

Contact Information	Department of Mathematics & Statistics Lederle Graduate Research Tower 1336 University of Massachusetts Amherst, MA 01003-9305	<i>Phone:</i> (413) 577-9781 <i>E-mail:</i> hmichael@math.umass.edu <i>Website:</i> https://haben-michael.github.io
Education	Ph.D., Statistics, Stanford University, 2017 Ph.D. Minor, Computer Science Dissertation: Evaluating Diagnostics Under Dependency Constraints Advisors: Lu Tian, Ingram Olkin J.D., Yale Law School, 2010 B.S., Mathematics, Stanford University, 2004	
Employment	Department of Mathematics & Statistics, University of Massachusetts Assistant Professor Sept. 2019–present Department of Statistics, The Wharton School, University of Pennsylvania Post-doctoral Research Associate Sept. 2017–Sept. 2019 Advisor: Eric Tchetgen Tchetgen Wachtell, Lipton, Rosen & Katz Corporate Associate Sept. 2010–June 2012	
Research Interests	Causal inference Diagnostic assessment Meta-analysis Longitudinal data analysis Applications to HIV drug trials	

Publications

Pre-prints and submitted manuscripts

- [1] Alexis Doyle-Connolley and Haben Michael. “Nonparametric estimation of the AUC of an index with estimated parameters”. Submitted. 2024.
- [2] Haben Michael. “Gaffke’s Conjecture on an Exact Confidence Interval for a Bounded Mean”. In progress. 2024.
- [3] Haben Michael. “Testing for a difference in AUCs based on LDA fitted values”. Submitted. 2024.
- [4] Haben Michael. “Inference on the difference of estimated index AUCs under the null”. Submitted. 2024.
- [5] Haben Michael. “The effect of screening for publication bias on the outcomes of meta-analyses”. Under revision at Scandinavian Journal of Statistics. 2024.
- [6] Haben Michael, Angelina Chen, and Lu Tian. “Exact Inference on a Linear Combination of Multinomial Probabilities”. Submitted. 2024.

- [7] Haben Michael, Yifan Cui, and Eric J. Tchetgen Tchetgen. “Efficient and Robust Estimation of Marginal Structural Models for Time-varying Endogenous Treatments”. In progress. 2024.
- [8] Haben Michael and Musie Ghebremichael. “Power Analysis of Common Tests for Publication Bias”. To appear in *Statistica Neerlandica*. 2024.
- [9] Haben Michael and Lu Tian. “The Population and Personalized AUCs for Clustered Data”. Under revision at *Statistica Sinica*. 2024.

Published

- [10] Yifan Cui, Haben Michael, Frank Tanser, and Eric Tchetgen Tchetgen. “Instrumental variable estimation of the marginal structural Cox model for time-varying treatments”. In: *Biometrika* 110.1 (2023), pp. 101–118.
- [11] Haben Michael, Yifan Cui, Scott Lorch, and Eric Tchetgen Tchetgen. “Instrumental Variable Estimation of Marginal Structural Mean Models for Time-Varying Treatment”. In: *Journal of the American Statistical Association* 0.0 (2023), pp. 1–12.
- [12] Haben Michael and Musie Ghebremichael. “A correction to Begg’s test for publication bias”. In: *Communications in Statistics - Theory and Methods* 0.0 (2023), pp. 1–21.
- [13] Musie Ghebremichael and Haben Michael. “Comparison of the binormal and Lehman receiver operating characteristic curves”. In: *Communications in Statistics - Simulation and Computation* 53.2 (2021), pp. 772–785.
- [14] Joseph Makhema et al. “Universal testing, expanded treatment, and incidence of HIV infection in Botswana”. In: *New England Journal of Medicine* 381.3 (2019), pp. 230–242.
- [15] Haben Michael, Suzanne Thornton, Minge Xie, and Lu Tian. “Exact inference on the random-effects model for meta-analyses with few studies”. In: *Biometrics* 75.2 (2019), pp. 485–493.
- [16] Haben Michael, Lu Tian, and Musie Ghebremichael. “The ROC curve for regularly measured longitudinal biomarkers”. In: *Biostatistics* 20.3 (2019), pp. 433–451.
- [17] Eric J. Tchetgen Tchetgen, Haben Michael, and Yifan Cui. *Marginal Structural Models for Time-varying Endogenous Treatments: A Time-Varying Instrumental Variable Approach*. Tech. rep. arXiv:1809.05422. Department of Statistics, The Wharton School, Sept. 2018.
- [18] Haben Michael and Lu Tian. “Discussion of “A risk-based measure of time-varying prognostic discrimination for survival models,” by C. Jason Liang and Patrick J. Heagerty””. In: *Biometrics* 73.3 (2017).
- [19] Abraar Karan, Prashanth Somasundaram, Haben Michael, Aryan Shayegani, and Hylton Mayer. “The effect of multimedia interventions on the informed consent process for cataract surgery in rural South India”. In: *Indian Journal of Ophthalmology* 62.2 (2014), p. 171.

Work on publications [14]–[19] was all or primarily completed prior to my employment at the University of Massachusetts.

Department Service	Climate Committee, member	2023–24, 2021–22, 2020–21
	Statistics and Probability Seminar Series, co-chair	2021–22, 2020–21, 2019–20
	Statistics Graduate Admissions, chair	2023–24
	Statistics Graduate Admissions, member	2021–22
	Tenure-track Faculty Search Committee, member	2022–23
	Permanent Lecturer Search Committee, member	2021–22
	VAP Search, Statistics subcommittee chair	2022–23
	Liaison to the Five Colleges Statistics Group	2019–2023

Professional Service	Student Award Committee, New England Statistics Society	2024
	Organizer, Special Session on Recent Advances in Causal Inference I, II, and III, AMS Sectional Meeting, Amherst, MA	2022
	Ad-hoc Reviewer for <i>The American Statistician</i> , <i>Journal of the Royal Statistical Society Series B and C</i> , <i>Biometrics</i> , <i>Electronic Journal of Statistics</i> , <i>Statistics in Medicine</i> , <i>Statistical Methods in Medical Research</i> , <i>Biometrical Journal</i>	