Casey F. Breen

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Academic Positions

2023–	Postdoctoral Scholar, University of Oxford
	Leverhulme Centre for Demographic Science
	Department of Sociology
	Non-stipendiary Research Fellow, Nuffield College

Education

2023	Ph.D., Demography, UC Berkeley Committee: Joshua R. Goldstein (chair), Dennis M. Feehan, Ayesha S. Mahmud, Christopher Muller
2021	M.A., Biostatistics, UC Berkeley
2019	M.A., Demography, UC Berkeley
2016	B.A., Economics (Mathematics minor), Pomona College

Research Areas

Health and Mortality Disparities, Social Networks, Quantitative Social Science

Publications

Forthcoming	**Casey F. Breen**. "The Longevity Benefits of Homeownership: Evidence from Early 20th-Century U.S. Male Birth Cohorts." *Demography.* [open access]
Forthcoming	**Casey F. Breen** and Dennis Feehan. "New Data Sources for Demographic Research." *Population and Development Review.*
2023	**Casey F. Breen**, Maria Osborne, Joshua R. Goldstein. "CenSoc: Linked Administrative Mortality Records for Individual-level Research." *Scientific Data.* 10(1):802. doi: 10.1038/s41597-023-02713-y. [replication]
2023	Joshua R. Goldstein, Maria Osborne, Serge Atherwood, and **Casey F. Breen**. "Mortality Modeling of Partially Observed Cohorts Using Administrative Death Records." *Population Research and Policy Review.* 42(3):36. doi: 10.1007/s11113-023-09785-z. [open access] [replication] [R Package]
2023	**Casey F. Breen**. "Later-life Shifts in Ethnoracial Self-Identification: Evidence from Social Security Administrative Data." *Population Research and Policy Review.* 42(1):10. doi: 10.1007/s11113-023-09764-4. [open access] [replication]

2022	**Casey F. Breen**, Ayesha S. Mahmud, and Dennis M. Feehan. "Novel Estimates Reveal Subnational Heterogeneities in Disease-Relevant Contact Patterns in the United States." *PLOS Computational Biology.* 18(12):e1010742. [open access] [replication]
2022	**Casey F. Breen** and Joshua R. Goldstein. 2022. "Berkeley Unified Numident Mortality Database: Public Administrative Records for Individual-Level Mortality Research." *Demographic Research.* Volume 47, Page 111-142. [open access] [replication]
2022	**Casey F. Breen**, Cormac Herley, and Elissa M. Redmiles. 2022. "A Large-Scale Measurement of Cybercrime against Individuals." Pp.1–41 in *ACM Conference on Human Factors in Computing Systems (**CHI**).* New Orleans LA USA: ACM. [replication]

Under Review

Casey F. Breen and Nathan Seltzer. "Sociodemographics Alone Cannot Predict Individual-level Longevity." [open access]

In Progress

Casey F. Breen, Saeed Rahman, Christina Kay, Joeri Smits, Steve Ahuka, and Dennis M. Feehan. "Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." [Pre-registration]

Casey F. Breen, Masoomali Fatehkia, Jiani Yan, Douglas Leasure, Ingmar Weber, and Ridhi Kashyap. "Mapping Subnational Gender Gaps in Internet and Mobile Adoption Using Social Media Data."

Casey F. Breen and Dennis M. Feehan. "New Approaches to Collecting Data From a Respondent-Driven Sample."

Casey F. Breen. "Black-White Mortality Crossover: New Evidence from Linked Social Security Records."

Andrea Miranda-González, Katerine Perez, and **Casey F. Breen**. "Understanding the Hispanic Mortality Paradox: Variation by Country of Origin."

Joshua R. Goldstein, Guy Stecklov, and **Casey F. Breen**. "A Sibling Analysis of Longevity and African-American Names."

