

CURRICULUM VITAE

Kai Yang PhD

**Assistant Professor
Department of Institute for Health and Equity
Division of Biostatistics**

OFFICE ADDRESS:

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EDUCATION:

08/2012 - 06/2016 BS, Department of Mathematics, Nanjing University, China
08/2016 - 08/2019 MS, Department of Biostatistics, University of Florida, FL
08/2016 - 08/2021 PhD, Department of Biostatistics, University of Florida, FL

FACULTY APPOINTMENTS:

08/2021 - Present Assistant Professor, Institute for Health and Equity, Division of Biostatistics, The Medical College of Wisconsin, Milwaukee, WI

AWARDS AND HONORS:

05/2014 Jingchu Scholarship, Nanjing University
05/2015 First Prize of the People's Scholarship, Nanjing University
03/2018 Student Travel Award, Department of Biostatistics, University of Florida
05/2018 Outstanding Dissertation Research Award, University of Florida
05/2018 Best Student Paper Award, International Indian Statistical Association
08/2018 Young Investigator Award, American Statistical Association
05/2019 Student Travel Award, IMS/ASA Spring Research Conference
05/2019 Student Travel Award, Midwest Biopharmaceutical Statistics Workshop
07/2020 Outstanding Dissertation Research Award, University of Florida
03/2022 PHHP Outstanding Young Alumni Award, University of Florida

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

06/2017 - Present American Statistical Association
06/2017 - Present International Biometric Society
03/2018 - Present International Chinese Statistical Association
08/2018 - Present American Association for the Advancement of Science
03/2019 - Present Institute of Mathematical Statistics
03/2019 - Present Institute for Operations Research and the Management Sciences

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Journal Review

02/2019 - Present IEEE Access
03/2020 - Present International Journal of Production Research
11/2020 - Present Statistics in Medicine
05/2021 - Present BioData Mining
08/2021 - Present Global Epidemiology
01/2022 - Present BMJ Open
07/21/2022 - Present Journal of Applied Statistics

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

03/2022 - Present Member, ICSA Student Paper Competition Committee, ICSA

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:**Active****Peer Review**

Title: Online Spatio-Temporal Disease Surveillance Using Exponentially Weighted Spatial LASSO

Source: CTSI BERD Pilot Methodological Innovation Award

Role: Principal Investigator

Dates: 05/2022 - 04/2023

Prior**Peer Review**

Title: A Multipotential Mitigation Agent for Gastrointestinal Syndrome

Source: NIH

Role: Consultant

Dates: 08/2018 - 07/2019

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:**National**

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, IISA Conference on Statistics, Gainesville, FL, 05/17/2018 - 05/20/2018

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, INFORMS Annual Meeting, Seattle, WA, 10/20/2019 - 10/23/2019

Peihua Qiu, Kai Yang, Spatio-Temporal Disease Surveillance by Using Covariate Information, INFORMS Annual Meeting, Virtual, 11/08/2020 - 11/11/2020

Peihua Qiu, Kai Yang, Spatio-Temporal Disease Surveillance by Using Covariate Information, WNAR Annual Meeting, Virtual, 06/13/2021 - 06/16/2021

Kai Yang, Peihua Qiu, Design Variable Sampling Control Charts Using Covariate Information, INFORMS Annual Meeting, Anaheim, CA, 10/24/2021 - 10/27/2021

Kai Yang, Peihua Qiu, Adaptive Process Monitoring Using Covariate Information, ICSA Applied Statistics Symposium, Gainesville, FL, 06/19/2022 - 06/22/2022

Peihua Qiu, Kai Yang, Spatio-Temporal Process Monitoring Using Exponentially Weighted Spatial LASSO, INFORMS Annual Meeting, Indianapolis, IN, 10/16/2022 - 10/19/2022

International

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, Nanjing University, Nanjing, China, 11/02/2020 - 11/02/2022

Kai Yang, Peihua Qiu, Design Variable-Sampling Control Charts Using Covariate Information, Jinan University, Guangzhou, China, 06/29/2021

Peihua Qiu, Kai Yang, Effective Disease Surveillance by Using Covariate Information, IISA Conference on Statistics, Bangalore, India, 12/26/2022 - 12/30/2022

PEER REVIEWED WORKSHOPS/PRESENTATIONS:**Local**

Kai Yang, Peihua Qiu, Spatio-Temporal Incidence Rate Data Analysis by Using Nonparametric Regression, UF Biostatistics Workshop, Gainesville, FL, 04/07/2017 - 04/08/2017

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, UF Statistics Winter Workshop, Gainesville, FL, 01/19/2018 - 01/20/2018

Kai Yang, Peihua Qiu, Nonparametric Modeling of Spatio-Temporal Disease Incidence Rate Data, UF Emerging Pathogens Institute Research Day, Gainesville, FL, 02/12/2019

Regional

Kai Yang, Peihua Qiu, Effective Statistical Process Control by Using Covariate Information, ASA Florida Chapter Meeting, Orlando, FL, 02/08/2019 - 02/09/2019

National

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, ENAR Spring Meeting, Atlanta, GA, 03/25/2018 - 03/28/2018

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, Midwest Biopharmaceutical Statistics Workshop, Indianapolis, IN, 05/20/2019 - 05/22/2019

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, IMS/ASA Spring Research Conference, Blacksburg, VA, 05/22/2019 - 05/24/2019

Kai Yang, Peihua Qiu, Adaptive Process Monitoring Using Covariate Information, Joint Statistical Meeting, Washington, DC, 08/06/2022 - 08/11/2022

International

Kai Yang, Peihua Qiu, Online Sequential Monitoring of Spatio-Temporal Disease Incidence Rates, Joint Statistical Meeting, Vancouver, Canada, 07/28/2018 - 08/02/2018

