

Ian D. Buller

National Cancer Institute
 Division of Cancer Epidemiology and Genetics
 Occupational and Environmental Epidemiology Branch
 9609 Medical Center Drive, 6E124
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EDUCATION

- 2013 B.A./M.A., Ecology and Evolutionary Biology, University of Colorado – Boulder
 Thesis: *Nationwide distributional determinants for a wildlife and human parasite*
- 2019 Ph.D., Environmental Health Sciences, Emory University
 Dissertation: *On estimating the spatial distribution of enzootic Yersinia pestis in the United States using a wide-ranging sentinel species and spatial statistics with sampling considerations*

PROFESSIONAL EXPERIENCE

- 2008-2013 Student Assistant (I & II), University of Colorado – Boulder (CU-Boulder), Boulder, CO
- 2012-2013 Research Assistant, Wedge Communications L.L.C., Golden, CO
- 2013 Visiting Research Assistant, Instituto Leônidas e Maria Deane – Fiocruz Amazônia, Manaus, Brazil
- 2019- Cancer Prevention Fellow, National Institutes of Health (NIH), National Cancer Institute (NCI), Division of Cancer Epidemiology and Genetics (DCEG), Occupational and Environmental Epidemiology Branch

OTHER TRAINING

- 2012 Graduate Summer Session in Epidemiology, University of Michigan, Ann Arbor, MI
- 2015 Adult Mosquito Identification Certification, East Georgia State College, Swainsboro, GA
- 2017 Bayesian and INLA Disease Mapping Curriculum, Medical University of South Carolina, Charleston, SC
- 2017 Graduate Workshop on Environmental Data Analytics, National Center for Atmospheric Research, Boulder, CO
- 2019 Principles and Practice of Cancer Prevention and Control course, NCI, Rockville, MD
- 2019 Molecular Cancer Prevention course, NCI, Rockville, MD
- 2020 Linux for Biomedical Researchers, Foundation for Advanced Education in the Sciences (FAES) at NIH, Bethesda, MD
- 2020 Creating Plots, Graphs, and Maps Using R, FAES at NIH, Bethesda, MD

SOFTWARE SKILLS

R, LaTeX, Git, Shell, markdown, SAS, ArcGIS, EndNote, Excel, Word, PowerPoint

AWARDS, SCHOLARSHIPS, HONORS

- 2006 Eagle Scout Rank, Boy Scouts of America
- 2008 Summer Undergraduate Research Experience, CU-Boulder

- 2008-2013 Presidential Leadership Class, CU-Boulder
- 2010 Alvin G. Flanagan/Walker Family Scholarship, CU-Boulder
- 2011 Barry M. Goldwater Scholarship, Barry M. Goldwater Scholarship and Excellence in Education Foundation
- 2013 Graduate Research Fellowship Program, National Science Foundation (honorable mention)
- 2014 Global Health Student Photography Contest, Emory Global Health Institute (honorable mention)
- 2017 New Thinkers/New Leaders Award, Emory University
- 2018 Student Section Travel Award, Ecological Society of America Annual Meeting
- 2018 Young Investigator Award, American Society of Tropical Medicine and Hygiene (first-tier mention)

COMPETITIVE RESEARCH FUNDING

- 2014-2019 Graduate Research Fellowship Program, National Science Foundation
- 2017 Graduate Research Internship Program, National Science Foundation
- 2020 William G. Coleman Jr., Ph.D., Minority and Health Disparities Research Innovation Award, National Institute on Minority Health and Health Disparities, NIMHD
- 2020 DCEG Informatics Tool Challenge, NCI

ACADEMIC APPOINTMENTS/ MENTORING EXPERIENCE

- 2011 Undergraduate Teaching Assistant, Department of Ecology and Evolutionary Biology, CU-Boulder
- 2010-2011 First Year Class Advisor, Presidents Leadership Class, CU-Boulder
- 2011-2013 Academic Affairs Fellow, Presidents Leadership Class, CU-Boulder
- 2014-2017 Teaching Assistant, Rollins School of Public Health, Emory University
- 2017-2018 Laboratory Instructor, College of Arts and Sciences, Emory University
- 2017-2018 Symposium Research Mentor, Undergraduate Research Program, Emory University

PROFESSIONAL CONTRIBUTIONS AND AFFILIATIONS

Committees, Review Panels, and Editorial Boards

- 2015-2018 Co-Founder, President, and Treasurer, Public Health Doctoral Students in Environmental Health, Emory University
- 2016-2018 Team Lead, Emory Climate Analysis and Solutions Team, Emory University
- 2017 Judge, Science Fair, Fernbank Elementary School, Decatur, GA
- 2017-2018 Judge, Undergraduate Research Symposium, Emory University
- 2018-2019 Judge, American Statistical Society DataFest at Emory University, Emory University
- 2019- Co-Editor & Reviewer, DCEG Fellows Editorial Board, NCI

2019- Method and Training Committee, Fellows Advisory Board, Division of Cancer Prevention (DCP), NCI

