

## Education

### Sun Yat-sen University

Shenzhen, China

PH.D. CANDIDATE OF EPIDEMIOLOGY AND BIOSTATISTICS

Sep. 2022 - Present

- Advisor: [Siyang Liu](#), [Huachun Zou](#)
- Research fields: Biostatistics, artificial intelligence, clinical epidemiology, casual inference, human statistical genetics, and bioinformatics

### Harbin Medical University

Harbin, China

M.SC. OF EPIDEMIOLOGY AND BIOSTATISTICS

Sep. 2018 - Jun. 2021

- Advisor: Yan Liu
- Research fields: Biostatistics, data science, and machine learning

### Harbin Medical University

Harbin, China

B.SC. OF PREVENTIVE MEDICINE

Sep. 2013 - Jun. 2018

- Courses: Epidemiology, and biostatistics

### Sun Yat-sen University

Shenzhen, China

INTERNATIONAL SUMMER SCHOOL

Jul. 2025 - Aug. 2025

- Courses: Health medical big data and intelligent statistics

## Work Experience

### MacroStat (China) Clinical Research Co., Ltd. - Tigermed

Shanghai, China

STATISTICIAN I

Jul. 2021 - Mar. 2022

- Specialized in statistical methods and SAS programming in clinical trials

## Publications

### REPRESENTATIVE JOURNAL ARTICLES [6/34] (\* FOR CO-FIRST AUTHOR)

1. H. Zou, **Z. Lu\***, W. Weng, L. Yang, L. Yang, X. Leng, J. Wang, Y.-F. Lin, J. Wu, L. Fu, X. Zhang, Y. Li, L. Wang, X. Wu, X. Zhou, T. Tian, L. Huang, C. M. Marra, B. Yang, T.-C. Yang, and W. Ke. "Diagnosis of neurosyphilis in HIV-negative patients with syphilis: development, validation, and clinical utility of a suite of machine learning models". *eClinicalMedicine* 62 (2023), p. 102080. doi: [10.1016/j.eclinm.2023.102080](https://doi.org/10.1016/j.eclinm.2023.102080). (Advisor as first author, JCR Q1, IF 17.033).
2. **Z. Lu**, B. Dong, H. Cai, T. Tian, J. Wang, L. Fu, B. Wang, W. Zhang, S. Lin, X. Tuo, J. Wang, T. Yang, X. Huang, Z. Zheng, H. Xue, S. Xu, S. Liu, P. Sun, and H. Zou. "Identifying Data-Driven Clinical Subgroups for Cervical Cancer Prevention With Machine Learning: Population-Based, External, and Diagnostic Validation Study". *JMIR Public Health Surveill* 11 (2025), e67840. doi: [10.2196/67840](https://doi.org/10.2196/67840). (JCR Q1, IF 3.5).
3. B. Dong, **Z. Lu\***, T. Yang, J. Wang, Y. Zhang, X. Tuo, J. Wang, S. Lin, H. Cai, H. Cheng, X. Cao, X. Huang, Z. Zheng, C. Miao, Y. Wang, H. Xue, S. Xu, X. Liu, H. Zou, and P. Sun. "Development, validation, and clinical application of a machine learning model for risk stratification and management of cervical cancer screening based on full-genotyping hrHPV test (SMART-HPV): a modelling study". *The Lancet Regional Health – Western Pacific* 55 (2025). doi: [10.1016/j.lanwpc.2025.101480](https://doi.org/10.1016/j.lanwpc.2025.101480). (JCR Q1, IF 7.6).
4. **Z. Lu**, L. Fu, L. Yang, T. Tian, Y. Gao, X. Meng, and H. Zou. "Hesitancy to Undergo SARS-CoV-2 Rapid Antigen Testing in China: Nationwide Cross-sectional Study". *JMIR Public Health Surveill* 9 (2023), e43555. doi: [10.2196/43555](https://doi.org/10.2196/43555). (JCR Q1, IF 14.557).
5. **Z. Lu**, B. Dong, P. Yao, Y. Huang, L. Fu, B. Wang, X. Huang, X. Mao, S. Xu, S. Liu, P. Sun, and H. Zou. "Characteristics of Human Papillomavirus Prevalence and Infection Patterns Among Women Aged 35–65 in Fujian Province, China: A Nine-Year Retrospective Observational Study". *Journal of Medical Virology* 97.2 (2025), e70238. doi: <https://doi.org/10.1002/jmv.70238>. (JCR Q1, IF 6.8).
6. L. Yang, **Z. Lu\***, J. Bian, F. Li, and H. Zou. "Association between chronic viral infection-related hospitalization and risk of cardiovascular disease: A population-based cohort study". *Journal of Medical Virology* 96.1 (2024), e29350. doi: <https://doi.org/10.1002/jmv.29350>. (JCR Q1, IF 12.7).

SOFTWARE PACKAGES

1.

**Z. Lu.** “omixVizR: A Toolkit for Omics Data Visualization”. *Software* (2025). DOI: <https://doi.org/10.32614/CRAN.package.omixVizR>. URL: <https://cran.r-project.org/package=omixVizR>. (R package version 1.1.3).

2.

**Z. Lu.** “omixvizpy: A Python package for omics data visualization”. *Software* (2025). URL: <https://github.com/Leslie-Lu/omixvizpy>. (Python package version 0.1.2).

Patents

Non-therapeutic clinical diagnosis system for neurological syphilis based on machine learning, LU504466 (rank 1/1)

2023

Honors & Awards

2024	National Scholarship, China	Nov.
2024	Presidential Scholarship, Sun Yat-sen University	Sep.
2024	Cover Article, Journal of Medical Virology	Vol. 96, No. 1, Jan.
2023	First Prize Scholarship, Sun Yat-sen University	Sep.
2019	First Prize Scholarship, Harbin Medical University	Dec.

Teaching Experience

2022-24	Undergraduate Teaching Assistant, Epidemiology	Sun Yat-sen University
2023	Undergraduate Teaching Assistant, English for Public Health	Sun Yat-sen University
2018-19	Undergraduate Teaching Assistant, Biostatistics	Harbin Medical University

Service & Outreach

WeChat Official Account: Biostatistics Education (@luzhen-biostat, ~8k subscribers)

OWNER & CREATOR

- Created content on biostatistics, artificial intelligence, and statistical programming

Academic Reviewer

SERVED AS PEER REVIEWER

- Completed the peer-review process by providing the review reports for academical journals

Academic Advising

PROVIDED CONSULTATION IN BIOSTATISTICAL AND EPIDEMIOLOGY

- Mentored graduate and undergraduate students in biostatistics and academic writing

Skills

Programming Languages	R, SAS, Python, SQL; Git, Bash/Shell; Markdown, Quarto, LaTeX
IDE	Mandarin (native), English (fluent)
	Visual Studio Code, SAS Enterprise Guide, RStudio, GitHub, Overleaf, PASS