

# CURRICULUM VITAE

Yi Zuo, MPH

## Contact Information

Email: [yi.zuo@vanderbilt.edu](mailto:yi.zuo@vanderbilt.edu)

Website: <https://zuoyi93.github.io>

Google Scholar: <https://scholar.google.com/citations?user=3djXdpYAAAAJ&hl=en>

Address: Department of Biostatistics  
Vanderbilt University School of Medicine  
2525 West End Ave, Ste. 1130  
Nashville, Tennessee 37203, USA

## Education

|               |                      |   |
|---------------|----------------------|---|
| Expected 2022 | PhD in Biostatistics | Vanderbilt University, Advisor: Dr. Jeffrey D Blume |
| 2017          | MPH in Biostatistics | Boston University                                   |
| 2015          | BS in Statistics     | Central Univ. of Finance and Economics, China       |

## Additional Trainings

|      |   |                          |
|------|---|--------------------------|
| 2017 | Summer Institute in Statistics for Big Data | University of Washington |
| 2014 | Longitudinal Data Analysis                  | University of Michigan   |

## Work Experience

|                  |                      |  |
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| 11/2015 – 5/2018 | Lead Biostatistician | Bindu Kalesan lab<br>Boston University |
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## Honors

|      |   |
|------|---|
| 2017 | Travel Award  |
|      | Summer Institute in Statistics for Big Data, University of Washington |
| 2014 | Meritorious Winner  |
|      | Mathematical Contest in Modeling                                      |
| 2013 | Yongjin Research Award  |
|      | Central University of Finance and Economics, China                    |
| 2013 | Research Scholarship  |
|      | Central University of Finance and Economics, China                    |
| 2012 | Outstanding Student Researcher Award                                  |
|      | Central University of Finance and Economics, China                    |

## Teaching Experience

Teaching assistant to Introduction to Study Design August 2021 – Dec. 2021  
Held weekly office hours to answer questions on the design of randomized clinical trials, prospective cohort studies, and case-control studies, among other epidemiological topics

Graded homework for 11 graduate students pursuing Biostatistics PhD/MS degree

Teaching assistant to Contemporary Statistical Inference January 2021 – May 2021  
Held weekly 1-hour lab to demonstrate software implementation of key statistical concepts  
Graded homework for 10 graduate students pursuing Biostatistics PhD/MS degree

Teaching assistant to Modeling and Machine Learning II August 2020 – Dec. 2020  
Designed and coded for six homework on deep learning using Python with GPU capabilities  
Topics included deep convolutional neural network, LSTM time series forecast, ResNet-50 image classification, text classification, and Mask R-CNN object detection/segmentation.  
Graded homework for 30 graduate students pursuing Data Science MS degree

### **Mentee**

Max Rosenthaler First-year medical student October 2017 - May 2018

### **Oral Presentations**

Zuo, Y. (Mar. 17, 2021) Feature Selection by Second-Generation P-Values Can Outperform Oracle Adaptive Lasso. (Session 90) Eastern North American Region International Biometric Society 2021, Virtual

Zuo, Y. (Mar. 23, 2020) An Investigation of Fully Relaxed Lasso and Second-Generation P-Values for High-Dimensional Feature Selection. (Session 24) Eastern North American Region International Biometric Society 2020, Nashville

Zuo, Y. (Nov. 6, 2017) Patterns of injury severity in firearm hospitalizations from 1993 to 2013: A repeated cross-sectional study. (Session 3277.0, Abstract Number 389707) American Public Health Association Annual Meeting & Expo 2017, Atlanta

### **Poster Presentations**

Can Computational Surveillance of Autism Spectrum Disorder Fuel Big-Data Science? International Society for Autism Research 2019, May 2, 2019, Montreal, QC, Canada

### **Original Publications (peer-reviewed)**

Zuo Y, Stewart TG, Blume JD (2021). Variable Selection With Second-Generation P-Values, *The American Statistician*. 2021 Jul 23:1-1.

Zuo Y, Stewart TG, Blume JD. Variable Selection for GLM and Cox models with Second-Generation P-Values. *Biostatistics*. Under review.

Zuo Y, Blume JD. ProSGPV: An R Package for Penalized Regression with Second Generation P-Values. *The R Journal*. Under review.

Kozek K, Wada Y, Sala L, Denjoy I, Egly C, O'Neill MJ, Aiba T, Shimizu W, ..., **Zuo Y**, ..., Makita N, Ishikawa T, Crotti L. Estimating the Post-Test Probability of Long QT Syndrome Diagnosis for Rare KCNH2 Variants. *Circulation: Genomic and Precision Medicine*. 2021 Jul 9.

Banerdt JK, Mateyo K, Yan Y, Liu D, **Zuo Y**, Di Gravio C, Thome JC, Riviello ED, Saylor D, Ely EW, Heimbürger DC. Risk factors for delirium among hospitalized patients in Zambia. *PLoS One*. 2021 Apr 8;16(4):e0249097. doi: 10.1371/journal.pone.0249097. PMID: 33831010.

Janeway MG, Zhao X, Rosenthaler M, **Zuo Y**, Balasubramaniyan K, Poulson M, Neufeld M, Siracuse JJ, Takahashi CE, Allee L, Dechert T. Clinical diagnostic phenotypes in hospitalizations due to self-inflicted firearm injury. *Journal of Affective Disorders*. 2020 Sep 15.

Kalesan B, Zhao S, Poulson M, Neufeld M, Dechert T, Siracuse JJ, **Zuo Y**, Li F. Intersections of firearm suicide, drug-related mortality, and economic dependency in rural America. *Journal of surgical research*. 2020 Dec 1;256:96-102.

Kroncke BM, Smith DK, **Zuo Y**, Glazer AM, Roden DM, Blume JD. A Bayesian method to estimate variant-induced disease penetrance. *PLoS genetics*. 2020 Jun 22;16(6):e1008862.

Kalesan B, **Zuo Y**, Vasani RS, Galea S. Risk of 90-day readmission in patients after firearm injury hospitalization: a nationally representative retrospective cohort study. *Journal of Injury and Violence Research*. 2019 Jan;11(1):65.

Pino EC, **Zuo Y**, Schor SH, Zatwarnicki S, Henderson DC, Borba CP, Milanovic SM, Kalesan B. Temporal trends of co-diagnosis of depression and/or anxiety among female maternal and non-maternal hospitalizations: Results from Nationwide Inpatient Sample 2004–2013. *Psychiatry Research*. 2019 Feb 1;272:42-50.

Vasani RS, **Zuo Y**, Kalesan B. Divergent Temporal Trends in Morbidity and Mortality Related to Heart Failure and Atrial Fibrillation: Age, Sex, Race, and Geographic Differences in the United States, 1991–2015. *Journal of the American Heart Association*. 2019 Apr 16;8(8):e010756.

Bailey HM, **Zuo Y**, Li F, Min J, Vaddiparti K, Prosperi M, Fagan J, Galea S, Kalesan B. Changes in patterns of mortality rates and years of life lost due to firearms in the United States, 1999 to 2016: A joinpoint analysis. *PLoS One*. 2019 Nov 22;14(11).

Siracuse JJ, Farber A, James T, Cheng TW, **Zuo Y**, Kalish JA, Jones DW, Kalesan B. Readmissions after Firearm Injury Requiring Vascular Repair. *Annals of Vascular Surgery*. 2019 Apr 1;56:36-45.

Siracuse JJ, Cheng TW, Farber A, James T, **Zuo Y**, Kalish JA, Jones DW, Kalesan B. Vascular repair after firearm injury is associated with increased morbidity and mortality. *Journal of Vascular Surgery*. 2019 May 1;69(5):1524-31.

**Zuo Y**, Pino EC, Vyliparambil M, Kalesan B. Sex Differences in Early Cardiovascular and All-Cause Hospitalization Outcomes After Surviving Firearm Injury. *American Journal of Men's Health*. 0(0):1557988318761989.

Kalesan B, **Zuo Y**, Xuan Z, Siegel MB, Fagan J, Branas C, Galea S. A multi-decade joinpoint analysis of firearm injury severity. *Trauma Surgery & Acute Care Open*. 2018 Jan 1;3(1):e000139.

Pino EC, **Zuo Y**, De Olivera CM, Mahalingaiah S, Keiser O, Moore LL, Li F, Vasani RS, Corkey BE, Kalesan B. Cohort profile: The MULTI sTUDY Diabetes rEsearch (MULTITUDE) consortium. *BMJ Open*. 2018 May 1;8(5):e020640.

Pino EC, **Zuo Y**, Borba CP, Henderson DC, Kalesan B. Clinical depression and anxiety among ST-elevation myocardial infarction hospitalizations: Results from Nationwide Inpatient Sample 2004–2013. *Psychiatry research*. 2018 Aug 1;266:291-300.

Kalesan B, Sampson LA, **Zuo Y**, Galea S. Sex and age modify the relationship between life circumstances and use of a firearm in suicide deaths across 17 US states. *Journal of affective disorders*. 2018 Aug 15;236:105-11.

Kalesan B, Vyliparambil MA, **Zuo Y**, Siracuse JJ, Fagan JA, Branas CC, Galea S. Cross-sectional study of loss of life expectancy at different ages related to firearm deaths among black and white Americans. *BMJ evidence-based medicine*. 2018 Nov 22:bmjebm-2018.

Kalesan B, Cheng TW, Farber A, **Zuo Y**, Kalish JA, Jones DW, Siracuse JJ. Readmissions after thoracic endovascular aortic repair. *Journal of vascular surgery*. 2018 Aug 1;68(2):372-82.

Siracuse J, Farber A, Cheng T, **Zuo Y**, Jones D, Kalish J, Kalesan B. Analysis of Vascular Injuries After Gunshot Wounds: IP259. *Journal of Vascular Surgery*. 2018 Jun 1;67(6).