Helen Wilson Burns, PhD

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Research: environmental demography · climate migration · computational, quantitative environmental social science · climate change adaptation · human-environmental data integration

Education

Ph.D., Environmental Studies, University of Colorado Boulder — May 2026
Dissertation: *Demographic Perspectives on Migration and Socioenvironmental Change*
Advisor: Amanda Carrico (Environmental Studies); Committee: Karen Bailey (Environmental Studies); Katharine Donato (Migration Studies), Lori Hunter (Sociology) and Fernando Riosmena (Sociology and Geography)

Graduate Certificate in Quantitative Methods for Behavioral Sciences

Graduate Certificate in Population Studies

Graduate Certificate in College Teaching

M.S., Environmental Studies, University of Colorado Boulder — Dec 2022

B.A., International Affairs, minor in Geography, *summa cum laude*, The George Washington University — May 2018
Elliott School of International Affairs

Academic Appointments

Postdoctoral Trainee in Population Science, University of North Carolina at Chapel Hill — Aug 2026–present
Carolina Population Center, National Institutes of Health (T32) training program
Preceptors: Clark Gray (Geography) and Miyuki Hino (City and Regional Planning)

Publications

Bold = self; ^ = undergraduate mentee

Amanda R. Carrico, **Helen Wilson Burns**, Katharine M. Donato, Hafizur Rahaman, and Kelsea B. Best (2026). Do social networks moderate the effect of extreme weather on migration? *Population and Development Review*. doi:10.1111/padr.70061

Under Review

Helen Wilson Burns, Katharine M. Donato, Bishawjit Mallick, and Amanda R. Carrico. Diversity and change in women's migration in Bangladesh. Conditionally accepted at *Demography*.

Helen Wilson Burns, Katharine M. Donato, and Amanda R. Carrico. Remittances and well-being resilience after COVID: Evidence from Bangladesh.

Near Submission

Helen Wilson Burns, Fernando Riosmena, Johannes Uhl, and Stefan Leyk. Drought and migration across contexts and demography in Mexico.

Works in Progress

Dylan Connor, Deborah Balk, Melanie Gall, Lori Hunter, Jiwan Jang, Jenna Tipaldo, and **Helen Wilson Burns**. A person-level linkage of U.S. hazard losses to the American Community Survey, 2005–2024. (Order of authors after first author to be determined.)

Helen Wilson Burns, Samina Islam, Katharine M. Donato, and Amanda R. Carrico. Who goes where when there's (no) rain? Modeling household labor migration choices across gender and destination after environmental stress in Bangladesh.

Helen Wilson Burns, Clark Gray, Miyuki Hino, Russell Blessing, and Antonia Sebastian. Women's well-being, migration, and flooding in the Global South.

Lori Hunter, Christopher Jackson, **Helen Wilson Burns**, Catherine Talbot, Dylan Connor, and Ruby Kass^. Older adult migration patterns and disaster exposure across the U.S.

Arup Ratan Paul, Emily Burchfield, **Helen Wilson Burns**, Katharine M. Donato, Christopher Small, and Amanda R. Carrico. Land use change and migration in coastal Bangladesh: A community-level analysis.

Grants and Fellowships

Fellowships

National Institutes of Health T32 Postdoctoral Traineeship in Population Science (annual)	$63,480	2026–present
Chancellor's Graduate Fellowship, University of Colorado Boulder (two academic years)	$61,000	2020, 2025

Competitive Research and Travel Funding, University of Colorado Boulder: $19,850 across 15 awards

Graduate School and Population Center Travel Grants (4)	$2,100	2022–2025
Population Center Summer Research Award	$750	2024
Environmental Studies Graduate Student Research Grants (4)	$4,500	2021–2023
Byers Family Summer Fellowship	$8,000	2023
Institute of Behavioral Science Small Grants and Summer Funding (3)	$1,500	2022
Center to Advance Research and Teaching in the Social Sciences Graduate Research Award	$1,000	2022
Population Center Graduate Research Assistant Summer Funding (with F. Riosmena)	$2,000	2021

Honors and Awards

Honorable Mention, National Science Foundation Graduate Research Fellowship (Geography)	Apr 2022
Chancellor's Graduate Fellowship, University of Colorado Boulder (top incoming doctoral students)	Mar 2020
Semi-Finalist, Fulbright–Anne Wexler Master's Award in Public Policy	Jan 2019
Distinguished Student Researcher Award, The School for Field Studies	Feb 2017

Conference Presentations

* = presenter; ^ = undergraduate mentee

Carrico, A.*, **Wilson Burns, H.**, Donato, K., Rahaman, H., & Best, K. (2026). The role of migrant networks in climate migration: Insights from Bangladesh. Panel, Population Association of America Annual Meeting, St. Louis, MO.

