

Aja Sutton

Social Sciences Division &
Department of Earth System Science
Stanford Doerr School of Sustainability
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EDUCATION

- 2023 PhD Geography
University of Washington, Seattle, WA, USA
- ▶ *Modeling the social and political contexts of United States health protective interventions during the COVID-19 pandemic*, Committee: Zack W. Almquist, Mark Ellis, Jonathan Mayer (Chair), Suzanne Davis Withers
 - ▶ TADA-BSSR NIH T32 Fellowship in Data Science and Demography
 - ▶ Certificate in Demographic Methods, Center for Studies in Demography and Ecology
- 2014 MSc Palaeopathology
Durham University, United Kingdom
- 2012 MA History
Western University, Canada
- 2011 BA (Hons.) History, and Classical Studies
Queen's University, Canada

EMPLOYMENT

- 2023 - Present Postdoctoral Scholar
Social Sciences Division & Department of Earth System Science,
Stanford Doerr School of Sustainability, Stanford University, CA, USA
PI: James Holland Jones (Professor of Environmental Behavioral Sciences)

RESEARCH INTERESTS

Population health, quantitative demography, social ecology, temporal and spatial methods (incl. small area estimation), social & spatial epidemiology, human behavior & utility (decision) processes, (re)emerging infectious disease & antimicrobial resistance

BOOK CHAPTERS

- Sutton, A.** and Z. W. Almquist. (2023). Small Area Estimation for Demographic Analysis. In Parfait M. Eloundou-Enyegue (Ed). *Recent Trends in Demographic Data*. IntechOpen. DOI: 10.5772/intechopen.1001842
- Gause, E., **A. Sutton**, and J. Mayer. (Forthcoming). The West African Ebola Epidemic 2014. In Jayson Funke, Waquar Ahmed, Ipsita Chatterjee, Steve McCauley (Eds.) *Geography in the 21st Century: Defining Moments that Shaped Society*. ABC-Clio/Bloomsbury.

MANUSCRIPTS UNDER REVIEW

- Sutton, A.**, Z. W. Almquist, J. Mayer, and J. H. Jones. Mask-wearing and Trump support in the United States during the COVID-19 pandemic.

MANUSCRIPTS IN PREPARATION

- Sutton, A.**, M. A. Turner, M. Harris and J. H. Jones. The effects of social influence on behavioral and epidemic dynamics and outcomes.
- Sutton, A.**, Reynolds, A. Z., and J. H. Jones. The individual rationality of early first-birth under conditions of deprivation: modeling the effects of non-maternal alloparental contributions and optimal age at first birth.
- Turner, M. A., **A. Sutton**, and J. H. Jones. Evolutionary theory for improved pandemic preparedness in heterogeneous populations.
- Sutton, A.** and Z. W. Almquist. (Ante portas). Demographic and spatial distribution of respondent mask-wearing behaviors in the COVID-19 Trends and Symptoms Survey and correlation with the Behavioral Change COVID-19 survey.
- Sutton, A.**, Z. W. Almquist, and J. Wakefield. (Ante portas). Re-evaluating spatial specifications for multi-level regression and post-stratification for small area estimation using complex survey data [Working title].
- Sutton, A.**, W. Walker, A. Hagopian, and Z. W. Almquist. Amenities, environmental hazards, and neighborhood stressors among people living outdoors in Seattle, Washington[Working title].

