

Audrey M. Dorélien

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EMPLOYMENT

- 2014-present Assistant Professor of Public Affairs, University of Minnesota
Faculty Member of Minnesota Population Center, University of Minnesota
- 2019-present Faculty Affiliate: Interdisciplinary Center for the Study of Global Change,
University of Minnesota
- 2017-present Faculty Associate: Institute on the Environment, University of Minnesota
- 2012-2014 Robert Wood Johnson Foundation Health & Society Scholar and Postdoctoral
Fellow Affiliate in the Population Studies Center at the University of Michigan.
- 2008 Bixby Intern in the Population-Health-Environment Program at the
Population Reference Bureau, Washington DC
- 2007 Fellow, Community Enterprise Solutions, Antigua, Guatemala
- 2004-2006 Senior Consultant, CompassLexecon an FTI Company, Cambridge, MA

EDUCATION

- 2012 Ph.D. Public Affairs, Office of Population Research and
Woodrow Wilson School of Public and International Affairs, Princeton University
Dissertation Title: Birth Seasonality in Sub-Saharan Africa: Its Determinants and
Implications for Child Health.
Committee: Bryan Grenfell (chair), German Rodriguez, Deborah Balk, and Adel
Mahmoud
Examinations:
Demographic Theory and Methods (Thomas Espenshade and German Rodriguez);
Infectious Disease and Ecosystem System Structure (Burton Singer and Adel
Mahmoud)
- 2004 B.A. Economics and Biology, Swarthmore College (Honors)
- 2002 Study abroad, Internship in Francophone Europe, Paris, France

ADDITIONAL TRAINING

- 2013 Responsible Conduct of Research Training, University of Michigan School of Public Health
- 2012 Population Health Course, University of Michigan School of Public Health
- 2011 Global Assessment and Monitoring Using Remote Sensing Course, Columbia University
- 2011 Genetics and Disease Control Workshop, DIMACS/MBI US-African Biomathematics Initiative
- 2011 Ecology of Infectious Disease Modeling and Data Analysis Workshop Sponsored by Department of Biology, Colorado State University
- 2008 Environmental Demography Summer Short Course, University of Colorado, Population Center

SCHOLARLY ARTICLES AND BOOK CHAPTERS

Published and Forthcoming

Audrey M. Dorélien and Hongwei Xu. “Estimating rural urban disparities in self-rated health in China: Impact of choice of urban definition.” Conditional Acceptance at *Demographic Research*

Grace, K., A. Verdin, A. Dorélien, F. Davenport, G. Husak, C. Funk. 2020. Exploring strategies for investigating the mechanisms linking climate and individual-level child health outcomes: an analysis of birth weight in Mali. *Demography*, Forthcoming.

Audrey M. Dorélien, Alisha Simon, Sarah Hagge, Kathleen Thiede Call, Eva Enns, and Shalini Kulasingam. 2020. “Minnesota Social Contacts and Mixing Patterns Survey with Implications for Modelling of Infectious Disease Transmission and Control.” *Survey Practice* 13 (1). <https://doi.org/10.29115/SP-2020-0007>.

Frank Davenport, Audrey M. Dorélien, Kathryn Grace. 2020. “Investigating the linkages between pregnancy outcomes and climate in sub-Saharan Africa.” *Population and Environment* 41:397–421 <https://doi.org/10.1007/s11111-020-00342-w>

Olga Tymejczyk, Vanessa Rivera, Mireille Peck, Audrey Dorelien, Jacky Petion, Grace Seo, Kathleen F Walsh, Jean W. Pape, Margaret McNairy, Daniel W. Fitzgerald, Denis Nash, Angela Parcesepe. 2020. “Psychological distress among a population-representative sample of residents of four slum neighborhoods in Port-au-Prince, Haiti.” *Journal of Affective Disorders* 263:241–245 <https://doi.org/10.1016/j.jad.2019.11.103>

Margaret McNairy, Olga Tymejczyk, Vanessa Rivera, Grace Seo, Audrey Dorélien, Mireille Peck, Jacky Petion, Kathleen Walsh, Anna Bolgrien, Denis Nash, Jean Pape, Daniel Fitzgerald.

