

Casey F. Breen

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Academic Positions

2023– Senior Postdoctoral Research Fellow in Computational Social Science
University of Oxford, Leverhulme Centre for Demographic Science

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, Computational Social Science

Publications

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](#)]

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. “The Unpredictability of Individual-level Longevity.” [[open access](#)]

Casey F. Breen. “The Longevity Benefits of Homeownership.” [[open access](#)]

Casey F. Breen, Maria Osborne, Joshua R. Goldstein. “CenSoc: Linked Administrative Mortality Records for Individual-level Mortality Research.”

In Progress

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 Administrative Data.”

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

2023 **Casey F. Breen** and Nathan Seltzer. “The Unpredictability of Individual-level Longevity.” Population Association of America. April 2023, New Orleans, Louisiana.
Casey F. Breen. “The Effect of Record Linkage Algorithms on Research Results.” Population Association of America. April 2023, New Orleans, Louisiana.

2022 **Casey F. Breen** and Joshua R. Goldstein. “Berkeley Unified Numident Mortality Database: Public Administrative Records for Individual-level Mortality Research.” Social Science History Association. November 2022, Chicago, Illinois.
Casey F. Breen. “Long Live the American Dream? The Longevity Benefits of Homeownership.” Department of Sociology, Florida State University. November 2022, Tallahassee, Florida.
Casey F. Breen and Nathan Seltzer. “Using Machine Learning Algorithms to Predict Age of Death.” American Sociological Association. August 2022, Los Angeles, California.
Casey F. Breen and Dennis M. Feehan. “New Approaches to Collecting Data From a Respondent-Driven Sample.” American Sociological Association. August 2022, Los Angeles, California.

Casey F. Breen, Cormac Herley, Elissa M. Redmiles. “A Large-Scale Study of Cybercrime Against Individuals.” The 2022 ACM Conference on Human Factors in Computing Systems (**CHI**). May 2022, New Orleans, Louisiana. [\[video\]](#)

Casey F. Breen. “Mortality Consequences of Home Ownership.” Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

Casey F. Breen and Dennis M. Feehan. “New Approaches to Collecting Data From a Respondent-Driven Sample.” Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

Katerine Perez, Andrea Miranda-González, and **Casey F. Breen**. “Understanding the Hispanic Mortality Paradox: Variation by Country of Origin.” Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

Joshua R. Goldstein, Maria Osborne, Serge Atherwood, Leslie Root, Nathan Seltzer, Jordan Weiss, **Casey F. Breen**. “Mortality Modeling of Partially Observed Cohorts Using Administrative Death Records.” Oral session at the Population Association of America. April 2022, Atlanta, Georgia.

2021 **Casey F. Breen**. “Black-White Mortality Crossover: New Evidence from Linked Administrative Data.” IPUMS Data Intensive Research Conference. June 2021, virtual.

Casey F. Breen, Ayesha S. Mahmud, Dennis M. Feehan. “Estimating Subnational Contact Patterns using Multilevel Regression with Poststratification.” Oral session at the Population Association of America. April 2021, virtual.

Joshua R. Goldstein, Guy Stecklov, and **Casey F. Breen**. “Black Names and the Longevity of Siblings.” Oral session at the Population Association of America. April 2021, virtual.

Casey F. Breen. “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 **Casey F. Breen**. “Shifting Racial Self-Identification for the Greatest Generation.” American Sociological Association. August 2020, virtual.

Casey F. Breen. “The CenSoc Project.” University of Toronto Data Workshop. July 2020, virtual.

Casey F. Breen. “Shifting Racial Self-Identification for the Greatest Generation.” UC Berkeley Record Linkage Conference. February 2020, Berkeley, CA.

Professional Experience

2023	<i>Consultant</i> , CenSoc Project (PI: Joshua Goldstein)
2018-2023	<i>Graduate Student Researcher</i> , CenSoc Project (PI: Joshua Goldstein)
2023	<i>Consultant</i> , IMPACT Initiatives
2022	<i>Research Scientist Intern</i> , Meta (Demography and Survey Science Team)
2020	<i>Intern</i> , Microsoft Research (Mentors: Elissa M. Redmiles and Cormac Herley)

2018, 2021	<i>Consultant</i> , World Health Organization
2016-2018	<i>Data Analyst</i> , Institute for Social Research and Data Innovation (IPUMS)

Awards

2021	Best Poster Award, Population Association of America
2017	Institute for Social Research and Data Innovation Outstanding Service Award

Departmental and Professional Service

2020 – Ad Hoc	Organizer, Mortality Reading Group Reviewer, <i>Population Research and Policy Review</i> , <i>Demographic Research</i> , <i>Journal of the International AIDS Society</i> , <i>Biometrical Journal</i> , <i>The Journal of Mathematical Sociology</i> , <i>The Journal for the Scientific Study of Religion</i> , <i>ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'23)</i>
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Teaching Experience

2021	<i>Graduate Student Instructor</i> , UC Berkeley Formal Demography Workshop
2013-2015	<i>Economics Tutor</i> , Pomona College Quantitative Resource Center

Open Source Software

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

Research Mentoring

POSITION	NAME	CURRENT POSITION
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, L^AT_EX, Beamer, Qualtrics.
- German (reading and oral comprehension high proficiency; intermediate speaker).

References

Joshua R. Goldstein

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Elissa M. Redmiles

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