CONFERENCE PAPERS, POSTERS & PRESENTATIONS

- (Upcoming) 2024 **Sutton, A.**, M. Turner, M. Harris, and J. H. Jones. The effects of social influence on behavioral and epidemic dynamics and outcomes [Oral Presentation]. International Network for Social Network Analysis — Sunbelt 2024, Edinburgh, UK, June 24-30.
- 2024 **Sutton, A.**, A. Z. Reynolds, M. Turner, M. Hilde-Jones, and J. H. Jones. The individual rationality of early first-birth under conditions of deprivation [Oral Presentation]. Population Association of America Annual Meeting, Columbus, USA, April 17-20.
- 2023 **Sutton, A.**, A. Hagopian, W. Walker, K. Salinas, B. Zhao, P. Hebert, and Z. W. Almquist. Seattle tent encampment locations in proximity to amenities and hazards, and the role of criminalization and removals in disrupting spatial networks [Oral Presentation]. International Network for Social Network Analysis — Sunbelt 2023, Portland, USA, June 27-July 1.
- 2023 **Sutton, A.**, A. Hagopian, W. Walker, B. Zhao, P. Hebert, and Z. W. Almquist. The impact of encampment dispersal on mobility and access to support services among individuals experiencing homelessness in Seattle-King County, Washington [Poster Presentation]. Population Association of America Annual Meeting, New Orleans, USA, April 12-15.
- 2022 **Sutton, A.**, Z. W. Almquist, J. Wakefield, A. Hazel, M. Kline, P. Smaldino, C. Moya, and J. H. Jones. Re-evaluating spatial multi-level regression with poststratification for small area estimation [Oral Presentation]. American Sociological Association Annual Meeting, Los Angeles, USA, August 5-9.
- 2022 **Sutton, A.**, Z. W. Almquist, J. Wakefield, A. Hazel, M. Kline, P. Smaldino, C. Moya, and J. Jones. Adherence to mask-wearing and trust in government: a Bayesian hierarchical analysis of COVID-19 social behavior in the United States [Oral Presentation]. Population Association of America Annual Meeting, Atlanta, USA, April 6-8.
- 2021 **Sutton, A.** Mask-wearing and trust in government during the COVID-19 pandemic in the United States: an analysis using logistic regression [Lightning Talk Presentation]. Center for Studies in Demography and Ecology, Seattle, USA, December 10.
- 2019 Strand, L., J. Mayer, M. Rosenthal, J. Russo, M. Sullivan, **A. Sutton**, S. D. Withers, and A. Basu. A remedy for despair? Short-term changes in economic conditions and opioid prescribing in Washington State [Poster Presentation]. International Society for Pharmacoeconomics and Outcomes Research Annual Conference, New Orleans, USA, May 21.

- 2017 **Sutton, A.** and T. Ostrander. Outside Looking In: Seattle as a cultural frontier, pre-contact to present [Oral Presentation]. Theoretical Archaeological Group North America Conference, Toronto, Canada, May 19.
- 2017 **Sutton, A.** and T. Ostrander. Make No Bones About It: practical tips for recognizing human vs. faunal remains [Oral Presentation]. Northwest Anthropological Conference, Spokane, USA, April 12-15.
- 2017 Ostrander, T., **A. Sutton**, and M. Bever. A Case Study Evidencing Pre-contact Reinterment of Inadvertently Discovered Human Remains [Oral Presentation]. Northwest Anthropological Conference, Spokane, USA, April 12-15.
- 2013 Gowland, R. and **A. Sutton**. 'I shall wear purple': Gender and the Life Course in Anglo-Saxon England [Oral Presentation]. Leeds International Medieval Congress, for Institute for Medieval Studies, University of Leeds, United Kingdom, July 1-4.

GRANTS, FELLOWSHIPS & AWARDS

- 2023 Edward L. Ullman Doctoral Award for Excellence in Scholarship, Department of Geography, University of Washington, Seattle
- 2023 Arch C. Gerlach Endowed Fellowship, Department of Geography, University of Washington, Seattle
- 2023 Sunbelt-2023-INSNA Student Member Travel Award, International Network for Social Network Analysis
- 2023 Graduate School Conference Presentation Award, The Graduate School, University of Washington, Seattle
- 2022 Graduate Student Travel Award, Center for Statistics and the Social Sciences, University of Washington, Seattle
- 2020 - 2022 T32 Fellowship in Data Science and Demography: Training in Advanced Data Analytics for Behavioral and Social Sciences Research, National Institutes of Health (TADA-BSSR NIH), Center for Studies in Demography and Ecology, University of Washington, Seattle, Faculty mentors: Z. W. Almquist and J. Wakefield

INVITED TALKS

- 2024 Incorporating multilevel regression and poststratification and spatial data for indirect estimation using survey estimates. Computational Demography Working Group at the University of Washington & Max Planck Institute for Demographic Research. May 22. Seattle, WA.

