Curriculum Vitae
Peihua Qiu
Date: August 1, 2023

Education:

1993-1996   PhD in Statistics/Biostatistics, University of Wisconsin - Madison
1992-1993   MS in Statistics, University of Georgia
1986-1989   MS in Statistics, Fudan University, China
1982-1986   BS in Mathematics, Fudan University, China

Employment:

2022-present   Dean's Professor and Founding Chair, Department of Biostatistics, College of Public Health and Health Professions and College of Medicine, University of Florida (UF)
2018-present   Director, Biostatistics and Data Management Core, Claude D. Pepper Older Americans Independence Center, Institute of Aging, UF
2018-present   Affiliate Professor, Department of Statistics, UF
6-9/2020   Interim Chair, Department of Epidemiology, UF
2016-2020   Director, Biostatistics and Epidemiology Research Design, Clinical and Translational Science Institute (CTSI), UF
2016-2019   Joint Appointment (10% FTE), Department of Surgery, College of Medicine, UF
2013-2022   Professor and Founding Chair, Department of Biostatistics, UF
2007-2013   Tenured Full Professor, School of Statistics, University of Minnesota
2002-2007   Tenured Associate Professor, School of Statistics, University of Minnesota
1998-2002   Assistant Professor, School of Statistics, University of Minnesota
1996-1998   Senior Research Consulting Statistician, Biostatistics Center, Ohio State University
1989-1991   Assistant Professor, Department of Statistics and Operations Research, School of Management, Fudan University, Shanghai, China

Short Research Visits:

06/2014-07/2014   National Center for Theoretical Sciences, Taiwan
01/2012-03/2012   University of Melbourne, Australia
08/2011-08/2011   University of Texas at Houston
05/2008-06/2008   Nankai University, China
07/2006-07/2006   National Taiwan University, Taiwan
06/2005-06/2005   Universite Catholique de Louvain, Belgium
09/2004-11/2004   Australian National University, Australia
01/2004-01/2004   Universite Catholique de Louvain, Belgium
08/2003-09/2003   Universite catholique de Louvain, Belgium
05/2002-06/2002   Australian National University, Australia

Awards, Honors and Recognitions:

1. Keynote Speaker, 2023 INFORMS Conference on Quality, Statistics, and Reliability (ICQSR), June 6-8, 2023, North Carolina State University, Raleigh, NC.

2. Elected Fellow, 2022, American Association for the Advancement of Science (AAAS).

3. 2022 International Educator of the Year (Senior Faculty) Award, UF College of Public Health and Health Professions, November 2022.

4. Dean's Professor, April 2022, UF College of Public Health and Health Professions and College of Medicine.

5. Plenary Speaker, 2022 International Webinar on Artificial Intelligence and Data Science in Industry 4.0, July 14, 2022, virtual Webinar organized by Dong A University, Vietnam.

6. Elected Fellow, 2021, American Society for Quality (ASQ).

7. Plenary Speaker, The 37th ASA Quality and Productivity Research Conference (QPRC 2021), July 26-29, 2021, Florida State University, Tallahassee, FL.

8. Plenary Speaker, The 10th International Conference and Workshop on High-Dimensional Data Analysis, October 13-14, 2020, Bali Indonesia (changed to an online conference due to COVID-19).

9. Dean's Citation Paper Award, 2019, College of Public Health and Health Professions, University of Florida (for the paper: Qiu, P., Zi, X., and Zou, C. (2018), "Nonparametric Dynamic Curve Monitoring," *Technometrics*, **60**, 386–397).

10. Dean's Citation Paper Award, 2019, College of Public Health and Health Professions, University of Florida (for the paper: Ross, K., Qiu, P., You, L., and Wing, R. (2018), "Characterizing the Pattern of Weight Loss and Regain in Adults," *Obesity*, **26**, 318–323).

11. Plenary Speaker, ISSAT International Conference on Data Science in Business, Finance and Industry, July 3–5, 2019, Da Nang, Vietnam.

12. The paper Qiu et al. (2010, *Technometrics*) was chosen by the 60th anniversary virtual issue of the flagship statistical journal *Technometrics* as one of the 35 classic articles published in the journal during the past 60 years.

13. University Term Professor, 2018-2021, University of Florida.

14. Special invited speaker (with a 45-minute presentation), The 2017 IISA International Conference on Statistics, December 27–30, 2017, Hyderabad, India.

15. Plenary Speaker (90-minute presentation followed by 90-minute discussions), 2017 Stu Hunter Research Conference, March 5-8, 2017, Copenhagen, Denmark.

16. Dean's Citation Paper Award, 2016, College of Public Health and Health Professions, University of Florida (for the paper: Liang, F., Song, Q., and Qiu, P. (2015), "An Equivalent Measure of Partial Correlation Coefficients for High Dimensional Gaussian Graphical Models," *Journal of the American Statistical Association*, **110**, 1248–1265).

17. Mini-Plenary Speaker, The South African Statistical Association's 57th Annual Conference, November 29 - December 2, 2015, University of Pretoria, South Africa.

18. Dean's Citation Paper Award, 2015, College of Public Health and Health Professions, University of Florida (for the paper: Park, K.Y., and Qiu, P. (2014), "Model Selection and Diagnostics For Joint Modeling Of Survival And Longitudinal Data With Crossing Hazard Rate Functions," *Statistics in Medicine*, **33**, 4532–4546).

19. Keynote speaker, 2nd INFORMS International Symposium on System Informatics and Engineering, July 8-9, 2013, Xi'an, China.

20. *Technometrics* invited speaker with discussions, 2012 INFORMS annual meeting, October 14-17, 2012, Pheonix, AZ.

21. Plenary speaker, The 4th International Conference on Computational Intelligence and Software Engineering (CiSE 2012), December 14-16, 2012, Wuhan, China.

22. Plenary speaker, International Conference on Quality and Reliability Engineering, December 20-22, 2011, Bangalore, India.

23. Plenary speaker, 5th WSEAS International Conference on COMPUTER ENGINEERING and APPLICATIONS (CEA '11), January 29-31, 2011, Puerto Morelos, Mexico.

24. Elected Fellow, 2010, Institute of Mathematical Statistics (IMS).

25. Plenary speaker, Annual Meeting of the German Statistical Society, September 14 - 17, 2010, Nuremberg, Germany.

26. Featured speaker of the *Technometrics* invited session with discussions, Joint Statistical Meetings, July 31 - August 5, 2010, Vancouver, Canada.

27. Elected Fellow, 2009, American Statistical Association (ASA).

28. Elected member, 2009, International Statistical Institute (ISI).

29. Special invited speaker (with a 50-minute presentation), The Winter 2009 Canadian Mathematical Society meeting, December 5-7, 2009, Windsor, Canada.

30. Inaugural Ziegel prize winner, sponsored by *Technometrics*, 2007 (for the book *Image Processing and Jump Regression Analysis*).

31. Marquis Who's Who in America, 2003-2007, 2012-2013; Marquis Who's Who in American Education, 2006, 2007.

32. Faculty Sabbatical Supplement Awards, 2004/2005, 2011/2012, College of Liberal Arts, University of Minnesota.

33. *Technometrics* invited speaker, 45th Annual Fall Technical Conference, October 18-19, 2001, Toronto, Canada.

34. Single Semester Leave Awards, Fall 2001, Fall 2008, College of Liberal Arts, University of Minnesota.

35. Best paper winner, the 5th International Statistical Institute paper competition for young statisticians, Cairo, Egypt, September 1991.

36. Winner of the 1990 UAP Mathematical Award, April 1990, Fudan University, China.

Research Grants:

1. Co-I, "Wearable Technology Infrastructure to Enhance Capacity for Real-Time, Online Assessment and Mobility (ROAMM) of Intervening Health Events in Older Adults," NIH R21/R33 AG059207, PI: Todd Manini, amount: $1,745,603, grant period: 02/01/2020-01/31/2025 (5% FTE since 2023).

2. Co-I, "Fasting to provide Energy Needed to Help Adults in Need of Cognitive Enhancement," Florida Department of Health, 23A08, PI: Stephen Anton, amount: $350,000, grant period: 03/01/2023-02/28/2025 (5% FTE for me each year).

3. PI, "Building mathematical modeling workforce capacity to support infectious disease and healthcare research," CDC, 1U01CK000670, MPI: Yang Yang and Peihua Qiu, amount: $882,184, grant period: 09/30/2022-09/29/2025.

4. Director, Biostatistics and Data Management Core (RC3), Claude D. Pepper Older Americans Independence Center, NIH, P30AG028740, PI: Marco Pahor, amount: $6,500,000, grant period: 06/15/2022-03/31/2027 (about $112K for the core and 10% FTE for me each year).

5. Co-I, "Synergizing home health rehabilitation therapy to optimize patients' activities of daily living," NIH, R21AG076972, PI: Chiung-ju Liu, amount: $411,472, grant period: 05/15/2022-04/30/2024 (3% FTE plus a 25% RA each year).

6. PI, "Longitudinal Sequential Learning System for Effective Personalized Screening of Age-Related Chronic Diseases," UFII SEED Award on AI Research, $20,500, 4/1/2022-3/31/2023 (This internal grant provides an additional $5,000 for using the HiperGator supercomputing services).

7. Co-I, "Intercollaborative Radiation Countermeasure (INTERACT) Consortium for Advanced Development of Medical Countermeasures to Mitigate/Treat Acute and Delayed Radiation Syndromes," NIH, 1U19AI150574-01, PI: Zeljko Vujaskovic, amount: $12,239,361, grant period: 06/16/2020-05/31/2025 (8% FTE plus a 10% RA each year).

8. PI, "Longitudinal Modelling and Sequential Monitoring of Image Data Streams," NSF, DMS-1914639, amount: $180,000, grant period: 08/01/2019-07/31/2023 (This is a single-investigator grant).

9. Co-I, "Nicotinamide riboside as an Enhancer of Exercise Therapy in hypertensive older adults: The NEET Trial," NIH, R21AG064282, PI: Robert Mankowski, amount: $429,957, grant period: 09/01/2019-05/31/2021 (5% FTE each year).

10. Co-I, "Evaluation of an Adaptive Intervention for Weight," NIH, R01DK119244, PI: Kathryn Ross, amount: $2,996,032, grant period: 7/1/19-3/31/2024 (10% FTE plus a 50% RA each year).

11. Director, Biostatistics and Epidemiology Research Design (BERD), National Center for Advancing Translational Sciences of the National Institutes of Health under University of Florida Clinical and Translational Science Award, U54 TR001427-05, PI: David Nelson, $29 million, grant period: 7/1/2019-6/30/2024 (about $280K for the core and 10% FTE for me each year. I stepped down from the director position in 2020, but stayed in BERD with 5% FTE afterwards.).

12. Co-I, "RadTox: Measuring Radiation Toxicity Using Circulating DNA," NIH, PO# 18-100, PI: Aiguo Zhang, amount: $1,999,984, grant period: 9/17/2018- 9/16/2023 (10% FTE plus 50% Post-Doc each year).

13. Director, Biostatistics and Data Management Core (RC3), Claude D. Pepper Older Americans Independence Center, NIH, P30AG028740, PI: Marco Pahor, amount: $5,287,639, grant period: 04/01/2017-03/31/2022 (about $90K for the core and 10% FTE for me each year since 04/2018. This center grant has been successfully renewed recently).

14. Biostatistician, "A Multipotential Mitigation Agent for Gastrointestinal Syndrome," NIH, HHSN272201700008C, PI: Paul Okunieff, amount: $4,494,880, grant period: 11/1/2017- 1/31/2021 (10% FTE plus 25% RA each year).