Technical Reports

2022	**Casey F. Breen** and Maria Osborne. "An Assessment of CenSoc Match Quality." [open access]

Presentations († Invited)

2024	"Mapping Subnational Gender Gaps in Internet and Mobile Adoption Using Social Media Data." European Population Conference. June 2024, Edinburgh, UK.
	"Black-White Mortality Crossover: New Evidence from Linked Social Security Records" MORTAL Conference, University of Oxford. June 2024, Oxford, UK.
	"Measuring Mortality in Humanitarian Emergencies." CrisisReady, invited panelist. Remote.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." Population Studies Group, London School of Hygiene and Tropical Medicine. May 2024, London, UK.†

"Mapping Subnational Gender Gaps in Internet and Mobile Adoption Using Social Media Data." Population Association of American. April 2024, Columbus, Ohio.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." Population Association of American. April 2024, Columbus, Ohio.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." Measuring Adult Mortality Community of Practice Webinar, United Nations Statistical Commission. January 2024, Virtual. †

2023   "Mapping Subnational Gender Gaps in Internet and Mobile Adoption Using Social Media Data." Johns Hopkins Population Health Seminar Series. December 2023, Baltimore, Maryland. †

"Computational Approaches to Estimating Key Demographic Quantities in Data-sparse Settings." Oxford University, Leverhulme Centre for Demographic Science. December 2023, Oxford, United Kingdom.

"The Longevity Benefits of Homeownership." Social Science and History Association Annual Conference. November 2023, Washington D.C.

"CenSoc: Public Linked Administrative Mortality Records for Individual-Level Research." Social Science and History Association Annual Conference. November 2023, Washington D.C.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." Quetelet Conference. November 2023, Louvain-la-Neuve, Belgium.

"New Approaches to Collecting Data from a Respondent-Driven Sample." Quetelet Conference. November 2023, Louvain-la-Neuve, Belgium.

"Mapping Subnational Gender Gaps in Internet and Mobile Adoption using Social Media Data." Oxford Digital Gender Gap Workshop. October 2023, Oxford, United Kingdom.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." British Society for Population Studies Annual Conference. September 2023, Oxford, United Kingdom.

"New Approaches to Collecting Data From a Respondent-Driven Sample." Oxford Hard-to-Reach Populations Conference. August 2023, Oxford, United Kingdom.

"Estimating Death Rates in Complex Humanitarian Emergencies Using the Network Survival Method." Oxford Hard-to-Reach Populations Conference. August 2023, Oxford, United Kingdom.

"The Longevity Benefits of Homeownership." IPUMS Data-Intensive Research Conference. July 2023, Minneapolis, Minnesota.

"The Unpredictability of Individual-level Longevity." Population Association of America. April 2023, New Orleans, Louisiana.

"The Effect of Record Linkage Algorithms on Research Results." Population Association of America. April 2023, New Orleans, Louisiana.

2022   "Berkeley Unified Numident Mortality Database: Public Administrative Records for

Individual-level Mortality Research." Social Science History Association. November 2022, Chicago, Illinois.

"The Longevity Benefits of Homeownership." Department of Sociology, Florida State University. November 2022, Tallahassee, Florida.†

"Using Machine Learning Algorithms to Predict Age of Death." American Sociological Association. August 2022, Los Angeles, California.

"New Approaches to Collecting Data From a Respondent-Driven Sample." American Sociological Association. August 2022, Los Angeles, California.

"A Large-Scale Study of Cybercrime Against Individuals." The 2022 ACM Conference on Human Factors in Computing Systems (**CHI**). May 2022, New Orleans, Louisiana. [video]

"Mortality Consequences of Home Ownership." Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

"New Approaches to Collecting Data From a Respondent-Driven Sample." Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

2021	"Black-White Mortality Crossover: New Evidence from Linked Administrative Data." IPUMS Data Intensive Research Conference. June 2021, virtual.

"Estimating Subnational Contact Patterns using Multilevel Regression with Post-stratification." Oral session at the Population Association of America. April 2021, virtual.

"Black-White Mortality Crossover: New Evidence from Linked Administrative Data." Poster session at the Population Association of America. April 2021, virtual.

