

# Heather Fawn Randell

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## ACADEMIC APPOINTMENTS

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- 2019-present Assistant Professor of Rural Sociology and Demography  
Department of Agricultural Economics, Sociology, and Education  
Penn State University  
Faculty Associate, Population Research Institute
- 2018-2019 Postdoctoral Research Associate, Maryland Institute for Applied Environmental Health  
University of Maryland School of Public Health  
Faculty Affiliate, Maryland Population Research Center
- 2016-2018 Postdoctoral Fellow, National Socio-Environmental Synthesis Center (SESYNC)

## EDUCATION

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- 2016 PhD, Sociology, Brown University  
Demography Trainee, Population Studies & Training Center
- 2008 MEM, Nicholas School of the Environment, Duke University  
Certificate in Global Health, Duke Global Health Institute
- 2005 BS, Biology, Cornell University, *cum laude*

## RESEARCH INTERESTS

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Health impacts of climate change; dam-induced displacement; environmental change and sustainable development; food security and nutrition; migration; rural livelihoods; social capital and networks.

## PEER REVIEWED ARTICLES

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- Randell, H, K Grace, & M Bakhtsiyarava. (2021) Climatic conditions and infant care: Implications for child nutrition in rural Ethiopia. *Population and Environment*. Online First.
- Randell, H, C Gray, & K Grace. (2020) Stunted from the start: Early life weather and child undernutrition in Ethiopia. *Social Science & Medicine*. 261: Article 113234.
- Alexander, S, K Jones, N Bennett, A Budden, M Cox, M Crosas, E Game, J Geary, RD Hardy, J Johnson, S Karcher, N Motzer, J Pittman, H Randell, J Silva, P da Silva, C Strasser, C Strawhacker, A Stuhl, & N Weber. (2020) Qualitative data sharing and synthesis for sustainability science. *Nature Sustainability*. 3: 81-88.
- Randell, H & C Gray. (2019) Climate change and educational attainment in the global tropics. *Proceedings of the National Academy of Sciences*. 116(18): 8840-8845.

- Randell, H. (2018) The strength of near and distant ties: Social capital, environmental change, and migration in the Brazilian Amazon. *Sociology of Development*. 4(4): 394-416.
- Randell, H. (2017) Forced migration and changing livelihoods in the Brazilian Amazon. *Rural Sociology*. 82 (3): 548-573.
- Randell, H & C Gray. (2016) Climate variability and educational attainment: Evidence from rural Ethiopia. *Global Environmental Change*. 41: 111-123.
- Randell, H. (2016) The short-term impacts of development-induced displacement on wealth and subjective well-being in the Brazilian Amazon. *World Development*. 87: 385-400.
- Randell, H. (2016) Structure and agency in development-induced forced migration: The case of Brazil's Belo Monte Dam. *Population and Environment*. 37 (3): 265-287.
- Randell, H & L VanWey. (2014) Networks versus need: Drivers of urban out-migration in the Brazilian Amazon. *Population Research and Policy Review*. 33 (6): 915-936.
- Dickinson, K, H Randell, R Kramer, & E Shayo. (2012) Socioeconomic status and malaria-related outcomes in Mvomero District, Tanzania. *Global Public Health*. 7 (4): 384-399.
- Le Menach, A, AJ Tatem, JM Cohen, SI Hay, H Randell, AP Patil, & DL Smith. (2011) Travel risk, malaria importation and malaria transmission in Zanzibar. *Scientific Reports*. 1 (93).
- Randell, H, K Dickinson, E Shayo, L Mboera & R Kramer. (2010) Environmental management for malaria control: Knowledge and practices in Mvomero, Tanzania. *EcoHealth*. 7 (4): 507-516.
- Pimentel, D, S Cooperstein, H Randell, D Filiberto, S Sorrentino, B Kaye, C Nicklin, J Yagi, J Brian, J O'Hern, A Habas, & C Weinstein. (2007) The ecology of increasing diseases: Population growth and environmental degradation. *Human Ecology*. 35 (6): 653-668.

## UNDER REVIEW

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- Randell, H & P Klein. Hydropower development, collective action, and social justice in the Brazilian Amazon. Revised and resubmitted to *Society & Natural Resources*.
- Randell, H, C Jiang, X-Z Liang, R Murtugudde, & A Sapkota. Food insecurity and compound environmental shocks in Nepal: Implications for a changing climate. Revised and resubmitted to *World Development*.
- Lindstrom, D & H Randell. The migration response to food insecurity and household shocks in southwestern Ethiopia. Revise and resubmit in *International Migration Review*.
- Reyes, C & H Randell. Household shocks and children's education in Peru. Under review.
- Thiede, B, H Randell, & C Gray. The childhood origins of climate-induced mobility and immobility. Under review.

## MANUSCRIPTS IN PREPARATION

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Southard, E & H Randell. Climate change and the feminization of agrarian distress in South Asia.

Randell, H, C Gray, & E Shayo. Climate anomalies and food security in Tanzania.

