

# **ELIZABETH E. BRUCH**

## **Curriculum Vitae**

### **CURRENT POSITION**

2023-present	Associate Director, Michigan Institute for Data Science
2017-present	External Faculty, Santa Fe Institute
2016-present	Associate Professor of Sociology and Complex Systems, University of Michigan
2016-present	Associate Research Professor, Institute for Social Research, University of Michigan

### **PRIOR POSITIONS**

2008-2016	Assistant Professor of Sociology and Complex Systems, University of Michigan
2008-2016	Assistant Research Professor, University of Michigan Institute for Social Research
2006-2008	Robert Wood Johnson Postdoctoral Fellow, University of Michigan

### **SCHOOLING**

2008	M.S. in Statistics, University of California—Los Angeles
2006	Ph.D. in Sociology, University of California—Los Angeles
1999	B.A. in Sociology, Reed College

### **HONORS AND AWARDS**

2025	KW Deutsch Visiting Professorship, WZB Social Science Center
2021	Innovation Prize, ASA Methodology Section
2015	Merton Prize, International Network of Analytical Sociologists
2015	Outstanding Article Award, ASA Mathematical Sociology Section
2006	Best Article Award, ASA Community and Urban Sociology Section
2006	Outstanding Article Award, ASA Rationality and Society
2006	American Journal of Sociology Gould Prize
1999	Reed College Class of '21 Award recognizing “creative work of notable character, involving an unusual degree of initiative and spontaneity.”

### **FELLOWSHIPS AND GRANTS**

#### **Fellowships**

2018-2019	Fellow, Institute for Advanced Study, Berlin
2013-2014	Fellow, Center for Advanced Study in the Behavioral Sciences
2006-2008	Robert Wood Johnson Foundation Health Policy Fellow
2000-2003	National Science Foundation Graduate Research Fellow

### **Extramural Grants**

2014-2019	National Institute of Health R-25 Award, \$980k (PI)
2014-2019	National Institute of Health K01 Award, \$653k (PI)
2010-2013	National Institute of Health R-21 Award, \$275k (co-PI)
2004-2005	National Science Foundation Dissertation Grant, \$7.5k (PI)

### **Internal Grants over \$15,000**

2024-2026	Associate Professor Support Fund, \$30k
2021-2025	Center for Academic Innovation, \$280k
2023	Population Studies Center New Investigator Fund, \$18k
2013, 2016	UM Support for Interdisciplinary Research, \$60k each

### **PUBLICATIONS** (\* denotes student or postdoc coauthor)

#### **Monograph**

Bruch, Elizabeth. (expected 2026). *Date Like a Local*. Accepted for publication at *Princeton University Press*, final manuscript in preparation.

#### **Under Review and Working Papers**

Field, Elly\*, Joffre Swait, and Elizabeth Bruch. 2025. "The Co-Evolution of Neighborhoods and Schools." 2<sup>nd</sup> Revise & Resubmit at the *American Journal of Sociology*.

Bruch, Elizabeth. 2025. "Fundamental Building Blocks for Social Science."

Wapman, Hunter\*, Daniel Larremore, and Elizabeth Bruch. 2024. "Competition in Online Dating Markets."

Joffre Swait and Elizabeth Bruch. 2025. "Coupled Choices."

#### **Peer Reviewed Articles**

Malik, Jai\*, Fred Feinberg, and Elizabeth Bruch. 2025. "From Transcripts to Trajectories: A Framework for Studying Academic Pathways." Forthcoming at the *Proceedings of the National Academy of Sciences (NEXUS)*.