15. Site PI, "Almost-Smooth Nonparametric Regression and Pattern Recognition," DoD, W911NF-17-1-0040, PI: Richard Charnigo (University of Kentucky), $496,839, 12/14/2016-11/13/2021 (8% FTE during 6/1/2021-10/31/2021).

16. Co-I, "Identification and Prediction of High-Risk Periods for Regain After Weight Loss", NIH, R21DK109205, PI: Kathryn Ross, grant period: 09/07/2016-09/06/2019 (5% FTE plus 50% RA, year 1; 3% FTE plus 25% RA, year 2).

17. Co-PI, "Statistical Inference for Biomedical Big Data: Theory, Methods and Tools," NSF, DMS-1703077, amount: $20,000 (this grant is for sponsoring a workshop in biostatistics during April 7-8, 2017 at UF Department of Biostatistics), PI: Faming Liang.

18. Biostatistical consultant, "Food Assistance, Diet, and Body Weight Status among WIC Eligible Children," NIH, R03 HD090387-01, PI: Harry Zhang (School of Community and Environmental Health, Old Dominion University), $155,000, grant period: 12/08/2016-12/31/2018 ($6,000 for my service).

19. Site-PI, "Equivalent Partial Correlation Methods for Integrative Genetic Network Analysis," NIH, 1R01GM117597, PI: Faming Liang, amount: $1,042,460, grant period: September 1, 2015 - May 31, 2019 (15% FTE during 2015-2017 and about $110K during 2018-2019).

20. Director, Biostatistics and Epidemiology Research Design (BERD), National Center for Advancing Translational Sciences of the National Institutes of Health under University of Florida Clinical and Translational Science Award UL1TR001427, PI: David Nelson, $17.5 million, grant period: 2015-2019 (about $280K for the core and 10% FTE for me each year).

21. PI, "New Methods for Sequential Monitoring of Longitudinal Patterns," National Science Foundation, DMS-1405698, amount: $120,000, grant period: July 1, 2014 - August 15, 2018 (This is a single-investigator grant).

22. Co-I, "Southeast Resource Center for Integrated Metabolomics (SECIM)," NIH, 1U24-DK097209-01A1, PIs: A.S. Edison and R.A. Yost, UFL, $9,999,524, 09/01/2013 - 08/31/2018 (10% FTE each year).

23. Co-I, "Associations between Ambient Air Pollution and Adverse Birth Outcomes in Florida," NIH, 5K01ES019177, PI: X Xu, Department of Epidemiology, UFL, $610,145, 12/08/2011 - 11/30/2016 (3% FTE in the last 3 years).

24. PI, "Intensity-Based Image Registration and 3-D Image Denoising," National Science Foundation, DMS-1007506, amount: $150,000, grant period: August 1, 2010 - July 31, 2013 (This is a single-investigator grant).

25. Co-PI, "Quantifying children's emotions with the emotion intensity-linkage function model," NIH, 5R01-HD055343, PI: Professor Michael Potegal, Department of Pediatrics, University of Minnesota Medical School, amount: $906,668, grant period: September 30, 2008 - July 31, 2011, (28% FTE plus 50% RA each year).

26. PI, "Statistical Analysis of Image Restoration and Its Applications in Magnetic Resonance Imaging," National Science Foundation, DMS-0706082, amount: $140,000, grant period: July 1, 2007 - June 30, 2011 (This is a single-investigator grant).

27. PI, US - China research collaborations, National Science Foundation, DMS-0721204, amount: $39,996 (from US NSF) plus $30,000 Chinese Yuan (from Chinese NSF), grant period: August 1, 2007 - July 31, 2008.

28. PI, "Image Segmentation for cDNA Microarray Data and Jump Preserving Surface Estimation," National Science Foundation, DMS-0406020, amount: $50,000, grant period: August 1, 2004 - July 30, 2007 (This is a single-investigator grant).

29. Co-PI, "Flushing-related forehead temperature as a measure of anger intensity," Minnesota Medical Foundation, amount: $5,000, grant period: 09/01/05-08/31/06. (Note: This grant is mainly for buying some devices to perform the study supported by the UMN Grant-in-Aid grant listed in the next item.)

30. Co-PI, "Flushing-related forehead temperature as a measure of anger intensity," Grant-in-Aid of Research, Artistry and Scholarship, University of Minnesota, amount: $29,922, grant period: January 1, 2005 - June 30, 2006. (Note: This grant is mainly for supporting a one-year 50%-FTE RA in statistics.)

31. Co-PI, "Quantifying the time course of tantrum anger," NIH, R21, PI: Michael Potegal, Department of Pediatrics, University of Minnesota Medical School, amount: $370,557, grant period: July 1, 2004 - June 30, 2006, (25% FTE plus a one-year 50% RA in statistics).

32. PI, "Image reconstruction by local smoothing techniques," National Security Agency, amount: $38,899, grant period: March 5, 2004 - March 4, 2006 (This is a single-investigator grant).

33. Travel grant, Summer 2003, $500, Office of International Programs, University of Minnesota.

34. PI, "Two-dimensional jump regression analysis," Grant-in-Aid of Research, Artistry and Scholarship, University of Minnesota, amount: $15,908, grant period: July 1, 2000 - June 30, 2002.

35. Biostatistician, Design and Analysis Core, Transdisciplinary Tobacco Use Research Center (TTURC), National Cancer Institute, amount: $9,227,445, grant period: September 30, 1999 - September 29, 2004, (20% FTE in the first year).

Research Monographs:

1. **Qiu, P.** (2023), *Statistical Methods for Dynamic Disease Screening and Spatio-Temporal Disease Surveillance*, (contracted with Chapman & Hall/CRC; expected to publish in 2023).

2. **Qiu, P.** (2014), *Introduction to Statistical Process Control*, Boca Raton, FL: Chapman & Hall/CRC.

3. **Qiu, P.** (2005), *Image Processing and Jump Regression Analysis*, New York: John Wiley & Sons (Inaugural Ziegel prize winner, sponsored by *Technometrics*, 2007).

Refereed Book Chapters (names with "*" denote students):

4. Xie, X.*, and **Qiu, P.** (2023), "Dynamic Process Monitoring Using Machine Learning Control Charts," In *Artificial Intelligence for Smart Manufacturing - Methods, Applications, and Challenges*, (editted by Kim Phuc Tran), 65–82, Springer Nature.

5. Xie, X.*, and **Qiu, P.** (2022), "Machine Learning Control Charts for Monitoring Serially Correlated Data," In *Control Charts and Machine Learning for Anomaly Detection in Manufacturing* (editted by Kim Phuc Tran), 131–147, Springer.

6. Kang, Y.*, and **Qiu, P.** (2021), "Nonparametric Deconvolution by Fourier Transformation and Other Related Approaches," In *Handbook of Measurement Error Models* (Grace Y. Yi, Aurore Delaigle, and Paul Gustafson eds), 221–243, Springer.

7. **Qiu, P.**, and Yi, F.* (2021), "Control Charts for Batch Processes," In *Wiley StatsRef-Statistics Reference Online*, Wiley, https://doi.org/10.1002/9781118445112.stat04057.pub2.

8. You, L.*, and **Qiu, P.** (2019), "A Nonparametric Control Chart for Dynamic Disease Risk Monitoring," In *Distribution-Free Methods for Statistical Process Monitoring and Control* (Koutras M., and Triantafyllou I. eds), 243–257, Springer.

9. Yang, K.*, and **Qiu, P.** (2019), "BCEWMA: A New and Effective Biosurveillance System for Disease Outbreak Detection," In *Statistical Methods for Global Health and Epidemiology* (Chen X., and Chen D.G. eds), 335-352, Springer.

10. **Qiu, P.** (2019), "Some Recent Studies in Statistical Process Control," In *Statistical Quality Technologies: Theory and Practice* (editted by Yuhlong Lio, Hon Keung Tony Ng, Tzong-Ru Tsai, and Ding-Geng Chen), 3–19, Springer.

11. **Qiu, P.**, and You, L.* (2018), "Recent Research in Dynamic Screening System for Sequential Process Monitoring," In *Proceedings of the Pacific Rim Statistical Conference for Production Engineering* (Choi et al. ed.), 85–93, Springer.

12. **Qiu, P.** (2017), "Statistical Process Control Charts as a Tool for Analyzing Big Data," In *Big and Complex Data Analysis: Statistical Methodologies and Applications* (Ejaz Ahmed ed.), 123–138, Springer.

13. **Qiu, P.** (2011), "Jump Regression Analysis," In *International Encyclopedia of Statistical Sciences* (Miodrag Lovric ed.), 702–704, Springer.

14. Potegal, M., and **Qiu, P.** (2010), "Anger in children's tantrums: a new quantitative, behaviorally based model," In *International Handbook of Anger* (Eds, M. Potegal, G. Stemmler, and C. Spielberger), pp. 193–217, New York: Springer.

15. **Qiu, P.** (2009), "Image restoration," In *Wiley Interdisciplinary Reviews: Computational Statistics,* **1**, 110–113, John Wiley & Sons.

16. Hawkins, D.M., **Qiu, P.**, and Zamba, K.D. (2008), "Change-point methods," *Encyclopedia of Statistics in Quality and Reliability*, John Wiley & Sons.

17. Hsu, J.C., **Qiu, P.**, Hin, L.Y., Mutti, D.O., and Zadnik, K. (2004), "Multiple comparisons with the best ROC curve", In IMS Lecture Notes **47**, *New Developments in Multiple Comparison Procedures* (Y. Benjamini, S. Sarkar, and F. Bretz, eds), 65–75.

18. **Qiu, P.** (2000), "Some recent developments on edge detection and image reconstruction based on local smoothing and nonparametric regression," in book *Recent Research Developments in Pattern Recognition*, Vol. 1, 41–49.

Editted Conference Proceedings:

19. *Proceedings of the Pacific Rim Statistical Conference for Production Engineering*, (Editors: Choi, D., Jang, D., Lai, T.L., Lee, Y., Lu, Y., Ni, J., Qian, P., **Qiu, P.**, and Tiao, G.), 2018, Singapore: Springer.

20. *Proceedings of the 4th International Congress on Image and Signal Processing (CISP11),* vol. 1–5 (Editors: **Qiu, P.**, Xiang, Y., Ding, Y., Li, D., and Wang, L.), 2011, New York: IEEE, Inc.

21. *Proceedings of the 2nd International Congress on Image and Signal Processing (CISP09),* vol. 1–9 (Editors: **Qiu, P.**, Yiu, C., Zhang, H., and Wen, X.), 2009, New York: IEEE, Inc.

Papers Published in Refereed Journals (names with "*" denote students):

22. Ross, K.M., You, L.*, **Qiu, P.**, Shankar, M.N., Swanson, T.N., Ruiz, J., Anthony, L., and Perri, M., "Predicting High-Risk Periods for Weight Regain Following Initial Weight Loss," *Obesity*, in press.

23. Xue, L., Wang, Q., He, Z., and **Qiu, P.**, "A nonparametric EWMA control chart for monitoring mixed continuous and count data," *Quality Technology & Quantitative Management*, in press.

24. Zhang, X.*, Ahn, S., **Qiu, P.**, and Datta, S., "Identification of Shared Biological Features in Four Different Lung Cell Lines Infected with SARS-CoV-2 Virus through RNA-Seq Analysis," *Frontiers in Genetics*, in press.

25. Song, Z., Mukherjee, A., and **Qiu, P.**, "Two Robust Multivariate Exponentially Weighted Moving Average Charts to Facilitate Distinctive Product Quality Features Assessment," *Computers & Industrial Engineering*, in press.

26. Xie, X.*, and **Qiu, P.**, "High-Dimensional Dynamic Process Monitoring By PCA-Based Sequential Learning," *Annals of Applied Statistics*, in press.