Randell, H, K Grace, & T Tartalha. Prenatal exposure to extreme weather events and adverse birth outcomes: Evidence from Brazil.

## BOOK CHAPTERS

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Randell, H. Heat, mortality, and health. Forthcoming in *International Handbook of Population and Environment*. Springer.

## POPULAR MEDIA PUBLICATIONS

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Randell, H. (2019) Social capital and environmental migration: Insights from the Brazilian Amazon and implications for climate change. *Sociological Insights for Development Policy*. Vol 4, No. 4. [https://sociologyofdevelopment.files.wordpress.com/2019/12/4\\_4\\_randell\\_dec\\_2019.pdf](https://sociologyofdevelopment.files.wordpress.com/2019/12/4_4_randell_dec_2019.pdf).

Randell, H. (2019) Climate change may weaken children's education in the tropics. *New Security Beat*. The Wilson Center. May 7, 2019. [www.newsecuritybeat.org/2019/05/climate-change-weaken-childrens-education-tropics/](http://www.newsecuritybeat.org/2019/05/climate-change-weaken-childrens-education-tropics/).

## EXTERNAL GRANTS

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| 2020-2023 | NSF ICER-1927827. NNA Track 1: Pursuing Opportunities for Long-term Arctic Resilience for Infrastructure and Society (POLARIS). (\$3,000,000 total costs)<br>Role: Senior Personnel (PI Guangqing Chi) |
| 2017-2021 | NSF OISE-1658251. IRES: People, Power, and Rivers: Social-ecological Dynamics of Hydroelectric Development in Northern Mongolia. (\$249,971 total costs).<br>Role: Collaborator (PI Olaf Jensen)       |
| 2014-2015 | NSF Sociology SBE-1434020. Doctoral Dissertation Research: Forced Migration and Economic Development. (\$10,792 total costs).<br>Role: Co-PI (PI Leah VanWey)  |

## INTERNAL GRANTS

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| 2019-2020 | Penn State-Monash University Collaboration Fund. Transformative Resilience in the Context of Climate Change. (AUD\$45,000 total costs).<br>Role: Co-Investigator (Penn State PI Paige Castellanos, Monash PI Becky Batagol) |
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## GRANTS PENDING

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| 2021-2023 | NICHD. Development-Induced Displacement and Women and Children's Well-Being. (\$455,000 total costs).<br>Role: PI   |
| 2021-2023 | NSF. EAGER: SAI: Collaborative Research: Bridging the Arctic: Community-Driven Innovation for Resilient Bridges in Rural Alaska Communities. (\$259,112 total costs). |

Role: Co-PI (PI: Guangqing Chi)

2021-2024 NSF. IRES Track I: Manifestations of Climate Change in Extreme Events. (\$379,004 total costs).  
Role: Co-PI (PI Julio Urbina)

## **AWARDS AND FELLOWSHIPS**

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2019 Roy C. Buck Faculty Award, College of Agricultural Sciences, Penn State  
2015-2016 Institute at Brown for Environment & Society (IBES) Graduate Fellowship  
2014-2015 Department of Sociology Dissertation Fellowship  
2014 Center for Latin American & Caribbean Studies Brazil Research Grant  
2011-2013 NICHD Population Studies and Training Center Fellowship  
2011 Tinker Field Research Grant, Center for Latin American & Caribbean Studies  
2011 National Science Foundation Graduate Research Fellowship Honorable Mention  
2007 Lazar Scholarship for International Environmental Leadership, Duke University

## **INVITED PRESENTATIONS**

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2020 Penn State, Department of Meteorology and Atmospheric Science  
UC Santa Barbara, Broom Center for Demography  
2018 University of Maryland, Maryland Institute for Applied Environmental Health  
UMBC, Department of Geography & Environmental Systems  
2017 University of North Carolina at Chapel Hill, Department of Geography  
Duke University, Nicholas School of the Environment  
2016 Brown University, Watson Institute for International and Public Affairs  
University of Maryland, Program for Society and the Environment

## **CONFERENCE PRESENTATIONS (SINCE 2015)**

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2020 Randell, H, C Gray, & E Shayo. Climate variability, food security, and resilience in Tanzania. Paper presented at the Association for Public Policy and Management (APPAM) Fall Research Conference. Virtual, November 11-13.

2019 Randell, H. Impactos socioeconômicos de curto prazo dos deslocamentos de populações rurais afetadas por Belo Monte. Paper presented at Seminário Sobre os Impactos de Longo Prazo na Amazônia, Unicamp, Limeira, SP, Brazil, November 25-27.

Randell, H, K Grace, & M Bakhtsiyarava. Climate, infant care, and child undernutrition: Evidence from rural Ethiopia. Paper presented at Demographic Responses to Changes in the Natural Environment, University of Wisconsin, October 24-25.

