

# Yang Li

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## Contact Information

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## Education

**PhD in Statistics**, University of Missouri-Columbia (Advisor: Dr. Jianguo (Tony) Sun), May 2013

**Master of Science in Mathematics**, University of Arkansas-Little Rock, May 2007

**Bachelor of Engineering**, Beijing Institute of Technology, June 2005

## Research Expertise

Statistical methodology development: *Survival Analysis, Recurrent Event Data Analysis, Longitudinal Data Analysis, Panel Count Data Analysis*

Scientific Collaboration: Dementia, Nephrology, Alcoholic Liver Disease, Cancer, Gastroenterology and Hepatology

## Professional Positions and Employment

- Associate Professor of Biostatistics, Department of Biostatistics and Health Data Science, Indiana University (IU) School of Medicine (IUSM) and Richard M. Fairbanks School of Public Health, July 2020-Present
- Assistant Professor of Statistics, Department of Mathematics and Statistics, UNCC, 2013-2020 (maternity leave during August-December, 2016)
- Graduate Instructor/Teaching Assistant/Research Assistant, Department of Statistics, University of Missouri-Columbia (Mizzou), 2008-2013
- Graduate Instructor/Teaching Assistant, Department of Mathematics and Statistics, University of Arkansas-Little Rock (UALR), 2005-2007

## Publications

(†student/trainee author; #corresponding author)

### Refereed Articles on Statistical Methodology

Li, Y.<sup>#</sup>, Tu, W. (2024). “An additive-multiplicative model for longitudinal data with informative observation times”, *Statistical Methods in Medical Research*, 33(5), 807-824.

Sun, D., Guo, Y., Li, Y., Sun, J. & Tu, W (2024). “A Flexible Time-varying Coefficient Rate Model for Panel Count Data”, *Lifetime Data Analysis*, 1-21.

Ge, L.<sup>†</sup>, Li, Y.<sup>#</sup> & Sun, J. (2024). “Semiparametric regression of panel binary data with a dependent observation process”, *Computational Statistics*, in press.

- Sun, D., Guo, Y., **Li, Y.**, Tu, W., & Sun, J. (2024), “A New Robust Approach for Regression Analysis of Panel Count Data with Time-varying Covariates”, *Bernoulli*, 30(4), 3251-3275.
- Ge, L.<sup>†</sup>, Hu, T., & **Li, Y.**<sup>#</sup> (2024). “Simultaneous variable selection and estimation in semiparametric regression of mixed panel count data”. *Biometrics*, 80(1), ujad041.
- Zheng, T. <sup>†</sup>, **Li, Y.**<sup>#</sup>. & Sun, J. (2024+). “A Conditional Semiparametric Approach for the Analysis of Semi-competing Risk Data”, *Statistics and Its Interface*, in press.
- Ge, L.<sup>†</sup>, Liang, B., Hu, T., Sun, J., Zhao, S., & **Li, Y.** (2023). “Variable selection for mixed panel count data under the proportional mean model”. *Statistical Methods in Medical Research*, 32(9), 1728-1748.
- Ge, L.<sup>†</sup>, Choi, J., Zhao, H., **Li, Y.**, & Sun, J. (2023). “Regression analysis of mixed panel count data with dependent observation processes”. *Journal of Nonparametric Statistics*, 1-16.
- Li, Y.**<sup>#</sup>, Liu, H., Wang, X. & Tu, W. (2022). “Semiparametric Time-to-Event Modeling of Lengths of Hospital Stays”, *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 71(5), 1623-1647.
- Feng, Y., Wang, J., & **Li, Y.** (2022). “Goodness-of-fit Inference for the Additive Hazards regression model with clustered current status data”, *Journal of Applied Statistics*, 1-21.
- Feng, Y., Lin, S., & **Li, Y.** (2019). Semiparametric regression of clustered current status data. *Journal of Applied Statistics*, 46(10), 1724-1737.
- Yu, G., **Li, Y.**, Zhu, L., Zhao, H., Sun, J., & Robison, L. L. (2019). An additive-multiplicative mean model for panel count data with dependent observation and dropout processes. *Scandinavian Journal of Statistics*, 46, 414-431.
- Li, Y.**, Qi, L., & Sun, Y. (2018). Semiparametric varying-coefficient regression analysis of recurrent events with applications to treatment switching. *Statistics in Medicine*, 37(27), 3959-3974.
- Liang, Y., **Li, Y.**, & Zhang, B. (2018). Bayesian nonparametric inference for panel count data with an informative observation process. *Biometrical Journal*, 60(3), 583-596.
- Yu, G., Zhu, L., **Li, Y.**, Sun, J., & Robison, L. L. (2017). Regression analysis of mixed panel count data with dependent terminal events. *Statistics in Medicine*, 36(10), 1669-1680.
- Feng, Y., Dong, Y., & **Li, Y.** (2017). Additive hazards regression of current status data with auxiliary covariates. *Communications in Statistics-Theory and Methods*, 46(21), 10657-10671.
- Li, Y.**, & Sun, Y. (2016). Semiparametric random effects models for longitudinal data with informative observation times. *Statistics and Its Interface*, 9(3), 333-341.
- Li, Y.**, He, X., Wang, H., & Sun, J. (2016). Joint analysis of longitudinal data and informative observation times with time-dependent random effects. In *New Developments in Statistical Modeling, Inference and Application* (pp. 37-51). Springer, Cham.
- Li, Y.**, He, X., Wang, H., & Sun, J. (2016). Regression analysis of longitudinal data with correlated censoring and observation times. *Lifetime Data Analysis*, 22(3), 343-362.
- Li, Y.**, He, X., Wang, H., Zhang, B., & Sun, J. (2015). Semiparametric regression of multivariate panel count data with informative observation times. *Journal of Multivariate Analysis*, 140, 209-219.
- Wang, H., **Li, Y.**, & Sun, J. (2015). Focused and model average estimation for regression analysis of panel count data. *Scandinavian Journal of Statistics*, 42(3), 732-745.
- Li, Y.**, Zhao, H., Sun, J., & Kim, K.M. (2014). Two-sample nonparametric comparison for panel