- Bruch, Elizabeth. 2023. "Robert Mare's Legacy in Neighborhood Research." *Research in Social Stratification and Mobility* 88:100811.
- Kizilcec, René, Rachel Baker, Elizabeth Bruch, Kalena E. Cortes, Laura T. Hamilton, David Nathan Lang, Zachary A. Pardos, Marissa E. Thompson, Mitchell L. Stevens. 2023. "From Pipelines to Pathways in the Study of Academic Progress." *Science* 380:344-347.
- Feinberg, Fred, Elizabeth Bruch, Braun, Michael, Falk BH, Fefferman N, Feit EM, Helveston J, Larremore D, McShane BB, Patania A, Small ML. 2020. "Choices in networks: a research framework." *Marketing Letters* 31:349-59. [Triennial Choice Symposium paper, Bruch co-organized and led the workshop.]
- Bruch, Elizabeth and Joffre Swait. 2019. "Choice Set Formation and its Implications for Segregation Dynamics." *Demography* 56(5):1665-1692.
- Bruch, Elizabeth and Mark Newman. 2019. "The Structure of Online Dating Markets in U.S. Cities." *Sociological Science* 6: 219-234.
- Bruch, Elizabeth and Mark Newman. 2018. "Aspirational Pursuit of Mates in Online Dating Markets." *Science Advances* 4: eaap9815.
- Endsley, Arthur\*, Dan Brown, and Elizabeth Bruch. 2018. "Housing Market Activity is Associated with Disparities in Urban and Metropolitan Vegetation." *Ecosystems* 21: 1593-1607.
- Dellaert, Benedict, Joffre Swait, Vic Adamowicz, Theo Arentze, Elizabeth Bruch, Elisabetta Cherchi, Caspar Chorus, Bas Donkers, Fred Feinberg, Antony Marley, Linda Salisbury. 2017. "Individuals' Decisions in the Presence of Multiple Goals." *Consumer Needs and Solutions* 1:1-14. [Triennial Choice Symposium Paper, Bruch was attendee of workshop.]
- Bruch, Elizabeth and Fred Feinberg. 2017. "Decision Making in Social Environments." *Annual Review of Sociology* 43: 207-227.
- Bruch, Elizabeth, Fred Feinberg, and Kee Yeun Lee\*. 2016. "Extracting multistage screening rules from online dating activity data." *Proceedings of the National Academy of Sciences* 113: 10530-10535.
- Bruch, Elizabeth and Jon Atwell\*. 2015. "Agent-Based Models in Empirical Social Research." *Sociological Methods and Research* 44:186-221.
- Bruch, Elizabeth. 2014. "How Population Structure Shapes Neighborhood Segregation." *American Journal of Sociology* 119:1221-1278.
- Bruch, Elizabeth, and Robert Mare. 2012. "Methodological Issues in the Analysis of Residential Preferences and Residential Mobility." *Sociological Methodology* 42: 103-154.

Bruch, Elizabeth and Robert Mare. 2009. "Preferences and Pathways to Segregation: Reply to van de Rijt, Siegel, and Macy." *American Journal of Sociology* 114:1181-98.

Bruch, Elizabeth and Robert Mare. 2006. "Neighborhood Choice and Neighborhood Change." *American Journal of Sociology* 112: 667-709.

### **Book Chapters**

Bruch, Elizabeth and Robert Mare. 2009. "Segregation Processes." In the *Oxford Handbook of Analytical Sociology*, edited by P. Bearman and P. Hedström. Oxford University Press.

Bruch, Elizabeth, Ross Hammond, and Peter Todd. 2015. "The Co-Evolution of Decision Making and Social Environments." Chapter in *Emerging Trends in the Social and Behavioral Sciences*, edited by Robert Kaplan and Stephen Kosslyn. Hoboken NJ: John Wiley and Sons.

### **INVITED PRESENTATIONS (since 2015)**

#### **Keynotes and Colloquium**

2024	International Conference for Computational Social Science
2023	Sociology Department, Duke University Sociology Department, University of Wisconsin WZB Social Science Center, Berlin Complexity Science Hub, Vienna Academy of Sociology, Cologne Sociology Department, University of Leipzig
2022	Sociology Department, Stanford University
2021	Sociology Department, Tel Aviv University Demography Department, UC Berkeley Sociology Department, University of North Carolina at Chapel Hill
2020	Institute for Advanced Study, Princeton University
2019	Sociology Department, University of Chicago Office of Population Research, Princeton University Sociology Department, Yale University Sociology Department, New York University Sociology Department, Oxford University Cognitive Science Department, Indiana University
2017	Sociology Department, Northwestern University
2016	Sociology Department, Columbia University
2015	Plenary, Annual Meeting of the American Sociological Association

#### **Seminars and Workshops**

2025	Pathways Seminar, Stanford University
2023	Opportunity Insights Seminar, Harvard University

2021	Biases in Machine/Human Workshop, Princeton University
2019	Data Science Seminar, New York University Institute for Analytical Sociology, Norrkoping, Sweden Population Seminar, Duke University Google Ventures, Mountain View
2018	Workshop on Networks and Culture, Stanford University
2017	Economic Demography Workshop, Washington University Analytical Sociology Workshop, European University Institute
2016	Radcliffe workshop on “Decision Processes in Urban Environments” Computational Social Science Seminar, University of Chicago PAM/CPC Seminar, Cornell University Northwestern Institute on Complex Systems
2015	Organizational Behavior Seminar, Stanford University