Randell, H & A Sapkota. The cumulative effects of climate change and natural disasters on food security: A natural experiment using the 2015 Nepal earthquake. Paper presented at the Population Association of America Annual Meeting, Austin, TX, April 10-13.

- Klein, P & H Randell. Countering internal colonialism: Hydropower development, collective action, and environmental justice in the Brazilian Amazon. Paper presented at the American Association of Geographers Annual Meeting, Washington, DC, April 3-7.
- 2018      Randell, H. Invited panelist for session on Temporality, Agency, and Migration in the Context of Climate Change. American Association of Geographers Annual Meeting, New Orleans, LA, April 10-14.
- 2017      Randell, H & C Gray. Climate change and educational attainment in the global tropics. Paper presented at the Population Association of America Annual Meeting, Chicago, IL, April 27-29.
- Randell, H & C Gray. Livelihood adaptation to climate change in rural Ethiopia. Paper presented at the American Association of Geographers Annual Meeting, Boston, MA, April 5-9.
- 2016      Randell, H & P Klein. Countering internal colonialism: Hydropower development, collective action, and environmental justice in the Brazilian Amazon. Paper presented at the International Conference on Development in Question, Cornell University, Ithaca, NY, October 6-8.
- Randell, H. Development-induced displacement, productive investments, and income diversification in the Brazilian Amazon. Paper presented at the Annual Meeting of the American Sociological Association, Seattle, WA, August 20-23.
- Randell, H & C Gray. Climate shocks and educational investments in rural Ethiopia. Paper presented at the Population Association of America Annual Meeting, Washington, DC, March 31- April 2.
- Randell, H. The impacts of development-induced displacement on wealth, inequality, and subjective well-being in the Brazilian Amazon. Paper presented at the Population Association of America Annual Meeting, Washington, DC, March 31-April 2.
- 2015      Randell, H. Structure and agency in development-induced forced migration: The case of Brazil's Belo Monte Dam. Paper presented at the Annual Meeting of the American Sociological Association, Chicago, IL, Aug. 22- 25, 2015 and the Population Association of America Annual Meeting, San Diego, CA, April 30- May 2.

## TEACHING EXPERIENCE

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### ***Instructor***

CED 230: Development Issues in the Global Context, Penn State (Spring 2020, Fall 2020)

RSOC 573: Methods of Survey Data Analysis, graduate level, Penn State (Fall 2019, Spring 2021)

Socio-Ecological Research in Mongolia (co-taught) (Spring 2018, Spring 2019)

Climate Change and Health, University of Maryland (Fall 2017, Spring 2019)

### ***Teaching Assistant***

Multivariate Statistical Methods II, graduate level, Brown University (Spring 2014)

Multivariate Statistical Methods I, graduate level, Brown University (Fall 2013)

Climate and Climate Change, Brown University (Fall 2012)

### **GRADUATE STUDENT ADVISING**

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*PhD committee co-chair:* Carolyn Reyes (RSOC)

*PhD committee member:* Michaela Hoffelmeyer (RSOC), Kaitlin Fischer (RSOC), Shuai Zhou (RSOC)

### **SERVICE ACTIVITIES**

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#### ***Service to the Department***

M.E. John Seminar Committee (2019–present)

#### ***Service to the University***

Founder and organizer, Population Research Institute (PRI) Working Group on Environmental Demography (2020–present)

#### ***Service to the Profession***

Contributing Author, Intergovernmental Panel on Climate Change (IPCC) WGII Sixth Assessment Report, Chapter 9: Africa

Associate Editor, *Frontiers in Ecology and the Environment* (2017–present)

#### **Manuscript Reviewer**

Ambio, Applied Geography, BMJ Global Health, The Cambridge Handbook of Environmental Sociology, Demography (3), EcoHealth, Environmental Development, Global Environmental Change, Health and Place, Journal of Development Studies, Nature Climate Change, Population and Environment (5), Population and Development Review, Population Research and Policy Review, Proceedings of the National Academy of Sciences, Rural Sociology (3), Sociology of Development (2), Social Science & Medicine (2), Springer Nature Social Sciences, World Development, World Development Perspectives

#### **Grant Reviewer**

Ministry of Foreign Affairs of Denmark (Danida Fellowship Centre)

Maryland Sea Grant Coastal Resilience and Sustainability Fellowship

#### **Population Association of America**

Session Organizer (2020)

Discussant (2019)

Session Chair (2016)

### **MEDIA COVERAGE**

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Worland, Justin (2020). The Debate About Reopening Schools Is a Preview of Climate-Related Disruption to Come. *Time Magazine*. Available at: <https://time.com/5880680/climate-change-reopening-schools/>

## TRAINING

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2016	<i>Teaching about Socio-Environmental Synthesis with the Case Studies Approach</i> , SESYNC, Annapolis, Maryland
2015	<i>Summer Workshop on Social Network Analysis</i> , LINKS Center for Social Network Analysis, University of Kentucky, Lexington
2014	<i>Graduate Student Workshop on Environmental Demography</i> , University of Colorado at Boulder