count data with unequal observation processes. *Computational Statistics & Data Analysis*, 73, 103-111.

Zhao, H., **Li, Y.**, & Sun, J. (2013). Semiparametric analysis for multivariate panel count data with a terminal event. *Journal of Nonparametric Statistics*, 25(2), 379-394.

Zhao, H., **Li, Y.**, & Sun, J. (2013). Analyzing panel count data with dependent observation process and a terminal event. *The Canadian Journal of Statistics*, 41(1), 174-191.

**Li, Y.**, Sun, J., & Song, S. (2012). Statistical analysis of bivariate failure time data with Marshall-Olkin Weibull models. *Computational Statistics & Data Analysis*, 56(6), 2041-2050.

### **Scientific and Other Publications**

Lim, K., Naylor, M., Burney, H., Li, X., **Li, Y.**, Arroyo, E., Wan, D., Ting, S., Hiemstra, T.F., Thadhani, R., Moe, S., Zehnder, D., Larson, M.G., Ramachandran, V.S., & Lewis, G., (2023+). "Impairment of Cardiovascular Functional Capacity In Mild To Moderate Kidney Dysfunction", *Clinical Journal of the American Society of Nephrology*, conditionally accepted.

Patidar, K., Tu, W., Cotter, T., Simonetto, D., Asgharpour, A., Jan, M., Tang, Q., Yu, Y., **Li, Y.**, et al. (2023). Acute Kidney Injury in Severe Alcohol-Associated Hepatitis Treated with Anakinra and Prednisone. *Hepatology*, 10-1097.

Tu, W., Liangpunsakul, S., Nguyen, C. M., Healey, R., **Li, Y.**, Radaeva, S., Gawrieh, S., Su, J. (2024). "Risk of mortality among patients with alcohol-associated hepatitis in the US from 2007 to 2021". *Alcohol*.

Danner, A., Hays, M., **Li, Y.**, & Johns, S. (2023). "Exploring Relationships Between Fear of Cancer Recurrence, Psychological Distress, and Mental Health Service Use in Breast Cancer Survivors". *Proceedings of IMPRS*, 6(1).

Arroyo, E., Leber, C. A., Burney, H. N., **Li, Y.**, Li, X., Lu, T. S., Jones, G., Kaufmann, M., Ting, S., Hiemstra, T., Zehnder, D. and Lim, K. (2024). "Epimeric vitamin D and cardiovascular structure and function in advanced CKD and after kidney transplantation". *Nephrology Dialysis Transplantation*, 39(2), 264-276.

Gawrieh, S., Dasarathy, S., Tu, W., Kamath, P. S., Chalasani, N. P., McClain, C. J., Bataller, R., Szabo, G., Tang, Q., Radaeva, S., Barton, B., Nagy, L. E., Shah, V. H., Sanyal, A. J., Mitchell, M. C., **Li, Y.**, et al. (2024). "Randomized-controlled trial of anakinra plus zinc vs. prednisone for severe alcohol-associated hepatitis". *Journal of Hepatology*, 80(5), 684-693.

Liangpunsakul, S., Tu, W., Nguyen, C. M., Healey, R., **Li, Y.**, Radaeva, S., ... & Su, J. (2023, October). "Hospitalization and mortality in commercially insured patients with alcohol-associated hepatitis (Vol. 78, pp. S1611-S1612)". Two Commerce Sq, 2001 Market St, Philadelphia, PA 19103 USA: Lippincott Williams & Wilkins.

Tu, W., Gawrieh, S., Dasarathy, S., Mitchell, M. C., Simonetto, D. A., Patidar, K. R., McClain, C. J., Bataller, R., Szabo, G., Tang, Q., Barton, B. A., Radaeva, S., Sanyal, A. J., Shah, V., **Li, Y.**, et al. (2023). "Design of a multicenter randomized clinical trial for treatment of Alcohol-Associated Hepatitis". *Contemporary Clinical Trials Communications*, 32, 101074.

Arroyo, E., Burney, H. N., **Li, Y.**, Li, X., Coggan, A. R., & Lim, K. (2023). "Serum Vitamin D C3-epimer Levels Are Associated With Cardiorespiratory Fitness In Patients With Advanced Ckd: 192". *Medicine & Science in Sports & Exercise*, 55(9S), 54.

