Heejun Shin

CONTACT	Department of Biostatistics	*Email:* *heejunshin@hsph.harvard.edu*
	Harvard T.H. Chan School of Public Health	*Webpage:* *hshin111.github.io*
	Building 2 Room 435	
	655 Huntington Avenue	
	Boston, MA 02115	

INTERESTS   Causal Inference, Bayesian Modeling, High-dimensional Inference, Environmental Statistics

EMPLOYMENT

Postdoctoral Research Fellow, Harvard University   2024–present
Mentor: Professor Francesca Dominici

Research Assistant, University of Florida   2021–2024
Mentor: Professor Joseph Antonelli

EDUCATION

Ph.D. in Statistics, University of Florida   2024
Thesis: Causal Inference with Bayesian Modeling for Challenging Environmental Health Problems
Advisior: Professor Joseph Antonelli

B.S. in Applied Statistics, Konkuk University   2019
Ranked first in class

PUBLICATIONS & PREPRINTS

Shin, H., Linero, A., Audirac, M., Irene, K., Braun, D., and Antonelli, J. (2024+). Treatment effect heterogeneity and importance measures for multivariate continuous treatments. arXiv:2404.09126. *Under Revision* [Link]

Shin, H., Braun, D., Irene, K., and Antonelli, J. (2023+). A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments. arXiv:2305.14194. [Link]

Shin, H. and Antonelli, J. (2023). Improved inference for doubly robust estimators of heterogeneous treatment effects. *Biometrics*, 79(4): 3140–3152. [Journal][arXiv]

HONORS & AWARDS

Early Career Paper Award, American Statistical Association Biometrics Section   2024
Kenneth and Janet Keene Endowed Dissertation Fellowship, College of Liberal Arts and Sciences, University of Florida   2024
Mark CK Yang Student Research Award, UF Joint Statistics and Biostatistics Workshop   2023
Boyd Harshburger Travel Award funded by National Science Foundation, The Southern Regional Council on Statistics   2022
The John Van Ryzin Award for the best student paper of the year, International Biometric Society Eastern North American Region   2022
Distinguished Student Paper Award, International Biometric Society Eastern North American Region   2022
College of Liberal Arts and Sciences Graduate Student Travel Award, University of Florida
- Joint Statistical Meetings   2023
- Eastern North American Region Spring Meeting, Joint Statistical Meetings   2022
The President's Award for an outstanding graduating undergraduate student, Korean Statistical Society   2019
Academic Excellence Scholarship
- Chungbuk Human Resource Development Foundation   2018
- The South Korean National Agricultural Cooperative Federation   2018
- Konkuk University   2013-2018

PRESENTATIONS

Seminar talk. "Treatment effect heterogeneity and importance measures for multivariate continuous treatments" *Konkuk University*. Seoul, Korea 2024.

Contributed talk (as an Early Career Paper Award recipient). "Treatment effect heterogeneity and importance measures for multivariate continuous treatments" *Joint Statistical Meetings*. Portland, OR. 2024.

Seminar talk. "Improved inference for doubly robust estimators of heterogeneous treatment effects" *WebENAR*. Virtual 2024.

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *Bayesian Young Statisticians Meeting*. Virtual. 2023.

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *UF Joint Statistics and Biostatistics Workshop*. Gainesville, FL. 2023.

Seminar talk. "Identifying Interactions between Covariates and Continuous Exposures via Targeted Smoothing" *UFSTAT Student Seminar Series*. Gainesville, FL. 2023.

Contributed talk. "A spatial interference approach to account for mobility in air pollution studies with multivariate continuous treatments" *Joint Statistical Meetings*. Toronto, Canada. 2023.

Contributed poster. "Causal Effects of Continuous Exposures in the Presence of Spatial Interference: the Effects of Air Pollution on Public Health." *American Causal Inference Conference*. Austin, TX. 2023.

Contributed poster. "Improved inference for doubly robust estimators of heterogeneous treatment effects." *The Southern Regional Council on Statistics Summer Research Conference*. Jekyll Island, GA. 2022.

Contributed talk. "Improved inference for doubly robust estimators of heterogeneous treatment effects." *Joint Statistical Meetings*. Washington, D.C. 2022.

Contributed talk (as the John Van Ryzin Award winner). "High-dimensional and nonparametric Bayesian methodology for treatment effect heterogeneity." *Eastern North American Region Spring Meeting*. Houston, TX. 2022.

TEACHING EXPERIENCE	**Instructor**, University of Florida STA3024 - Introduction to Statistics II	2023
	Teaching Assistant, University of Florida	2019–2023
	STA 3024 - Introduction to Statistics II	
	STA 4241 - Statistical Learning	
	STA 4321 - Introduction to Probability	
	STA 4322 - Introduction to Statistical Theory	
	STA 4502 - Nonparametric Statistical Methods	
	STA 6166 - Statistical Methods in Research	

SERVICE	Organizer, *UFSTAT Student Seminar Series*, Department of Statistics, University of Florida	2022-2023
	Graduate Mentor, *Statistics Undergraduate Research Experience*, SRCoS	2022
	Journal Referee, *PeerJ: life and environment*	

REFERENCES	**Dr. Joseph Antonelli** Assistant Professor of Statistics University of Florida 206 Griffin-Floyd Hall, P.O. Box 118545 Gainesville, FL 32611-8545 jantonelli@ufl.edu • +1 (352) 273-4638	**Dr. Francesca Dominici** Clarence James Gamble Professor of Biostatistics, Population, and Data Science Harvard T.H. Chan School of Public Health 655 Huntington Avenue, SPH2, 4th Floor Boston, Massachusetts, 02115 fdominic@hsph.harvard.edu • + 1 (410) 258-5886

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