# Casey F. Breen

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**?** github.com/caseybreen

aseybreen.com

# ACADEMIC POSITIONS

2023-	Senior 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, Christopher Muller, Ayesha S. Mahmud
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, Computational Social Science

## **PUBLICATIONS**

2024	Casey F. Breen. "The Longevity Benefits of Homeownership: Evidence from Early 20th-Century U.S. Male Birth Cohorts." <i>Demography</i> . [open access] [replication]	
	$\star$ Research profiled by: Fast Company, The Independent, Black Enterprise	
2024	Casey F. Breen and Dennis Feehan. "New Data Sources for Demographic Research." Population and Development Review. [open access]	
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 <b>Casey F. Breen</b> . "Mortality Modeling of Partially Observed Cohorts Using Administrative Death Records." <i>Population Research and Policy Review.</i> 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." <i>Population Research and Policy Review</i> . 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 R	
	veal 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. "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. "A Large-Scale Measure-	

### Under Review

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." (Revise and Resubmit, *American Journal of Epidemiology.*) [open access] [Pre-registration] [replication]

ment of Cybercrime against Individuals." Pp.1–41 in ACM Conference on Human Factors in Computing Systems (CHI). New Orleans LA USA: ACM. [replication]

Casey F. Breen and Nathan Seltzer. "Demographic Perspectives on Predicting Individual-level Mortality." [open access] [replication]

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." [open access] [replication]

### In Progress

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

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

Casey F. Breen and Won-tak Joo. "Inference with Linked Data: A Social Scientist's Guide."

Casey F. Breen, Mike Bailey, Guanghua Chi, Veronica Rivera, Emilio Zagheni, and Elissa Redmiles. "Timing and Determinants of Migrant Social Integration: Evidence from 1.8 Billion Facebook Friendships"

Casey F. Breen, Till Koebe, and Ridhi Kashyap. "Fertility Impacts of 3G Mobile Expansion: Evidence from Nigeria."

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]
2022	Clémentine Rossier, Onikepe Owolabi, Seni Kouanda, Martin Bangha, Caron R. Kim,
	Bela Ganatra, Dennis Feehan, Casey F. Breen, Moussa Zan, Rachidatou Compaoré.

Adama Baguiya, Ramatou Ouédraogo, Clement Oduor, Vincent Bagnoa, and Sherine Athero, "Describing the Safety of Abortion at the Population Level Using Network-Based Survey Approaches." *Reproductive Health.* 19, no. 1: 231, doi:10.1186/s12978-022-01518-3.

# Presentations († Invited)

2024

2024

# Black-White Mortality Crossover Paradox: New Evidence from Linked Social Security Records

- Historical Economic Demography Workshop, London School of Economics. December 2024. London, United Kingdom.
- CenSoc Users Conference, UC Berkeley. December 2024. Berkeley, California.
- Department of Economic History, Lund University. December 2024. Lund, Sweden.†
- University of Washington, Sociology Department. November 2024, Seattle, Washington.  $\dagger$
- UT-Austin Sociology Department, November 2024, Austin, Texas.†
- Social Science and History Association. October 2024, Toronto, Canada.
- British Society for Population Studies Annual Conference, University of Bath. September 2024, Oxford, UK.
- MORTAL Conference, University of Oxford. June 2024, Oxford, UK.
- IPUMS Data Intensive Research Conference. June 2021, virtual.
- Population Association of America [poster]. April 2021, virtual.

# 2024 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.†
- Population Association of American. April 2024, Columbus, Ohio.
- CrisisReady, Invited Panelist. February 2024, Virtual.
- Measuring Adult Mortality Community of Practice Webinar, United Nations Statistical Commission. January 2024, Virtual.†
- Oxford University, Leverhulme Centre for Demographic Science. December 2023, Oxford, United Kingdom.
- Quetelet Conference. November 2023, Louvain-la-Neuve, Belgium.
- British Society for Population Studies Annual Conference. September 2023, Keele, United Kingdom.
- Oxford Hard-to-Reach Populations Conference. August 2023, Oxford, United Kingdom.

# Mapping Subnational Gender Gaps in Internet and Mobile Adoption Using Social Media Data.

- Digital Inequalities Symposium, Sciences Po. December 2024, Paris, France.
- Digital Inequality and Sustainable Development Workshop, Oxford University. October 2024, Oxford, UK.
- European Population Conference. June 2024, Edinburgh, UK.
- Population Association of America. April 2024, Columbus, Ohio.
- Johns Hopkins Population Health Seminar Series. December 2023, Baltimore, Maryland.†
- Oxford University, Leverhulme Centre for Demographic Science. December 2023,

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2023

2023

2020

- Oxford Digital Gender Gap Workshop. October 2023, Oxford, United Kingdom.

