Emily M. Cantrell

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October 2026

EDUCATION

Princeton University, Princeton, New Jersey
PhD, Sociology & Social Policy — Anticipated March 2027
Master of Arts, Sociology & Social Policy — Nov. 2022
Committee: Matthew Salganik (chair), Kathryn Edin, & Brandon Stewart

Denison University, Granville, Ohio
Bachelor of Arts, Human Development & Social Policy — May 2017
Summa Cum Laude

PUBLICATIONS

Kapoor, S., **Cantrell, E. M.**, Peng, K., Pham, T. H., Bail, C. A., Gundersen, O. E., Hofman, J. M., Hullman, J., Lones, M. A., Malik, M. M., Nanayakkara, P., Poldrack, R. A., Raji, I. D., Roberts, M., Salganik, M. J., Serra-Garcia, M., Stewart, B. M., Vandewiele, G., & Narayanan, A. (2024). "REFORMS: Consensus-Based Recommendations for Machine-Learning-Based Science." *Science Advances.*

MANUSCRIPTS UNDER REVIEW

Cantrell, E. M., Anchuri, P., Ren, H., & Salganik, M. "Machine Learning Models Trained on a Longitudinal Survey Dataset Poorly Predict Hundreds of Life Outcomes."

Cantrell, E. M.,* Ren, H.*, Verhagen, M., Kapoor, S., Narayanan, A., & Salganik, M. "More Data, Modest Gains: Assessing Limits of Prediction in Multidomain Population-Scale Social Data." *(*Denotes equal first authorship.)*

Ren, H.,* & **Cantrell, E. M.*** "You Have More Data Than You Think: Optimizing Machine Learning in Tabular Social Science Datasets Through Augmentation and Linkage." *(*Denotes equal first authorship.)*

Sivak, E., **Cantrell, E. M.**, Emery, T., Garcia-Bernardo, J., Hafner, F., ... Nissim, M., Salganik, M. J., & Stulp, G. (112 authors). "Births are Difficult to Predict Even With Rich Survey and Full-Population Register Data."

PUBLISHED REPORTS

Cantrell, E. (2025). "Universal Free School Meals in Ohio: A Cost-Benefit Analysis." Columbus, Ohio: Scioto Analysis.

Thomson, D., **Cantrell, E.**, Guerra, G., Gooze, R., & Tout, K. (2020). "Conceptualizing and Measuring Access to Early Care and Education." Bethesda, MD: Child Trends.

Briggs, S., **Cantrell, E.**, & Karberg, E. (2019). "Family Instability and Children's Social Development." Bethesda, MD: Child Trends.

Cantrell, E., Karberg, E., Ciaravino, S., Scott, M., Wilson, A., Ramos-Olazagasti, M., Huz, A., Moron, L., Finocharo, J., Logan, D., & Bhatia, A. (2019). "Coparenting Literature Review Synthesis: Understanding the Nature of Fathers' Coparenting Relationships." Memo to the Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Bethesda, MD: Child Trends.

Rosinsky, K., Madill, R., Bashara, S., Supplee, L., Shaw, S., Stearns, R., Li, W., Gutowski, T., & **Cantrell, E.** (2019). "Assessment and Mapping of Community Connections in Home Visiting: Final Report." OPRE Report Number 2019-68. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

POLICY-RELEVANT EMPLOYMENT

Scioto Analysis — April 2025 - Oct. 2025
Policy Analyst (Part time) — Columbus, OH (remote)

New Mexico House of Representatives — Jan. - Feb. 2022
Health and Human Services Committee Assistant — Santa Fe, NM

Child Trends — Nov. 2018 - July 2019
Senior Research Assistant (Early childhood public policy) — Bethesda, MD

Child Trends — July 2017 - Nov. 2018
Research Assistant (Early childhood public policy) — Bethesda, MD

El Barrio at the Centers for Families and Children — June - Aug. 2016
Intern (Public benefits and community resource navigation) — Cleveland, OH

INVITED PRESENTATIONS

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "Machine Learning Models Trained on a Longitudinal Survey Dataset Poorly Predict Hundreds of Life Outcomes." Metrics & Models Seminar Series, University of Oxford, Oct. 2026.

Cantrell, E. "Universal Free School Meals in Ohio: A Cost-Benefit Analysis." Food Research & Action Center State Advocates Meeting, Jan. 2026.