Halim, A., Burney, H. N., Li, X., **Li, Y.**, Tomkins, C., Siedlecki, A. M., Lu, T., Kalim S., Thadhani, R., Moe, S. M., Ting, S. M. S., Zehnder, D., Hiemstra, T. F. & Lim, K. (2022). FGF23 and Cardiovascular Structure and Function in Advanced Chronic Kidney Disease. *Kidney360*.

Arroyo, E., Umukoro, P. E., Burney, H. N., **Li, Y.**, Li, X., Lane, K. A., Sher, S. J., Lu, T., Moe, S. M., Moorthi, R., Coggan, A. R., McGregor, G., Hiemstra, T. F., Zehnder, D. & Lim, K. (2022). "Initiation of Dialysis Is Associated With Impaired Cardiovascular Functional Capacity", *Journal of the American Heart Association*, e025656.

Ajrouch, A., Jennewein, L., **Li, Y.**, Pike, F., & Hanna, N. H. (2022). "The association of social and demographic factors on the time interval between a suspected diagnosis of cancer, diagnosis, treatment, and outcomes in a lung cancer patient population". *Journal of Clinical Oncology* 40 (16), e18598-e18598.

Jan, M. Y., Moe, S. M., Adebisi, O., Chen, J., Powelson, J., Burney, H., Yaqub, M. S., Mishler, D., Moorthi, R., Taber, T., Anderson, M., **Li, Y.**, Li, X., Fridell, J., Goggins, W., Sharfuddin, A. (2022). "Vasopressin for Post Kidney Transplant Hypotension", *Kidney International Reports*.

Jan, M. Y., Yaqub, M. S., Adebisi, O. O., Taber, T. E., Anderson, M. D., Mishler, D. P., Burney, H. N., **Li, Y.**, Li, X., Sharfuddin, A. A. (2022). "Nondirected Living Kidney Donation and Recipient Outcomes in the United States: A 20-Year Review", *Kidney International Reports*.

Jan, M. Y., Yaqub, M. S., Taber, T., Adebisi, O., Anderson, M., Mishler, D., Burney, H., **Li, Y.**, Li, X., Sharfuddin, A. (2021), "Altruistic Kidney Donations: Optimizing Utility and Beneficence", *Transplant International*, 34(111), 26-26.

**Li, Y.** (2014). Book review: statistical analysis of panel count data. *Austin Statistics*, 1(1), 1. (Invited editorial-board article)

Zhang, Y., Yu, F., Feng, Y., Zhou, Y., & **Li, Y.** (2004). Math-model and data disposal of spot space orientation system with double-area CCD. *Journal of Optoelectronics Laser*, 15(6), 695-697.

### **Conference Abstracts**

Nuseibeh, B. Z., Hays, M. E., **Li, Y.**, Johns, S. A. (2024). Correlates of Decreased Fear of Cancer Recurrence Among Breast Cancer Survivors Participating in a Three-Arm Randomized Controlled Trial. American Psychosocial Oncology Society (APOS) 2025 Conference.

Johns, S. A., **Li, Y.**, Hays, M. E. (2024). Facilitating adaptive coping with fear of recurrence among breast cancer survivors: Results from a three-arm randomized controlled trial. American Psychosocial Oncology Society 2025 Conference.

Wegermann, K., Wilson, L., Sarmiento E., **Li, Y.**, Lloyd, A., Lake, J., Price, J., Woreta, T., Crandall, H., Sterling, R., Loomba, R., Suzuki, A., Chalasani, N. (2024). Differences in prevalence of MASLD with clinically significant fibrosis by sex/menopause status in a large prospective US cohort of persons with HIV. The Liver Meeting 2024.

Li, J., Jiang, S., Nguyen, C.M., **Li, Y.**, Healey, R., Liangpunsakul, S., Tu, W., Su, J. (2024). Real-world Evidence of Emerging Health Disparities in Severe Alcoholic Hepatitis Incidence in the Post-COVID Era. The Liver Meeting® 2024.

Nguyen, C.M., Su, J., Healey, R., **Li, Y.**, Jiang, S., Li, J., Gawrieh, S., Liangpunsakul, S., Tu, W. (2024). Short-term Costs of Alcohol-associated Hepatitis Care in Different Clinical Settings. The Liver Meeting 2024.

Mao, J., **Li, Y.**, Thyvalikakath, T., Tu, W. (2024). A regularized multi-state model for health status transitions using electronic medical records data. 2024 Midwest Biopharmaceutical Statistics Workshop.

Sinclair, K., Hawkins, M., **Li, Y.**, Hays, M., Johns, S. (2024). Inequities in Obesity and Related Multimorbidity among Breast Cancer Survivors. IUSCCC Cancer Research Day.

Johns, S., **Li, Y.**, Hays, M., Bricker, J., Miller, K. (2024). Facilitating Adaptive Coping With Fear Of Recurrence Among Breast Cancer Survivors: Feasibility And Acceptability Outcomes From A

Three-arm Randomized Controlled Trial. 2024 American Society of Clinical Oncology (ASCO) Annual Meeting.

