

Bokai Zhao

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[Bokai Zhao | LinkedIn](#)

EDUCATION

University of Georgia	Athens, GA
Ph.D. candidate in Biostatistics / GPA: 3.91	Aug 2021 – Present
Emory University	Atlanta, GA
M.S.PH. in Biostatistics / GPA: 3.69	Aug 2017 – May 2019
Huazhong University of Science and Technology (HUST)	Wuhan, China
B.S. in Computing Mathematics / GPA:3.44	Sep 2013 – Jun 2017

CERTIFICATES

- SAS Certified Advanced Programmer for SAS 9 Feb 2018
- SAS Certified Base Programmer for SAS 9 Dec 2017

PROFESSIONAL EXPERIENCE

University of Georgia	Athens, GA
<i>Graduate Research Assistant</i>	Aug 2021 – Present
<ul style="list-style-type: none"> • Cooperated with College of Pharmacy in creating robust prediction models for intervenable events <ul style="list-style-type: none"> • Employing data-driven approaches to enhance the predictive performance of the MRC-ICU score • Developing models that utilize the MRC-ICU score alongside other patient data to predict intervenable events • Investigating the causal relationships among intervenable events, CCP interventions, and patient outcomes • Assisted Department of Psychology in research of smoking cessation <ul style="list-style-type: none"> • Comparing two partner-involved FITs (single vs. dual incentives) against a no-treatment control condition via ANOVA, Chisq Test and Bayes Factors • Fitting longitudinal models on feasibility and tolerability measured at the beginning, midpoint and end of study across different treatments 	
<i>Graduate Teaching Assistant</i>	
<ul style="list-style-type: none"> • BIOS 7010 Introductory Biostatistics I 2022 Spring • BIOS 3000 Intermediate Biostatistics for Public Health Science 2021 Fall • BIOS 2010 Elementary Biostatistics 2021 Fall 	
Baim Institute for Clinical Research	Boston, MA
<i>Statistical Programmer / Biostatistician</i>	Aug 2019 – Jul 2021
<ul style="list-style-type: none"> • Program statistical analyses (i.e., tables, listings, figures, and inferential statistical output) using SAS® • Acted as an integral member of project team. Attended project team meetings; worked with biostatisticians, data managers, and project managers • Performed SAS® programming using such techniques as SAS® macro language, advanced data manipulation techniques, and statistical procedures (e.g., PROC GLM, PROC FREQ, PROC REPORT) • Performed quality review of SAS® programs generated by other statistical programmers and biostatisticians. • Reviewed and provided feedback regarding Data Management Plans 	
Emory University	Atlanta, GA
<i>Biostatistical Analyst Intern (School of Medicine)</i>	Jun 2018 – Aug 2018
<ul style="list-style-type: none"> • Collected large data of Red Blood Cell Transfusion and Digestive Tract oxygenation in Preterm infants • Developed reports summarizing data on the primary outcome of interest by writing SAS® macros • Generated plots and estimated failure probability with statistical analysis 	
<i>Graduate Teaching Assistant (School of Public Health)</i>	

- BIOS 510 Probability Theory I

2018 Fall

Peking University Health Science Center

Beijing, China

Biostatistical Analyst Intern cooperated with Pfizer Inc. (NYSE: PFE)

Jun 2016 – Aug 2016

- Collaborated in preparation of the clinical development and sample size calculation under the supervision
- Conducted data pre-processing and visualization; Assisted in statistical analysis of effect of Celebrex using SAS
- Participated in reviewing statistical results in the clinical study report

RESEARCH EXPERIENCE

- **Publications**

Peer-reviewed Journal Publications

1. vanDellen, M. R., Wright, J. W., **Zhao, B.**, Cullinan, C., Beach, S. R., Shen, Y., ... & MacKillop, J. M. (2023). Partner-Involved Financial Incentives for Smoking Cessation in Dual Smoker Couples: A Randomized Pilot Trial. *Nicotine and Tobacco Research*, nta183.
2. Mihatov, N., Secemsky, E. A., Kereiakes, D. J., Steg, P. G., Cutlip, D. E., Kirtane, A. J., Mehran, R., **Zhao, B.**, Song, Y., Gibson, C. M., & Yeh, R. W. (2022). Individualizing Dual Antiplatelet Therapy (DAPT) Duration Based on Bleeding Risk, Ischemic Risk, or Both: An Analysis From the DAPT Study. *Cardiovascular revascularization medicine : including molecular interventions*, 41, 105–112.

Articles Pending Peer Review

1. Liu, Z., Wu, Z., Hu, M., **Zhao, B.**, Zhao, L., Zhang, T., ... & Sikora, A. (2023). Pharmacypt: The AI Pharmacist. arXiv preprint arXiv:2307.10432.
2. Sikora, A., **Zhao, B.**, Kong, Y., Murray, B., & Shen, Y. (2023). Machine learning based prediction of prolonged duration of mechanical ventilation incorporating medication data. medRxiv, 2023-09.

- **Working Papers**

1. Machine learning-based prediction of ICU complications using medication data: a validation study
2. Timely Prediction in ICU Outcomes via Weighted Nested Group LASSO
3. Timely Prediction and Variable Selection in ICU Outcomes via Weighted Nested LASSO and Group Bridge

- **Master Graduate Thesis**

Investigation of Multiple Biomarkers in Predicting Disease Free Survival and Overall Survival among Head and Neck Cancer Patients, 2019

ADDITIONAL SKILLS AND HONORS

Relevant Courses: Regression and ANOVA, Linear and Generalized Linear Models, Cohort Study Design, Case-Control Study Design, Longitudinal Data Analysis, Survival Analysis, Categorical Data Analysis, Clinical Trial

Research: Causal Inference, Machine Learning, Missing Data, LASSO, Functional Data Analysis, Joint Modeling

Data management: SDTM/ADaM

Software & Packages: R (60%), SAS (30%), Python (5%), STATA (5%)

Language: Mandarin and English

Honors: HUST Student Leadership Excellence (Top 4%)