.](#) *Indian Journal of Gender Studies* 19(2): 341-344.
- **White Paper:** 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, and P. Dixit. 2017. [Stresses and instability in coastal systems: sustaining prosperity, increasing diversity, and achieving resilience.](#) VTechWorks, Virginia Tech.
- **Encyclopedia Entries:**
  - **Juran, L.** (In Press). Indian Ocean tsunami, 2004. In *Natural hazards and disasters: from avalanches and climate change to water spouts and wildfires*, B.K. Paul (ed.). Broomfield: ABC-CLIO.
  - Clark, B.,<sup>^</sup> I. MacNaughton,<sup>^</sup> **L. Juran**. (In Press). Bhola Cyclone, Bangladesh, 1970. In *Natural hazards and disasters: from avalanches and climate change to water spouts and wildfires*, B.K. Paul (ed.). Broomfield: ABC-CLIO.
  - Stevens, A.,<sup>^</sup> K. Compton,<sup>^</sup> **L. Juran**. (In Press). BP Deepwater Horizon oil spill, 2010. In *Natural hazards and disasters: from avalanches and climate change to water spouts and wildfires*, B.K. Paul (ed.). Broomfield: ABC-CLIO.

<sup>^</sup> = Undergraduate student
- **Poems:**
  - **Juran, L.** 2018. [Area \(colonial\) studies: academic concerto No. posture.](#) *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.
- **Photos:**
  - Bélanger, P., A. Gauzza, A.C. Baker, C. Milos, P. Ritchot (eds.). (In Press). *Estuarine urbanization: strategies of coastal adaptation, intertidal ecologies, deltaic economies, marine conservation & ocean urbanization*. Photo credit in “Cyclone sheltering: Bay of Bengal coast, Bangladesh.” Chicago: University of Chicago Press.
  - 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.

- **Open Source Lecture:** Juran, L. 2015. [Women, gender norms, and natural disasters: examples from South Asia](#). VTechWorks, Virginia Tech.
- **Consultant:** Asia Disaster Preparedness Center. 2015. [Handbook for disaster recovery practitioners: disaster recovery toolkit](#). 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:** Wrote cover endorsement for *Disaster relief aid: changes & challenges* (B.K. Paul, 2019, Palgrave Macmillan)
- **Video:** [How my fieldwork has impacted local communities in India](#)

## CONFERENCE & INVITED PRESENTATIONS

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- 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* (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* (2018)
- **Juran, L.**, “The geography of failure and hope in post-disaster reconstruction: planning problems and planning progress,” *AAG Annual Meeting* (2018)
- Prince, B.\* & **L. Juran**, “An analysis of human-environment waterscapes using a modified Water Poverty Index,” *AAG Annual Meeting* (2018)
- Aksha, S.,\* **L. Juran**, L. Resler, “How resilient are Himalayan communities? An assessment of disaster resilience in Nepal,” *AAG Annual Meeting* (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* (2017)
- Olson, E.,\* R. Oliver, **L. Juran**, K. Kolivras, “Rescinding a bid: Stockholm’s uncertain relationship with the Olympic Games,” *SEDAAG Annual Conference* (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 (2017)
- Prince, B.\* & **L. Juran**, “Construction and application of a contextualized, multiscale Water Poverty Index in coastal India,” *Water Research: Building Knowledge & Innovative Solutions*, Mid-Atlantic Regional Water Centers (2017)
- Prajapati, S. ^ & **L. Juran**, “Social, economic, and cultural factors of latrine adoption in coastal South India,” *AAG Annual Meeting* (2017)
- Aksha, S.,\* **L. Juran**, L. Resler, “Assessment of social vulnerability to natural hazards in Nepal,” *AAG Annual Meeting* (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* (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* (2016)
- Aksha, S.\* **L. Juran**, L. Resler, “Spatial patterns of natural disaster mortality in Nepal,” *AAG Annual Meeting* (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.,\* K. Kolivras, **L. Juran**, “Actions to prevent *Aedes* mosquitoes and mosquito-borne diseases in Costa Rica,” *AAG Annual Meeting* (2016)
- Bandzuh, J.,\* **L. Juran**, K. Kolivras, “Investigating actions versus perceptions of *Aedes* mosquito control in Costa Rica,” *UTK Geography Symposium*, University of Tennessee (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*, UNC-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* (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* (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* (2015)
- **Juran, L.**, “Development and application of a contextualized, multiscalar Water Poverty Index in post-tsunami South India,” *AAG Annual Meeting* (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*, UC-Boulder (2014)
- **Juran, L.**, “Water infrastructure challenges in the Mid-Atlantic region: perspectives from Virginia,” *The Future of Mid-Atlantic Infrastructure: Challenges and Solutions* (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* (2014)

