Yangjianchen Xu

Department of Statistics and Actuarial Science University of Waterloo 200 University Avenue West Waterloo, ON N2L 3G1, Canada

Phone: (919) 265-8371 E-Mail: yangjc@uwaterloo.ca

Website: https://yangjc-xu.github.io

Education

2024 Ph.D. in Biostatistics, University of North Carolina at Chapel Hill
2019 B.S. in Statistics, Peking University

Professional Experience

2024-present	Assistant Professor, Department of Statistics and Actuarial Science, University of
	Waterloo
2019–2024	Graduate Research Assistant, Department of Biostatistics, University of North Carolina at Chapel Hill

Awards & Honors

2024	ICSA Student Paper Honorable Mention
	International Chinese Statistical Association (ICSA)
2024	Delta Omega Honorary Society in Public Health Inductee
	Delta Omega
2024	SPH Student Travel Expendable Travel Award
	Department of Biostatistics, University of North Carolina at Chapel Hill
2024	Distinguished Student Paper Award
	International Biometric Society, Eastern North American Region (ENAR)
2023	Student Paper Award
	Lifetime Data Science (LiDS) Section, ASA
2023	Gillings Global Health Endowment Scholarship
	Department of Biostatistics, University of North Carolina at Chapel Hill
2023	Graduate Student Transportation Grant
	The Graduate School, University of North Carolina at Chapel Hill
2017	POSCO Asia Fellowship
	School of Mathematical Sciences, Peking University
2017	Elite Undergraduate Program of Applied Mathematics and Statistics
	School of Mathematical Sciences, Peking University
2017	Elite Undergraduate Program of Applied Mathematics and Statistics

Publications

Google Scholar

Peer-Reviewed Articles

- 1. Lin, D. Y.*, Xu Y.*, Gu, Y., Sunny, S., Moore, Z., Zeng, D. Impact of booster vaccination interval on SARS-CoV-2 infection, hospitalization, and death. *International Journal of Infectious Diseases* **145**, 107084, (2024).
- 2. Lin, D. Y., Du, Y., Xu, Y., Paritala, S., Donahue, M., Maloney, P. Durability of XBB.1.5 Vaccines against Omicron Subvariants. *New England Journal of Medicine* **399**(22), 2124–2127, (2024).
- 3. **Xu, Y.**, Zeng, D., Lin, D. Y. Proportional rates models for multivariate panel count data. *Biometrics* **80**(1), ujad011, (2024).
- 4. Lin, D. Y., Du, Y., Xu, Y., Paritala, S., Donahue, M., Maloney, P. Effectiveness of XBB.1.5 Vaccines Against Omicron Subvariants. *Medical Research Archives* 12(8), (2024).
- 5. **Xu, Y.**, Zeng, D., Lin, D. Y. Marginal proportional hazards models for multivariate intervalcensored data. *Biometrika* **110**(3), 815–830, (2023).
- 6. Lin, D. Y.*, Xu, Y.*, Gu, Y.*, Zeng, D., Wheeler, B., Young, H., Sunny, S., Moore, Z. Effects of COVID-19 vaccination and previous SARS-CoV-2 infection on Omicron infection and severe outcomes in children under 12 years of age: an observational cohort study. *The Lancet Infectious Diseases* 23(11), 1257–1265, (2023).
- 7. Lin, D. Y., **Xu, Y.**, Gu, Y., Zeng, D., Sunny, S., Moore, Z. Durability of bivalent boosters against Omicron subvariants. *New England Journal of Medicine* **388**(19), 1818–1820, (2023).
- 8. Lin, D. Y., **Xu, Y.**, Gu, Y., Zeng, D., Wheeler, B., Young, H., Sunny, S., Moore, Z. Effectiveness of bivalent boosters against severe Omicron infection. *New England Journal of Medicine* **388**(8), 764–766, (2023).
- 9. Paritala, S., **Xu, Y.**, Du, Y., Donahue, M., Maloney, P., Lin, D. Y. Effectiveness of Bivalent Boosters Over Nine and Half Months. *Journal of Biotechnology and Biomedicine* **6**(4), 585–589, (2023).
- 10. Lin, D. Y., **Xu, Y.**, Zeng, D., Sunny, S. A Cost-Benefit Analysis of Bivalent Covid-19 Vaccines. *Journal of Biotechnology and Biomedicine* **6**(4), 551–553, (2023).
- 11. Lin, D. Y., Gu, Y., Xu, Y., Wheeler, B., Young, H., Sunny, S., Moore, Z., Zeng, D. Association of primary and booster vaccination and prior infection with SARS-CoV-2 infection and severe COVID-19 outcomes. *JAMA* 328(14), 1415–1426, (2022).
- 12. Lin, D. Y., Gu, Y., Xu, Y., Zeng, D., Wheeler, B., Young, H., Sunny, S., Moore, Z. Effects of vaccination and previous infection on Omicron infections in children. *New England Journal of Medicine* **387**(12), 1141–1143, (2022).

Presentations

1. Checking the Cox Regression Model with Interval-Censored Data. Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong, China. Nov. 2024.

^{*} Equal contribution

- 2. Checking the Cox Regression Model with Interval-Censored Data. 2024 ICSA Applied Statistics Symposium, Nashville, USA. June 2024.
- 3. Proportional Rates Models for Multivariate Panel Count Data. ENAR 2024 Spring Meeting, Baltimore, USA. Mar. 2024.
- 4. Checking the Cox Regression Model with Interval-Censored Data. Department of Biostatistics and Data Science, UTHealth School of Public Health, Houston, USA. Feb. 2024.
- 5. Checking the Cox Regression Model with Interval-Censored Data. Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Canada. Feb. 2024.
- 6. *Checking the Cox Regression Model with Interval-Censored Data.* Department of Statistics, University of California, Riverside, USA. Feb. 2024.
- 7. Proportional Rates Models for Multivariate Panel Count Data. Joint Statistical Meeting, Toronto, Canada. Aug. 2023.
- 8. *Proportional Rates Models for Multivariate Panel Count Data.* Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, USA. Apr. 2023.
- 9. Marginal Proportional Hazards Models for Multivariate Interval-Censored Data. ENAR 2023 Spring Meeting, Nashville, USA. Mar. 2023.
- 10. *Marginal Proportional Hazards Models for Multivariate Interval-Censored Data.* Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, USA. Nov. 2022.

Teaching

University of Waterloo

STAT 231 Statistics (Winter 2025)

STAT 330 Mathematical Statistics (Fall 2025)

Software

R packages

DOVE3: Durability of Effectiveness of Vaccination and Prior Infection

Professional Memberships

- American Statistical Association (ASA)
- Institute of Mathematical Statistics (IMS)
- Eastern North American Region (ENAR) of International Biometric Society
- International Chinese Statistical Association (ICSA)
- Statistical Society of Canada (SCC)

Professional Service

- Department service: Statistics and Biostatistics Seminar Committee (2024), ASA DataFest Committee (2025)
- Journal reviewer: Biometrics, Annals of Applied Statistics, Statistics in Biosciences, CHEST
- Conference reviewer: International Conference on Learning Representations (ICLR 2024, 2025), Conference on Neural Information Processing Systems (NeurIPS 2023, 2024), International Conference on Machine Learning (ICML 2023, 2024), AAAI Conference on Artificial Intelligence (AAAI 2025)
- Conference session chair: ENAR (2025)

• Conference session organizer: ICSA Applied Statistics Symposium (2025)

Last updated: April 11, 2025