

Department of Mathematics
Washington University in St. Louis
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Saint Louis, Missouri 63130

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Education

2003 Ph.D., Department of Statistics, University of Illinois at Urbana-Champaign
2003 M.S., Department of Finance, University of Illinois at Urbana-Champaign
2000 M.S., Department of Statistics, University of Illinois at Urbana-Champaign
1999 B.S. in Computer Science, the Special Class for Gifted Young, University of Science and Technology of China

Appointments

2011-present **Associate Professor** (with tenure), Department of Mathematics, Washington University in St. Louis
2011-present **Associate Professor**, Division of Biostatistics, Washington University in St. Louis, School of Medicine
2011-2014 **Dongshi Visiting Professor**, School of Mathematics and Statistics, Northeast Normal University, Changchun, China
2004-2011 **Assistant Professor**, Department of Mathematics, Washington University in St. Louis
2006-2011 **Assistant Professor**, Division of Biostatistics, Washington University in St. Louis, School of Medicine
2003-2004 **Postdoctoral Associate**, Yale Center for Statistical Genomics and Proteomics, Department of Epidemiology and Public Health, Yale University School of Medicine

Research Interests

Statistical computing in massive data, Bayesian quantile regression, bioinformatics, longitudinal and functional data analysis, and statistical applications in anesthesiology

Honors

Dongshi Visiting Professor, School of Mathematics and Statistics, Northeast Normal University, Changchun, China, 2011-2014
Special Recognition for Outstanding Mentors, College of Arts and Sciences, Washington University in St. Louis, Spring 2007
Technometrics Invited Paper Presentation at Spring Research Conference 2004

Professional Services

Editorial Services

Associate Editor, *Computational Statistics and Data Analysis*, 2011-present
Reviewer, *Mathematical Reviews*, 2012-present

Data Safety and Monitoring Boards (DSMBs)

Member, DSMB of Randomized Clinical Trial to Evaluate Guidelines for Acute Rhinosinusitis, NIH, 2006-2009.

Conference Program Committee

The 20th Annual Meetings of the Midwest Econometrics Group, 2010

International Association for Statistical Computing for the 2013 ISI World Statistics Congress

Conference Session Chair

International Conference on Statistics and Society, Beijing, China, 2010

The 20th Annual Meetings of the Midwest Econometrics Group, 2010

The NBER-NSF Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), 2013

Conference Reviewer

The 14th International Conference on Artificial Intelligence and Statistics (AISTAT), 2011

The 30th International Conference on Machine Learning (ICML), 2013, 2014

Grant proposal reviewer

National Science Foundation, Division of Mathematics Sciences, 2005

National Security Agency, Mathematical Sciences Grants Program, 2012

Central Michigan University Early Career Grant, 2013

Journal Referee

Bioinformatics

Biometrical Journal

BMC Bioinformatics

Canadian Journal of Statistics

Communications in Statistics–Simulation and Computation

Computational Statistics and Data Analysis

FEBS Letters

Functional and Integrative Genomics

IEEE/ACM Transactions on Computational Biology and Bioinformatics

IEEE Transactions on Signal Processing

IEEE Transactions on Systems, Man and Cybernetics

Journal of the American Statistical Association

Journal of Biopharmaceutical Statistics

Journal of Computational and Graphical Statistics

Journal of Machine Learning Research

Journal of Mathematical Inequalities

Journal of Nonparametric Statistics

Journal of the Royal Statistical Society, Series B

Journal of Statistical Planning and Inference

Metron: International Journal of Statistics

Physica A

Psychometrika

Science China Mathematics

Statistical Analysis and Data Mining

Statistical Methods and Applications

Statistics and Its Interface

Statistics and Probability Letters

Statistics in Medicine

Technometrics

Book reviewer

Chapman & Hall/CRC

Elsevier Publisher

SAGE Publications

Springer Publisher

Professional Society Membership

International Chinese Statistical Association

Advising

Ph.D. Students

1. Ruibin Xi (2009), *Statistical Aggregation: Theory and Applications*
 - First job: Postdoc at the Center for Biomedical Informatics, Harvard Medical School
 - Current job: faculty at Peking University
2. Qing Li (2010), *On Bayesian Regression Regularization Methods*
 - First job: Biometrician at Merck & Co., Inc.
 - Current job: Associate Principal Scientist at Merck & Co., Inc.
3. Chao Chang (2015), *Nonparametric Bayesian Quantile Regression Using Dirichlet Process Mixtures*
 - First job: Data Scientist at Google
4. Xiaoyu Dai (since 2014), in process
5. Guanshengrui Hao (since 2014), in process
6. Liqun Yu (since 2014), in process
7. Wei Wang (since 2014), in process

Master Students

8. Haeri Lee, M. A. (2012), *Bayesian Bidimensional Regression and Its Extension*
 - Current job: Business Planning Analyst at LG CNS
9. Jia Wang, M. A. (2009), *Interval Estimation of Excess Risk Related Effective Doses in Tobit Models*
 - Current job: Biostatistician at Merck Serono, Beijing
10. Zhiyong Huang, M. A. (2008), *Interval Estimation of Effective Doses*
 - Current job: Consumer behavior analyst at Department of Industry and Market Research, China Mobile Research Institute
11. Xiaoqiong Yu, M. A. (2006) (Co-advised with Professor Stanley Sawyer)
 - First job: Analyst at Health Benchmarks Inc.