- **Juran, L.**, “Water, disasters, & reconstruction: a conceptual human-environment framework for sustainable water sector reconstruction,” *SEDAAG Annual Conference* (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* (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)
- **Juran, L.**, “Coping with natural disasters in Bangladesh,” *Kohn Colloquium*, University of Iowa, and *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, 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: what happened and why?,” *Dubuque Rotary Club* and *Balltown Lion’s Club* (2006)

^ = Undergraduate student

\* = Graduate student

## GRANTS & AWARDS

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- Manodharma India Faculty Travel Grant - \$5,900 (2018-Present)



- Sustainable Water Undergraduate Research Fellowship, Virginia Tech - \$3,557 (2016-17), \$2,710 (2018-Present), and \$3,000 (2018-Present)
- Freshwater Systems Seed Grant, Virginia Tech - \$7,200 (Co-PI, 2018-Present)
- 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

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- Saalehah Habeebah, Funded Undergraduate Research Assistant, Virginia Tech (2018-Present)
  - 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-Present)
  - Project: *The introduction of aquaponics systems in the educational setting in Montgomery County, Virginia*
- Damien Geffroy, M.S. Committee, Geography, Virginia Tech (2018-Present)
  - Thesis: *Paris 2024 summer Olympics: resolving the core-suburban dilemma through sport development?*
- Veronica Warda, M.S. Chair, Geography, Virginia Tech (2017-Present)

- Thesis: *Strontium in drinking water: assessing strontium as a drinking water contaminate in Virginia private wells*
- Sanam Aksha, Ph.D. Co-Chair, Geospatial & Environmental Analysis, Virginia Tech (2014-Present)
  - Dissertation: *Modeling multihazard risk and vulnerability in the Nepal Himalaya*
- Sarah Abrahams (Auburn University), Michael Galeski (Creighton University), and Elise Malvicini (Mount Holyoke College), Mentor for USDA-REEU, Virginia Tech Stream Lab (Completed 2018)
  - Project: *Ecosystem and Cultural Impacts of the Mountain Valley Pipeline Using a Mixed Methods Approach*
- Breeanna Prince, M.S. Chair, Geography, Virginia Tech (Completed 2018)
  - 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 (Completed 2018)
  - 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 (Completed 2018)
  - Thesis: *Rescinding a bid: Stockholm's uncertain relationship with the Olympic Games*
- Julia Sherry, M.S. Chair, Geography, Virginia Tech (Completed 2017)
  - Thesis: *Perceptions of water services and innovations to improve water services in Tanzania*
- Shaifali Prajapati, Funded Undergraduate Research Assistant, Virginia Tech (Completed 2017)
  - Project: *Social, economic, and cultural factors of latrine adoption in coastal South India*
- Jackie Scott, Guided Independent Study, Virginia Tech (Completed 2017)
  - Project: *Community resilience to natural disasters in the American context*
- Vinit Sehgal, M.S. Committee, Biological Systems Engineering, Virginia Tech (Completed 2017)
  - Thesis: *Near real-time seasonal drought forecasting and retrospective drought analysis using simulated multi-layer soil moisture from hydrological models at sub-watershed scales*
- John Bandzuh, M.S. Co-Chair, Geography, Virginia Tech (Completed 2016)
  - Thesis: *Perceptions of measures to control Aedes mosquitoes and mosquito-borne diseases in Costa Rica*
- Breeanna Prince, Funded Undergraduate Research Assistant, Virginia Tech (Completed 2016)
  - Project: *Development and application of a multiscalar Water Security Index*
- Kinsey Blumenthal, M.S. Committee, Geography, Virginia Tech (Completed 2016)
  - Thesis: *Predicting spatial variability in soil organic carbon among Delmarva bays*
- Adrian Santiago Tate, Mentor for Wayne & Claire Horton Fellowship, Virginia Tech (Completed 2015)
  - Project: *Post-tsunami hazard mitigation in Sri Lanka, Indonesia, and Hawaii*
- Ashley Lewis, M.S. Committee, Geography, Virginia Tech (Completed 2015)
  - Thesis: *Human-wildlife conflict and mobile phone use among Maasai pastoralists near Tarangire National Park, Northern Tanzania*
- William Cross, Guided Independent Study, Virginia Tech (Completed 2015)
  - Project: *A comparison of sustainability activities in Iceland and the United States*