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "How accurately can machine learning algorithms predict a person's future?" New York City Department of Health and Mental Hygiene, April 2025.

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "How accurately can machine learning algorithms predict a person's future?" Engaging Communities in Developing Technologies for Community Flourishing Workshop, Lehigh University, May 2024.

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "How accurately can machine learning algorithms predict a person's future?" Computational Social Science Group at University of Groningen, Netherlands, March 2024.

CONFERENCE PRESENTATIONS

Cantrell, E.* & Ren, H.* "You Have More Data Than You Think: Optimizing Machine Learning in Tabular Social Science Datasets through Augmentation and Linkage." APPAM, Seattle, WA, Nov. 2025.

Cantrell, E.,* Ren, H.*, Verhagen, M., Kapoor, S., Narayanan, A., & Salganik, M. "Exploring the Impact of Dataset Size on Machine Learning Model Performance Using Dutch Administrative Register Data." Administrative Data Research Conference (ADRCon), Washington, DC, June 2025.

Ren, H.* & **Cantrell, E.**,* "How to Expect When They're Expecting: Strategies for Predicting Births & Adoptions in Survey and Register Data." ODISSEI, Rotterdam, Netherlands, Nov. 2024.

Cantrell, E.,* Ren, H.*, Verhagen, M., Kapoor, S., Narayanan, A., & Salganik, M. "Impacts of Sample Size and Feature Sets on the Performance of Machine Learning Models for Predicting Births & Adoptions." APPAM, Washington, DC, Nov. 2024.

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "How accurately can machine learning algorithms predict a person's future?" PAA, Columbus, OH, April 2024.

Cantrell, E., Anchuri, P., Ren, H. & Salganik, M. "How accurately can algorithms predict a person's future?" APPAM, Atlanta, GA, Nov. 2023.

POSTERS

Cantrell, E. M., Anchuri, P., Ren, H., & Salganik, M. "Machine Learning with Longitudinal Survey Data Poorly Predicts Hundreds of Social Outcomes." The Ohio State University AI Research Summit, Columbus, OH, March 2026.

Cantrell, E., Thomson, D., & Tout, K. "Definition and Measurement of Access to Early Care and Education in the Literature." Child Care and Early Education Policy Research Consortium (CCEEPRC) annual conference, Washington, DC, April 2019.

BLOG POSTS

Cantrell, E. Universal Free School Meals in Ohio: Costs, Benefits, and Policy Options. 2025.

Cantrell, E. What is the Community Eligibility Provision for School Meals? 2025.

Cantrell, E. How Would Proposed Medicaid and SNAP Cuts Affect Ohio? 2025.

Cantrell, E. Attachment Behaviors in Children with Incarcerated Fathers. 2018.

TEACHING ASSISTANCE

Social Networks (SOC 204, with M. Salganik) Fall 2021
Summer Institute in Computational Social Science (Princeton) Summer 2021
Machine Learning with Social Data (SOC 306, with B. Stewart) Spring 2021
Applied Social Science Statistics (SOC 400/500, with B. Stewart) Fall 2020

DATA SCIENCE COMPETITIONS

PreFer Challenge Part 2: Predicting Fertility with Administrative Data
First place, in collaboration with Hanzhang Ren June - Oct. 2024

PreFer Challenge Part 1: Predicting Fertility with Survey Data
First place, in collaboration with Hanzhang Ren April - Sept. 2024

PROFESSIONAL DEVELOPMENT

Mentorship & Social Committee Lead Feb. 2025 - Nov. 2025
APPAM Data Science Community

"Engaging Communities in Developing Technologies for Community Flourishing" Workshop
Bethlehem, Pennsylvania, May 2024
Participant in workshop on the intersection of community-based participatory research and computational social science

Summer Institute in Computational Social Science
Rotterdam, Netherlands, June 2023
Participant in workshop on computational social science methods and the Dutch national administrative data infrastructure

"Grant Writing for Nonprofit Organizations" Course
Remote, Jan. - March 2018
Participant in course by the American Grant Writers' Association

HONORS & AWARDS

Graduate School Teaching Award, Princeton University April 2021
Leland Gordon Prize in Economics: First Place (for Senior thesis) April 2017
Distinguished Leadership Award, Denison University April 2017
Phi Beta Kappa, Theta of Ohio Chapter April 2017