Professional Societies and Memberships

2010-2013 American Society of Parasitologists
 2011- Phi Beta Kappa
 2011-2018 Ecological Society of America
 2013- Society for Epidemiologic Research
 2016-2017 Georgia Public Health Association
 2017-2018 American Public Health Association
 2018- American Society of Tropical Medicine and Hygiene
 2018- American Statistical Association
 2019- American Association for Cancer Research (Affiliate member)
 2020- American Association of Geographers
 2020- National Postdoctoral Association (Affiliate member)

Reviewer for Refereed Journals

PLoS – Neglected Tropical Diseases *Journal of the Georgia Public Health Association*
Methods in Ecology and Evolution *Cancer Causes & Control*

MEETINGS AND PRESENTATIONS (presenting author only)

Oral Presentations

2010 A loaded toad: Parasite communities of juvenile Western Toads (*Anaxyrus boreas*) from California and Oregon. American Society of Parasitologists Annual Meeting, Colorado Springs, CO
 2011 Parasite communities of juvenile Western Toads (*Anaxyrus boreas*) from California and Oregon, USA. Rocky Mountain Conference of Parasitologists Annual Meeting, Ogallala, NE
 2012 Factors related to the distribution and abundance of the four-host trematode parasite *Alaria* spp. in amphibians in the San Francisco Bay Area. Ecological Society of America Annual Meeting, Portland, OR
 2015 A solution to the problem of separation in site-occupancy models. Ecological Society of America Annual Meeting, Baltimore, MD

Poster Presentations

2013 Nationwide distributional determinants of an amphibian and human parasite. Ecological Society of America Annual Meeting, Minneapolis, MN
 2017 Spatial distribution of *Yersinia pestis* in wildlife in California while accounting for sampling effort. Ecology and Evolution of Infectious Disease Annual Meeting, Santa Barbara, CA
 2017 Assessing public health co-benefits of the City of Atlanta's Climate Action Plan. American Public Health Association Annual Meeting, Atlanta, GA
 2018 Spatial distribution of *Yersinia pestis* found in a sentinel species across the United States while

accounting for sampling uncertainty. Ecology and Evolution of Infectious Disease Annual Meeting, Glasgow, United Kingdom

- 2018 Spatial distribution of *Yersinia pestis* found in a sentinel species across the United States while accounting for sampling uncertainty. Ecological Society of America Annual Meeting, New Orleans, LA
- 2018 Spatial distribution of *Yersinia pestis* found in a sentinel species across the United States while accounting for sampling uncertainty. American Society of Tropical Medicine and Hygiene Annual Meeting, New Orleans, LA
- 2020 Geographic variation in the oral microbiome of Agricultural Health Study applicators. American Association of Geographers Annual Meeting, Denver, CO (*accepted but COVID-19*)
- 2020 Geographic variation in the oral microbiome of Agricultural Health Study applicators. Society for Epidemiologic Research Annual Meeting, Boston, MA (*postponed vis-à-vis COVID-19*)
- 2020 Geographic variation in the oral microbiome of NIH-AARP Diet and Health Study participants. International Society for Environmental Epidemiology (*virtual vis-à-vis COVID-19*)

Invited Presentations

- 2017 Panelist, Dean's council meeting: Climate and health, Emory University, Rollins School of Public Health, Atlanta, GA
- 2018 Spatial distribution of *Yersinia pestis* found in *Canis latrans* across North America, United States Department of Agriculture, Animal & Plant Health Inspection Services, Wildlife Disease Program, Fort Collins, CO
- 2018 Spatial distribution of *Yersinia pestis* found in a sentinel species across the United States while accounting for sampling uncertainty, Lancaster University, Lancaster, United Kingdom
- 2018 Climate and the plague. The Emory Climate Analysis and Solutions Team, Climate@Emory, Emory University, Atlanta, GA
- 2019 On examining spatial patterns in principal component space to identify suitable habitat for *Yersinia pestis* transmission in the western United States, DCEG Geographic Analysis Working Group, NCI, Rockville, MD
- 2019 On examining spatial patterns in principal component space to identify suitable habitat for *Yersinia pestis* transmission in the western United States, Geospatial Interest Group, Federal Committee on Statistical Methods, Washington, DC
- 2019 The geographic distribution of *Yersinia pestis* in California: a spatial analysis of carnivore-based spatial disease surveillance, Vector-Borne Disease Section, California Department of Public Health, Sacramento, CA
- 2020 Zoonotic surveillance of plague via point processes in geographic and principal component space, Department of Biostatistics and Bioinformatics Seminar, Emory University, Atlanta, GA
- 2020 A place for spatial analysis in the Cancer Control Continuum, DCP, NCI, Rockville, MD

BIBLIOGRAPHY

Peer-reviewed Publication(s)

1. Johnson PTJ, **Buller ID**. Parasite competition hidden by correlated coinfection: Using surveys and experiments to understand parasite interactions. *Ecology* 92(3): 535-541; 2011. PMID: 21608460

Software Package(s)

2. **Buller ID**, Brown D. sparrpowR: Power analysis to detect spatial relative clusters. R package version 0.1.1; 2020. <https://CRAN.R-project.org/package=sparrpowR>