# YUE WANG

## Arizona State University ywan1282@asu.edu

## **EDUCATION**

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| University of North Carolina at Chapel Hill, Chapel Hill Ph.D. in Biostatistics Department of Biostatistics  | 2014.08 - 2018.08 |
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| University of Science and Technology of China, Hefei B.S. in Statistics Department of Statistics and Finance   | 2010.09 - 2014.06 |
| PROFESSIONAL EXPERIENCE  |                   |
| Assistant Professor of Statistics School of Mathematical and Natural Sciences, Arizona State University  | 2020.08- Present  |
| Postdoctoral Fellow Department of Biostatistics, University of Washington Public Health Division, Fred Hutchinson Cancer Research Center Supervisor: Dr. Ali Shojaie and Dr. Jing Ma | 2018.09- 2020.08  |
| Graduate Research Assistant Biostatistics Core, Lineberger Comprehensive Cancer center, UNC Hospitals  | 2016.01- 2018.08  |
| Graduate Research Assistant Department of Biostatistics, University of Texas MD Anderson Cancer Center Supervisor: Dr. Hongtu Zhu  | 2017.05- 2017.08  |
| Graduate Research Assistant Department of Biostatistics, University of North Carolina at Chapel Hill Supervisor: Dr. Hongtu Zhu and Dr. Joseph G. Ibrahim                            | 2014.08- 2015.12  |
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## TEACHING EXPERIENCE

## Instructor

School of Mathematical and Natural Sciences, Arizona State University

• STP226 Elements of Statistics

Department of Biostatistics, University of North Carolina at Chapel Hill

• 2018 BIOS Bootcamp (Summer 2018; Ph.D. preparation course): Real Analysis

## Teaching Assistant

Department of Biostatistics, University of North Carolina at Chapel Hill

- BIOS 690 (Fall 2015; master level course): Special Topics in Statistics
- BIOS 600 (Fall 2016): Introduction to Biostatistics
- BIOS 779 (Fall 2017; advanced course for Ph.D. students): Bayesian Statistics

### RESEARCH INTEREST

Functional Data Analysis; High-dimensional Statistics; Statistical Learning for (undirected/directed) Networks.

## **PUBLICATIONS**

## Statistical Methodology

- 1. Lu, Z. H., Khondker, Z., Ibrahim, J. G., **Wang, Y.**, Zhu, H. (2017). Bayesian longitudinal low-rank regression models for imaging genetic data from longitudinal studies. *NeuroImage*, 149, 305-322.
- 2. Wang, Y., Randolph, T. W., Shojaie, A., Ma, J. (2019). The GMD-biplot and its application to microbiome studies. *mSystems*; 4(6). (This paper is published as the editor's pick.)
- 3. Wang Y., Ibrahim J.G., Zhu H. (2020) Partial least squares for functional joint models with applications to the Alzheimers disease neuroimaging initiative study. *Biometrics*, 1-11.
- 4. Wang, Y., Ibrahim, J. G., Zhu, H. (2019+). RAPLS: Residual-based Alternative Partial Least Squares for Functional Regression Models. *Submitted*.
- 5. Wang, Y., Shojaie, A., Randolph, T. W., Ma, J. (2019+). Generalized Matrix Decomposition Regression. Submitted.
- 6. Wang, Y., Ma, J., Shojaie, A. (2019+). Direct Estimation of Differences in High-dimensional Vector Autoregressive Models. *In preparation*.