Jan, M. Y. , Balmes-Fenwick , M. F., Lane, K., Moe, S., Yaqub, M. S., Goggins, W., Powelson, J., Sundaram, C., Adebisi, O., **Li, Y.**, Li, X., Sharfuddin, A. (2024). Donors With Nephrolithiasis At The Time Of Transplant Evaluation (donate). Long Term Prospective Follow Up. American Transplant Congress 2024.

Adebisi, O., Lane, K., **Li, Y.**, Sharfuddin, A., Yenebere, P., Jan, M.Y., Yaqub, M., (2024). The Double Burden: How Bmi And Social Factors Shape Kidney Transplant Outcomes. American Transplant Congress 2024.

Adebisi, O., Lane, K., **Li, Y.**, Yenebere, P., Jan, M.Y., Yaqub, M., Sharfuddin, A. (2024). Reassessment Of Obesity Implications On Kidney Transplant Outcomes. American Transplant Congress 2024.

Aslam, A., Moe, S.,**Li, Y.**, Lane, K., Yaqub, M. (2023). Renal allograft function outcomes after conversion from conventional immunosuppression to Belatacept plus low dose conventional drug regimen. American Society of Nephrology Kidney week.

Gupta, N., Lane, K., **Li, Y.** and Miller, B. (2023). A Pilot Study to establish Dialysate Flow Characteristics in Peritoneal Dialysis to Predict Catheter Flow Complications. American Society of Nephrology (ASN) 2023 Kidney Week.

Gupta, N., Lane, K., **Li, Y.** and Miller, B. (2023). A feasibility study to establish Dialysate Flow Characteristics in Peritoneal Dialysis to associate Outflow Dysfunction. American Society of Nephrology (ASN) 2023 Kidney Week.

Danner, A., Hays, M., **Li, Y.**, Johns, S. (2023). Suffering in Silence: The Relationship Between Clinically Significant Distress Levels and Mental Health Service Use in Breast Cancer Survivors. 2023 IUSM Student Research Symposium.

Danner, A., Hays, M., **Li, Y.**, Johns, S. (2023). Exploring Relationships Between Fear of Cancer Recurrence, Psychological Distress, & Mental Health Services Utilization in Breast Cancer Survivors, Indiana Medical Student Program for Research and Scholarship (IMPRS) 2023 Research Symposium.

Pandita, P., Ajrouch, A., **Li, Y.**, Pike, F., Turk, A., Hanna, N. (2023). Disparities in the time interval to care for colorectal cancer: The impact of sociodemographic and clinical factors. American Society of Clinical Oncology (ASCO) 2023 Annual Meeting.

Raza, A., Faqah, A., Sharfuddin, A., Jan, M. Y., Yaqub, M. S., Mishler, D. P., Yenebere, P. M., **Li, Y.**, Lane, K., Adebisi, O. (2023). "Health Disparity In Pre-emptive Transplant And Dialysis Vintage Based On Social Vulnerability Index", American Transplant Congress (ATC) 2023.

Raza, A., Faqah, A., Sharfuddin, A., Jan, M. Y., Yaqub, M. S., Mishler, D. P., Yenebere, P. M., **Li, Y.**, Lane, K., Adebisi, O. (2023). "Concordance of Social Vulnerability Index with Clinical outcomes In Kidney Transplant Recipients", Cutting Edge of. Transplantation meeting (CEoT) 2023.

Raza, A., Faqah, A., Sharfuddin, A., Jan, M. Y., Yaqub, M. S., Mishler, D. P., Yenebere, P. M., **Li, Y.**, Lane, K., Adebisi, O. (2023). "Health Disparity In Pre-emptive Transplant And Dialysis Vintage Based On Social Vulnerability Index", Cutting Edge of. Transplantation meeting (CEoT) 2023.

Pandita, P., Ajrouch, A., Jennewein, L., **Li, Y.**, Pike, F., Hanna, N. (2022), "The Association of Sociodemographic Factors on the Time Interval Between an Objective Suspicion of Cancer, Diagnosis, Treating Physician Contact and Treatment in a Midwest Urban Colorectal Cancer Patient Population", Cancer Research Day, Indiana University

Halim, A., Burney, H. N., Li, X., **Li, Y.**, Lu, T., Hiemstra, T., Zehnder, D., Lim, K. (2022), "FGF23 is Associated with Cardiovascular Functional Capacity Before and After Kidney Transplantation", American Society of Nephrology (ASN) Kidney Week 2022.

Pandita, P., Ajrouch, A., **Li, Y.**, Pike, F., Hanna, N. (2022), "The association of sociodemographic factors on the time interval between a suspected diagnosis of cancer, diagnosis, treatment, and outcomes in a colorectal cancer patient population", American Public Health Association (APHA) Annual Meeting.

Ajrouch, A., Jennewein, L., **Li, Y.**, Pike, F., Hanna, N. (2022), "The association of social and demographic factors on the time interval between a suspected diagnosis of cancer, diagnosis, treatment, and outcomes in a lung cancer patient population", American Society of Clinical Oncology (ASCO) Annual Meeting.

