

## Derick S. Baum

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### EMPLOYMENT

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**University of Georgia, Department of Sociology**  
Assistant Professor

Athens, GA  
Start Date: August 2026

**Brown University, Department of Sociology**  
Postdoctoral Research Associate (Quantitative Research Methods Fellowship)

Providence, RI  
2024-present

### EDUCATION

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**Harvard University**  
Ph.D. in Sociology (Presidential Scholar)  
*Dissertation:* “Developments in Aggregate Relational Data”  
*Committee:* Alexandra Killewald, Peter V. Marsden (Chair), Xiang Zhou

Cambridge, MA  
2018-2024

A.M. in Sociology

2018-2021

**University of California, Santa Barbara**  
B.A. in Sociology and Mathematics (*Summa Cum Laude* and Phi Beta Kappa)

Santa Barbara, CA  
2013-2017

### RESEARCH AND TEACHING INTERESTS

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Quantitative and computational methods, social network analysis, Bayesian inference, causal inference, survey methods, social capital

### PEER-REVIEWED ARTICLES AND BOOK CHAPTERS

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**Baum, Derick S.** 2025. “Explaining Contact Patterns in Acquaintanceship Networks: A New Covariate-Based Model.” *Social Networks* 83:79-91. <https://doi.org/10.1016/j.socnet.2025.05.005>.

Marsden, Peter V., and **Derick S. Baum**. 2024. “Occupational Selection and the Reliability of Position Generator Measures of Social Capital.” *Social Networks* 79:34–47. <https://doi.org/10.1016/j.socnet.2024.05.001>.

**Baum, Derick S.**, and Peter V. Marsden. 2023. “Uses and Limitations of Dichotomous Aggregate Relational Data.” *Social Networks* 74:42–61. <https://doi.org/10.1016/j.socnet.2023.02.001>.

Winner of the 2023 Best Student Paper Award from the International Network for Social Network Analysis

**Baum, Derick S.**, and Xiang Zhou. 2022. “rbw: An R Package for Constructing Residual Balancing Weights.” *The R Journal* 14(3):174–92. <https://doi.org/10.32614/RJ-2022-049>.

Marsden, Peter V., Maleah Fekete, and **Derick S. Baum**. 2021. “Egocentric Network Studies within the General Social Survey: Measurement Methods, Substantive Findings, and Methodological Research.” Pp. 519–52 in *Personal Networks: Classic Readings and New Directions in Egocentric Analysis*, edited by B. Pescosolido, B. L. Perry, E. B. Smith, and M. L. Small. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108878296.038>.

## WORKING PAPERS (DRAFTS AVAILABLE UPON REQUEST)

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**Baum, Derick S.**, and Xiang Zhou. “Explaining Disparities at Quantiles: An Augmented Kitagawa-Oaxaca-Blinder Decomposition.” Revise & Resubmit at *Sociological Methodology*.

**Baum, Derick S.** “Assessing the Goodness of Fit of Models for Analyzing Aggregate Relational Data.”

**Baum, Derick S.** “The Reliability of Items and Measures for Aggregate Relational Data.”

Short, Susan E., Ester Fanelli, Meghan Zacher, and **Derick S. Baum**. “The Contribution of Education to the Growing Gender Divide in Feelings Towards Feminists.”

## SOFTWARE DEVELOPMENT

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Zhou, Xiang, and **Derick S. Baum**. “rbw: Residual Balancing Weights for Marginal Structural Models.”  
<https://cran.r-project.org/web/packages/rbw/index.html>

Bojanowski, Michał, and **Derick S. Baum**. “stansum: Bayesian Models for Aggregated Relational Data.”  
<https://github.com/coalesce-lab/stansum>

## TEACHING

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### Head Instructor, Brown University

SOC 2071: Introduction to Social Network Analysis (Graduate) Spring 2025, Fall 2025

### Teaching Fellow, Harvard University

SOCIOL 1156: Statistics for Social Sciences (Undergraduate) Spring 2023

Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2275: Social Network Analysis (Graduate) Fall 2022

Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

PSY 1900: Introduction to Statistics for the Behavioral Sciences (Undergraduate) Spring 2022

Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2245: Causal Inference for the Social Sciences (Graduate) Spring 2021

Certification of Distinction in Teaching, Derek Bok Center for Teaching and Learning

SOCIOL 2202: Intermediate Quantitative Research Methods (Graduate) Fall 2021, Fall 2020

## AWARDS AND ACCOMPLISHMENTS

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Harvard Griffin Graduate School of Arts and Sciences Dissertation Completion Fellowship 2023-2024

Harvard Griffin Graduate School of Arts and Sciences Professional Development Fund 2023

Best Student Paper Award from the International Network for Social Network Analysis 2023

Presidential Scholar in the Harvard Griffin Graduate School of Arts and Sciences 2018-2024

Award conferred to a small group of top prospective Ph.D. students in the humanities and social sciences. Awardees receive additional financial support in years one, two, and the dissertation completion year.

Certification of Distinction in Teaching from the Derek Bok Center for Teaching and Learning at Harvard University 2021-2023

Academic Excellence Award from the UCSB Honors Program 2017

Best Undergraduate Paper in Sociology from the UCSB Sociology Department 2017

Distinction of *Summa Cum Laude* from the UCSB Sociology Department 2017

## CONFERENCES

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**Baum, Derick S.** 2025. "The Reliability of Items and Measures for Aggregate Relational Data."

Oral Presentation at the Sunbelt Network Conference.

**Baum, Derick S.,** and Xiang Zhou. 2025. "Explaining Disparities at Quantiles: An Augmented Kitagawa-Oaxaca-Blinder Decomposition."

Oral Presentation at the Population Association of America's (PAA) Annual Meeting.

Short, Susan E., Ester Fanelli, Meghan Zacher, and **Derick S. Baum.** 2025. "The Contribution of Education to the Growing Gender Divide in Feelings Towards Feminists."

Oral Presentation at the Population Association of America's (PAA) Annual Meeting (listed as co-author; not presenter).

**Derick S. Baum.** 2021. "Uses and Limitations of Dichotomous Aggregated Relational Data for Estimating Personal Network Size."

Oral Presentation at the 3rd North American Social Networks Conference (NASN).

## SERVICES

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External Consultant, PATCHWORK Project at the Autonomous University of Barcelona 2023-present

Consulted on questionnaire design for a European Union-funded project investigating social integration in five European countries through cross-national surveys.

Member of the Best Student Paper Award Committee, International Network for Social Network Analysis 2024

Peer Mentor, Summer Research Opportunities at Harvard 2022-2023

Mentored college students from underrepresented backgrounds interested in pursuing doctoral studies in the humanities and social sciences.

Ad Hoc Reviewer

*Demography, Social Networks, Demographic Research, National Science Foundation* Proposal Review

## **ORGANIZATIONS**

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American Sociological Association Member, Section on Mathematical Sociology	2023-present
International Network for Social Network Analysis	2023-present
The Institute for Quantitative Social Science at Harvard Graduate Student Affiliate	2021-2024
UCSB Honors Program	2014-2017

## **TECHNICAL SKILLS**

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R, Stan, LaTeX, Stata, Qualtrics

## **LANGUAGES**

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English (fluent), Portuguese (native)

## **REFERENCES**

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Peter V. Marsden  
33 Kirkland Street, Cambridge, MA 02138  
[pvm@wjh.harvard.edu](mailto:pvm@wjh.harvard.edu)

Alexandra Killewald  
ISR 2030, 426 Thompson Street, Ann Arbor, MI 48109  
[akillewa@umich.edu](mailto:akillewa@umich.edu)

Xiang Zhou  
33 Kirkland Street, Cambridge, MA 02138  
[xiang\\_zhou@fas.harvard.edu](mailto:xiang_zhou@fas.harvard.edu)