# The Longevity Benefits of Homeownership: Evidence from Early 20th-Century U.S. Male Birth Cohorts.

- Social Science and History Association Annual Conference. November 2023, Washington D.C.
- IPUMS Data-Intensive Research Conference. July 2023, Minneapolis, Minnesota.
- Department of Sociology, Florida State University. November 2022, Tallahassee, Florida.†
- Population Association of America. April 2022, Atlanta, Georgia.

### CenSoc: Public Linked Administrative Mortality Records for Individual-Level Research

- Social Science History Association Annual Conference. November 2023, Washington D.C.
- University of Toronto Data Workshop. July 2020, virtual.†

### New Approaches to Collecting Data from a Respondent Driven Sample

- Quetelet Conference. November 2023, Louvain-la-Neuve, Belgium.
- Oxford Hard-to-Reach Populations Conference. August 2023, Oxford, United Kingdom.
- American Sociological Association. August 2022, Los Angeles, California.
- Population Association of America. April 2022, Atlanta, Georgia

## 2023 Demographic Perspectives on Predicting Individual-Level Longevity

- Population Association of America. April 2023, New Orleans, Louisiana.
- American Sociological Association. August 2022, Los Angeles, California

## 2023 The Effect of Record Linkage Algorithms on Research Results

- Population Association of America. April 2022, 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.

#### 2022 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]

# 2021 Estimating Subnational Contact Patterns using Multilevel Regression with Poststratification.

- Population Association of America. April 2021, virtual.

#### Shifting Racial Self-Identification for the Greatest Generation.

- American Sociological Association. Roundtable. August 2020, virtual.
- 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

2024–present	Consultant, MLP Project (PI: Steven Ruggles)
	- R01AG057679-06
2024-present	Consultant, Abandoned Settlements Project (PI: Mathew Hauer)
	- R21AG088598-01
2018–present	Consultant, graduate student researcher, CenSoc Project (PI: Joshua R. Goldstein)
	- R01AG076830-02, R01AG058940-03
2023	Consultant, IMPACT Initiatives
2022	Research Scientist Intern, Meta (Demography and Survey Science Team)
2020	Ph.D. Intern, Microsoft Research (Mentors: Elissa M. Redmiles and Cormac Herley)
2018, 2021	Consultant, World Health Organization
2016-2018	${\it Data~Analyst},  {\rm Institute~for~Social~Research~and~Data~Innovation~(IPUMS)}$
Awards	
2023	Doctoral Completion Fellowship (UC Berkeley)
2021	Best Poster Award, Population Association of America

### TEACHING EXPERIENCE

NIH Training Fellowship

2018 - 2020

2017

2025	Instructor of Record, Topics in Computational Social Science, University of Oxford
2024	Instructor, Introduction to R, University of Oxford
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

Institute for Social Research and Data Innovation Outstanding Service Award

## PROFESSIONAL ACTIVITIES

### REVIEWER

Demography (2x), Demographic Research (3x), Population Research and Policy Review (2x), Population Studies, The Journal of the International AIDS Society, The Journal of Computational Social Science, Biometrical Journal, PLOS One, 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), ACM CHI Conference on Human Factors in Computing Systems (CHI 2025)

#### DISCIPLINE

Network Representative Co-Chair, Family Demography (SSHA 2024)

Discussant, Chair, Labor, Patents, and Regulation: Insights from Full Count Censuses (SSHA 2024)

Chair, Environmental and Social Dimensions of Infectious Disease Mortality (SSHA 2024)

Chair, Health and Mortality: International Perspectives on Health and Mortality (BSPS 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)

#### Departmental

Organizer, UC Berkeley CenSoc Users Conference

Co-Organizer, Oxford Workshop on Digital Technologies and Sustainable Development

Organizer, UC Berkeley Mortality Reading Group

New student ambassador, UC Berkeley Demography Department

### RESEARCH MENTORSHIP

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

## LANGUAGE PROFICIENCY AND SKILLS

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

#### References

### Joshua R. Goldstein

Chancellor's Professor of Demography
Department of Demography
University of California, Berkeley

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### Ridhi Kashyap

Professor of Demography
Department of Sociology
University of Oxford

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## Dennis M. Feehan

Associate Professor of Demography Department of Demography University of California, Berkeley ⋈ feehan@berkeley.edu

### **Christopher Muller**