Undergraduates

12. Wenshuai Ye (2013, honor thesis), *Analysis of Effective Connectivity under Different Anesthetic Conditions Using Resting-State fMRI Data*
 - First job: Data and policy analyst at Acumen LLC
13. Zoe Rehnberg (2014, ARTU scholar), in process

Other

- External dissertation examiner, Nanyang Technological University, Singapore, 2013
- External dissertation examiner, Hong Kong Baptist University, 2015
- Postdoc Mentor, Transdisciplinary Research in Energetics and Cancer Center, Washington University in St. Louis, School of Medicine, 2012
- Mentor of a MD student in Department of Anesthesiology, Washington University in St. Louis, School of Medicine, under an NIH TL1 training grant, 2011

Publications and Manuscripts

Book chapter

- [1] **Lin, N.**, Noe, D. and He, X. (2006), Tree-based methods and their applications, in H. Pham (eds), *Springer Handbook of Engineering Statistics*, 551-569, Springer.

Peer-reviewed journal publications

- [2] **Lin, N.**, Bailey, B. A., He, X. and Buttlar, W. G. (2004), Adjustment of measuring devices with linear models, *Technometrics*, **46**(2), 127-134.
- [3] **Lin, N.**, Wu, B., Jansen, R., Gerstein, M. and Zhao, H. (2004), Information assessment on predicting protein-protein interactions, *BMC Bioinformatics*, **5**: 154.
- [4] **Lin, N.** and Zhao, H. (2005), Are scale-free networks robust to measurement errors?, *BMC Bioinformatics*, **6**: 119.
- [5] **Lin, N.** and He, X. (2006), Robust and efficient estimation under data grouping, *Biometrika*, **93** (1), 99-112.
- [6] McDunn, J. E., Husain, K. D., Polpitiya, A. D., Burykin A., Ruan, J., Li, Q., Schierding, W., **Lin, N.**, Dixon, D., Zhang W., Coopersmith, C. M., Dunne, M. W., Colonna, M., Ghosh, B., Cobb, J. P. (2008), Plasticity of the systemic inflammatory response to acute infection during critical illness: Development of the Riboleukogram, *PLoS ONE*, **3**, e1564.
- [7] Woods, C. and **Lin, N.** (2009), Item response theory with estimation of the latent density using Davidian curves, *Applied Psychological Measurement*, **33**, 102-117.
- [8] Xi, R., **Lin, N.**, and Chen, Y. (2009), Compression and aggregation for logistic regression analysis in data cubes, *IEEE Transactions on Knowledge and Data Engineering*, **21**(4), 479-492.
- [9] Liu, T., **Lin, N.** and Zhang, B. (2009), Empirical likelihood for balanced ranked-set sampled data, *Science in China Series A: Mathematics*, **52**(6), 1351-1365. (special issue in honor of Prof. Zhidong Bai of his 65th birthday)
- [10] Liu, T., **Lin, N.**, Shi, N. and Zhang, B. (2009), Information criterion-based clustering with order-restricted candidate profiles in short time-course microarray experiments, *BMC Bioinformatics*, **10**: 146.
- [11] Cobb, J. P., Moore, E. E., Hayden, D. L., Minei, J. P., Cuschieri, J., Yang, J., Li, Q., **Lin, N.**, Brownstein, B. L., Hennessy, L., Mason, P. H., Schierding, W. S., Dixon, D. J., Tompkins, R. G., Warren, H.S., Schoenfeld, A. D. and Maier, R. V. (2009), Validation of the Riboleukogram to detect ventilator-associated Pneumonia after severe injury, *Annals of Surgery*, **250**, 531-539..

- [12] **Lin, N.** and Xi, R. (2010), Fast surrogates of U-statistics, *Computational Statistics and Data Analysis*, **54**, 16-24.
- [13] Li, Q. and **Lin, N.** (2010), The Bayesian elastic net, *Bayesian Analysis*, **5**, 151-170.
- [14] Kertai, M.D., Pal, N., Palanca, B. J. A., **Lin, N.**, Searleman, S. A., Zhang, L., Burnside, B.A., Finkel, K. J., Avidan, M. S. (2010), Association of perioperative risk factors and cumulative duration of low bispectral index with intermediate-term mortality following cardiac surgery, *Anesthesiology*, **112**, 1116-1127.
- [15] Shen, H., Buchowski, J. M., Yeom, J. S., Liu, G., **Lin, N.** and Riew, K. D. (2010), Pseudarthrosis in multilevel anterior cervical fusion with rhBMP-2 and allograft: Analysis of one hundred twenty-seven cases with minimum two-year follow-up, *Spine*, **35**(7):747-753.
- [16] Muenzer, J.T., Jaffe, D.M., Schwulst, S.J., Dixon, D. J., Schierding, W. S., Li, Q., Macmillan, S. K., Oppedal, D., Warner, B.W., Dillon, P. A., **Lin, N.**, Checchia, P. A., Cobb, J. P. (2010), Evidence for a novel blood RNA diagnostic for pediatric appendicitis: the Riboleukogram, *Pediatric Emergency Care*, **26**(5): 333-338.
- [17] Yan, X., Liu, T., **Lin, N.** and Zhang, B. (2010), Combining conditional and unconditional moment restrictions with missing responses using empirical likelihood, *Journal of Multivariate Analysis*, **101**, 2420-2433.
- [18] Li, Q., Xi, R. and **Lin, N.** (2010), Bayesian regularized quantile regression, *Bayesian Analysis*, **5**, 533-556.
- [19] **Lin, N.** and Xi, R. (2011), Aggregated estimating equation estimation, *Statistics and Its Interface*, **4**, 73-84.
- [20] Bottros, M. M., Palanca, B. J. A., Mashour, G. A., Patel, A., