

ISABEL ROSE FULCHER

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EDUCATION

Harvard University Doctor of Philosophy, Biostatistics Dissertation Advisor: Eric Tchetgen Tchetgen Dissertation Title: “Statistical Inference for Causal Mechanisms: Mediation and Interference”	Cambridge, MA March 2019
Harvard University Masters of Arts, Biostatistics	Cambridge, MA May 2016
McGill University Bachelor of Arts and Science, Mathematics and Anthropology	Montreal, QC May 2012

ACADEMIC APPOINTMENTS

Harvard Data Science Initiative <i>Postdoctoral Fellow</i>	Cambridge, MA September 2019 – Current
Department of Global Health and Social Medicine, Harvard Medical School <i>Postdoctoral Fellow</i> Advisers: Bethany Hedt-Gauthier and Eric Tchetgen Tchetgen	Boston, MA January 2019 – August 2019

PUBLICATIONS

PEER REVIEWED

6. **Fulcher, I. R.**, Hedt, K., Marealle, S., Abdalla O., Tibaijuka, J., Hoffman, R., Layer, E., Mitchell, M., and Hedt-Gauthier, B. (2020). Errors in estimated gestational ages reduce the likelihood of health facility deliveries: results from an observational cohort study in Zanzibar. *In Press* at BMC Health Services Research.
5. **Fulcher, I. R.**, Shpitser, I., & Tchetgen Tchetgen, E. J. (2019). Robust inference on population indirect causal effects: the generalized front-door criterion. *Journal of the Royal Statistical Society Series B*. DOI: 10.1111/rssb.12345
4. **Fulcher, I. R.**, Shi, X., & Tchetgen Tchetgen, E. J. (2019). Estimation of natural indirect effects robust to unmeasured confounding and mediator measurement error. *Epidemiology*, 30(6), 825-834.
3. Janiak, E., **Fulcher, I. R.**, ..., & Goldberg, A. (2019). Impact of Massachusetts’ parental involvement law on procedural timing among adolescents seeking abortion. *Obstetrics & Gynecology*, 133(5): 978-986.
2. Bao, E.L., Lareau, C. A., Brugnara, C., **Fulcher, I. R.** et al. (2019). Heritability of fetal hemoglobin, white cell count, and other clinical traits from a sickle cell disease family cohort. *American Journal of Hematology*. DOI: 10.1002/ajh.25421.

1. **Fulcher, I. R.**, Tchetgen Tchetgen E. J., & Williams, P. L. (2017). Mediation analysis for censored survival data under an accelerated failure time model. *Epidemiology*, 28(5), 660-666.

PRE-PRINTS

1. Tchetgen Tchetgen, E. J., **Fulcher, I. R.**, and Shpitser, I. (2018). Auto-g-computation of causal effects on a network. *In revision*. arXiv preprint arXiv:1709.01577.

HONORS & AWARDS

University of Florida Statistics Workshop Travel Award	2019
National Science Foundation Travel Award for Atlantic Causal Inference Conference	2018
Barry R. and Irene Tilenius Bloom Fellowship	2018
Harvard University Distinction in Teaching	2017
Harvard T.H. Chan School of Public Health Rose Traveling Fellowship	2017
Maternal Health Task Force Travel Award	2017
Statistics in Epidemiology Young Investigator Award	2017
McGill University Dean's Honour List	2012
Golden Key International Honour Society	2010, 2011, 2012

INVITED TALKS

“Bayesian auto-g-computation of network causal effects: incarceration and infection in a high risk network.” Statistics & Probability Seminar, University of Massachusetts Amherst, Amherst, MA (December 2019).

“Improving the delivery of healthcare to pregnant women in sub-Saharan Africa with statistics and data science.” Mathematics and Statistics Colloquium, Colby College, Waterville, ME (December 2019).

“Bayesian auto-g-computation of network causal effects: incarceration and infection in a high risk network.” Joint Statistical Meetings, Denver, CO (July 2019).

“Bayesian auto-g-computation of network causal effects: incarceration and infection in a high risk network.” New England Statistical Society, Hartford, CT (May 2019).