2019. “High burden of non-communicable disease among a young slum population in Haiti.” *Journal of Urban Health*. <https://doi.org/10.1007/s11524-019-00368-y>

Audrey M. Dorélien. 2019. “The effect of in utero exposure to influenza on birth and infant outcomes in the US.” *Population and Development Review* 45(3): 489–523
<https://doi.org/10.1111/padr.12232>

Tymejczyk O, McNairy ML, Petion J, Rivera VR, Dorélien A, Peck M, Seo G, Walsh K, Fitzgerald DW, Peck R, Joshi A, Pape JW, Nash D. 2019. “Hypertension prevalence and risk factors among residents of four slum communities: population-representative findings from Port-au-Prince, Haiti.” *Journal of Hypertension* 37(4), 685-695. <https://doi.org/10.1007/s11524-019-00368-y>

Audrey M. Dorélien. 2016. “Birth seasonality in sub-Saharan Africa.” *Demographic Research* 34(27), 761-796. 10.4054/DemRes.2016.34.27

Audrey M. Dorélien. 2015. “Effect of birth month on child health and survival in sub-Saharan Africa.” *Biodemography and Social Biology* 61(2), 209-230.

Audrey M. Dorélien, Sebastian Ballesteros, Bryan T. Grenfell. 2013. “Impact of birth seasonality on dynamics of acute immunizing infections in sub-Saharan Africa.” *PLoS ONE* 8(10): e75806. doi:10.1371/journal.pone.0075806

Audrey Dorélien, Deborah Balk, and Megan Todd. 2013. “What is urban? Comparing a satellite view with the Demographic & Health Surveys.” *Population Development Review*, 39 (3): 413-439

Andrew J Tatem, Susana Adamo, Nita Bharti, Clara R Burgert, Marcia Castro, Audrey Dorelien, Gunther Fink, Catherine Linard, John Mendelsohn, Livia Montana, Mark R Montgomery, Andrew Nelson, Abdisalan M Noor, Deepa Pindolia, Greg Yetman and Deborah Balk. 2012. “Mapping the denominator: Improving spatial demographic data for disease modeling and deriving health metrics.” *Population Health Metrics* 10(8) doi:10.1186/1478-7954-10-8

Balk, D., Montgomery, M. R., McGranahan, G., Kim, D., Todd, M., Buettner, T., and Dorélien, A. 2009. Mapping Urban Settlements and the Risks of Climate Change in Africa, Asia, and South America. In G. Martine, J.-M. Guzman, G. McGranahan, D. Schensul, & C. Tacoli (Eds.), *Population Dynamics and Climate Change* (pp. 80-103). New York: United Nations Population Fund and International Institute for the Environment and Development

Audrey Dorélien. 2008. “Population’s Role in the Current Food Crisis: Focus on East Africa.” Population Reference Bureau web article

Jason Bremner, and Audrey Dorélien. 2008. “Forest Conservation and Population Growth among Indigenous Peoples of the Amazon.” Population Reference Bureau web article

Work Under Review and In Progress

Dorélien, A.M., Ramen, A. and Swanson, I., 2020. Analyzing the demographic, spatial, and temporal factors influencing social contact patterns in US and implications for infectious disease spread. MPC Working paper 2020-05. <https://doi.org/10.18128/MPC2020-05>

Audrey M. Dorélien, Kathryn Grace, and Frank Davenport. “Malaria exposure and pregnancy outcomes in Sub-Saharan Africa.”

Audrey Dorélien. “Seasonal birth patterns differ by socio-demographic characteristics in sub-Saharan Africa.” *Working Paper*

Audrey Dorélien. “Analysis of Temporary Protected Status for Natural Disasters.” *In Preparation*

AWARDS, FELLOWSHIPS & GRANTS

2020	Minnesota Population Center Pilot Grant
2020	Minnesota Social Contact and Modelling Study. (Co-Investigator). Funded by Minnesota Department of Health.
2019	University of Minnesota Grant-In-Aid (\$31,895)
2019	Minnesota Population Center Diversity Fellowship Program
2018	Minnesota Population Center Outstanding Research Award for “The effect of in utero exposure to influenza on birth and infant outcomes in the US” accepted in journal <i>Population and Development Review</i>
2017	Minnesota Population Center Proposal Development Mentorship Grant. (mentorship during grant writing process and \$10,000 upon submission of grant to external agency)
2015-2016	NIH Fogarty 3D43TW009606-03S1, Demography and Population Health Training and Research Project Supplement Grant (\$50,000). Dorelien is a co-investigator on this grant.
2013-2014	Robert Wood Johnson Foundation Health and Society Scholars Program Research Seed Grant (\$15,000) for project on “Impact of infectious diseases on population health”
2012-2014	Robert Wood Johnson Foundation Health and Society Scholar, University of Michigan (\$192,100 for salary, travel, relocation, computing, and research)