COMMUNITY OUTREACH

- 2024 Panel Discussion: Homelessness is a Housing Problem (Book Club). Salesforce, Seattle, WA. March 13.

SERVICE TO UNIVERSITY AND DEPARTMENT

- 2022-2023 Quarterly Graduate Student Lightning Talks Organizer, Center for Studies in Demography and Ecology, University of Washington, Seattle
- 2020 - 2021 Diversity and Equity Committee Member, Department of Geography, University of Washington, Seattle
- 2019 Session Chair, Geography Undergraduate Research Symposium, Department of Geography, University of Washington, Seattle
- 2013 Human Osteology Laboratory Demonstrator, Durham Archaeology Days, Durham University, Durham, United Kingdom

2012 - 2013 Vice-President (and Acting President), St. Chad's College Middle Common Room,
Durham University, Durham, United Kingdom

SERVICE TO PROFESSION

2021 - Present Managing Editor, Population Dynamics Lab, Center for Studies in Demography and Ecology, University of Washington, Seattle, Editor-in-Chief: S. Curran

2019 Graduate Editor, Plenum: University of Washington Undergraduate Journal of Geography, Department of Geography, University of Washington, Seattle

TEACHING EXPERIENCE

Teaching Assistant, University of Washington, Seattle, WA, USA

Urban Geographic Information Science

Advanced; 60 students, Spring 2021

- Technical instructor
- Taught advanced GIS and mapping methods, incl. geospatial and intermediate spatial statistical analysis methods using ESRI products
- Supported development of student independent research projects relating to urban geography and urban populations
- Revised, updated, and evaluated assignments (technical skills and reporting) and provided constructive feedback
- Developed student learning resources

GIS and Mapping

Intermediate; 60 students, Winter 2020

- Technical instructor
- Taught intermediate GIS and mapping methods incl. geospatial analysis skills and effective geographic data processing and visualization using ESRI products; database management;
- Evaluated assignments (technical skills and reporting) and provided constructive feedback

Geographical Patterns of Health and Disease (Instructor of record)

Advanced; 80 students, Spring 2019

- Independently developed weekly complementary lectures and discussion session programs complementary to the course materials using contemporary examples from recent news or research bulletins, including group and independent exercises and activities to reinforce key concepts and major course themes
- Provided a special focus on bioethics in health practice and emergency health response decision-making
- Provided research project development feedback and writing support
- Organized and managed peer-sharing poster sessions for final research projects

Geography of Health and Healthcare (Instructor of record)

Intermediate; 80 students, Winter 2019

- Technical instructor
- Independently developed weekly discussion session programs highlighting core aspects of weekly course materials
- Independently developed group exercises and activities to reinforce key concepts and major course themes including political ecology of health event "story mapping" and introduction to ethical public health response scenarios
- Provided research project development feedback and writing support

Geodemographics

Introductory; 120 students, Autumn 2018 & 2019

- Technical instructor
- Taught introductory GIS and mapping methods, introduction to census data, quantitative data management and core demographic concepts
- Provided support for and evaluation of assignments using multiple platforms (Tableau, ESRI ArcMap, QGIS)

Teaching Assistant, Western University, London, Ontario, Canada

Plague, Pox and Flu: Disease in Global History

Intermediate; 2011-2012 year

- Managed and evaluated online discussion boards
- Provided research development and library resources advice
- Evaluated final essays and provided constructive feedback