## Honors and Awards

Women in Statistics and Data Science Travel Award, the National Science Foundation (NSF), 2018

Junior Researcher Award (paper award), International Chinese Statistical Association (ICSA), 2017

Junior Faculty Development Award, UNCC, 2016-2017

Boyd Harshbarger Student Travel Award, Southern Regional Council on Statistics, 2012

Outstanding Achievement by a Graduate Student, UALR, 2006-2007

Tuition Assistance for Minority Students (TAMS) Award, UALR, 2005-2007

People's Scholarship, Beijing Institute of Technology, 2001-2005

Undergraduate Registration Scholarship, Beijing Institute of Technology, 2001-2005

## Grants

### Funded Projects

- Walther Endowment (PI: Johns) Pursuing Exploration into the Supportive Care Needs and Intervention Preferences of Survivors of Testicular Cancer (PERSIST) (2024-2025)  
Role: Faculty Biostatistician
- 5R01DK121378-05 (PI: Chalasani) Ancillary Studies of NAFLD and NASH in HIV infected Adults (2024-2025)  
Role: Faculty Biostatistician
- 1R01DK138021-01 (PI: Moe) Uremic toxins and osteocyte dysfunction in CKD (2024-2027)  
Role: Faculty Biostatistician
- NIH/NCCIH pilot study (PIs: Johns and Mosher) Perceived Economic Burden in Cancer Survivors: Relationships to Acceptance and Commitment Therapy Constructs (EMOT-ECON) (2023-2024) Role: Collaborator
- Indiana CTSI UL1TR002529 Risk assessment, stratification and prediction for cognitive impairment in the Health and Retirement Study (2022-2023)  
Role: PI
- 5P30CA082709 (PI: Lee) Indiana University Melvin and Bren Simon Cancer Center Support Grant (2021-2022)  
Role: Faculty Biostatistician

- IU Health grant (PI: Lim) Effects of Thrice Weekly versus Daily Hemodialysis on Cardiovascular Functional Capacity (ELDEN) study (2021-2024)  
Role: Collaborator
- 1R01CA255480-01A1 (PI: Johns)  
Acceptance and Commitment Therapy for Fear of Recurrence in Breast Cancer Survivors (2021-2025)  
Role: Co-I
- NIAAA 5U24 AA026969-04 (PI: Tu)  
Data Coordinating Center for the Alcoholic Hepatitis Research Network (2018-2023)  
Role: Co-I
- UNCC Faculty Research Grant  
Regression analysis of panel count data with correlated observation times (2014-2015)  
Role: PI

### Pending Grant Proposals

- NIH-R01 (to be submitted September 2024); **Role: Co-I**, “Development of a novel alpha-Klotho proteomic assay”. (PI: Halim)
- American Heart Association Postdoc training grant (submitted August 2024; **Role: Collaborator**) “Mechanisms of Chronotropic Incompetence in hemodialysis patients”. (PI: Campos)
- NIH-R01 (submitted June 2024); **Role: Faculty Biostatistician**, “Uremic toxins and cardiovascular disease”. (PI: Moe)
- NIH-R01 (submitted June 2024); **Role: Co-I**, “Therapeutic targeting of cardiac fibrosis in CKD by KL1”. (PI: Lim)
- NIAAA-U24 (submitted April 2024); **Role: Co-investigator, Co-Director of the Data Core**, “Integrated Therapies for Alcohol use in Alcohol-associated Liver Disease (ITAALD) - Indiana University Data Coordinating Center”. (PIs: Tu., Gawrieh)

### Submitted but Unfunded Grant Proposals

- NIH-R01 (submitted March 2024); **Role: MPI**, “Mapping the Interplay of Physical and Cognitive Health Pathways in Older Adults: Identifying the Individual, Environmental, and Reciprocal Influences of Cognitive and Physical Functioning”. (PIs: Latham-Mintus, Li)
- NIH-F31 (submitted December 2023); **Role: Collaborator**, “Singing intervention to fear of cancer recurrence”. (PI: Nuseibeh)
- NIDDK-KUH UC2-TL1 training grant (submitted October 2023); **Role: Mentor**, “Indiana Next Generation Training Program in Kidney, Urology, and Hematology Research”. (PI: Sutton)
- NIH-R01 (submitted July 2023, scored 14th percentile); **Role: Faculty Biostatistician**, “Uremic toxins and cardiovascular disease”. (PI: Moe)
- NIH-R01 (submitted February 2023, scored 53th percentile); **Role: Co-I**, “Identifying Enabling Environments for Older Adults with Cognitive and Mobility Impairment”. (PI: Latham-Mintus)
- NIH-SPORE (submitted January 2023, September 2023); **Role: Co-I**, “Mitigating Disparities in Precision Oncology”. (PI: Schneider)

- NIH-R01 (submitted in October 2022, September 2023 Scored 35th percentile); **Role: Co-I**, “Therapeutic targeting of cardiac fibrosis in CKD by KL1” (PI: Lim).
- NIH-F32 (submitted in July 2022); **Role: Collaborator**, “Effects of kidney transplantation on skeletal muscle mitochondrial capacity and physical function” (PI: Arroyo).
- NIH-R01 (submitted in July 2021); **Role: Co-I**, “Bone quality and gut derived uremic toxins in chronic kidney disease” (PI: Moe).
- NIH-R21 (submitted in November 2021, 2022); **Role: Sole PI** “Risk assessment, prediction and stratification of cognitive impairment in the Health and Retirement Study”. (PI: Lim)
- NIH-P30 (submitted in May 2021); **Role: Co-I**, “Prospective Observation of the Incidence and Natural History of Monoclonal Gammopathy in African Americans and Hispanic or Latino Individuals” . (PI: Abonour)
- NIH-R01 (submitted on October 5, 2020); **Role: Co-I**, “Redefining cardiovascular risk assessment in chronic kidney disease patients (ROCK)” (PI: Lim).
- NIH-R01 (submitted in February 2021); **Role: Co-I**, “Tenapanor in the treatment of cardiovascular disease in CKD (TITUS) study”. (PI: Lim)
- IU Health grant (submitted on August 21, 2020); **Role: Collaborator**, “Effects of Thrice Weekly versus Daily Hemodialysis on Cardiovascular Functional Capacity (ELDEN) study”. (PI: Lim)
- NIH-R03 (submitted in July 2020, December 2020; **Role: Collaborator**), “Enabling Older Adults by Identifying the Individual and Environmental Determinants of Recovery from Mobility Disability”. (PI: Latham-Mintus)
- Open Education North Carolina Faculty Adoption Grant (Submitted in March 2019; **Role: Sole PI**), “Linear Statistical Models”.
- Department of Defense (DOD) Breast Cancer Research Program Breakthrough Award Level 1 (Submitted in March 2019; **Role: Co-I**), “Inflammasome inhibition and TMUC1 antibody immunotherapy to prevent breast tumor progression”.
- NIH-R03 (Submitted in February 2019; **Role: Sole PI**), “Joint analysis of recurrent illnesses and severe diseases under complex observation schemes”.
- NIH-R15 (Submitted in February 2019; **Role: Co-I**), “TMUC1 and inflammasome-driven inflammatory microenvironment in breast cancer”.
- DOD Breast Cancer Research Program Breakthrough Award Level 1 (Submitted in November 2018; **Role: Co-I**), “Combining inflammasome inhibitors and immune checkpoint treatments to prevent breast tumor progression”.
- National Cancer Institute (NCI)-R03 (Submitted in October 2018; **Role: PI**), “Statistical analysis of panel count data with stage-varying covariate effects and interstage correlations”.
- UNCC Faculty Research Grant (Submitted in October 2018; **Role: Sole PI**), “Statistical analysis of panel count data with stage-varying covariate effects and interstage correlations”.
- NIH-R15 (Submitted in June 2018; **Role: Senior/Key Participant**), “TMUC1 and inflammasome driven inflammatory microenvironment in breast cancer”.
- Association for Women in Mathematics (AWM) Travel Grants (Submitted in February 2018; **Role: Sole PI**), “Treatment comparison and prediction with internal-censored cancer data”.



- Simons Foundation Collaboration Grants for Mathematicians (Submitted in January 2018; **Role: Sole PI**), “Treatment comparison and prediction with internal-censored cancer data”.
- DOD Reconstructive Transplant Research Program Concept Award (Submitted in December 2017; **Role: Statistician**), “Anti-MUC1 and anti-PD1 immunotherapy to prevent breast cancer progression”.
- DOD Reconstructive Transplant Research Program Concept Award (Submitted in December 2017; **Role: Statistician**), “Preventing inflammasomes’ activation to improve transplantation success”.
- AWM Travel Grants (Submitted in January 2016; **Role: Sole PI**), “Flexible modeling of panel count data with correlated observation times”.
- Oak Ridge Associated Universities Junior Faculty Enhancement Award (Submitted in September, 2013; **Role: Sole PI**), “Nonparametric Tests for Panel Count Data with Unequal Observation Processes”.

## Professional Services

### University Service

- 2024-Present: faculty biostatistician, Gastroenterology, IUSM
- 2022: PhD Admissions Committee, IUSM
- 2021, 2022, 2024: PhD Qualifying Exam Committee, IUSM
- 2020-Present: faculty biostatistician, Division of Nephrology & Hypertension, IUSM
- 2020-2022: faculty biostatistician, IU Simon Comprehensive Cancer Center (IUSCCC)
- 2020-2022: reviewer for the scientific review committee (SRC), IUSCCC
- 2019-2020: statistics representative for the UNC system-wide math pathways initiative, UNCC
- 2019-2020: statistics consulting service founding and planning group, UNCC
- 2018-2020: department’s representative on the CLAS Faculty council, UNCC
- 2018-2020: department undergraduate curriculum committee, UNCC
- 2015-2019: statistics subcommittee for statistics hire, UNCC
- 2015-2018: comprehensive exam writer and grader for math-finance master’s program, UNCC
- 2015-2016: alternate department representative to the university faculty council, UNCC
- 2014-2020: statistics Ph.D. qualifying exam reader, UNCC
- 2014-2018: reader of the STAT 1222 and STAT 1220 common final exams, UNCC
- 2013-2019: frequent host of statistics colloquium talks, UNCC
- 2013-2017: math finance committee, UNCC
- 2013-2017: high school contest committee, UNCC
- 2012-2013: seminar Co-organizer for Biostatistics Working Seminar, MU