- Best Poster Award, Population Association of America

2020	"Shifting Racial Self-Identification for the Greatest Generation." American Sociological Association. August 2020, virtual.

"The CenSoc Project." University of Toronto Data Workshop. July 2020, virtual.†

"Shifting Racial Self-Identification for the Greatest Generation." UC Berkeley Record Linkage Conference. February 2020, Berkeley, CA.

OPEN SOURCE SOFTWARE

- **gompertztrunc**: R package for computing mortality differentials under double truncation [GitHub] [CRAN]

PROFESSIONAL EXPERIENCE

2023–	*Consultant*, CenSoc Project (PI: Joshua Goldstein)
2018-2023	*Graduate Student Researcher*, CenSoc Project (PI: Joshua Goldstein)
2023	*Consultant*, IMPACT Initiatives
2022	*Research Scientist Intern*, Meta (Demography and Survey Science Team)
2020	*Intern*, Microsoft Research (Mentors: Elissa M. Redmiles and Cormac Herley)
2018, 2021	*Consultant*, World Health Organization

| 2016-2018 | *Data Analyst*, Institute for Social Research and Data Innovation (IPUMS) |

Awards

2023	Doctoral Completion Fellowship (UC Berkeley)
2021	Best Poster Award, Population Association of America
2018-2020	NIH Training Fellowship
2017	Institute for Social Research and Data Innovation Outstanding Service Award

Teaching Experience

2023	*Instructor*, Demographic Methods, University of Oxford
2023	*Tutorial Lead*, Demography and Population, University of Oxford
2023	*Instructor*, Introduction to R, University of Oxford
2021	*Graduate Student Instructor*, UC Berkeley Formal Demography Workshop
2013-2015	*Economics Tutor*, Pomona College Quantitative Resource Center

Professional Activities

Referee

Demography, Population Studies, Demographic Research, Population Research and Policy Review, Journal of the International AIDS Society, Biometrical Journal, The Journal of Mathematical Sociology, The Journal for the Scientific Study of Religion, Historical Methods: A Journal of Quantitative and Interdisciplinary History, ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'23)

Field

Network Representative Co-Chair, Family Demography (SSHA 2024)
Poster Judge, "Mortality and Morbidity" (PAA 2024)
Chair, "Innovations in Data Infrastructure for Population Research" (PAA 2024)
Discussant, "History and the Political Economy of Inequality" (PAA 2024)
Discussant, "Methods and Mortality in Historical Demography" (SSHA 2023)
Chair, "Measurement Issues in Historical Data " (SSHA 2023)
Discussant, "Novel Methods and Data on Aging and Related Applications" (PAA 2023)
Discussant, "Network Methods" (PAA 2023)

Berkeley

Organizer, UC Berkeley Mortality Reading Group
New student ambassador, UC Berkeley Demography Department

Research Mentoring

Position	Name	Current Position
Research Assistant, DGG Project	Jiaxuan Li	MPhil Student, University of Oxford
Research Assistant, DGG Project	Jiani Yan	DPhil Student, University of Oxford
Research Assistant, DGG Project	Xinyi Zhao	DPhil Student, University of Oxford
Research Assistant, CenSoc Project	Anna Wikle	Biostats/Epi MPH Candidate, UC Berkeley
Research Assistant, CenSoc Project	Benjamin Shapiro	Demographic Researcher, IHME
Predoctoral Researcher, CenSoc Project	Katerine Perez	Sociology Ph.D. Student, Columbia Univ.
Cal-ADAR Fellow, UC Berkeley	Ashley Quiterio	Learning Sciences Ph.D. Student, Northwestern Univ.

LANGUAGE PROFICIENCY AND SKILLS

- R (package development, Tidyverse), Python, SQL (Presto), ArcGIS, LaTeX, Beamer, Qualtrics
- German (reading and oral comprehension high proficiency; intermediate speaker).

References

Joshua R. Goldstein
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Associate Professor of Demography
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