- Julia Sherry, Undergraduate Honors Thesis Committee, Virginia Tech (Completed 2015)
  - Thesis: *The sustainability of water, sanitation, and hygiene interventions by humanitarian nonprofit organizations*
- Malaysia Lumpkin, Funded Undergraduate Research Assistant, Virginia Tech (Completed 2015)
  - Project: *Development and application of a multiscalar Water Security Index*
- Haitao Wang, M.S. Committee, Geography, Virginia Tech (Completed 2014)
  - Thesis: *Monitoring vegetation dynamics in Zhongwei, an arid city of Northwest China*
- Karla Boza (Manhattanville College), Nicole Carter (Oklahoma State University), and Erica Davis (University of Tennessee, Knoxville), Mentor for NSF-REU, Virginia Tech Stream Lab (Completed 2014)
  - Project: *Valuing the urban hydroscape: perceptions and importance of urban water*

## MEMBERSHIPS & ACTIVITIES

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- Radical Interpretations of Disasters and Radical Solutions (Radix) (2018-Present)
- Chesapeake Research Consortium (2017-Present)
- Scholars of South Asia, Virginia Tech (2017-Present)
- Coastal@VT (2017-Present)
- Gender & Water Alliance (2016-Present)
- Gender CC - Women for Climate Justice (2016-Present)
- American Geographical Society (2015-16)
- Southeast Division of the American Association of Geographers (2014-Present)
- Interdisciplinary Coastal Hazards Research Team, Virginia Tech (2014-Present)
- Southern Region Integrated Water Resources Committee (SERA43) (2014-Present)
- SafeZone (2014-Present)
- Upper Roanoke River Roundtable (2013-14)
- Virginia Geographic Alliance (2013-Present)
- Virginia Water Monitoring Council (2013-Present)
- CARTHA Global Ambassador (2012-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 (2009-Present)
- Gender & Disaster Network (2008-Present)
- Geographic Alliance of Iowa (2003-13)
- Autonomous Language Learning Network (ALLNet) for Tamil (2010-11)

## HONORS

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- 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
- Dean's list every semester of higher education
- Ph.D. and M.A. *summa cum laude*, B.A. *magna cum laude*

## PROFESSIONAL & INSTITUTIONAL SERVICE

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- Manuscript and Book Reviews:

*Geographical Review* (2)

Routledge Press (2 books)

*American Journal of Tropical Medicine & Hygiene*

*Indian Journal of Gender Studies*

*Journal of the American Water Resources Association*

*Natural Hazards*

*GeoHealth* (2)

*Water History* (2)