### National Service

- June 3, 2024: Panel review member for the NIA special emphasis panel

- 2015: Grant Reviewer for the NSF Social Psychology Program

### International Service

- **Journal Reviewer** for:

Annals of Applied Statistics, 2021, 2022

Biometrics, 2014, 2016

Communications in Statistics-Theory and Methods, 2013-Present

Computational Statistics, 2020, 2021

Computational Statistics And Data Analysis, 2013-Present

Computer Methods and Programs in Biomedicine, 2015

Environmetrics, 2016, 2017

International Journal of Clinical Biostatistics and Biometrics, 2015

International Statistical Review, 2018, 2019

Journal of the American Statistical Association, 2013

Journal of Applied Statistics, 2017-Present

Journal of Nonparametric Statistics, 2019-Present

Journal of Dermatology Research and Therapy, 2015

Journal of Testing and Evaluation, 2018

Kybernetika, 2020, 2021

Lifetime Data Analysis, 2015, 2016,2020

Scandinavian Journal of Statistics, 2020, 2021

Statistics and Its Interface, 2014

Statistica Sinica, 2017

- **Grant Reviewer** for: Medical Research Council (MRC, UK), 2017;

- **Editorial Board Member** for: ARC Journal of Cancer Science, Austin Mathematics, Austin Statistics (2014), JSM Mathematics and Statistics

- **Conference Organizer**

June 2016, for Session“Recent Advances in Analysis of Interval-Censored Failure Time Data and Longitudinal data”, 2016 ICSA Symposium, Atlanta, Georgia.

July 2015, for Session“Recent Developments in Survival Analysis and Longitudinal Studies”, 2015 ICSA China Statistics Conference, Shanghai, China.

July 2023, for Session“Statistical methods in health research”, The 12th ICSA International Conference, Hong Kong, China.

## Teaching

### Courses Developed and Taught at IU

- PBHL-B573 (Applied Survival Analysis), graduate level, 3 credit hours: Fall 2024
- PBHL-B573/670 (Applied Survival Analysis), graduate level, 4 credit hours: Fall 2022, 2023

### Courses Taught at UNCC

- New Course Designed: STAT 6113/ECON 6113 (Cross-Section and Time-Series Econometrics) for the Master of Science Program in Mathematical Finance ;
- Graduate Courses: STAT 7127/8127 (Linear Statistical Models): Spring 2019 (8 students);  
STAT 6113/ECON 6113 (Cross-Sectional and Time-Series Econometrics): Spring 2016 (8 students);  
STAT 6113/ECON 6113: Spring 2015 (7 students)
- Undergraduate Courses: STAT 3128 (Prob & Stat for Engineers): Summer 2020 (35 students);  
STAT 2122 (Introduction to Probability and Statistics): Spring 2020 (57 students);  
STAT 3123 (Probability and Statistics II ): Spring 2020 (27 students);  
STAT 2122 (Introduction to Probability and Statistics): Fall 2019 (66 students);  
STAT 3122 (Probability and Statistics I ): Fall 2019 (36 students);  
STAT 1220 (Elements of Statistics I): Summer 2019 (7 students);  
STAT 1222 (Introductory Statistics): Spring 2019 (65 students);  
STAT 3122/MATH 3122 (Probability and Statistics i): Fall 2018 (51 students);  
STAT 1222 (Introductory Statistics): Fall 2018 (41 students);  
STAT 1220 (Elements of Statistics I): Summer 2018 (14 students);  
STAT 2122 (Introduction to Probability and Statistics): Spring 2018 (54 students);  
STAT 2122 (Introduction to Probability and Statistics): Spring 2018 (56 students);  
STAT 3160 (Applied Multivariate Analysis): Fall 2017 (13 students);  
STAT 1222 (Introductory Statistics): Fall 2017 (52 students);  
STAT 1222 (Introductory Statistics): Spring 2016 (69 students);  
STAT 1222 (Introductory Statistics): Fall 2015 (35 students);  
STAT 1222 (Introductory Statistics): Fall 2015 (51 students);  
STAT 1222 (Introductory Statistics): Fall 2014 (45 students);  
STAT 1222 (Introductory Statistics): Fall 2014 (41 students);  
STAT 1222 (Introductory Statistics): Spring 2014 (70 students);  
STAT 1222 (Introductory Statistics): Spring 2014 (62 students);  
STAT 1222 (Introductory Statistics): Fall 2013 (45 students);  
STAT 1222 (Introductory Statistics): Fall 2013 (35 students)

### **Courses Taught at Mizzou**

- STAT 1200 (Introductory Statistical Reasoning): 3 semesters (about 35 students each semester)

### **Courses Taught at UALR**

College Algebra (1 semester, about 35 students)

Computer Labs for Calculus II (2 semesters, about 25 students each semester)

Computer Labs for Calculus III (2 semesters, about 25 students each semester)

### **Mentoring**

#### **Post-doc mentored**

- Dr. Lei Ge (Co-mentored with Dr. Kun Huang), 2022-2023

## Student Advising

### Current Student

- Ph.D. student: Jason Mao (Co-Advising with Dr. Wanzhu Tu), 2023-2025

### Students Advised

- Ph.D.: Unkung Lee (co-advised with Dr. Yanqing Sun in 2014), “Analysis of semiparametric regression models for the cumulative incidence functions under the two-phase sampling designs”.
- Masters: 1. Xueji Wang (advised in 2017-2018), “Longitudinal data analysis using generalized estimating equations”, *graduated* in Spring 2018;  
2. Gordon Black (advised in Fall 2015), “A flexible modeling of panel count data with informative observation times and drop-outs”.
- Senior project: Christopher Burlison (advised in Fall 2018), “Regression analysis of ischemic heart disease”.