27. Xie, X.*, and **Qiu, P.**, "A General Framework for Robust Monitoring of Multivariate Correlated Processes," *Technometrics*, in press.

28. Balachandran, A.T., Evans, W.J., Cawthon, P.M., Wang, Y.*, Shankaran, M., Hellerstein, M., **Qiu, P.**, and Manini, T., "Comparing D3-Creatine dilution and DXA muscle mass responses to strength training in low functioning older adults", *Journal of Gerontology: Medical Sciences*, in press.

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29. Yi, F.*, and **Qiu, P.** (2023), "Water Resource Surveillance for the Salton Sea in California By Adaptive Sequential Monitoring of Its Landsat Images," *Journal of Agricultural, Biological and Environmental Statistics*, **28**, 549–563.

30. Tian, Z.*, and **Qiu, P.** (2023), "Multivariate single index modeling of longitudinal data with multiple responses," *Statistics in Medicine*, **42**, 2982–2998.

31. Xie, X.*, and **Qiu, P.** (2023), "Control Chart For Dynamic Process Monitoring With An Application To Air Pollution Surveillance," *Annals of Applied Statistics*, **17**, 47–66.

32. **Qiu, P.**, and Yang, K.* (2023), "Spatio-Temporal Process Monitoring Using Exponentially Weighted Spatial LASSO," *Journal of Quality Technology*, **55**, 163–180.

33. Park, C., **Qiu, P.**, Carpena-Nunez, J., Rao, R., Susner, M., and Maruyam, B. (2023), "Sequential Adaptive Design for Jump Regression Estimation," *IISE Transactions*, **55**, 111–128.

34. Mankowski, R.T., Sibille, K.T., Leeuwenburgh, C., Hsu, F.C., **Qiu, P.**, Sandesara, B., and Anton, S.D. (2022), "Effects of curcumin C3 complex (R) on physical function in moderately functioning older adults with low-grade inflammation – A pilot trial," *Journal of Frailty & Aging*, https://doi.org/10.14283/jfa.2022.47.

35. **Qiu, P.**, and You, L.* (2022), "Dynamic Disease Screening by Joint Modeling of Survival and Longitudinal Data," *Journal of the Royal Statistical Society (Series C)*, **71**, 1158–1180.

36. **Qiu, P.**, and Xie, X.* (2022), "Transparent Sequential learning for Statistical Process Control of Serially Correlated Data," *Technometrics*, **64**, 487–501.

37. Xie, X.*, and **Qiu, P.** (2022), "Robust Monitoring of Multivariate Processes With Short-Ranged Serial Data Correlation," *Quality and Reliability Engineering International*, **38**, 4196–4209.

38. Xiang, D., **Qiu, P.**, Wang, D., and Li, W. (2022), "Reliable Post-Signal Fault Diagnosis for Correlated High-Dimensional Data Streams," *Technometrics*, **64**, 323–334.

39. Wang, G., Zou, C., and **Qiu, P.** (2022), "Data-Driven Determination of the Number of Jumps in Regression Curves," *Technometrics*, **64**, 312–322.

40. Hong, Y.R., Xie, Z., Suk, R., Tabriz, A.A., Turner, K., and **Qiu, P.** (2022), "Analysis of US Household Catastrophic Healthcare Expenditures associated with Chronic Disease, 2008-2018," *JAMA Network Open*, **5**, e2214923.

41. Ross, K., Carpenter, C.A., Arroyo, K.M., Shankar, M.N., Yi, F.*, **Qiu, P.**, Anthony, L., Ruiz, J., and Perri, M.G. (2022), "Impact of Transition from Face-to-Face to Telehealth on Behavioral Obesity Treatment During the COVID-19 Pandemic," *Obesity*, **30**, 858–863.

42. Yildiz, H., Talluri, S., Xie, X.*, Yoon, J., **Qiu, P.**, and Wassick, J. (2022), "Evaluating and monitoring distribution network efficiency with multivariate process control methods," *International Journal of Production Research*, **60**, 517–533.

43. Yang, K.*, and **Qiu, P.** (2022), "Design Variable-Sampling Control Charts Using Covariate Information," *IISE Transactions*, **54**, 505–519.

44. Yi, F.*, and **Qiu, P.** (2022), "An Adaptive CUSUM Chart for Drift Detection," *Quality and Reliability Engineering International*, **38**, 887–894.

45. Gierz, K., Park, K.*, and **Qiu, P.** (2022), "Non-parametric treatment time-lag effect estimation," *Statistical Methods in Medical Research*, **31**, 62–75.

46. Zhou, Q., and **Qiu, P.** (2022), "Phase I Monitoring of Serially Correlated Nonparametric Profiles By Mixed-Effects Modeling," *Quality and Reliability Engineering International*, **38**, 134–152.

47. Yang, K.*, and **Qiu, P.** (2022), "A Three-Step Local Smoothing Approach for Estimating the Mean and Variance/Covariance Functions of Spatio-Temporal Data," *Annals of the Institute of Mathematical Statistics*, **74**, 49–68.

48. Anton, S.D., Mankowski, R.T., **Qiu, P.**, You, L.*, Bensadon, B.A., Audino, E.J., Custodero, C., Lee, J., Hincapie, J., McLaren, C., Leeuwenburgh, C., and Ganesh, S.P. (2022), "Vitamin D supplementation is associated with a reduction in self-reported falls among older adults with previous fall history – Feasibility study," *The Journal of Frailty & Aging*, **11**, 224-230.

49. Mukherjee, A., **Qiu, P.**, and Marozzi, M. (2021), "A comprehensive distribution-free scheme for tri-aspect surveillance of complex processes," *Applied Stochastic Models in Business and Industry*, **37**, 1157–1181.

50. Yi, F.*, and **Qiu, P.** (2021), "Edge-Preserving Nonparametric Denoising of Image Sequences," *Entropy*, **23(10)**, doi: 10.3390/e23101332.

51. **Qiu, P.**, and Yang, K.* (2021), "Effective Disease Surveillance By Using Covariate Information," *Statistics in Medicine*, **40**, 5725–5745.

52. Wang, J., Chong, Z., and **Qiu, P.** (2021), "Optimal monitoring of Poisson data with known and unknown shifts," *Computers & Industrial Engineering*, **154**, 107100.

53. Cenko, E., Chen, H., Gill, T.M., Glynn, N.W., Henderson, R.M., King, A.C., Pahor, M., **Qiu, P.**, Rego, A., Reid, K.F., Tudor-Locke, C., Valiani, V., You, L.*, and Manini, T.M. (2021), "Ratings of Perceived Exertion during Walking: Predicting Major Mobility Disability and Effect of Structured Physical Activity in Mobility-Limited Older Adults," *The Journals of Gerontology: Series A*, **76(10)**, e264-e271.

54. You, L.*, and **Qiu, P.** (2021), "Joint Modeling of Multivariate Nonparametric Longitudinal Data and Survival Data – A Local Smoothing Approach," *Statistics in Medicine*, **40(29)**, 6689–6706.

55. Xue, L., and **Qiu, P.** (2021), "A Nonparametric CUSUM Chart For Monitoring Multivariate Serially Correlated Processes," *Journal of Quality Technology*, **53**, 396–409.

56. You, L.*, and **Qiu, P.** (2021), "A Robust Dynamic Screening System By Estimation of the Longitudinal Data Distribution," *Journal of Quality Technology*, **53**, 383–395.

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204. Qiu, P. (2014), "Editor's Report," *Technometrics*, **56**, 417–418.

205. Qiu, P. (2014), "Technometrics Highlights: Regression Diagnostics, Control Charts, and Bayesian Methods Featured in August Issue," *Amstat News*, August 2014, online.

206. Qiu, P. (2014), "Technometrics Highlights: Bayesian Approaches for Modeling Computer Experiments Featured in May Issue," *Amstat News*, June 2014, 11–12.

207. Qiu, P. (2014), "Technometrics Highlights: Experimental Design Featured in February Issue," *Amstat News*, February 2014, 17–18.

208. Chakraborti, S, Qiu, P., and Mukherjee, A. (2013), "Nonparametric Statistical Process Control Charts-A Special Issue of QREI," *Quality and Reliability Engineering International*, **29**, page 617.

209. Qiu, P. (2012), Review of *Microarray Image Analysis: An Algorithmic Approach* by Karl Fraser, Zidong Wang, and Xiaohui Liu, 2010, *Technometrics*, Vol. 54, page 199.

210. Qiu, P., Xiang, Y., Ding, Y., Li, D., and Wang, L. (2011), "Preface," *Proceedings of the 4th International Congress on Image and Signal Processing,* New York: IEEE, Inc.

211. Qiu, P., C. Yiu, and L. Wang (2011), "Guest editorial: special issue on new trends in multimedia processing," *Multimedia Tools and Applications*, Vol. 52(1), 1–4.

212. Qiu, P., C. Yiu, H. Zhang, and X. Wen (2009), "Preface," *Proceedings of the 2nd International Congress on Image and Signal Processing,* New York: IEEE, Inc.

213. Qiu, P. (2008), Review of *Fuzzy Modeling and Fuzzy Control* by Huaguang Zhang and Derong Liu, Birkhäuser, 2006, *Technometrics*, Vol. 50, 408–409.

214. Qiu, P. (2005), Review of *Generalized Least Squares* by Takeaki Kariya and Hiroshi Kurata, John Wiley, 2004, *Technometrics*, Vol. 47, page 519.

215. Qiu, P. (2005), Review of *The Statistical Evaluation of Medical Tests for Classification and Prediction* by Margaret Sullivan Pepe, Oxford University Press,2003, *JASA*, **100**, 2005, page 705.

216. Qiu, P. (2002), Review of *Statistical Analysis of Microstructures in Materials Science* by Joachim Ohser and Frank Mücklich, John Wiley & Sons, 2000, *Technometrics*, Vol. 44, page 86.

217. Qiu, P. (2000), Review of *Multivariate Image Analysis* by Paul Geladi and Hans Grahn, John Wiley & Sons, 1996, *Technometrics*, Vol. 42, 211–212.

Conference Presentations:

1. Qiu, P. (2023), "New Statistical Method for Spatio-Temporal Surveillance of Infectious Diseases," **invited talk**, The 12th ICSA International Conference, July 7-9, 2023, Hong Kong.

2. Qiu, P. (2023), "Transparent Sequential Learning for Monitoring Sequential Processes," **invited talk**, ICSA 2023 China Conference, June 30 - July 3, 2023, Chengdu, China.

3. Qiu, P. (2023), "Recent Statistical Process Control Methods for Dynamic Disease Screening and Spatio-Temporal Disease Surveillance," **Keynote Speaker**, 2023 INFORMS Conference on Quality, Statistics, and Reliability (ICQSR), June 6-8, 2023, North Carolina State University, Raleigh, NC.

4. Qiu, P. (2023), "Leader Forum – Value and Need for Industry and Academia Collaboration," **Invited Panelist**, 2023 INFORMS Conference on Quality, Statistics, and Reliability (ICQSR), June 6-8, 2023, North Carolina State University, Raleigh, NC.

5. Qiu, P. (2023), "Spatio-Temporal Process Monitoring Using Exponentially Weighted Spatial LASSO," **invited talk**, Spring Research Conference, May 24-26, 2023, Banff Centre, Alberta, Canada.

6. Qiu, P. (2023), "Adaptive Process Monitoring Using Covariate Information," **invited talk**, IISE Annual Conference & Expo 2023, May 19-23, 2023, New Orleans, Louisiana.

7. Qiu, P. (2023), "Spatio-Temporal Data Modelling and Monitoring," **invited talk**, 2nd ISSAT International Conference on Data Science in Business, Finance and Industry (DSBFI 2023), January 8-10, 2023, Da Nang, Vietnam.