- 2011-2012 Grant to hold interdisciplinary seminar series, Global Health Program, Office of Population Research, Ecology and Evolutionary Biology, Princeton University (\$6,000)
- 2011 Travel Grant to Genetics and Disease Control Workshop, NSF
- 2011 Travel Grant to Ecology of Infectious Disease Modeling and Data Analysis Workshop
- 2011 Best Poster Prize, Population Association of America Annual Meeting
- 2010 Patrice Y. Johnson Memorial Service Award, Assoc. of Black Princeton Alumni
- 2008 National Science Foundation Pre-doctoral Fellowship Honorable Mention
- 2007-2012 Travel Grant, Office of Population Research and Graduate School, Princeton University (various years)
- 2007-2012 Princeton University Graduate Fellowship

CONFERENCE & INVITED PRESENTATIONS

- 2019 “Using remotely sensed data to study *in utero* health shocks in Sub-Saharan Africa. Invited talk at the Institute for Population Research at the Ohio State University, February 12, 2019
- 2018 “Effects of *in utero* exposure to influenza on birth and infant outcomes in the US.” Invited talk at the University of Maryland Population Research Center, October 1, 2018
- 2017 Discussant for “Session 289- Sex, gender, and health”. International Union for the Scientific Study of Population (IUSSP) 28th International Population Conference in Cape Town, South Africa, October 29-November 4, 2017
- “Economic Shocks, Seasonal Patterns and the Spread of Close-Contact Infectious Diseases in the United States: Evidence from Time Use Data.” Paper presented in session 180 at IUSSP 28th International Population Conference, Cape Town South Africa, October 29-November 4, 2017
- “Demography and migration patterns of residents in four urban slums in Port-au-Prince, Haiti.” Poster presented in session 36 at IUSSP 28th International Population Conference, Cape Town South Africa, October 29-November 4, 2017
- “Demography and migration in four urban slums in Port-au-Prince, Haiti.” Invited talk at the Institute of Behavioral Science, University of Colorado Boulder, September 14, 2017
- “The Impact of Climate and Food Insecurity on Miscarriage, Stillbirth, and Neonatal Mortality in Africa.” Paper presented in session 155 at Population Association of America 2017 Annual Conference, Chicago, April 27-29

- “Economic Shocks, Seasonal Patterns and the Spread of Close-Contact Infectious Diseases in the United States: Evidence from Time Use Data.” Poster presented at Population Association of America 2017 Annual Conference, Chicago, April 27-29
- “The Stress of Keeping up with the Wangs: Do Psychosocial Factors Mediate the Association Between Subjective Social Status and Health?” Poster presented at Population Association of America 2017 Annual Conference, Chicago, April 27-29
- 2016 “Effects of In-Utero Exposure to Seasonal Influenza on Fetal and Infant Outcomes in the United States.” Invited talk at University of California, Berkeley, April 20
- 2015 “Seasonal Patterns in Child Health: The Roles of Social & Environmental Factors.” Invited talk at University of Washington Center for the Study of Demography and Ecology (CSDE), October 30
- 2015 Discussant for “Session 207: Early Life Health and Mortality in the Developing World.” Population Association of America 2015 Annual Conference, San Diego, April 30 – May 2
- 2015 “Effects of In-Utero Exposure to Seasonal Influenza on Fetal and Infant Outcomes in the United States, 1989-2004” Poster presented at Population Association of America 2015 Annual Conference, San Diego, April 30 – May 2
- 2014 “Effect of in-utero exposure to seasonal influenza on fetal and infant outcomes in the United States, 1989-2004.” Robert Wood Johnson Foundation Health and Society Program Meeting, Detroit, May 2014
- 2014 Discussant for “Session 221: Population and Environment II.” Population Association of America 2014 Annual Conference, Boston, May 2014
- 2013 “The relationship between birth month and child health and survival in sub-Saharan Africa.” Paper presented in session 225 at IUSSP’s 27th International Population Conference, Busan, South Korea, Aug. 2013
- 2013 “Effect of in-utero exposure to seasonal influenza on fetal and infant outcomes in the United States, 1989-2004.” Robert Wood Johnson Foundation Health and Society Program Meeting, San Diego, May 2013
- 2013 “The relationship between birth month and child health and survival in sub-Saharan Africa.” Population Association of America Annual Meeting, New Orleans, LA, Apr. 2013

