ELIZABETH E. BRUCH

500 S. State Street Ann Arbor, MI, 48109 ebruch@umich.edu

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." 2nd 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 coorganized 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)