

# FAN BU

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<https://fanbu1995.github.io>

## PROFESSIONAL AFFILIATIONS

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### Tenure-track Assistant Professor

Jan 2024 - present

Department of Biostatistics, University of Michigan - Ann Arbor

### Postdoctoral Scholar

Aug 2021 - Dec 2023

Department of Biostatistics, University of California - Los Angeles

### Visiting Scholar

Sept 2022 - Nov 2022

Simons Institute, University of California - Berkeley

## EDUCATION

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### Department of Statistical Science, Duke University

2017 - 2021

Ph.D. in Statistics; Dissertation: Stochastic Process Models on Dynamic Networks

### School of Mathematical Sciences, Peking University

2013 - 2017

B.S. in Mathematics and Applied Mathematics

## PUBLICATIONS & PREPRINTS

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### Statistical Methodology:

**F. Bu**, A. E. Aiello, A. Volfovsky, and J. Xu. Stochastic EM algorithm for partially observed stochastic epidemics with individual heterogeneity (2024). *Biostatistics*.

**F. Bu**, J. Kagaayi, M. K. Grabowski, J. Xu, and O. Ratmann. Inferring HIV Transmission Patterns from Viral Deep-Sequence Data via Latent Spatial Poisson Processes (2024). *Biometrics*.

**F. Bu**, M. J. Schuemie, A. Nishimura, L. H. Smith, K. Kostka, T. Falconer, J. A. McLeggon, P. B. Ryan, G. Hripcsak, and M. A. Suchard. Bayesian Safety Surveillance with Adaptive Bias Correction (2023). *Statistics in Medicine*.

M. Schuemie, **F. Bu**, A. Nishimura and M. Suchard. Adjusting for Both Sequential Testing and Systematic Error in Safety Surveillance using Observational Data: Empirical Calibration and MaxSPRT (2023). *Statistics in Medicine*.

**F. Bu**, A. E. Aiello, J. Xu, and A. Volfovsky. Likelihood-based Inference for Partially Observed Epidemics on Dynamic Networks (2020). *Journal of the American Statistical Association* (Winner of 2020 ASA SBSS Student Paper Award).

**F. Bu**, S. Xu, K. Heller, and A. Volfovsky. SMOGS: Social Network Metrics of Game Success (2019). *The 22nd International Conference on Artificial Intelligence and Statistics (AISTATS)*.

W. Zhang, **F. Bu**, D. Owen-Oas, K. Heller, and X. Zhu. Who Started It? Identifying Root Sources in Textual Conversation Threads (2018). *arXiv:1809.03648*.

### Scientific & Collaborative (selected):

D. Morales, **F. Bu**, B. Viernes, [...], and M. A. Suchard. Risk of thyroid tumours with glucagon-like peptide-1 receptor agonists: international cohort study (2024). *Under revisions for JAMA Internal Medicine*.

R. Khera, A. Aminorroaya, L. S. Dhingra, P. M. Thangaraj, A. P. Camargos, **F. Bu**, [...], and M. A. Suchard. Comparative Effectiveness of Second-line Antihyperglycemic Agents for Cardiovascular

Outcomes: A Large-scale, Multinational, Federated Analysis of the LEGEND-T2DM Study (2024). *Journal of the American College of Cardiology*.

T. V. Anand, **F. Bu**, M. J. Schuemie, M. A. Suchard, and G. Hripcsak. Comparative safety and effectiveness of angiotensin converting enzyme inhibitors and thiazides and thiazide-like diuretics under strict monotherapy (2024). *Journal of Clinical Hypertension*.

F. Arshad, M. J. Schuemie, **F. Bu**, [...], and M. A. Suchard. Serially Combining Epidemiological Designs Does Not Improve Overall Signal Detection in Vaccine Safety Surveillance (2023). *Drug Safety*.

## Awards and Honors

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OHDSI Titan Award for Methodological Research.	<i>October 2022</i>
Mentorship of Excellence award for 2022 UCLA B.I.G. summer research program.	<i>August 2022</i>
ISBA World Meeting travel award.	<i>June 2022</i>
Duke CFAR Fall Retreat Best Poster Award.	<i>October 2020</i>
ASA SBSS Student Paper Award; JSM travel award.	<i>August 2020</i>
Honorable Mention for Ph.D. Teaching Assistant for the Year.	<i>May 2020</i>
Women in Machine Learning Workshop (WiML) travel award.	<i>December 2017</i>

## PROFESSIONAL SERVICE

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Associate Chair for <i>ENAR Social Media Committee</i>	<i>September 2023 - December 2024</i>
Program Chair for <i>the junior section of the International Society for Bayesian Analysis (j-ISBA)</i> .	<i>January 2022 - December 2023</i>

## Invited Talks and Presentations

### Since January 2024:

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Invited talk at the UM Statistics student seminar (scheduled).	<i>November 2024</i>
Invited talk at the 2024 International Day of Women in Statistics and Data Science (IDWSDS) Conference.	<i>October 2024</i>
Contributed talk at ISBA World Meetings 2024.	<i>July 2024</i>
Invited talk at Ecosta 2024.	<i>July 2024</i>
Invited talk at the Online Seminar on Spatial and spatio-temporal Point processes and beyond (OSSP).	<i>April 2024</i>
Invited talk at the Statistical Methods for Infectious Diseases Across Scales Workshop (by Penn State University).	<i>April 2024</i>
Recent publications highlight talk at OHDSI community meeting.	<i>March 2024</i>
Invited talk at ENAR 2024.	<i>March 2024</i>