CONFERENCE PARTICIPATION

CONTRIBUTED TALKS

“The generalized front-door formula for estimation of indirect causal effects of a confounded treatment.” ENAR Spring Meeting, Atlanta, GA (2018).

“Data for decision-making in digital health programs: how analysis of routine data from the Safer Deliveries program in Zanzibar improved program implementation and mothers' outcomes.” Global Digital Health Forum, Washington, DC (2017).

“Mediation analysis for censored survival data under an accelerated failure time model.” Joint Statistical Meetings, Baltimore, MD (2017).

“The generalized front-door formula for identification of partial causal effects.” ENAR Spring Meeting, Washington, DC (2017).

“Mediation analysis for censored survival data under an accelerated failure time model.” ENAR Spring Meeting, Austin, TX (2016).

POSTERS

“Bayesian auto-g-computation of network causal effects: incarceration and infection in a high risk network.” 21st Meeting of New Researchers in Statistics and Probability. Fort Collins, CO (2019).

“Estimation of natural indirect effects robust to unmeasured confounding and mediator measurement error.” University of Florida Winter Workshop, Gainesville, FL (2019).

“Nonparametric identification and robust estimation of indirect causal effects in the presence of exposure-outcome confounding.” Atlantic Causal Inference Conference, Pittsburgh, PA (2018).

“Auto-g-computation of causal effects on a sexual and injection-drug use network.” Harvard Data Science Conference, Cambridge, MA (2018).

“Working towards safer deliveries in Zanzibar, Tanzania.” Future Health Campaign Celebration, Harvard T.H. Chan School of Public Health, Boston, MA (2018).

“Nonparametric identification and robust estimation of indirect causal effects in the presence of exposure-outcome confounding.” Atlantic Causal Inference Conference, Pittsburgh, PA (2018).

TEACHING EXPERIENCE

Global Initiative for Neuropsychiatric Genetics Education in Research

Teaching Fellow, Interactive Biostatistics Workshop

Addis Ababa, Ethiopia

November 2019

Harvard T.H. Chan School of Public Health

Instructor, Biostatistics Preparatory Course: Methods and Computing in R

Instructor, Stata Orientation for Incoming Graduate Students

Head Teaching Assistant, Core Principles of Biostatistics and Epidemiology

Teaching Assistant, Core Principles of Biostatistics and Epidemiology

Teaching Assistant, Quantitative Methods in Program Evaluation

Teaching Assistant, Methods for Monitoring and Evaluation

Boston, MA

Summer 2018

Summer 2016, 2017, 2018

Fall 2016, 2017

Fall 2015

Spring 2017

Spring 2016

University of Global Health Equity

Teaching Assistant, Program Monitoring, Evaluation, and Research Methods

Kigali, Rwanda

Spring 2017, 2018

D-tree International

Instructor, Data Analysis and Stata Software Training Course

Zanzibar, Tanzania

Summer 2017

McGill University

Teaching Assistant, Probability

Teaching Assistant, Statistics

Montreal, QC

Fall 2010, 2011

Spring 2012

ACADEMIC CONSULTING EXPERIENCE

Bridge to Health USA	May 2019 – Present
Planned Parenthood League of Massachusetts	August 2017 – Present
D-tree International, Tanzania	May 2017 – Present
Department of OB/GYN/RS, University of Pittsburgh School of Medicine	April 2018 – March 2019

INDUSTRY EXPERIENCE

ZS Associates	Evanston, IL
<i>Business Associate</i>	September 2012 – July 2014

PROFESSIONAL SERVICE

JOURNAL PEER REVIEWER

Annals of Global Health
BMJ Open
Biometrics
Epidemiology
Journal of Causal Inference
Statistical Methods in Medical Research

UNIVERSITY ACTIVITY

<i>Mentor</i> , Pipelines into Biostatistics Summer Program, Harvard T.H. Chan School of Public Health	2018
<i>Student Committee Chair</i> , Department of Biostatistics, Harvard T.H. Chan School of Public Health	2018
<i>Organizer</i> , HIV Working Group, Department of Biostatistics, Harvard T.H. Chan School of Public Health	2017