- 2013 “The impact of birth seasonality on dynamics of acute immunizing infections in sub-Saharan Africa.” Population Association of America Annual Meeting, New Orleans, LA, Apr. 2013
- 2012 “Social and Ecological Drivers of Birth Seasonality in Sub-Saharan Africa.” Poster presentation at Population Association of America Annual Meeting, San Francisco, CA, May 2012
- 2011 “Social and Ecological Drivers of Birth Seasonality in Sub-Saharan Africa.” Union for African Population Studies, Ouagadougou, Burkina Faso, Dec. 2011
- 2011 “Birth month and Child Health and Survival in sub-Saharan Africa.” Union for African Population Studies, Ouagadougou, Burkina Faso, Dec. 2011
- 2011 “Birth Seasonality and Disease Dynamics in Sub-Saharan Africa.” DIMACS Center for Discrete Mathematics & Theoretical Computer Science, Elmina, Ghana, Aug. 2011
- 2011 “Birth Seasonality in sub-Saharan Africa.” Poster presentation at Population Association of America Annual Meeting, Washington, DC, Mar.-Apr. 2011
- 2010 “Conceptualizing and Measuring Urban Locations: Comparing a satellite view with the Demographic & Health Surveys.” Population Association of America, Dallas, TX, Apr. 2010
- 2010 “Analysis of Temporary Protected Status for Environmental Disasters: How much protection is provided and why do some countries receive TPS designation and others do not?” Symposium in Honor of Black History Month, Princeton University, Mar. 2010
- 2009 Discussant for Session 64: “Spatial Approaches to Understanding Inequality in Health and Poverty.” IUSSP’s 26th International Population Conference, Marrakesh, Morocco, Sep.-Oct. 2009

TEACHING EXPERIENCE

University of Minnesota

Fall 2019, 2020

Politics and Policy of Demographic Change (@PoliDemog)

Fall 2015, 2016; Spring 2018, 2019

Economics for Policy Analysis and Planning I [Microeconomics]

Fall 2014, 2015, 2016, 2018, 2020

Global & US Perspectives on Health & Mortality

Fall 2014, 2015; Spring 2016, 2018, 2019, 2020

September 2020

Data Visualization: Telling Stories with Numbers

Princeton University Assistant in Instruction

Spring 2009; Fall 2011

Disease Ecology, Economics, and Public Policy (Professors Ramanan Laxminarayan and Bryan Grenfell)

Fall 2009; Spring 2010

Epidemiology (Professor Anne Andermann)

Volunteer Tutor/Instructor

2007

Assistant English teacher, Escuela Javier Alonso Sayles Vargas, Ahome, Mexico

SERVICE & ACTIVITIES

2019-present Humphrey School PhD Committee

2019-present Minnesota Population Center Advisory Board

2017-2019 Humphrey School Admissions Committee

2016-2020 Member of NASA Socioeconomic Data and Applications Center (SEDAC) User Working Group (UWG)

2016-present IPUMS Demographic Health Surveys advisory board member

2016-2017 Session organizer for 2017 Population Association of America (PAA) conference

2015-2017 Co-coordinator of Minnesota Population Center's Inequality & Methods Workshop

2016 Co-coordinator of Population Association of America pre-conference Data Visualization Workshop

2015-2016 Member of Women Gender and Public Policy Center Director Search Committee

2014-2015 Population Association of America 2015 Conference Program Committee: Population, Development, and the Environment topic chair.

2012 Co-convener of seminar series "Research at the Interface of Economics, Ecology, and Health." Princeton University

2011-2012 Residential Graduate Student, Butler College, Princeton University

2009-2010 Diversity Fellow, Office of Associate Dean of Academic Affairs and Diversity, Princeton University

- 2010 Global Crisis Committee (formerly Haiti Earthquake Response Committee),
Princeton University
- 2008-2010 President of the Black Graduate Caucus, Princeton University
- 2007-2008 Black Graduate Caucus Representative to Graduate Student Council, Princeton
University
- 2008 PhD Representative to the Woodrow Wilson School Action Committee, Princeton
University

Invited Peer Reviewer

- Demography; Demographic Research; Biodemography and Social Biology; Population Studies; Population & Environment; Annals of Epidemiology; Maternal and Child Health; PLOS One; Population Health Metrics; Global and Environmental Change; Proceedings of the Royal Society B; Biological Sciences; Journal of Water and Health; Environmental Practice; Cahiers Québécois de Démographie; Journal of Biosocial Science

Professional Memberships

- Interdisciplinary Association for Population Health Science (IAPHS)
- Population Association of America (PAA)
- Association for Public Policy Analysis and Management (APPAM)
- Models of Infectious Disease Agent Study Network (MIDAS)
- International Union for the Scientific Study of Population (IUSSP)
- Population Environment Research Network (PERN),
- Union for African Population Studies (UAPS)