

Yangjianchen Xu

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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

Research Grants

2025–2030 NSERC Discovery Grant (RGPIN-2025-04055)
2025 NSERC Discovery Launch Supplement (DGEGR-2025-00463)

Publications

[Google Scholar](#)

* Equal contribution

1. **Xu, Y.**, Zeng, D., Lin, D. Y. Checking the Cox proportional hazards model with interval-censored data. *Journal of the American Statistical Association*, in press (2025+).
2. Yang, X., Shi, F., Chen, S., Liu, Z., **Xu, Y.**, Poland, G. A., Weissman, S., Olatosi, B., Zhang, J., Li, X. Effects of COVID-19 vaccination and past SARS-CoV-2 infection on subsequent COVID-19 infection in people with HIV. *Journal of Microbiology, Immunology and Infection*, in press (2025+).
3. 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).
4. 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).
5. **Xu, Y.**, Zeng, D., Lin, D. Y. Proportional rates models for multivariate panel count data. *Biometrics* **80**(1), ujad011, (2024).
6. 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).
7. **Xu, Y.**, Zeng, D., Lin, D. Y. Marginal proportional hazards models for multivariate interval-censored data. *Biometrika* **110**(3), 815–830, (2023).
8. 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).
9. 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).
10. 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).
11. 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).
12. 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).
13. 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).

14. 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*. 2025 ICSA Applied Statistics Symposium, Storrs, USA. June 2025.
2. *Checking the Cox Regression Model with Interval-Censored Data*. 2025 Lifetime Data Science Conference, New York, USA. May 2025.
3. *Checking the Cox Regression Model with Interval-Censored Data*. 2025 SSC Annual Meeting, Saskatoon, Canada. May 2025.
4. *Checking the Cox Regression Model with Interval-Censored Data*. Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong, China. Nov. 2024.
5. *Checking the Cox Regression Model with Interval-Censored Data*. 2024 ICSA Applied Statistics Symposium, Nashville, USA. June 2024.
6. *Proportional Rates Models for Multivariate Panel Count Data*. ENAR 2024 Spring Meeting, Baltimore, USA. Mar. 2024.
7. *Checking the Cox Regression Model with Interval-Censored Data*. Department of Biostatistics and Data Science, UTHealth School of Public Health, Houston, USA. Feb. 2024.
8. *Checking the Cox Regression Model with Interval-Censored Data*. Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Canada. Feb. 2024.
9. *Checking the Cox Regression Model with Interval-Censored Data*. Department of Statistics, University of California, Riverside, USA. Feb. 2024.
10. *Proportional Rates Models for Multivariate Panel Count Data*. Joint Statistical Meeting, Toronto, Canada. Aug. 2023.
11. *Proportional Rates Models for Multivariate Panel Count Data*. Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, USA. Apr. 2023.
12. *Marginal Proportional Hazards Models for Multivariate Interval-Censored Data*. ENAR 2023 Spring Meeting, Nashville, USA. Mar. 2023.
13. *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

Instructor, University of Waterloo

STAT 231 Statistics (Winter 2025)
STAT 330 Mathematical Statistics (Fall 2025)

Teaching Assistant, University of North Carolina at Chapel Hill

BIOS 780	Theory and Methods for Survival Analysis (Fall 2023)
BIOS 761	Advanced Probability and Statistical Inference (II) (Spring 2021)
BIOS 760	Advanced Probability and Statistical Inference (I) (Fall 2021)
BIOS 735	Statistical Computing - Basic Principles and Applications (Spring 2022)
BIOS 680	Introductory Survivorship Analysis (Spring 2022)
BIOS 611	Introduction to Data Science (Fall 2022)

Software

R packages

DOVE3: Durability of Effectiveness of Vaccination and Prior Infection

Professional Memberships

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

Professional Service

• Departmental Service

- ASA DataFest Committee (2025)
- Statistics and Biostatistics Seminar Committee (2024)

• Editorial and Reviewing Service

- Statistical Reviewer: *CHEST* (2025–present)
- Journal Reviewer: *Journal of the Royal Statistical Society Series B*, *Biometrics*, *Annals of Applied Statistics*, *Statistics in Biosciences*, *CHEST*
- Conference Reviewer: International Conference on Learning Representations (ICLR), Conference on Neural Information Processing Systems (NeurIPS), International Conference on Machine Learning (ICML), AAAI Conference on Artificial Intelligence (AAAI)

• Conference Service

- Session Chair: ENAR (2025)
- Session Organizer: ICSA Applied Statistics Symposium (2025)
- Reviewer: ICSA Student Paper Competition (2025)

Last updated: June 23, 2025