### Committee Member

- Master’s Thesis: Sayantika Nag, Summer 2019; Zhiyuan Weng, Fall 2017; Chengwei Sun, Spring 2016; Shilue Zhang, Fall 2014
- Dissertation: Chengwei Sun, Fall 2019; Fei Heng, Spring 2019; Liqiu Deng, Spring 2019; Unkung Lee, Spring 2016; Yan Han, 2023

## Research Presentations

### Invited Talks

- “Semiparametric Regression of Mixed Panel Count Data with Informative Observation Times”, Mizzou statistics 60th anniversary conference (Being Significant: 60 Years of Mizzou Statistics), Columbia, Missouri, October 2023
- “Semiparametric Analysis of Multivariate Recurrent Events with Informative Censoring”, The 5th International Conference on Econometrics and Statistics (EcoSta 2022), Kyoto, Japan, June 2022.
- “Semiparametric Regression of Recurrent Events with Informative Censoring”, IU Math Departmental Seminar, April 2021.
- “Analysis of Recurrent Events under Complex Observation Schemes”, The 2020 ICSA Applied Statistics Symposium, Houston, Texas, December 2020.
- “Joint Analysis of Interval-Censored Recurrent Events and Survival Data”, The 2019 ICSA Applied Statistics Symposium, Raleigh, North Carolina, June 2019.
- “A General Additive-Multiplicative Mean Model for Panel Count Data Analysis”, The 2019 Conference on Lifetime Data Science, Pittsburgh, Pennsylvania, May 2019.

- “Semiparametric Regression of Panel Count Data with Informative Observation and Dropout Processes”, A Statistics Seminar at University of South Carolina, Columbia, South Carolina, April 2018.
- “Semiparametric Varying-Coefficient Regression Analysis of Recurrent Events”, The 2017 ICSA China Conference with the Focus on Lifetime Data Science, Jilin, China, July 2017.
- “Semiparametric Varying-Coefficient Regression for Recurrent Events”, The First International Conference on Econometrics and Statistics, Hong Kong, June 2017.
- “Semiparametric Varying-Coefficient Regression Analysis of Recurrent Events”, The 2016 ICSA Applied Statistics Symposium, Atlanta, Georgia, June 2016.
- “Regression Analysis of Multivariate Panel Count Data with Informative Observation Times”, The 2015 ICSA China Statistics Conference, Shanghai, China, July 2015.
- “Semiparametric Regression of Multivariate Panel Count Data with Informative Observation Times”, The Fifth International Biostatistics Workshop of Jilin University, Jilin, China, June 2015.
- “Regression Analysis of Panel Count Data with Informative Observation Times”, The 2014 Joint Applied Statistics Symposium of ICSA & Korean International Statistical Society, Portland, Oregon, June 2014.
- “Analyzing Panel Count Data with a Terminal Event”, A Biostatistics Working Seminar at University of Missouri, Columbia, Missouri, September 2012.
- Series Presentations “The Statistical Analysis of Failure Time Data”, Biostatistics Working Seminars at University of Missouri, Columbia, Missouri, February-May 2010.

### **Contributed Talks**

- “Facilitating adaptive coping with fear of recurrence among breast cancer survivors: Feasibility and acceptability outcomes from a three-arm randomized controlled trial”, 2024 American Society of Clinical Oncology (ASCO) Annual Meeting , Chicago, Illinois, June 2024.
- “An Additive-Multiplicative Mean Model for Panel Count Data with Dependent Observation and Dropout Processes”, The 2018 Joint Statistical Meetings (JSM), Vancouver, Canada, July 2018.
- “Semiparametric Varying Coefficient Regression for Analysis of Recurrent Event Data”, The 2016 International Biometric Conference, Victoria, Canada, July 2016.
- “Semiparametric Random-Effect Models for Panel Count Data with Informative Observation Times”, The 2015 JSM, Seattle, Washington, August 2015.
- “Regression Analysis of Longitudinal Data with Correlated Censoring and Observation Times”, The 2014 Eastern North American Region (ENAR) Meetings, Baltimore, Maryland, March 2014.
- “Regression Analysis of Panel Count Data with Informative Observation Times”, The 2014 JSM, Boston, Massachusetts, August 2014.

- “Two-Sample Nonparametric Comparison for Panel Count Data with Unequal Observation Processes”, The 2013 ENAR Meetings, Orlando, Florida, March 2013.
- “Semiparametric Transformation Model for Panel Count Data with Dependent Observation Process and a Terminal Event”, The 2012 Southern Regional Council on Statistics Summer Research Conferences, Jekyll Island, Georgia, June 2012.