#### Scientific Collaboration

- 1. Wang, K., Eblan, M. J., Deal, A. M., Lipner, M., Zagar, T. M., Wang, Y., ... & Socinski, M. A. (2017). Cardiac toxicity after radiotherapy for stage III nonsmall-cell lung cancer: pooled analysis of dose-escalation trials delivering 70 to 90 Gy. *Journal of Clinical Oncology*, 35(13), 1387.
- 2. Czernuszewicz, T. J., Homeister, J. W., Caughey, M. C., Wang, Y., Zhu, H., Huang, B. Y., ... & Ford, P. F. (2017). Performance of acoustic radiation force impulse ultrasound imaging for carotid plaque characterization with histologic validation. *Journal of vascular surgery*, 66(6), 1749-1757.
- 3. Lee, E., Giovanello, K. S., Saykin, A. J., Xie, F., Kong, D., Wang, Y., ... & Alzheimer's Disease Neuroimaging Initiative. (2017). Single-nucleotide polymorphisms are associated with cognitive decline at Alzheimer's disease conversion within mild cognitive impairment patients. Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring, 8, 86-95.
- 4. Wang, K., Pearlstein, K. A., Patchett, N. D., Deal, A. M., Mavroidis, P., Jensen, B. C., Lipner, M., Zagar, T. M., Wang, Y., ... & Eblan, M. J. (2017). Heart dosimetric analysis of three types of cardiac toxicity in patients treated on dose-escalation trials for Stage III non-small-cell lung cancer. Radiotherapy and Oncology, 125(2), 293-300.
- Williams, G. R., Deal, A. M., Lund, J. L., Chang, Y., Muss, H. B., Pergolotti, M., Guerard, E. J., Schachar, S. S., Wang, Y., ... & Sanoff, H. K. (2018). PatientReported Comorbidity and Survival in Older Adults with Cancer. *The oncologist*, 23(4), 433-439.
- Flentie, K., Gonzalez, C., Kocher, B., Wang, Y., Zhu, H., Marasa, J., & Piwnica-Worms, D. (2018). Nucleoside Diphosphate Kinase-3 (NME3) Enhances TLR5-Induced NFB Activation. Molecular Cancer Research, 16(6), 986-999.
- 7. Zhao, B., Ibrahim, J. G., Li, Y., Li, T., Wang, Y., Shan, Y., ... & Liao, H. (2018). Heritability of regional brain volumes in large-scale neuroimaging and genetic studies. *Cerebral Cortex*, 29(7), 2904-2914.
- 8. Moon, D. H., Chera, B. S., Deal, A. M., Wang, Y., Muss, H. B., & VanderWalde, N. A. (2019). Clinician-observed and patient-reported toxicities and their association with poor tolerance to

- therapy in older patients with head and neck or lung cancer treated with curative radiotherapy.  $Journal\ of\ geriatric\ oncology,\ 10(1),\ 42-47.$
- 9. Judy, G. D., Kaidar-Person, O., Deal, A., Wang, Y., Migliardi, A., Long, J., ... & Marks, L. B. (2018). The persistent problem of local/regional failure after surgical intervention for early-stage lung cancer. *The Annals of thoracic surgery*, 106(2), 382-389.
- 10. Wang, K., Pearlstein, K. A., Moon, D. H., Mahbooba, Z. M., Deal, A. M., **Wang, Y.**, ... & Sheets, N. C. (2019). Assessment of risk of xerostomia after whole-brain radiation therapy and association with parotid dose. JAMA oncology, 5(2), 221-228.

#### **PRESENTATIONS**

- 1. Joint models of longitudinal and survival outcomes with high-dimensional neuroimaging data, ENAR, 2017, Washington DC
- 2. Partial least squares for functional regression models, LIDA, 2017, University of Connecticut (Invited Session)
- 3. RAPLS: Residual based alternative partial least squares method for functional models, ENAR, 2018, Atlanta (Invited Session)
- 4. Partial least squares for functional regression models, Biostatistics Seminar, 2018, Fred Hutchinson Cancer Research Center
- 5. The GMD-biplots and its application to microbiome data. ENAR 2019, Philadelphia.
- 6. Generalized Matrix Decomposition Regression. JSM 2019, Denver.
- 7. Generalized Matrix Decomposition: Exploratory Analysis, Prediction and Inference. Southern University of Science and Technology. Shenzhen, China 2020.

#### **HONORS & AWARDS**

- Outstanding Undergraduate Student Award, University of Science and Technology of China, 2011-2014.
- Travel Award, University of North Carolina at Chapel Hill, 2015-2017

### PROFESSIONAL ACTIVITIES

#### **Session Chair**

Recent Advances in Dimension Reduction and Clustering. JSM, Denver, 2019.

#### Referee Service:

Referee for Computational Statistics and Data Analysis (4), Journal of the American Statistical Association (1), Transportation Research Part D: Transport and Environment (1), Science Advances (1).