RESEARCH EXPERIENCE

- 2022 - 2023 **Doctoral Student Researcher**
Population Health Initiative and REACH Evergreen Treatment Services, University of Washington, Seattle, WA, USA
co-PIs: A. Hagopian and Z. W. Almquist
- 2021 - 2023 **Doctoral Student Researcher**
University of Washington, Seattle, USA
Laboratory: STAB (Space-Time Analysis, Bayes) Lab
PI: J. Wakefield
- Spatial methods for multilevel regression and poststratification**
Description and personal responsibilities: I test Bayesian spatial statistical methods for the improvement of multilevel regression and poststratification for the model-based adjustment of subnational non-representative survey data, and for applications in small area estimation. I am responsible for data management, coding, testing, research design and presentation of results with mentorship from J. Wakefield.
- United Nations Under 5 Mortality Rate (U5MR) Estimation Project**
Citation: United Nations Inter-agency Group for Child Mortality Estimation, Subnational Under-five and Neonatal Mortality Estimates, 2000–2021 Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation, United Nations Children’s Fund, New York, 2023.
- 2020 - 2023 **Doctoral Student Researcher**
University of Washington, Seattle, USA
Laboratory: The Social, Spatial and Dynamic Analysis Lab
PI: Z. W. Almquist

2023 The political ecology of mask-wearing and presidential candidate preference in the United States — Doctoral dissertation research

Description and personal responsibilities: Using data from The Delphi Group at Carnegie Mellon University U.S. COVID-19 Trends and Impact Survey and the Behaviors and Behavioral Change COVID-19 survey, I built a hierarchical model of sociopolitical and spatial characteristics in the United States to evaluate the effect of presidential candidate preference on mask-wearing during the COVID-19 pandemic in the United States. I applied a political ecology of health theoretical framework, emphasizing human lived experience landscapes and the effects of social and political policy and identity.

2012 - 2014 Graduate Student Researcher

Durham University, Durham, Co. Durham, United Kingdom

PI: R. Gowland (advisor)

Thesis: “As our strength diminishes”: Exploring early Anglo-Saxon concepts of old age in the bioarchaeological record from the fifth to seventh centuries CE

Description and personal responsibilities: Using osteological cemetery population, palaeopathological and funerary context data from multiple sites, I developed a profile of gender identities, the life course and concepts of what it was to be “old” in the early medieval British population during the fifth to seventh centuries CE. I was responsible for conceptualizing and designing the project, as well as data collection, analysis and presentation with mentorship from R. Gowland.

2011 - 2012 Graduate Student Researcher

Western University, London, ON, Canada

PI: S. McKellar (advisor)

Thesis: Monstrum ex Machina: Navigating the Social Meanings and Importance of Monsters and Freaks in the Late-Medieval and Modern Western World

Description and personal responsibilities: Using primary source materials including interview transcripts, print ephemera and media, and contemporary descriptions and memoirs, I traced the development of the Western concept of the body and physical abnormality using a Disability Studies and post-colonial perspective, from the beginning of European cabinets of curiosity to the post-Second World War demise of the traveling carnival and “freak show”. I incorporated social theory from Irvine Goffman and Theodore Veblen to contribute to the academic conversation surrounding mediation of the observer and the observed. I was responsible for the conception, materials collection, theorization and production of ideas, and formal write-up with mentorship from S. McKellar.

OTHER WORK EXPERIENCE

2018 -2023 Osteoarchaeologist
Environmental Science Associates, Northern California Cultural Resources Group, Sacramento, CA, USA
Projects: Asian Art Museum Human Remains Project; San Francisco Public Utilities Commission Baker Beach (Golden Gate) Historic Cemetery

2014 - 2018 Osteoarchaeologist, Independent Consultant
Greater Toronto Area, ON, Canada

PROFESSIONAL MEMBERSHIPS

American Association of Geographers, Population Association of America, International Network for Social Network Analysis