Wilson Burns, H., Riosmena, F.*, Uhl, J., & Leyk, S. (2025). Drought and migration across contexts, gender, and the life course in Mexico. Panel, Population Association of America Annual Meeting, Washington, DC.

Wilson Burns, H., Hunter, L.*, Connor, D., Balk, D., Tipaldo, J., & Gall, M. (2025). Movers, stayers, and inequitable exposure to extreme events across the U.S. Panel, Population Association of America Annual Meeting, Washington, DC.

Connor, D.*, Balk, D., Tipaldo, J., **Wilson Burns, H.**, Hunter, L., & Gall, M. (2025). The changing demography of disaster impact in the US, 2012–2022. Panel, Population Association of America Annual Meeting, Washington, DC.

Hunter, L.*, Jackson, C., **Wilson Burns, H.**, Talbot, C., Connor, D., & Kass, R.^ (2025). Older adult migration patterns and disaster exposure across the U.S. Flash talk, Population Association of America Annual Meeting, Washington, DC.

Wilson Burns, H.*, Carrico, A., & Donato, K. (2024). Well-being, COVID coping, and remittances. Flash talk, Population Association of America Annual Meeting, Columbus, OH.

Wilson Burns, H., Carrico, A.*, Donato, K., & Mallick, B. (2023). Women's internal migration in Southwest Bangladesh: Investigating type, timing, and social norms. Flash talk, Population Association of America Annual Meeting, New Orleans, LA.

Wilson Burns, H.*, Carrico, A., Donato, K., & Mallick, B. (2023). Women's migration in Southwest Bangladesh: Learnings from a mixed methods study. Panel, American Association of Geographers Annual Meeting, Denver, CO.

Carrico, A.*, Donato, K., Rahaman, H., & **Wilson Burns, H.** (2023). Climate migration as adaptation: Mobility in response to extreme weather in Bangladesh. Panel, International Conference on Environmental Psychology, Aarhus, Denmark.

Wilson Burns, H.*, Carrico, A., Donato, K., & Mallick, B. (2022). Women's (non)migration and extreme weather in Southwest Bangladesh. Panel, Gobeshana Global Conference, Dhaka, Bangladesh (hybrid).

Riosmena, F.*, **Wilson Burns, H.**, Uhl, J., & Leyk, S. (2022). Migración y cambio climático en y desde México desde diferentes contextos, a través del curso de vida, y por género. Panel, Latin American Population Association (X Congreso ALAP), Valparaíso, Chile.

Wilson Burns, H.*, Carrico, A., Donato, K., & Best, K. (2022). Women's internal migration in Bangladesh: Investigating type, timing, and environmental intersections. Poster, Population Association of America Annual

Meeting, Atlanta, GA (hybrid).

Invited Talks

* = presenter

Hunter, L.*, Talbot, C.*, & **Wilson Burns, H.*** (2025). Natural disasters and the health of the rural elderly. Social & Environmental Data Integration at the US County Scale, Center for Aging, Climate, & Health (virtual).

Wilson Burns, H.*, Donato, K., & Carrico, A. (2024). Family well-being in Bangladesh after COVID-19 disruption to remittances and livelihoods. Advances in Research & Practice to Support Climate Migrants, Dhaka, Bangladesh.

Wilson Burns, H.* (2023). Climate migration. Invited public seminar, Jefferson County Libraries, Arvada, CO.

Co-Authored Invited Talks (presented by collaborators)

Wilson Burns, H., Riosmena, F.*, Uhl, J., & Leyk, S. (2025). Gendered climate migration across contexts: An examination in contemporary Mexico. Department of Sociology, University of Texas at Austin.

Carrico, A.*, Donato, K., & **Wilson Burns, H.** (2022). Who are the climate migrants? Investigating the moderating role of social networks on climate-induced mobility in Bangladesh. Utrecht University.

Riosmena, F.*, **Wilson Burns, H.**, Uhl, J., & Leyk, S. (2022). Climate migration across contexts, gender, and the life course: An examination in contemporary Mexico. Center for Studies in Demography and Ecology, University of Washington.

Riosmena, F.*, **Wilson Burns, H.**, Uhl, J., & Leyk, S. (2021). Climate migration across contexts, gender, and the life course: An examination in contemporary Mexico. Maryland Population Research Center, University of Maryland.

Teaching

University of Colorado Boulder

Lead Graduate Student Fellow, Center for Teaching & Learning — May 2025–May 2026

- Organized workshops, supported graduate educators, and trained to conduct teaching evaluations.

