

Ph.D. candidate of Epidemiology and Biostatistics

Shanghai, China

Education

Sun Yat-sen University

Shenzhen China

Ph.D. CANDIDATE IN EPIDEMIOLOGY AND BIOSTATISTICS

Sept. 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

Sept. 2018 - Jun. 2021

M.Sc. in Epidemiology and Biostatistics

· Advisor: Yan Liu

Research fields: Biostatistics, data science, and machine learning

Harbin Medical University

Harbin, China

B.Sc. IN PREVENTIVE MEDICINE

Sept. 2013 - Jun. 2018

· Courses: Epidemiology, and biostatistics

Sun Yat-sen University

Shenzhen, China

INTERNATIONAL SUMMER SCHOOL

• Courses: Health medical big data and intelligent statistics

Jul. 2025 - Aug. 2025

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)

- H. Zou, Z. Lu*, W. Weng, 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. (Advisor as first author, JCR Q1, IF 17.033).
- 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. (JCR O1, IF 3.5).
- 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. DOI: 10.1016/j.lanwpc. 2025.101480. (JCR Q1, IF 7.6).
- 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. (JCR Q1, IF 14.557).
- 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).
- 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

- 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	Sept.
2024	Cover Article, Journal of Medical Virology	Volume 96, Number 1, Jan.
2023	First Prize Scholarship, Sun Yat-sen University	Sept.
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 R, SAS, Python, SQL; Git, Bash/Shell; Markdown, Quarto, LaTeX

Languages Mandarin (native), English (fluent)

IDE Visual Studio Code, SAS Enterprise Guide, RStudio, GitHub, Overleaf, PASS