8. Qiu, P. (2022), "Transparent Sequential Learning for Nonparametric Sequential Process Monitoring," **invited talk**, 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022), December 17-19, 2022, King's College London, UK.

9. Qiu, P. (2022), "Transparent Sequential Learning for Statistical Process Control," **invited talk**, 2022 INFORMS Annual Meeting, October 16-19, 2022, Indianapolis, IN.

10. Qiu, P. (2022), "Transparent Sequential Learning: A Powerful Tool for Monitoring Sequential Processes," **keynote Speaker**, 2022 International Webinar on Artificial Intelligence and Data Science in Industry 4.0, July 14, 2022, a virtual Webinar organized by Dong A University, Vietnam.

11. Qiu, P. (2022), "Some Recent Methods for Sequential Monitoring of Complex Data," **invited talk**, 2022 ICSA Applied Statistics Symposium, June 19-22, 2022, Gainesville, FL.

12. Qiu, P. (2022), "Transparent Sequential Learning: A Flexible Method for Monitoring Processes with Complex Data," **invited talk**, The 38th ASA Quality and Productivity Research Conference (QPRC 2022), June 13-16, 2022, San Francisco State University, CA.

13. Qiu, P. (2021), "Adaptive Process Monitoring Using Covariate Information," **Technometrics invited talk**, 2021 INFORMS Annual Meeting, October 24-27, 2021, virtual presentation.

14. Qiu, P. (2021), "Adaptive Process Monitoring Using Covariate Information," **invited talk**, 2021 ICSA Applied Statistics Symposium, September 12-15, 2021, virtual conference.

15. Qiu, P. (2021), "Big Data? Statistical Process Control Can Help!", **Plenary Speaker**, The 37th ASA Quality and Productivity Research Conference (QPRC 2021), July 26-29, 2021, Florida State University, Tallahassee, FL.

16. Qiu, P. (2021), "Effective Spatio-Temporal Surveillance of Infectious Diseases," **invited talk**, 2021 WNAR annual meeting, June 13-16, 2021, online.

17. Qiu, P. (2020), "Transparent Sequential Learning for Process Control," **invited talk**, 2020 INFORMS annual meeting, November 7-13, 2020, online.

18. Qiu, P. (2020), "Statistical Process Control Can Be a Powerful Tool for Certain Big Data Applications," **Plenary Talk**, The Tenth International Conference and Workshop on High Dimensional Data Analysis (ICW-HDDA-X), October 13-14, 2020, Bali, Indonesia (changed to an online conference due to COVID-19).

19. Qiu, P. (2019), "Statistical Process Control in the Big Data Era," **invited talk**, 2019 INFORMS annual meeting, October 20-23, 2019, Seattle, WA.

20. Qiu, P. (2019), "Process Monitoring of Short-Range Serially Correlated Data," **invited talk**, 2019 INFORMS annual meeting, October 20-23, 2019, Seattle, WA.

21. Qiu, P. (2019), "Data Science in Industry 4.0," **invited panelist**, ISSAT International Conference on Data Science in Business, Finance and Industry, July 3–5, 2019, Da Nang, Vietnam.

22. Qiu, P. (2019), "Statistical Process Control and Its Potential for Handling Big Data Applications," **plenary talk**, ISSAT International Conference on Data Science in Business, Finance and Industry, July 3–5, 2019, Da Nang, Vietnam.

23. Qiu, P. (2019), "A Three-Step Nonparametric Regression Approach for Analyzing Spatio-Temporal Data," **invited talk**, International Conference on Econometrics and Statistic, June 25-27, 2019, National Chung Hsing University, Taiwan.

24. Qiu, P. (2019), "Online Sequential Monitoring Of Spatio-Temporal Infectious Disease Incidence Rates," **invited talk**, 2019 ENAR Annual Meeting, March 24-27, 2019, Philadelphia, PA.

25. Qiu, P. (2018), "From Disease Surveillance to Image Monitoring: Challenges in Modern SPC Applications," **invited talk**, The 3rd Pacific Rim Statistical Conference for Production Engineering, December 13-15, 2018, Hsinchu, Taiwan.

26. Qiu, P. (2018), "Image Comparison for Online Image Monitoring," **invited talk**, The 2018 INFORMS annual meeting, November 4–7, 2018, Phoenix, AZ.

27. Qiu, P. (2018), "Image Comparison for Online Image Monitoring," **invited talk**, The 2018 IISA International Conference on Statistics, May 17-20, 2018, University of Florida, Gainesville, FL.

28. Qiu, P. (2017), "Statistical process control as a tool for analyzing big data," **special invited talk (45 minutes)**, The 2017 IISA International Conference on Statistics, December 27–30, 2017, Hyderabad, India.

29. Qiu, P. (2017), "Effective Comparison of Two or More Hazard Rate Functions," **invited talk**, 2017 Conference on Lifetime Data Science, May 25-27, 2017, University of Connecticut, Storrs, CT.

30. Qiu, P. (2017), "Comparison of two hazard rate functions," **invited talk**, Biostatistics Workshop on Statistical Inference for Biomedical Big Data: Theory, Methods and Tools, April 7-8, 2017, UF Department of Biostatistics, Gainesville, FL.

31. Qiu, P. (2017), "Jump Regression, Image Processing, and Quality Control," **plenary talk** (90-minute presentation followed by 90-minute discussions), 2017 Stu Hunter Research Conference, March 5-8, 2017, Copenhagen, Denmark.

32. Qiu, P. (2016), "Spatio-Temporal Monitoring of Disease Incidence Data," **invited talk**, The 10th ICSA international conference, December 19-22, 2016, Shanghai Jiao Tong University, Shanghai, China.

33. Qiu, P. (2016), "Design SPC Charts Using p-Values and Process Monitoring Using a Dynamic Sampling Scheme," **invited talk**, International Workshop on Engineering Statistics, December 17, 2016, East China Normal University, Shanghai, China.

34. Qiu, P. (2016), "Dynamic Screening: An Approach for Detecting Diseases Early," **invited talk**, The 2nd Pacific Rim Statistical Conference for Production Engineering, December 15-16, 2016, Seoul National University, Korea.

35. Qiu, P. (2016), "Difference Detection Between Two Images For Image Monitoring," **invited talk**, 2016 INFORMS Annual Meeting, November 13-16, 2016, Nashville, Tennessee.

36. Qiu, P. (2016), "Voice of the Editor (Technometrics)," **invited panel discussions**, 2016 INFORMS Annual Meeting, November 13-16, 2016, Nashville, Tennessee.

37. Qiu, P. (2016), "Design statistical process control charts using p-values and dynamic sampling intervals," **invited talk**, The Fourth International Conference on the Interface between Statistics and Engineering 2016 (ICISE2016), June 20-22, 2016, University of Palermo, Italy.

38. Qiu, P. (2016), "Jump information criterion for estimating jump regression curves," **invited talk**, 2016 ICSA Applied Statistics Symposium, June 12-15, 2016, Atlanta.

39. Qiu, P. (2015), "Some Recent Research on Nonparametric Statistical Process Control," **invited mini-plenary talk**, The South African Statistical Association's 57th Annual Conference, November 29 - December 2, 2015, University of Pretoria, South Africa.

40. Qiu, P. (2015), "Voice of the Editor (Technometrics)," **invited talk**, 2014 INFORMS annual meeting, November 1-4, 2014, Philadelphia, PA.

41. Qiu, P. (2015), "New SPC Methods for Monitoring Infectious Diseases," **invited talk**, The 60th ISI World Statistics Congress (WSC), July 26-31, 2015, Rio de Janeiro, Brazil.

42. Qiu, P. (2015), "Dynamic Screening: An Approach for Expanding the SPC Applications," **invited talk**, The 4th International Symposium on Statistical Process Monitoring (ISSPM 2015), July 7-9, 2015, Padova, Italy.

43. Qiu, P. (2015), "Jump information criterion for statistical inference in estimating discontinuous regression curves," **invited talk**, The 10th International Conference on "Frontiers of Statistics", June 25-26, 2015, Chinese Academy of Science, Beijing, China.

44. Qiu, P. (2015), "From nonparametric statistical process control to dynamic screening systems," **invited talk**, 2015 Workshop on Frontiers in Industrial Statistics, June 18-21, 2015, Tianjin, China.

45. Qiu, P. (2014), "On nonparametric statistical process control," **invited talk**, 2014 Pacific Rim Statistics Conference on Production Engineering, December 12-13, 2014, Fudan University, China.

46. Qiu, P. (2014), "Statistical Monitoring of the Hand, Foot and Mouth Disease," **invited talk**, 2014 INFORMS annual meeting, November 9-12, 2014, San Francisco, CA.

47. Qiu, P. (2014), "Voice of the Editor (Technometrics)," **invited talk**, 2014 INFORMS annual meeting, November 9-12, 2014, San Francisco, CA.

48. Qiu, P. (2014), "My research in statistics and biostatistics," **invited talk**, *The 6th FCFA Symposium of Science, Engineering, and Biomedicine*, August 29 - September 1, Daytona Beach Shores, Florida.

49. Qiu, P. (2014), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal Patterns," **invited talk**, 2014 NCTS/ISRG Workshop on *Recent Advances in Big Data and Industrial Statistics*, June 28-29, 2014, Hsinchu, Taiwan.

50. Qiu, P. (2014), "On nonparametric image registration," **invited talk**, The 3rd IMS Asia Pacific Rim Meetings, June 29 - July 3, 2014, Taipei, Taiwan.

51. Qiu, P. (2014), "Disease Early Detection and Prevention by Dynamic Disease Screening System," **invited poster**, 2014 ENAR Meeting, March 16–19, 2014, Baltimore, MD.

52. Qiu, P. (2014), "Disease Early Detection and Prevention by Dynamic Disease Screening System," **invited talk**, 2014 ASA Florida-Chapter Annual Meeting, February 7–8, 2014, Gainesville, FL.

53. Qiu, P. (2014), "On Nonparametric Profile Monitoring," **invited talk**, Workshop on Statistical and Computational Theory and Methodology for Big Data Analysis, February 9–14, 2014, Banff International Research Station, Banff, Canada.

54. Qiu, P. (2013), "On Nonparametric Statistical Process Control," **invited talk**, 2013 INFORMS annual meeting, October 6-8, 2013, Minneapolis, MN.

55. Qiu, P. (2013), "Introduction to Some Image Processing Problems," **invited talk**, 2013 INFORMS annual meeting, October 6-8, 2013, Minneapolis, MN.

56. Qiu, P. (2013), "Nonparametric Profile Monitoring," **invited talk**, 2013 Joint Statistical Meeting, August 3–8, 2013, Montreal, Canada.

57. Qiu, P. (2013), "Some Recent Research On Nonparametric Profile Monitoring," **invited talk**, Fourth International Workshop in Sequential Methodologies, July 18-21, 2013, University of Georgia, GA.

58. Qiu, P. (2013), "Big Data? More Challenges!" **Keynote speach**, 2nd International Symposium on System Informatics and Engineering, July 8-9, 2013, Xi'an, China.

59. Qiu, P. (2012), "Intensity Based Nonparametric Image Registration," **plenary talk**, 4th International Conference on Computational Intelligence and Software Engineering (CiSE 2012), December 14 16, 2012, Wuhan, China.

60. Qiu, P. (2012), "Statistical Process Screening System: An Approach For Identifying Irregular Individuals," **invited talk**, 2012 INFORMS annual meeting, October 14-17, 2012, Phoenix, AZ.

61. Qiu, P. (2012), "On Nonparametric Statistical Process Control of Univariate Processes," *Technometrics* **invited talk with discussions**, 2012 INFORMS annual meeting, October 14-17, 2012, Phoenix, AZ.