*Annals of the American Association of Geographers*

*Indian Journal of Medical Ethics*

*Journal of Water & Climate Change*

*Urban Water Journal*

- Faculty Supervisor, Ascend Foundation at Virginia Tech (2018-Present)
- Faculty Development Committee, Dept. of Geography, Virginia Tech (2018-Present)
- Personnel Committee, Dept. of Geography, Virginia Tech (2018-Present)
- Treasurer, Southeastern Division of the American Association of Geographers (2017-Present)
- Interim Faculty Representative, Energy & Sustainability Committee, Virginia Tech (2017-Present)
- Oversight Committee, Watershed Management Minor, Virginia Tech (2015-Present)
- Internship Selection Committee, Virginia Water Resources Research Center (2015-Present)
- Faculty Supervisor, Oxfam America at Virginia Tech (2014-Present)
- Departmental Representative, Universities Council on Water Resources (2014-Present)
- Selection Committee, Walker Award, Virginia Water Resources Research Center (2014-Present)
- Reviewer, Student Research Grants, Virginia Water Resources Research Center (2014-Present)
- Steering Committee, Virginia Geographic Alliance (2013-Present)
- Abstract Reviewer, *UCOWR-NIWR Annual Water Resources Conference* (2018)
- Judge, ESRI/VGA Map Competition (2018)
- Judge, Mr. and Mrs. Agriculture Pageant, Virginia Tech (2018)
- Reviewer, Pre-proposals for Water Resources Research National Competitive Grants Program, USGS/NIWR (2017, 2018)
- Marshal, College of Natural Resources & Environment commencement (2017, 2018)
- Moderator and Judge, National Geographic Virginia State Geography Bee (2014, 2015, 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)
- Volunteer, Graduate College commencement, Virginia Tech (2016)
- Conference Co-Organizer, *Water Resources Conference of the Virginias: Water, Energy, Agriculture* (2015)
- Volunteer, undergraduate commencement, Virginia Tech (2015)
- Undergraduate Committee, Dept. of Geography, Virginia Tech (2013-15)
- Conference Co-Organizer, *The Future of Mid-Atlantic Infrastructure: Challenges and 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 and 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)
- Organized *Forum on Disaster Reconstruction*, IIT-Madras, India (2009)

## COMMUNITY ENGAGEMENT

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- Board of Directors, Sustainable Blacksburg, Town of Blacksburg (2018-Present)
- Implementation of aquaponics system with curriculum design and delivery, Blacksburg New School (2018-Present)
- Coordinated official visit and keynote presentation at Virginia Tech by Brian J. Moran, Virginia Secretary of Public Safety and Homeland Security (2018)
- Organized annual food drive for “Plenty!” food pantry (2015-18)
- 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 of 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, Habitat for Humanity (2006)
- Tsunami relief volunteer, Red Cross, Sri Lanka (2005)

## **CONFERENCE ATTENDANCE & PROFESSIONAL DEVELOPMENT**

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- *AAG Annual Conference* (2014-18)
- *Accessibility Certificate*, Virginia Tech (2017)
- *Exploring Built in Accessibility*, Virginia Tech (2017)
- *Water Research: Building Knowledge & Innovative Solutions*, Mid-Atlantic Regional Water Centers (2017)
- *Securing the Human: Security Awareness Training*, Virginia Tech (2017)
- *Altmetrics*, Virginia Tech (2017)
- *South Asia Symposium: Contemporary Films on Life in South Asia*, Virginia Tech (2017)
- *Pathways to Sustainability Workshop*, Virginia Tech (2017)
- *Proposal Development Institute*, Virginia Tech (2016-17)
- *Women in Natural Resources: Leading, Mentoring, and Connecting*, Virginia Tech (2016)
- *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)
- *Title IX and Violence Against Women Act Compliance Workshop*, Virginia Tech (2016)
- *Water & Health Conference 2015: Where Science Meets Policy*, UNC-Chapel Hill (2015)
- *Symposium on South Asia: An Interdisciplinary Perspective on Issues and Research*, Virginia Tech (2015)
- *Flipping the Classroom*, Virginia Tech (2015)
- *Conflict of Interest and Commitment Training*, CITI Program (2015)
- *Coastal Disaster Resilience Symposium*, Virginia Tech (2014, 2015)
- *SEDAAG Annual Conference* (2013-15)

- *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)
- *SafeZone*, Virginia Tech (2014)
- *Transgender 101*, Virginia Tech (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 and Humanitarian Aid*, University of Iowa (2012)
- *Moynihan Conference on Post-Disaster Recovery*, Syracuse University (2011)
- *Starving for Water: The Global Water Crisis and its Impact on Food and Health*, University of Iowa (2011)
- *A Global Exploration of Comparative Studies and Multi-Sited Research*, University of Iowa (2011)
- *Natural Disasters and 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 and 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)