## PROFESSIONAL SERVICE AND SCHOLARLY ACTIVITIES

### External Service

Deputy Editor, *Sociological Science*, 2025-present.  
 Editorial Board, *Sociological Methodology*, 2008-2011, 2015-2018, 2022- present.  
 Science Steering Committee, Santa Fe Institute 2020- present.  
 Consulting Editor, *Sociological Science*, 2017- 2025.  
 Committee on Population Statistics for Population Association of America, 2018-2021.  
 National Academy of Science Consensus Committee. 2013-2015.  
 Steering Committee, NIH summit on Best Practices in Modeling for Public Health, 2015.  
 Consulting Editor, *American Journal of Sociology*, 2011-2013.  
 Council Member, *Methodology Section*, American Sociological Association, 2018-2020.  
 Track leader, Agent-based Modeling Track of the National Institute of Health’s annual *Institute for Systems Science and Health*; May 2010, June 2011.  
 Reviewer for the *American Journal of Sociology*, *Sociological Methodology*, *Social Forces*, *Sociological Methods and Research*, *Demography*, *Population Research and Policy Review*, and the *American Sociological Review*.

### Non-Departmental Service and Leadership at the University of Michigan

Associate Director, Michigan Institute for Data Science, 2023-present.  
 UM Provost’s Committee on Analytics for Student Success and Equity Transformation, 2023-present.  
 Training Director, Population Studies Center, University of Michigan, 2022- present.  
 Member, Michigan Institute for Data Science Executive Committee, 2020-2023.  
 Member, Population Studies Center Advisory Committee, 2020-2023.  
 Member, Computing Education Task Force, University of Michigan, 2021.  
 Co-Chair, Quantitative Social Science Committee at University of Michigan, 2018  
 Faculty lead, University of Michigan Initiative in Computational Social Science, 2017-2019.  
 Faculty advisor, University of Michigan’s Computational Social Science Graduate Workshop, September 2016-2018.

### Other Academic Service (partial list)

Committee Chair, Merton Prize, International Network of Analytical Sociology 2023  
 Closing Panel, Meeting of the International Network of Analytical Sociology, Princeton NJ, 2023  
 Organizer, “Internet and other Online Data,” Session at the Population Association of America Meetings in Washington DC, 2020  
 Co-Organizer, “The Evolution of Search in Human Societies,” Google Ventures 2019  
 Co-Organizer, “Decision Processes on Networks,” Triennial Choice Symposium, 2019  
 Co-Organizer, “Mapping the Future of Analytical Sociology” Stockholm, 2017  
 Organizer, “Complex Systems,” Session at the American Sociological Association Meetings in Montreal, 2017  
 Organizer, “Modeling Population Dynamics,” Session at the Population Association of America Meetings in Chicago, 2017  
 Organizer, “Big Data and Population Processes” Session at the Population Association of America Meetings in Chicago, 2017  
 Co-Organizer, “Decision Processes in Urban Contexts,” Workshop at the Radcliffe Institute for Advanced Study  
 Discussant of session on “Segregation and Contextual Inequality” at the Annual Meetings of the Population Association of America, 2016.  
 Organizer and Presider of “Simulation Models for Understanding Health and Mortality” at the Population Association of America, 2016.  
 Program Committee member, International Conference on Computational Social Science, Helsinki Finland. 2015.  
 Organizer of “Population Processes” session at the Annual Meetings of the American Sociological Association. 2014.  
 Co-organizer of “Models Big and Small,” Center for the Study of Complex Systems at the University of Michigan. 2014.  
 Senior Program Committee member, International Conference on Social Informatics (SocInfo). 2014.  
 Organizer and Presider of “Behavioral Data and the Future of Stratification Research” [Thematic session] at the Annual Meetings of the American Sociological Association. 2013.  
 Organizer and Presider of “Residential Mobility and Neighborhood Change” at the Annual Meetings of the Population Association of America. 2009.  
 Discussant of session on “Segregation” at the Annual Meetings of the Population Association of America, 2007.

## **Research Networks**

NIH Network on “Inequality, Complexity and Health,” 2010-2014.

## **TEACHING AND MENTORING**

### **Undergraduate courses**

Tipping Points, Bandwagons, and Cascades: From Individual Behavior to Population Dynamics  
 Introduction to Computational Social Science  
 Evaluation of Evidence

### **PhD courses**

Quantitative Practicum  
Research Logics  
Analytical Sociology

**Present Advisees**

Galen Hall  
Kai Matheson  
Izabel Aguiar [postdoctoral scholar, Santa Fe Institute]

**Former Advisees**

Jeff Lockhart (Assistant Professor at UC-Berkeley)  
Elly Field (Postdoctoral Fellow at Brown University)  
Anne Clark (Survey Statistician at the National Center for Educational Statistics)  
Lydia Wileden (Assistant Research Professor at the University of Connecticut)  
Constance Hsiung (Postdoctoral Fellow at Goethe University)  
Michael Fang (Assistant Professor at Johns Hopkins University)  
Jon Atwell (Assistant Professor at Stanford University)