

# ELIZABETH E. BRUCH

## Curriculum Vitae

### ADDRESS

Department of Sociology, University of Michigan  
500 S. State Street, Ann Arbor, Michigan, 48109, U.S.A.

### SCHOOLING

M.S., Statistics, UCLA, 2008  
Ph.D., Sociology, UCLA, 2006  
M.A., Sociology, UCLA, 2001  
B.A., Sociology, Reed College, 1999

### POSITIONS HELD

Associate Director for Social Science, Michigan Institute for Data Science, 2023-  
Member, Santa Fe Institute Science Steering Committee, 2020-  
External Faculty Member, Santa Fe Institute, 2017-  
Associate Professor of Sociology & Complex Systems, U-Michigan 2016-  
Associate Research Professor, Institute for Social Research, 2016-  
Assistant Professor of Sociology & Complex Systems, U-Michigan 2008-2016  
Assistant Research Professor, Institute for Social Research, 2008-2016

### FELLOWSHIPS, HONORS, AND AWARDS

Innovation Prize from the ASA Methodology Section, 2021  
Fellow at the Institute for Advanced Study in Berlin, 2018-2019  
Merton Prize from the International Network of Analytical Sociologists, 2015  
Outstanding Article Award from the ASA Mathematical Sociology Section, 2015  
Fellow at the Center for Advanced Study in the Behavioral Sciences, 2013-2014  
Robert Park Best Article Award, ASA Community and Urban Sociology, 2006  
James Coleman Outstanding Publication Award, ASA Rationality and Society, 2006  
American Journal of Sociology Gould Prize for 2006-2007  
Robert Wood Johnson Foundation Health Policy Fellowship, 2006-2008  
National Science Foundation Graduate Research Fellowship, 2000-2003  
Reed College Class of '21 Award recognizing "creative work of notable character,  
involving an unusual degree of initiative and spontaneity," 1999

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

Bruch, Elizabeth. 2023. *Date Like a Local*. Under Contract at Princeton University Press.

## **Under Review**

Bruch, Elizabeth, Jai Malik\*, and Fred Feinberg. 2023. "From Transcripts to Trajectories: A Framework for Studying Academic Pathways." Revise & Resubmit at *PNAS-NEXUS*.

Elly Field\* and Elizabeth Bruch. 2022. "The Co-Evolution of Neighborhoods and Schools." Under 2<sup>nd</sup> Review at the *American Journal of Sociology*.

## **Articles**

Bruch, Elizabeth. 2023. "Robert Mare's Legacy in Neighborhood Research." Forthcoming in *Research in Social Stratification and Mobility*.

René F. Kizilcec, Rachel B. 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 M, 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, Land 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 of the United States of America* 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 TALKS SINCE 2019**

International Conference for Computational Social Science (IC2S2)  
 Population Studies, University of Wisconsin  
 Opportunity Insights, Harvard University  
 Sociology Department, Duke University  
 WZB Colloquium in Berlin  
 Complexity Science Hub in Vienna  
 Summer Institute in Computational Social Science at WZB in Berlin  
 Academy of Sociology Colloquium Series, Cologne

Sociology Department, University of Leipzig  
Social Science Workshop, European University Institute  
Sociology Department, Stanford University  
Sociology Department, Tel Aviv University  
Demography Department, UC-Berkeley  
Sociology Department, University of North Carolina at Chapel Hill.  
Public Lecture, Institute for Advanced Studies at Princeton University  
Summer Institute in Computational Social Science at Princeton University  
Sociology Department, University of Chicago  
Population Studies Colloquium, Princeton University  
Nuffield College, Oxford University  
Duke University, Office of Population Research  
New York University, Data Science Seminar  
Department of Sociology, Yale University  
New York University, Department of Sociology  
Institute for Analytical Sociology, Linköping  
Institute for Advanced Study in Berlin

#### **EXTRAMURAL RESEARCH GRANTS**

“Dynamic Models of Race and Income Segregation.” National Science Foundation  
Doctoral Dissertation Grant, 2004-05. (\$7,500)

“Neighborhood Choice and Neighborhood Change: Evaluating Dynamic Models of  
Residential Segregation.” (with R. Berk and R. Mare) National Science Foundation,  
2004-06. (\$230,000)

“Dynamic Models of Racial Residential Segregation.” (with L. Quillian) National Institute  
of Health R-21 Award, 2010-2013. Co-Principal Investigator. (\$275,000)

“Cognitively Plausible Models of Decision-Making.” National Institute of Health K01  
Award, 2014-2019. Principal Investigator. (\$653,000)

“Dynamic Systems Modeling for Demography and Public Health.” National Institute of  
Health R-25 Curriculum Development and Training Award, 2014-2019. Principal  
Investigator. (\$980,000)

#### **PROFESSIONAL SERVICE AND SCHOLARLY ACTIVITIES**

##### **External Service**

Editorial Board, *Sociological Methodology*, 2022-  
Science Steering Committee, Santa Fe Institute 2020-  
Committee on Population Statistics for Population Association of America, 2018-2021.

Editorial Board, *Sociological Methodology*, 2008-2011 and 2015-2018.  
Consulting Editor, *Sociological Science*, 2017-.  
National Academy of Science Consensus Committee. 2013-2015.  
Steering Committee, OBSSR Summit on Best Practices in Modeling for Public Health, Bethesda, MD. 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 in Social Science, Michigan Institute for Data Science, 2023-.  
Member, Training Community in Population Studies, University of Michigan, 2022-.  
Member, Michigan Institute for Data Science Executive Committee, 2020-.  
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, September 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, Annual 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.  
University of Chicago’s “Inequality: Measurement, Interpretation, and Policy” Network. 2013-.

### **TEACHING**

#### ***Courses Taught***

Quantitative Modeling (SOC 542)  
Research Methods (SOC 312)  
Research Logics (SOC 506)  
Analytical Sociology (SOC 595)  
Tipping Points, Bandwagons, and Cascades: From Individual Behavior to Population Dynamics (SOC 260)  
Introduction to Computational Social Science (SOC/QMSS 251)

#### ***Current Advisees in Sociology***

Elly Field  
Galen Hall

#### ***Former Advisees in Sociology***

Anne Clark (Postdoctoral Fellow, University of Notre Dame)  
Lydia Wileden (Mansueto Institute Postdoctoral Fellow, University of Chicago)

Jeff Lockhart (James S. McDonnell Foundation Fellow, University of Chicago)  
Constance Hsiung, Sociology (Postdoctoral Researcher, Goethe University)  
Michael Fang, Sociology (Assistant Scientist, Johns Hopkins University)  
Jon Atwell, Sociology and Complex Systems (Assistant Professor, Stanford University)

***Dissertation Committees (Member)***

Jon Zelner, Sociology  
Debra Hevenstone, Sociology  
Yuan He, Sociology  
Longxiu Tian, Marketing  
Kee Yeun Lee, Marketing  
Dana Turjeman, Marketing  
Gwen Ahn, Marketing  
Jessica Hoel, Economics  
Marta Murray-Close, Economics  
Michelle Debbink, Public Health  
Sara Rimer, Engineering  
Arthur Endsley, Resource Ecology  
Danaja Maldeniya, School of Information