Guest Lectures

"Population and Environment: Introduction and Mythbusting," Environmental Studies 1001 — Nov 2024, May 2025
"Working in International Development," Geography 3682 — Oct 2024
Teaching Assistant, Interdisciplinary Social Science Professional Socialization (Geography 6851) — Fall 2023
Teaching Assistant, Introduction to Environmental Studies (Environmental Studies 1000) — Fall 2020, Spring 2021

- Taught 3–4 recitations (∼50 students total) per semester; many students new to college-level science.
- Built scientific data literacy and holistic, critical thinking about environmental issues.
- Adapted curriculum to hybrid learning and supported students during COVID-19.

Workshops and Short Courses

Curriculum Developer, Disaster Data for Demographic Research, Population Association of America — Apr 2025
Lead Instructor, Integrating Social and Environmental Data to Support Climate Migrants — June 2024

- Developed and led three one-day workshops on basic data science and R for students, researchers, and faculty.
- Co-hosted by University of Barishal, BRAC, and University of Khulna, Bangladesh.

Mentoring

University of Colorado Boulder

Primary Advisor, Honors Thesis, Environmental Studies — May–Sept 2024; May 2025–May 2026
Graduate Peer Mentor — June 2024–May 2025
McNair Scholars Graduate Mentor (two undergraduates) — May 2023–May 2025
STUDIO Lab Mentor (undergraduate research) — Aug–Dec 2024
Undergraduate Research Opportunities Program Co-Mentor — Feb–July 2022
Co-Advisor, Honors Thesis, Environmental Studies — Aug 2020–May 2021

Research Experience

Extreme Flooding and Household Migration in the U.S. · Postdoctoral Researcher
Using restricted Census microdata, merge flood maps and US address data for migration analysis.

Migration, Health, and Flooding Across the Global South · Postdoctoral Researcher
Examining global patterns of women's health and mobility in context of flooding.

Bangladesh Environment and Migration Survey · Research Assistant & Collaborator
National Science Foundation · PIs: Amanda Carrico, Katharine Donato · Developed and trained pilot and longitudinal COVID-19 return-migration study; tablet survey programming; mixed-methods interviews

Extreme Events and Older Adult Health · Research Assistant & Co-Investigator
National Institute on Aging · PI: Lori Hunter · U.S. Census Bureau Special Sworn Status; led restricted microdata analysis

Mexican Migration and Drought · Research Assistant & Lead
PI: Fernando Riosmena · Integrated Mexican Census and climate data; cluster and difference-in-differences analyses

The Changing Demography of Disaster Impact in the U.S. · Collaborator
Integrated national hazard-loss (SHELDUS) and American Community Survey data in R using high-performance computing

Undergraduate field research · Samoa (environment and mobility); Bhutan (migration and demography)

Professional Experience

Graduate Coordinator, Training and Diversity, Equity & Inclusion, Institute of Behavioral Science — Aug–Dec 2023
Program Strategy Associate, The Pew Charitable Trusts, Washington, DC — Apr 2019–July 2020
Disaster Risk Reduction Intern, Mercy Corps Puerto Rico, San Juan — June–Nov 2018
Disaster Risk Reduction and Climate Researcher, UNICEF Myanmar, Yangon — June–Aug 2017
Environmental Peacebuilding Co-Coordinator, Environmental Law Institute, Washington, DC — May–Aug 2016
Research & Publications Intern, Environmental Law Institute, Washington, DC — Jan–May 2016

Service

To the Profession

Session Organizer, "Spatial Patterns of Health and Demographic Change," Population Association of America — 2027
Session Chair, "Internal Migration, Health, and Well-being," Population Association of America — 2025
Peer Reviewer: *Climatic Change*; *World Development*

To the University of Colorado Boulder

Board Member & Graduate/Postdoc Representative, Institute of Behavioral Science — July 2023–June 2024
Graduate Representative, Graduate Committee, Environmental Studies — Oct 2021–Jan 2024
Colloquium Committee, Environmental Studies — July 2021–May 2022

To the Community

Board Director, The Traveling School (nonprofit education) — July 2023–Aug 2025

Additional Training

D-4 Hack Week: Disasters, Demography, Disparities, and Decisions, University of Washington — Sept 2024
Leadership Coaching Program, University of Colorado Center for Leadership — Fall 2023
Summer Institute in Migration Research Methods, University of California, Berkeley — July–Aug 2022

Skills

Computing and Software: Stata (advanced, able to code fluently in offline/restricted environments), R (competent); high-performance computing workflows
Data and Analysis: integration of social and climate data across data types and scales (spatial, temporal, survey, mixed-methods); restricted federal microdata application and analysis; wrangling big data; multilevel modeling, survival and longitudinal analyses

Field: survey design and implementation; enumerator training; survey programming (KoboToolbox and XLSForm); qualitative interviews; cross-cultural collaboration

Professional Memberships

Population Association of America · American Association of Geographers
International Union for the Scientific Study of Population