ZHENKE WU, PHD

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EDUCATION AND TRAINING

2016   Postdoctoral Fellow, Johns Hopkins Individualized Health Initiative, Baltimore, MD, US
2014   Ph.D. in Biostatistics, Johns Hopkins Bloomberg School of Public Health (JHSPH), Baltimore, MD, US
2009   B.Sc. in Mathematics. First Class Honors, Fudan University, Shanghai, China

CURRENT POSITION

2023 - present   **Associate Professor** (with tenure), Department of Biostatistics, University of Michigan, US

SELECTED PUBLICATIONS   *"__": advisee;   Citations: 2,331 (Google Scholar); h-index: 22; i-10 index: 31*

[1] **Wu Z**, Li RZ, <u>Chen I</u>, <u>Li M</u> (2024). Tree-Informed Bayesian Multi-Source Domain Adaptation: Cross-population Probabilistic Cause-of-death Assignment using Verbal Autopsy. ▶ *Biostatsitics*. [Paper][*R package: doubletree*]

[2] <u>Li M</u>, Park DE, Aziz M, Liu CM, Price LB, **Wu Z** (2023). Integrating sample similarity information into latent class analysis: a tree-structured shrinkage approach. ▶ *Biometrics* 79(1):264-279. doi: 10.1111/biom.13580. PM-CID:PMC10642217. PMID:34658017.[Early View][*bioRxiv*]

[3] Wang J, Shi C, **Wu Z** (2023). A Robust Test for the Stationarity Assumption in Sequential Decision Making. ▶ *40th International Conference on Machine Learning (ICML)*.

[4] Wang J, Fang Y, Frank E, Walton MA, Burmester M, Tewari A, Dempsey W, NeCamp T, Sen S, **Wu Z** (2023). Effectiveness of gamified competition in the context of mHealth intervention for medical interns: a micro-randomized trial. ▶ *npj Digital Medicine*. doi:10.1038/s41746-022-00715-5. [*publisher's version*][*R code*]

[5] **Wu Z** and <u>Chen I</u> (2021). Probabilistic cause-of-disease assignment using case-control diagnostic tests: a hierarchical Bayesian approach. ▶ *Statistics in Medicine* 40(4): 823-841. PMID: 33159360. doi: 10.1002/sim.8804.

[6] **Wu Z**, Casciola-Rosen L, Rosen A, Zeger SL (2020). A Bayesian approach to restricted latent class models for scientifically-structured clustering of multivariate binary outcomes. ▶ *Biometrics* 77(4): 1431-1444. PMID: 33031597. PMCID:PMC10642691. doi: 10.1111/biom.13388.

[7] NeCamp T, Sen S, Frank E, Walton M, Ionides E, Fang Y, Tewari A, **Wu Z** (2020). Assessing real-time moderation for developing adaptive mobile health interventions for medical interns: micro-randomized trial. ▶ *Journal of Medical Internet Research (JMIR)* 22(3): e15033. doi: 10.2196/15033. PMID: 32229469. PMCID: PMC7157494. Trial Registration: 2018 Intern Health Study Micro-randomized Trial (IHS), NCT03972293.

[8] **Wu Z**, Deloria-Knoll M, and Zeger SL (2017). Nested partially-latent class models (npLCM) for dependent binary data; estimating disease etiology. ▶ *Biostatistics* 18(2): 200-213. PMID: 27549120. doi: 10.1093/biostatistics/kxw037. [*Software paper*][*R package*]

[9] <u>Li M</u>, Stephenson BJK†, **Wu Z**† (2023+). Tree-Regularized Bayesian Latent Class Analysis for Improving Weakly Separated Dietary Pattern Subtyping in Small-Sized Subpopulations. (†: co-senior authors). Submitted. [*arXiv*][*Github*][*shinyapp*][CRAN]

SELECTED SOFTWARE

baker:	Bayesian Analysis Kit for Etiology Research [CRAN][Development version]
doubletree:	Nested latent class models with double-tree shrinkage [Github]
ddtlcm:	Tree-regularized Latent Class Analysis to Overcome Weakly Separation [*shinyapp*][CRAN][*Github*]