62. Qiu, P. (2012), "Comments on the current image processing research," **invited panelist**, September 9-12, 2012, Opening Workshop, Massive Datasets Program, SAMSI, NC.

63. Qiu, P. (2012), "On nonparametric image registration," **invited talk**, IFNA World Congress 2012, June 25-July 1, 2012, University of Athens, Athens, Greece.

64. Qiu, P. (2011), "On Nonparametric Statistical Processes Control," **plenary talk**, International Conference on Quality and Reliability Engineering, December 20-22, 2011, Bangalore, India.

65. Qiu, P. (2011), "On Nonparametric Statistical Process Control Of Univariate Processes," **invited talk**, The First International Symposium on System Informatics and Engineering, July 11-13, 2011, Qingdao, China.

66. Qiu, P. (2011), "Intensity Based Nonparametric Image Registration," **invited talk**, IMS-China International Conference on Statistics and Probability, July 8-11, 2011, Xi'An, China.

67. Qiu, P. (2011), "Comparison of Two Hazard Rate Functions," **invited talk**, ICSA 2011 Applied Statistics Symposium, June 26-29, New York.

68. Qiu, P. (2011), "On Nonparametric Statistical Process Control Of Univariate Processes," **invited talk**, 2011 Joint Research Conference on Statistics, June 22-24, 2011, Chicago.

69. Qiu, P. (2011), "3-D Image Denoising By Local Smoothing And Nonparametric Regression," **invited talk**, 2011 IISA Conference on Probability, Statistics, and Data Analysis, April 21-24, 2011, Raleigh, NC, USA.

70. Qiu, P. (2011), "Local Surface Approximation for Edge Structure Preserving 3-D Image Denoising," **plenary talk**, January 29-31, 2011, 5th WSEAS International Conference on COMPUTER ENGINEERING and APPLICATIONS (CEA '11), Puerto Morelos, Mexico.

71. Qiu, P. (2010), "Jump Regression Analysis and Image Processing," **plenary talk**, September 13- 17, 2010, Annual Meeting of the German Statistical Society, Nurnberg, Germany.

72. Qiu, P. (2010), "Nonparametric Profile Monitoring By Mixed Effects Modeling," **featured presentation with discussions**, *Technometrics* invited session, Joint Summer Meeting, July 31 - August 6, 2010, Vancouver, Canada.

73. Qiu, P. (2010), "Intensity Based Nonparametric Image Registration," **invited talk**, July 19-20, 2010, Workshop for the Summer School, The Morningside Center of Mathematics, Chinese Academy of Science (CAS), Beijing, China.

74. Qiu, P. (2010), "Comparison of Two Hazard Rate Functions," **invited talk**, July 17-18, 2010, First Joint Biostatistics Symposium, Renming University, Beijing, China.

75. Qiu, P. (2010), "Distribution-Free Statistical Process Control Of Univariate Processes," **invited talk**, July 2-4, 2010, The international conference on Statistical Analysis of Complex Data (SACD), Yunnan University, Kunming, China.

76. Qiu, P. (2010), "Distribution-Free Statistical Process Control Of Univariate Processes," **invited talk**, May 25-27, 2010, 2010 Joint Research Conference on Statistics, National Institute of Standards and Technology (NIST), Gaithersburg, MD.

77. Qiu, P. (2010), "Intensity Based Nonparametric Image Registration," **invited talk**, March 29-31, 2010, ACM SIGMM International Conference on Multimedia Information Retrieval (MIR), Philadelphia, PA.

78. Qiu, P. (2009), "Jump Regression Analysis and Image Processing," **special invited talk (50 minutes)**, December 5-7, 2009, The Winter 2009 Canadian Mathematical Society meeting, Windsor, Canada.

79. Qiu, P. (2009), "Intensity Based Nonparametric Image Registration," **invited talk**, August 1-6, 2009, Joint Summer Meeting, Washington, DC.

80. Qiu, P. (2009), "Nonparametric profile monitoring," **topic contributed talk**, 1st International Conference on the Interface between Statistics and Engineering, July 13-15, 2009, Beijing, China.

81. Qiu, P. (2009), "Nonparametric profile monitoring," **invited talk**, IMS-China International Conference on Statistics and Probability, July 3-6, 2009, Weihai, China.

82. Qiu, P. (2009), "Blind Image Deblurring Using Nonparametric Regression," **invited talk**, May 15-16, 2009, Symposium on "New Directions in Asymptotic Statistics", University of Georgia, Athens, Georgia, USA.

83. Qiu, P. (2008), "On Image Registration In Magnetic Resonance Imaging," **invited talk**, May 27-30, 2008, International Conference on BioMedical Engineering and Informatics, Sanya, Hainan, China.

84. Qiu, P. (2008), "Local smoothing segmentation for spotted microarray images," **invited talk**, June 11-13, 2008, IMS-China International Conference on Statistics and Probability, Hangzhou, China.

85. Qiu, P. (2007), "Nonparametric Estimation Of The Point Spread Function For Blind Image Deblurring," **invited talk**, June 10-13, 35th Annual Meeting of the Statistical Society of Canada, Memorial University of Newfoundland, St. John's, Canada.

86. Qiu, P. (2007), "A Two-Stage Procedure For Comparing Hazard Rate Functions," **topic contributed talk**, July 29 - August 2, 2007, Joint Summer Meeting, Salt Lake City, Utah.

87. Qiu, P. (2006), "Distribution-free multivariate process control based on log-linear modeling," 2006 Joint Summer Meeting, **topic contributed talk**, August 6-10, 2006, Seattle, Washington.

88. Qiu, P. (2006), "Nonparametric multivariate statistical process control," 2006 International Conference on Design of Experiments and Its Applications, **invited talk**, July 9-13, 2006, Nankai University, Tianjing, China.

89. Qiu, P. (2006), "Jump-preserving curve estimation by local linear kernel smoothing," 2006 ICSA Applied Statistics Symposium, **invited talk**, June 14-17, 2006, University of Connecticut Storrs campus.

90. Qiu, P., and Hall, P. (2005), "Direct Methods for Determining a Point-Spread Function in Image Analysis, Without the Benefit of a Model," joint meeting sponsored by Institute of Mathematical Statistics (IMS) and Chinese Society of Probability and Statistics (CSPS), **invited talk**, July 9-12, 2005, Peking University, Beijing, China.

91. Qiu, P. (2005), "Nonparametric estimation of the point spread function for image deblurring," 2005 ICSA Applied Statistics Symposium, **invited talk**, June 12-15, 2005, Washington DC.

92. Qiu, P. (2005), **invited discussant** of the invited session "Image reconstruction, edge detection and feature-tracking", The 55th Session of the International Statistical Institute, April 5-12, 2005, Sydney, Australia.

93. Qiu, P., and Sun, J. (2004), "Image segmentation for cDNA microarray data based on local polynomial kernel smoothing," 2004 ENAR Spring Meeting, **invited talk**, March 28-31, Pittsburgh, PA.

94. Qiu, P., and Chatterjee, S. (2003), "Nonparametric Statistical Process Control With Bootstrap Cumulative Sum Control Charts," 47th Annual Fall Technical Conference, **invited talk**, October 16-17, El Paso, Texas.

95. Qiu, P. (2003), "Multivariate SPC Based On Log-Linear Modeling," 2003 Spring Research Conference on Statistics in Industry and Technology, **invited talk**, June 4-6, University of Dayton, OH.

96. Qiu, P., and Hawkins, D. (2001), "A rank based multivariate CUSUM," 45th Annual Fall Technical Conference, *Technometrics* **invited talk**, October 18-19, Toronto, Canada.

97. Qiu, P. (1999), "Comparisons of several local smoothing jump detectors in one-dimensional nonparametric regression," The Joint Statistical Meeting, **contributed talk**, August 8-12, 1999, Baltimore, Maryland.

98. Qiu, P., and Hawkins, D. (1999),"Rank based multivariate CUSUM", 1999 Spring Research Conference on Statistics in Industry and Technology, **contributed talk**, June 2-4, 1999, Minneapolis, Minnesota.

99. Qiu, P., and Yandell, B. (1996), "Discontinuity detection in regression surface" The Joint Statistical Meeting, **contributed talk**, August 4-8, 1996, Chicago, Illinois.

100. Qiu, P. (1992), "Jump regression surfaces fitting", AMS-IMS-SIAM Summer Research Conference on Change-Point Problems, **invited talk**, July 11-17, 1992, Mt. Holyoke, MA.

101. Qiu, P. (1991), "Jump regression function estimation," 48th session of the International Statistical Institute, **invited talk**, September 9-18, 1991, Cairo, Egypt.

102. Qiu, P. (1990), "Jump regression function and forecasting," The 4th Annual Conference of the Japanese Society of Computational Statistics, **invited talk**, May 17-18, 1990, Fukuoka, Japan.

<u>Invited Seminars:</u>

103. Qiu, P. (2022), "Transparent Sequential Learning: A Powerful Tool for Monitoring Sequential Processes," July 18, 2022, School of Statistics, East China Normal University, Shanghai, China.

104. Qiu, P. (2021), "Dynamic Screening System: An Approach For Disease Early Detection and Prevention," September 7, 2021, Dept of Biostatistics and Data Science, University of Texas Health Science Center at Houston.

105. Qiu, P. (2021), "Statistical Process Control As A Powerful Tool For Certain Big Data Applications," April 8, 2021, Department of Statistics, Pennsylvania State University, State College, PA.

106. Qiu, P. (2021), "Statistical Process Control in the Big Data Era," Chowdhury Lecture Series, February 23, 2021, Indian Statistical Institute, Bangalore, India.

107. Qiu, P. (2020), "Statistical Process Control as a Tool for Solving Some Big Data Applications," December 3, 2020, School of Statistics and Management, Shanghai University of Finance and Economics, Shanghai, China.

108. Qiu, P. (2020), "Introduction to My Research in Statistical Process Control," January 27, 2020, Department of Statistics, Purdue University, West Lafayette, Indiana.

109. Qiu, P. (2019), "Modeling and Monitoring Spatio-Temporal Disease Incidence Rate Data," November 4, 2019, Department of Statistics, Iowa State University, Ames, Iowa.

110. Qiu, P. (2019), "Data Science: My Personal Experience and Perspectives," July 2, 2019, Dong A University, Da Nang, Vietnam.

111. Qiu, P. (2018), "From Disease Surveillance to Image Monitoring: Challenges in Modern SPC Applications," December 17, 2018, Center for Statistical Science, Hsinghua University, Beijing, China.

112. Qiu, P. (2018), "Mathematics, Statistics, and Data Science: My Personal Experience and Perspectives," June 13, 2018, College of Science, Chang'An University, Xi'An, China.

113. Qiu, P. (2018), "Mathematics, Statistics, and Data Science: My Personal Experience and Perspectives," June 11, 2018, College of Mathematics and Statistics, Jiangsu Normal University, Xuzhou, China.

114. Qiu, P. (2018), "Dynamic Screening System: An Approach For Early Detecting Irregularities of a Longitudinal Process," June 8, 2018, School of Economics, Shanghai University of Finance and Economics, Shanghai, China.

115. Qiu, P. (2018), "Comparing Crossing Hazard Curves," June 5, 2018, Department of Biostatistics, Southern Medical University, Guangzhou, China.

116. Qiu, P. (2018), "A Brief Introduction About Biostatistics at UF," April 24, 2018, UF Institute of Informatics, University of Florida, Gainesville.

117. Qiu, P. (2018), "Dynamic Screening System: An Approach For Disease Early Detection and Prevention," April 2, 2018, Department of Statistics, Rice University, Houston, Texas.

118. Qiu, P. (2017), "Jump information criterion for statistical inference in estimating jump regression curves," November 3, 2017, Department of Statistics, University of Kentucky, Lexington, Kentucky.

119. Qiu, P. (2017), "From Quality Control to Disease Screening and Surveillance," October 27, 2017, Cincinnati Children's Hospital and University of Cincinnati CCTST, Cincinnati, OH.

120. Qiu, P. (2017), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal Patterns," July 14, 2017, College of Mathematics, Shanghai Jiaotong University, Shanghai, China.

121. Qiu, P. (2017), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal Patterns," July 11, 2017, College of Management and Economics, Tianjin University, Tianjin, China.

122. Qiu, P. (2017), "Introduction to My Recent Research in SPC," July 9, 2017, Institute of Statistical Research, Nankai University, Tianjin, China.

123. Qiu, P. (2017), "The Best Choice For Our Career: Statistics!" July 10, 2017, Institute of Statistical Research, Nankai University, Tianjin, China.

124. Qiu, P. (2017), "Dynamic Disease Screening: An Approach For Disease Early Detection and Prevention," Department of Mathematics and Statistics, Old Dominion University, April 20, 2017, Norfolk, Virginia.

125. Qiu, P. (2017), "Dynamic Disease Screening: An Approach for Disease Early Detection and Prevention," Department of Statistics and Actuarial Science, Simon Fraser University, March 31, 2017, Vancouver, Canada.

126. Qiu, P. (2016), "Disease Early Detection and Prevention by Dynamic Disease Screening System," October 28, 2016, Department of Statistics, University of Kentucky, Lexington, Kentucky.

127. Qiu, P. (2016), "Statistical Methods for Detecting Outbreaks of Infectious Diseases and Their Application to the Chinese National Influenza Surveillance Data," June 1, 2016, Chinese National Influenza Center, China CDC, Beijing, China.

128. Qiu, P. (2016), "Design control charts using p-values and dynamic sampling intervals," May 30, 2016, Institute of Statistical Research, Nankai University, Tianjin, China.

129. Qiu, P. (2016), "Recent research on nonparametric SPC," May 26, 2016, School of Statistics and Finance, East China Normal University, Shanghai, China.

130. Qiu, P. (2016), "Jump information criterion for statistical inference in estimating jump regression curves," April 21, 2016, Department of Statistics, Virginia Tech, Blacksburg, VA.

131. Qiu, P. (2015), "Disease Early Detection and Prevention by a Dynamic Screening System," June 26, 2015, College of Biological Sciences and Biotechnology, Beijing Forestry University, Beijing, China.

132. Qiu, P. (2015), Invited discussion on "Statistical Research in US," June 22, 2015, Department of Statistics, Tianjin University of Finance and Economics, Tianjin, China.

133. Qiu, P. (2015), Six one-hour lectures on "Basics of Statistical Process Control," June 10, 2015, School of Statistics and Finance, East China Normal University, Shanghai, China.

134. Qiu, P. (2014), Two-hour lecture on "Multivariate dynamic disease screening and monitoring of hand, foot and mouth disease in China," December 10, 2014, National Center of Theoretical Science, Hsinchu, Taiwan.

135. Qiu, P. (2014), Three-hour lecture on "Recent Research in Multivariate SPC, Nonparametric SPC, and Profile Monitoring," July 4, 2014, National Center of Theoretical Science, Hsinchu, Taiwan.

136. Qiu, P. (2014), "Dynamic Screening System: An Approach For Identifying Irregular Longitudinal Patterns," June 25, 2014, Department of Systems Engineering and Engineering Management, City University of Hong Kong, Hong Kong.

137. Qiu, P. (2014), "Dynamic Screening System: An Approach For Identifying Irregular Longitudinal Patterns," June 24, 2014, Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong.

138. Qiu, P. (2014), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal Patterns," March 27, 2014, Department of Statistics, Florida State University, Tallahassee, FL.

139. Qiu, P. (2014), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal Behavior," March 20, 2014, Department of Statistics, University of Georgia, Athens, GA.

140. Qiu, P. (2014), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal behavior," March 12, 2014, Department of Mathematics, Southeastern University, Nanjing, China.

141. Qiu, P. (2014), "Disease Early Detection and Prevention by Dynamic Disease Screening System," February 25, 2014, Division of Biostatistics, University of Miami, Miami, FL.

142. Qiu, P. (2013), "Jump Regression Analysis and Image Processing," November 25, 2013, Department of Mathematics, University of Florida, Gainesville, FL.

143. Qiu, P. (2013), "On Nonparametric Statistical Process Control," November 5, 2013, Department of Statistics, University of California at Riverside, Riverside, CA.

144. Qiu, P. (2013), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal behavior," October 24, 2013, Department of Statistics, University of Florida, Gainesville, FL.

145. Qiu, P. (2013), "Intensity Based Nonparametric Image Registration," August 30, 2013, Department of Statistics, Purdue University, West Lafayette, IN.

146. Qiu, P. (2013), "Comparison of Two Crossing Hazard Rate Functions," July 11, 2013, College of Mathematical Sciences, Beijing University of Technology, Beijing, China.

147. Qiu, P. (2013), Twelve one-hour lectures on "Jump regression analysis and image processing," July 5-6, 2013, School of Statistics and Finance, East China Normal University, Shanghai, China.

148. Qiu, P. (2013), "Statistical Process Screening System: An Approach For Identifying Irregular Longitudinal behavior," March 27, 2013, Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, MI.

149. Qiu, P. (2012), "Comparison of Two Crossing Hazard Rate Functions," December 16, 2012, School of Mathematics and Statistics, Wuhan University, Wuhan, China.

150. Qiu, P. (2012), "Statistical Process Screening System: An Approach For Identifying Irregular Individuals," November 14, 2012, School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA.

151. Qiu, P. (2012), "Comparison of Two Crossing Hazard Rate Functions," October 22, 2012, College of Public Health and Health Professions, University of Florida, FL.

152. Qiu, P. (2012), "Jump Regression Analysis and Image Processing," SAMSI image processing working group, WebEx talk, October 29, 2012, SAMSI, NC.

153. Qiu, P. (2012), "Comparison of two crossing hazard rate functions," February 28, 2012, Department of Mathematics and Statistics, University of Melbourne, Melbourne, Australia.

154. Qiu, P. (2012), "Jump regression analysis and image processing," February 21, 2012, Centre for Quantum Computation and Intelligent Systems, University of Technology at Sydney, Sydney, Australia.

155. Qiu, P. (2011), "Jump regression analysis and image processing," November 3, 2011, School of Mathematics and Statistical Sciences, Arizona State University, Tempe, AZ.

156. Qiu, P. (2011), six one-hour lectures on "jump regression analysis, image processing, and statistical process control," July 1-6, 2011, School of Statistics and Finance, East China Normal University, Shanghai, China.

157. Qiu, P. (2011), "Some research problems in image processing," July 13, 2011, School of Computer Science and Technology, Qingdao Technological University, Qingdao, China.

158. Qiu, P. (2010), "Jump Regression Analysis and Image Processing," June 26, 2010, Department of Mathematics, Southeastern University, Nanjing, China.

159. Qiu, P. (2010), "Distribution-Free Statistical Process Control Of Univariate Processes," June 22, 2010, School of Statistics and Finance, East China Normal University, Shanghai, China.

160. Qiu, P. (2009), "Comparison of two hazard rate functions," July 17, 2009, Institute of Applied Mathematics, Chinese Academy of Sciences, Beijing, China.

161. Qiu, P. (2009), "Local smoothing segmentation of spotted microarray images," July 16, 2009, Institute of Automation, Chinese Academy of Sciences, Beijing, China.

162. Qiu, P. (2009), "Local smoothing segmentation of spotted microarray images," July 7, 2009, Department of Electric Engineering, Fudan University, Shanghai, China.

163. Qiu, P. (2009), "Blind image deblurring using jump regression analysis," April 30, 2009, School of Mathematics, University of Minnesota.

164. Qiu, P. (2009), "Introduction to some research problems in statistics," February 6, 2009, seminar course, School of Statistics, University of Minnesota.

165. Qiu, P. (2009), "Statistical Modeling of the Time Course of Tantrum Anger," January 15, 2009, Department of Statistics, University of Georgia.

166. Qiu, P. (2008), "Comparison of two hazard rate functions," November 12, 2008, Department of Statistics, University of Pennsylvania.

167. Qiu, P. (2008), a series of six invited lectures were given at The Department of Statistics, Shanghai University of Finance and Economics, China, during June 17–19, 2008. The topics of the lectures are on jump regression analysis and statistical process control.

168. Qiu, P. (2008), "On some recent research topics in image processing and statistical process control," June 9, 2008, Department of Statistics, Nankai University, China.

169. Qiu, P. (2008), "Comparison of Two Possibly Crossing Hazard Rate Functions," April 17, 2008, School of Statistics, University of Minnesota.

170. Qiu, P. (2008), "Local smoothing segmentation of spotted microarray images," March 20, 2008, Statistical Engineering Division, National Institute of Standards and Technology, Gaithersburg, Maryland.

171. Qiu, P. (2008), "Segmentation of spotted microarray images for generating gene expression data," January 16, 2008, Department of Biostatistics, University of North Carolina at Chapel Hill.

172. Qiu, P. (2007), "A two-stage procedure for comparing hazard rate functions," October 25, 2007, Department of Statistics, The Pennsylvania State University.

173. Qiu, P., and Chatterjee, S. (2006), "Nonparametric Statistical Process Control With Bootstrap Cumulative Sum Control Charts," July 19, 2006, Institute of Statistics, National Tsing-Hua University, Taiwan.

174. Qiu, P. (2004), "Jump surface estimation and image restoration," November 25, 2004, Mathematical Sciences Institute, Australian National University, Canberra, ACT 0200, Australia.

175. Qiu, P. (2004), "Segmentation Of cDNA Microarray Images By Local Smoothing," October 26, 2004, Canberra branch, Statistical Society of Australia, Canberra, ACT 0200, Australia.

176. Qiu, P. (2004), "Jump Surface Estimation By Local Smoothing With Applications In Image Processing," April 22-23, 2004, Department of Statistics, Ohio State University, Columbus, Ohio.

177. Qiu, P. (2002), "Image Reconstruction By Local Smoothing Techniques", October 30-31, 2002, Department of Statistics, Texas A&M University.

178. Qiu, P., and Hawkins, D. (2002), "A distribution-free multivariate cusum procedure," June 13, 2002, Center for Mathematics and Its Applications, Australian National University, Canberra, Australia.

179. Qiu, P. (2001), "Nonparametric jump regression analysis and image processing," November 5, 2001, Department of Statistics, University of Chicago.

180. Qiu, P. (2000), a series of three invited lectures were given at The Institute of Systems Science, Academia Sinica, Beijing, P.R. China in May 2000. The titles were: 1. "Nonparametric estimation of jump regression functions"; 2. "ROC curve fitting And multiple comparisons"; 3. "Statistical model building for a rat sleep dataset".

181. Qiu, P. (2000), "Statistical model building for a rat sleep dataset," April 13, 2000, School of Statistics, University of Minnesota.

182. Qiu, P. (1999), "Sample size to test for interaction between a specific exposure and a second risk factor in a pair-matched case-control study," May 4, 1999, Division of Biostatistics, University of Minnesota.

183. Qiu, P. (1998), "Nonparametric estimation of jump regression functions", February 3, 1998, School of Statistics, University of Minnesota.

184. Qiu, P. (1998), "Jump regression analysis and image processing," February 10, 1998, Division of Statistics, Washington State University, Pullman, Washington.

185. Qiu, P. (1998), "Nonparametric ROC curve estimation," May 4, 1998, School of Public Health, The Ohio State University.

186. Qiu, P. (1996), "Modelling daily and subdaily cycles in rat sleep data," October 8, 1996, Biostatistics Center, The Ohio State University.

187. Qiu, P., Chappell, R., Obermeyer, W., and Benca, R. (1996), "Model building for rat sleep data," October 4, 1996, Department of Biostatistics, University of Wisconsin-Madison.

188. Qiu, P. (1991), "Estimation of jump regression functions," November 21, 1991, Department of Statistics, University of Georgia.

189. Qiu, P. (1990), "Some recent research in jump regression analysis," May 20, 1990, Institute of Engineering Sciences, Kyushu University, Japan.

Short Courses Given at Conferences:

1. Qiu (2016), "Modern Statistical Process Control Charts and Their Use as a Tool for Analyzing Big Data," February 18, 2016, 1:30 p.m. - 5:30 p.m., 2016 ASA Conference on Statistical Practice, San Diego, CA.

2. Qiu (2016), "Modern Statistical Process Control Chart and Their Applications to Big Data Analysis," December 14, 2016, 9:00 a.m. - 3:00 p.m., The 2nd Pacific Rim Statistical Conference for Production Engineering, Seoul National University, Korea.

3. Qiu (2018), "Modern Statistical Process Control Chart and Their Applications for Analyzing Big Data," December 15, 2018, 1:30-4:30 p.m., The 3rd Pacific Rim Statistical Conference for Production Engineering, Hsinchu, Taiwan.

Courses Taught at University of Minnesota:

STAT-1001, *Introduction to the Ideas of Statistics*, Spring02
STAT-3011, *Introduction to Statistical Analysis*, Fall98, Fall99, Fall99, Fall06, Spring09, Fall09
STAT-3022, *Data Analysis*, Winter99, Spring99, Spring00, Fall00, Spring02, Fall02, Spring03, Summer03, Spring10
STAT-3091, *Statistical Analysis for Engineering Students*, Winter99
STAT-5021, *Statistical Analysis*, Summer01, Summer02
STAT-5031, *Quality Control and Management*, Spring11
STAT-5101, *Theory of Statistics I*, Fall00
STAT-5102, *Theory of Statistics II*, Spring01
STAT-5401/8401, *Multivariate Statistical Analysis*, Spring07, Spring08
STAT-5421/8421, *Categorical Data Analysis*, Spring01, Fall03, Fall05, Fall07, Fall10
STAT-8051/8061, *Advanced Regression Techniques*, Fall02, Fall03, Fall10, Fall12
STAT-8053, *Applied Statistical Methods III: Multivariate Analysis and Advanced Regression*, Fall07
STAT-8931, *Advanced Topics Course*, Spring04, Spring06, Spring07, Spring10, Fall12

Courses Taught at University of Florida:

GMS-7093, *Introduction to Clinical and Translational Research*, Summer 2016, Summer 2018
PHC-6020, *Clinical Trial Methods*, Spring17, Spring18
PHC-7925, *Biostatistics Journal Club*, Fall19, Fall20, Fall21, Fall22

Supervised Graduate Students/Visitors at University of Minnesota:

Graduate Students:

1. Xiaoshan Zhang (MS 2001), project title: "Measurements of observer agreement".

2. Rong Yang (Ph.D 2005), thesis title: "Statistical modeling of multivariate longitudinal binary data".

3. Jingran Sun (Ph.D 2005), thesis title: "Edge detection, image segmentation and their applications in microarray image analysis".

4. Saveth Ho (MS 2006), project title: "Analysis of three anger datasets".

5. Jun Sheng (Ph.D 2006), thesis title: "Comparison of two crossing hazard rates".

6. Jinmei Qi (MS 2007), project title: "Exploratory analysis of circadian rhythm in tantrum frequency and tantrum duration"

7. Jong-Hoon Joo (Ph.D 2008), thesis title: "Jump/Roof/Valley Detection in Regression Curves and Surfaces"

8. Shengjie Zheng (MS 2009), project title: "Comparison of Two Early Breast Cancer Treatments"

9. Wei Liu (Ph.D 2010), thesis title: "Some Charting Methodologies in MSPC"

10. Xiao Liu (MS 2010). project title: "Using a correlation-matrix-based hierarchical clustering method to extract spontaneous BOLD fluctuation patterns"

11. Partha Sarathi Mukherjee (Ph.D 2011), thesis title: "Edge-structure preserving 2-D and 3-D image denoising by jump surface estimation"

12. Xiaopei Wang (MS 2011), project title: "A Dynamic Approach for Finding a Parametric Transformation in Regression"

13. Chen Xing (Ph.D 2012), thesis title: "Image Registration by Non-Degenerate Pixel Detection"

14. Jingnan Zhang (MS 2013), project title: "On Phase II SPC In Cases When Normality Is Invalid"

15. Songxuan Shen (MS 2013), project title: "A Dynamic Parametric Method For Regression Transformations"

16. Yicheng Kang (Ph.D 2013), thesis title: "Edge Detection and Image Restoration of Blurred Noisy Images Using Jump Regression Analysis"

17. Ka Young Park (Ph.D 2013), thesis title: "Comparing Crossing Hazard Rate Functions By Joint Modeling Survival And Longitudinal Data"

18. Jing Liu (MS 2013), project title: "A Review of Two-Dimensional Medical Image Registration Methods"

Visitors:

19. Changliang Zou, Ph.D. student, Department of Statistics, Nankai University, China. November 25, 2007 – September 25, 2008. Sponsored by an NSF grant for US – China research collaborations.

20. Xingfang Huang, Ph.D. student, Department of Applied Mathematics, Xian Jiaotong University, China, September 1, 2008 – August 31, 2010. Sponsored by China Scholarship Council for joint Ph.D. programs.

21. Zhonghua Li, Ph.D. student, Department of Statistics, Nankai University, China. September 1, 2009 – August 31, 2010. Sponsored by China Scholarship Council for joint Ph.D. programs.

22. Dongdong Xiang, Ph.D. student, Department of Statistics, East China Nornal University, China. September 1, 2011 – August 31, 2012. Sponsored by China Scholarship Council for joint Ph.D. programs.

23. Xueli Sung, Associate Professor, Department of Mathematics and Information and Science, Chang'an University, Xi'An, China, November 1, 2011 – October 31, 2012. Sponsored by China Scholarship Council for young researchers.

24. Qi Wang, Lecturer, Department of Mathematics, Northeastern University, Shenyang, China, April 1, 2012 – September 31, 2012. Sponsored by "Northeastern University sponsored oversea study program".

25. Jiujun Zhang, Associate Professor, Department of Mathematics, Liaoning University, Shenyang, China, January 8, 2013 – January 7, 2014. Sponsored by China Scholarship Council for young researchers.

Supervised Postdocs/Graduate Students/Visitors at University of Florida:

Postdocs:

26. Yicheng Kang, September 1, 2013 – August 31, 2014

27. Xuemin Zi, February 1, 2014 – July 31, 2014

28. Ka Young Park, September 1, 2014 - March 31, 2015

29. Long Feng, January 10, 2015 - January 9, 2016

Graduate Students:

30. Jingnan Zhang (PhD, 2016), thesis title: "An early warning system for modeling and monitoring spatio-temporal patterns of infectious diseases."

- Biostatistician, August 2016, Pfizer
- Outstanding International Student Award, November 2015, University of Florida

31. Zhaomian Li (MS, 2016), project title: "Longitudinal Change-Point Mixed Effect Modeling of Weight Loss."

32. Lu You (PhD, 2020), thesis title: "Dynamic Disease Screening by Online Risk Monitoring."

    - Research assistant professor, August 2020, Institute of Informatics, University of South Florida
    - Outstanding Dissertation Research Award, May 2019, Department of Biostatistics, University of Florida
    - Ph.D. Preliminary Exam Award, May 2018, Department of Biostatistics, University of Florida

33. Maryam Yazdanfar (MS Online, 2020), project title: "Effects of Physical Activity on Mobility Outcomes in Elderly."

34. Kai Yang (PhD, 2021), thesis title: "Nonparametric Modeling and Monitoring of Spatio-Temporal Data with Covariates."

    - Tenure-track assistant professor, August 2021, Division of Biostatistics, Medical College of Wisconsin at Milwaukee
    - Outstanding Dissertation Research Award, May 2020, Department of Biostatistics, University of Florida
    - Student Travel Award, May 2019, Midwest Biopharmaceutical Statistics Workshop
    - Student Travel Award, May 2019, IMS/ASA Spring Research Conference
    - Student Paper Competition Winner, August 2018, Section on Statistics in Epidemiology, Joint Statistical Meeting
    - Best Student Paper Award, May 2018, International Indian Statistical Association

35. Spencer Moore (MS Online, 2021), project title: "Review of Online Sequential Monitoring of Spatio-temporal Disease Incidence Rates."

36. Fan Yi (PhD student, 2018-2023)

    - Tenure-track assistant professor, Department of Mathematics and Statistics, University of Idaho
    - Best Presentation award, 2022 Annual ASA Florida Chapter Meeting
    - Ph.D. Preliminary Exam Award, May 2020, Department of Biostatistics, University of Florida

37. Xiulin Xie (PhD, 2019-2023)

  - Tenure-track assistant professor, Department of Statistics, Florida State University
  - Best Student Paper Award, 2022 ICSA Applied Statistics Symposium
  - National Science Foundation Scholarship Travel Award, 2022 Quality and Productivity Research Conference
  - Outstanding Dissertation Research Award, May 2022, Department of Biostatistics, University of Florida
  - Best Presentation award, 2022 Annual ASA Florida Chapter Meeting
  - National Science Foundation Scholarship Travel Award, 2021 Quality and Productivity Research Conference

38. Yipeng Wang (PhD student, 2020-)

39. Zibo Tian (PhD student, 2021-)

40. Xiaoxi Zhang (PhD student, co-advised with Somnath Datta, 2021-)

41. Shoumi Sarkar (PhD student, co-advised with Somnath Datta, 2021-)

Visitors:

42. Zhiming Xia, Associate Professor, Departmentof Mathmatics, Northwest University, China. November 26, 2013 – November 25, 2014. Sponsored by China Scholarship Council for young researchers.

43. Xiong Xiong, Ph.D. student, Department of Computer Science and Technology, Tsinghua University, December 15, 2013 – December 14, 2014. Sponsored by China Scholarship Council for joint Ph.D. programs.

44. Wenzhi Zhao, Associate Professor, School of Science, Xi'an Polytechnic University, China. July 1, 2014 – December 31, 2014. Sponsored by Xi an Polytechnic University.

45. Huajun Song, Associate Professor, College of Information and control Engineering, China Univeristy of Petroleum, China. April 26, 2015 – April 25, 2016. Sponsored by China Scholarship Council for young researchers.

46. Yangyang Zang, Ph.D. student, Department of Industrial Engineering, Tsinghua University, China. September 1, 2015 – August 31, 2016. Sponsored by China Scholarship Council for joint Ph.D. programs.

47. Xuemin Zi, Professor, Department of Applied Mathematics, Tianjin University of Technology and Education, Tianjin, China. September 1, 2015 – August 31, 2015. Sponsored by China Scholarship Council for young researchers.

48. Zhiqiong Wang, Ph.D. student, College of Management and Economics, Tianjin University, Tianjin, China. September 15, 2016 – September 14, 2017. Sponsored by China Scholarship Council for joint Ph.D. programs.

49. Wendong Li, Ph.D. student, Department of Statistics, East China Nornal University, China. October 19, 2017 – October 18, 2018. Sponsored by China Scholarship Council for joint Ph.D. programs.

50. Qin Zhou, Associate Professor, College of Mathematics and Statistics, Jiangsu Normal University, China. August 14, 2018 – August 13, 2019. Sponsored by China Scholarship Council for young researchers.

51. Li Xue, Associate Professor, Department of Management Engineering, Zhengzhou University of Aeronautics, China. September 28, 2018 – September 27, 2019. Sponsored by China Scholarship Council for young researchers.

52. Yawen Hou, Associate Professor, Department of Statistics, Jinan University, Guangdong Provice, China. January 1, 2020 – December 30, 2020. Sponsored by China Scholarship Council for young researchers.

53. Daniele Zago, Ph.D. student, Department of Statistics, University of Padova, Italy, January 1, 2023 – December 30, 2023. Sponsored by the University of Padova.

Editorial Service:

- Editorial Board Member, *Springer Handbook of Engineering Statistics (2nd ed.)*, 2019-2020.

- Editorial Board Member, *Quality Engineering*, 2019-present.

- Editorial Board Member, *Surgery*, 2016-2019.

- Editor-elect, 2013; editor, 2014-2016, *Technometrics*

- Associate Editor, *Journal of the American Statistical Association – Applications and Case Studies*, 2006-2012.

- Associate Editor, *Technometrics*, 2007-2012.

- Associate Editor, *Biometrics*, 2011-2012.

- Associate Editor, *Statistical Papers*, 2011-2012.

- Guest Co-Editor, *Multimedia Tools and Applications*, 2011, Special Issue on New Trends in Multimedia Processing, Vol. 52, Issue 1.

- Guest Co-Editor, *Quality and Reliability Engineering International*, 2013, Special Issue on Nonparametric Statistical Process Control.

Grant Reviews and Panels:

- National Science Foundation: 2003, 2005, 2008, 2009, 2013, 2014, 2015, 2018, 2020

- National Institute of Health: 2016

- National Security Agency: 2012, 2014

- National Sciences and Engineering Research Council of Canada: 2011, 2016, 2018, 2023

- Research Grant Council of Hong Kong: 2006, 2007, 2010, 2014, 2016

- US - Israel Binational Science Foundation: 2021

- Other agencieis: Alzheimer's Association; ARC program of the French Community of Belgium; Marsden Fund, Royal Society of New Zealand; Romanian National Research Council; UF Division of Sponsored Research (DSR), UF CTSI.

Service for Academic Organizations:

- American Statistical Association (ASA):

    - Committee on Publications (2013-2016, 2019-2021)
    - Caucus of Academic Representatives (2014-2017)
    - Technometrics Management Committee (Chair, 2019-2022)

- American Society for Quality (ASQ):

    - Journal Editor Committee (2013-2016)

- Institute of Mathematical Statistics (IMS):

    - Chair of the IMS Local Committee for the 2015 Joint Summer Meeting at Minneapolis
    - Committee on Nominations (2011)

- Institute for Operations Research and the Management Sciences (INFORMS):

    - Reviewer for the 2016 QSR Best Student Paper Competition
    - Advisory Board Member for the INFORMS QSR Section (2017-2022)
    - Judge for the 2019 QSR Best Student Paper Competition
    - Guest speaker and judge for the 2019 QSR Student Introduction and Interaction Session and the 2019 QSR Best Student Poster Competition

– One of the three Organizers, QSR Best Paper Award Competition, 2020 IN-FORMS Annual Meeting

- International Chinese Statistical Association (ICSA):

    – Board of Directors (2020-2022)
    – Chair, Executive Committee, 2022 ICSA Applied Statistics Symposium

- Institute of Industrial & Systems Engineers (IISE):

    – Judge for the 2023 QCRE Student Paper Competition

Service for Academic Conferences:

- Program Chair/Co-Chair

    1. 2009 International Congress on Image and Signal Processing, October 17-19, 2009, Tianjin, China.
    2. 2011 International Congress on Image and Signal Processing, October 13-15, 2011, Shanghai, China.
    3. 2015 Workshop on Frontiers in Industrial Statistics, June 18-21, 2015, Nankai University, Tianjin, China.

- Program committee member

    1. International Conference on Statistical Analysis of Complex Data, July 1-3, 2010, Kunming, China.
    2. 2011 International Conference on Applied and Engineering Mathematics, October 28-30, 2011, Shanghai, China.
    3. 2011 International Conference on Computational Biology and Bioinformatics, October 28-30, 2011, Shanghai, China.
    4. International Conference on Pattern Recognition Applications and Methods, February 6-8, 2012, Algorve, Portugal.
    5. The 4th International Conference on Computational Intelligence and Software Engineering (CiSE 2012), December 14 16, 2012, China.
    6. The 2nd International Conference on Pattern Recognition Applications and Methods, February 15-18, 2013, Barcelona, Spain.
    7. The 1st Sino-US Research Conference on Quality, Analytics, and Innovations, July 1-2, 2016, Shanghai, China.
    8. The 10th ICSA international conference, December 19-22, 2016, Shanghai, China.
    9. The 2nd Pacific Rim Statistics Conference for Production Engineering, December 15-16, 2016, Seoul, Korea.

10. Biostatistics Workshop "Statistical Inference for Biomedical Big Data," April 7-8, 2017, UF Department of Biostatistics, Gainesville, FL.

11. The 2018 IISA International Conference on Statistics, May 17-20, 2018, University of Florida, Gainesville, FL.

12. The 3rd Pacific Rim Statistics Conference for Production Engineering, December 13-14, 2018, National Tsing Hua University, Taiwan.

13. ISSAT International Conference on Data Science in Business, Finance and Industry, July 3-5, 2019, Da Nang, Vietnam.

14. ISSAT International Conference on Data Science in Business, Finance and Industry, July 1-3, 2020 (delayed due to COVID-19), Da Nang, Vietnam.

15. 2020 ICSA China Conference, June 26-29, 2020 (delayed due to COVID-19), Wuhan, China.

16. 2022 IISA Annual Conference, December 26-30, 2022, Bangalore, India.

17. ISSAT International Conference on Data Science in Business, Finance and Industry (DSBFI 2023), January 8-10, 2023, Da Nang, Vietnam.

- Organizers of over 60 invited sessions for various national and international conferences.

- Chairs of many sessions for various conferences.

Referee for Academic Journals and Book Publishers:

- Journals:

  American Statistician; *Annals of Applied Statistics*; *Annals of the Institute of Statistical Mathematics*; *Annals of Statistics*; *Applied Mathematics and Computation*; *Applied Physics B*; *Applied Stochastic Models in Business and Industry*; *Bioinformatics*; *Biometrics*; *Biometrika*; *BMC Medical Research Methodology*; *Communications in Statistics - Simulation and Computation*; *Communications in Statistics - Theory and Methods*; *Computational Statistics and Data Analysis*; *Computer Methods and Programs in Biomedicine*; *Computers and Mathematics with Applications*; *Current HIV Research*; *Environmental and Ecological Statistics*; *European Journal of Operational Research*; *IEEE Access*; *IEEE Transactions on Geoscience and Remote Sensing*; *IEEE Transactions on Image Processing*; *IEEE Transactions on Multimedia*; *IEEE Transactions on NanoBioscience*; *IEEE Transactions on Neural Networks*; *IEEE Transactions on Pattern Analysis and Machine Intelligence*; *IEEE Transactions on Signal Processing*; *IEEE Transactions on Systems, Man, and Cybernetics*; *IIE Transactions*; *IISE Transactions*; *IMS volume for the 3rd Lehmann Symposium*; *Information Sciences*; *International Journal of Production Research*; *Inverse Problems*; *Journal of Agricultural, Biological and Environmental Statistics*; *Journal of American Statistical Association*; *Journal of Applied Statistics*; *Journal of Computational and Graphical Statistics*; *Journal*

of Educational and Behavioral Statistics;   *Journal of Hydrology*;   *Journal of the Korean Statistical Society*;   *Journal of Multivariate Analysis*;   *Journal of Nonparametric Statistics*;   *Journal of the Operational Research Society*;   *Journal of Quality Technology*;   *JRSS-A*;   *JRSS-B*;   *Journal of Scheduling*;   *Journal of Statistical Computation and Simulation*;   *Journal of Statistical Planning and Inference*;   *Lifetime Data Analysis*;   *Magnetic Resonance Imaging*;   *Mathematical Problems in Engineering*;   *Medical Physics*;   *Multimedia Tools and Applications*;   *NeuroImage*;   *PLOS ONE*;   *Probability Theory and Related Fields*;   *Quality Engineering*;   *Quality and Reliability Engineering International*;   *Quality and Technology and Quality Management*;   *Sankhya (Series A)*;   *Scandinavian Journal of Statistics*;   *Science in China (Series A)*;   *Scientific Reports*;   *SIAM Journal on Imaging Sciences*;   *Signal Processing*;   *Statistica Sinica*;   *Statistical Analysis and Data Mining*;   *Statistical Papers*;   *Statistics and Computing*;   *Statistics and Its Interface*;   *Statistics and Probability Letters*;   *Statistics in Medicine*;   *Stochastic Environmental Research and Risk Assessment*;   *Surgery*;   *Technometrics*;   *The Open Medical Informatics Journal*.

- Book proposals review: John Wiley & Sons;   Springer;   Chapman & Hall/CRC;   Pearson Arts & Sciences.

Other Academic Services:

- Invited panelist of a panel discussion organized by the Twin Cities Chapter of ASA, February 10, 2005.

- Outside reviewer for faculty tenure and promotion cases in various universities in US (more than 30 times).

- Outside reviewer for faculty tenure and promotion cases in several universities in UK.

- Outside reviewer for faculty tenure and promotion cases in Chinese Academy of Sciences.

- Outside reviewer for faculty tenure and promotion in Yarmouk University of Jordan.

- Outside reviewer for faculty tenure and promotion in Singapore National University.

- Outside reviewer for faculty tenure and promotion in Tel-Aviv University, Israel.

- Outside reviewer for faculty tenure and promotion cases in several universities in India.

- Outside reviewer or committee member for PhD thesis research of students from Australia (once), Belgium (once), Egypt (once), India (twice), and China (twice).

Department/College/University Service at University of Minnesota:

- Department service:

    1. Curriculum committee (2006-2007)
    2. Faculty search committee (2005-2006, 2007-2008 Chair)
    3. Graduate admissions committee (1998-2004)
    4. Ph.D. exam committee (2009-1010, 2010-2011 Chair)
    5. Personnel Committee (2007-2009)
    6. Research computing committee (2001-2002)
    7. Seminar coordinator (2005-2006)

- College of Liberal Arts service:

    1. CLA InfoTechnology Committee (2002-2003)
    2. CLA Faculty Research Awards Committee (2010-2011)

- University service:

    1. General Research Advisory Committee, UMN Graduate School (2008-2009)

- Other service:

    1. Biostatistics faculty search committee (2002-2003)

Department/College/University Service at University of Florida:

- Department:

    1. Department Chair (2013-present)
    2. Curriculum committee (2013-2015)
    3. Faculty development committee (2013-2015)

- College of Medicine:

    1. Executive Committee (2013-present)
    2. LCME Information Resources and Library Services Sub-Committee (2014)

- College of Public Health and Health Professions:

    1. Executive Leadship Committee (2013-present)
    2. Public Health Policy Committee (2013-present)
    3. Committee on International Collaborations (Chair, 2018-present)
    4. Search Committee for the chair of the Department of Epidemiology (2018-2019)

5. Search Committee for the Director of Research Administration (2021)

6. Committee on diversity, equity and inclusion (DEI) (2022)

- University service:

1. Steering committee for the Life Sciences Preeminence Program (2013-2014)

2. Steering committee for the Biomedical Informatics Preeminence Program (2013-2014)

3. Steering committee for the Genomic Medicine Preeminence Program (2013-2014)

4. Scientific Advisory Committee, Biostatistics & Quantitative Sciences Shared Resource (BQS-SR), UF Health Cancer Center (2019-present)

5. Search committee for the dean of the College of Public Health and Health Professions (2021-2022)