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Education Background

2014—2018	Mathematics and Applied Mathematics, BS School of Mathematical Sciences, Peking University
2015—2018	Economics (double degree), BE National School of Development, Peking University
2018—2023	Statistics, PhD Candidate, Supervised by Xiao-Hua Zhou School of Mathematical Sciences, Peking University

Research Interests

- 1) Causal inference in broken randomized experiments.
- 2) Semi-competing risks
- 3) Observational studies

Awards

2017	Social Work Award of Peking University
2019	Research Excellence Award of Peking University
2020	The 28th “Challenge Cup” of Peking University, Outstanding Winner in interdisciplinary competition, and Meritorious Winner in science competition
2020	Academic Innovation Award and Research Excellence Award of Peking University
2020	Peking University President’s Scholarship
2021	“Three good” student of Peking University
2021	Peking University President’s Scholarship
2022	The 30th “Challenge Cup” of Peking University, Meritorious Winner in science competition
2022	Peking University President’s Scholarship

Publications

- [1] **Deng Y**, Zhou X-H. Methods to Control the Empirical Type I Error Rate in Average Bioequivalence Tests for Highly Variable Drugs. *Statistical Methods in Medical Research*. 2019.
- [2] You C, **Deng Y[#]**, Hu W, Sun J, Lin Q, Zhou F, Pang CH, Zhang Y, Chen Z, Zhou X-H. Estimation of the Time-Varying Reproduction Number of COVID-19 Outbreak in China. *International Journal of Hygiene and Environmental Health*. 2020.
- [3] **Deng Y**, You C, Liu Y, Qin J, Zhou X-H. Estimation of Incubation Period and Generation Time Based on Observed Length-biased Epidemic Cohort with Censoring for COVID-19 Outbreak in China. *Biometrics*. 2020.
- [4] **Deng Y**, Chen F, Li Y, Qian K, Wang R, Zhou X-H. A Powerful Test for the Maximum Treatment Effect in Thorough QT/QTc Studies. *Statistics in Medicine*. 2021.
- [5] **Deng Y**, Zhou X-H. Caution about truncation-by-death in clinical trial statistical analysis: a lesson from Remdesivir. *China CDC Weekly*. 2021.
- [6] He Y, **Deng Y[#]**, You C, Zhou X-H. Equivalence Tests for Ratio of Means in Bioequivalence Studies under Crossover Design. *Statistical Methods in Medical Research*. 2022.
- [7] **Deng Y**, Chang Y, Zhou X-H. Causal Inference with Truncation-by-Death and Confounded Principal Strata. *ArXiv preprint*. 2022.
- [8] Wu P, Li H[#], **Deng Y**, Hu W, Dai Q, Dong Z, Sun J, Zhang R, Zhou X-H. On the Opportunity of Causal Learning in Recommendation Systems: Foundation, Estimation, Prediction and Challenges. *IJCAI Survey Track*. 2022.
- [9] **Deng Y**, Wang Y, Zhan X, Zhou X-H. Separable Pathway Effects of Semi-competing Risks via Multi-State Models. *ArXiv Preprint*. 2023.

Ongoing Papers

- [1] **Deng Y**, Guo Y, Zhou X-H. Causal Pathways of Truncation-by-Death Using Sure Outcomes of Random Events Models. *Manuscript*.
- [2] Wang Y, **Deng Y[#]**, Zhou X-H. Causal Inference for Time-to-Event Data with A Cured Subpopulation. *Submitted*.
- [3] **Deng Y**, Han S[#], Kvist K, Ravn H, Zhou X-H. Causal Estimands and Inference in Randomized Controlled Trials with Time-to-Event Outcomes. *Manuscript*.
- [4] **Deng Y**, Wang Y, Zhou X-H. Direct and Indirect Effects in the presence of Semi-competing risks. *Manuscript*.

Software

- [1] Wu P, Hu W, Deng Y, Zhou X-H. CSTE: Covariate Specific Treatment Effect Curve. CRAN: Package CSTE. 2021.

Academic Activities

Anonymous reviewers for

(1) *Statistics in Medicine*, (2) *Biostatistics & Epidemiology*, (3) *Journal of Causal Inference*.

Teacher assistant in

(1) Causal inference, (2) Intermediate econometrics, (3) Mathematical statistics, (4) Probability and statistics, (5) Stochastic process, (6) Linear algebra.