COMMITTEE SERVICE:

Medical College of Wisconsin

09/2021 - Present Member, Website Committee, Division of Biostatistics, Institute for Health and Equity, Medical College of Wisconsin

09/2021 - Present Member, Computer Committee, Division of Biostatistics, Institute for Health and Equity, Medical College of Wisconsin

01/2022 - 05/2022 Member, Student Admission Committee, Division of Biostatistics, Institute for Health and Equity, Medical College of Wisconsin

03/2022 - Present Member, Faculty Recruitment Committee, Division of Biostatistics, Institute for Health and Equity, Medical College of Wisconsin

MEDICAL COLLEGE TEACHING ACTIVITIES:

Graduate Student Education

01/2022 - 05/2022 BIOS 04232 Statistical Models and Methods II

05/30/2022 - 12/16/2022 BIOS 04295 Reading and Research

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Qiu P, Yang K. Spatio-temporal process monitoring using exponentially weighted spatial LASSO. Journal of Quality Technology, 2022, in press.
2. Yang K, Qiu P. Design variable-sampling control charts using covariate information IISE Transactions. 2022;54(5):505-519.
3. Yang K, Qiu P. A three-step local smoothing approach for estimating the mean and covariance functions of spatio-temporal Data Annals of the Institute of Statistical Mathematics. February 2022;74(1):49-68.
4. Qiu P, Yang K. Effective disease surveillance by using covariate information. Stat Med. 2021 Nov 20;40(26):5725-5745.
5. Yang K, Qiu P. Adaptive Process Monitoring Using Covariate Information Technometrics. 2021;63(3):313-328.
6. Yang K, Qiu P. Online sequential monitoring of spatio-temporal disease incidence rates IISE Transactions. 1 November 2020;52(11):1218-1233.
7. Yang K, Qiu P. Nonparametric estimation of the spatio-temporal covariance structure. Stat Med. 2019 Oct 15;38(23):4555-4565.

8. Yang K, Qiu P. Spatiotemporal incidence rate data analysis by nonparametric regression. *Stat Med.* 2018 Jun 15;37(13):2094-2107.
9. Allen BR, Christenson RH, Cohen SA, Nowak R, Wilkerson RG, Mumma B, Madsen T, McCord J, Huis In't Veld M, Massoomi M, Stopyra JP, Montero C, Weaver MT, Yang K, Mahler SA. Diagnostic Performance of High-Sensitivity Cardiac Troponin T Strategies and Clinical Variables in a Multisite US Cohort. *Circulation.* 2021 Apr 27;143(17):1659-1672.
10. Riner AN, Underwood P, Yang K, Herremans KM, Cameron ME, Chamala S, Qiu P, George TJ, Permut JB, Merchant NB, Trevino JG (2020). Disparities in pancreatic ductal adenocarcinoma-the significance of hispanic ethnicity, subgroup analysis, and treatment facility on clinical outcomes. *Cancer Medicine,* 9, 4069-4082.
11. Kirkpatrick AF, Saghabi A, Yang K, Qiu P, Alexander J, Bavry E, Schwartzman R (2020). Optimizing the Treatment of CRPS with Ketamine. *The Clinical Journal of Pain,* 36, 516-523.
12. Iqbal A, Khan A, George TJ, Tan S, Qiu P, Yang K, Trevino J, Hughes S. Objective Preoperative Parameters Predict Difficult Pelvic Dissections and Clinical Outcomes. *J Surg Res.* 2018 Dec;232:15-25.
13. Qiu P, Yang K. Spatio-temporal process monitoring using exponentially weighted spatial LASSO *Journal of Quality Technology.* 2022.
14. Riner AN, Underwood PW, Yang K, Herremans KM, Cameron ME, Chamala S, Qiu P, George TJ, Permut JB, Merchant NB, Trevino JG. Disparities in Pancreatic Ductal Adenocarcinoma-The Significance of Hispanic Ethnicity, Subgroup Analysis, and Treatment Facility on Clinical Outcomes. *Cancer Med.* 2020 Jun;9(12):4069-4082. PMID: PMC7300394
15. Yang GS, Yang K, Weaver MT, Lynch Kelly D, Dorsey SG, Jackson-Cook CK, Lyon DE. Exploring the relationship between DNA methylation age measures and psychoneurological symptoms in women with early-stage breast cancer. *Support Care Cancer.* 2022 Dec 20;31(1):65.
16. Wynne N, Cava JA, Gaffney M, Heitkotter H, Scheidt A, Reiniger JL, Grieshop J, Yang K, Harmening WM, Cooper RF, Carroll J. Intergrader agreement of foveal cone topography measured using adaptive optics scanning light ophthalmoscopy. *Biomed Opt Express.* 2022 Aug 01;13(8):4445-4454. PMID: PMC9408252

Books, Chapters, and Reviews

1. Yang K, Qiu P. BCEWMA: a new and effective biosurveillance system for disease outbreak detection. In *Statistical Methods for Global Health and Epidemiology* (edited by Xinguang Chen and Ding-Geng Chen), 2020, 335-352, Springer.
2. Qiu P, Yang K, You L. Discussion of 'Post selection shrinkage estimation for high-dimensional data analysis' *Applied Stochastic Models in Business and Industry.* 1 March 2017;33(2):123-125.

Editorials, Letters to Editor, Other

1. Allen BR, Christenson RH, Cohen SA, Weaver MT, Yang K, Mahler SA. Response by Allen et al to Letter Regarding Article, "Diagnostic Performance of High-Sensitivity Cardiac Troponin T Strategies and Clinical Variables in a Multisite US Cohort". *Circulation.* 2021 Nov 09;144(19):e285-e286.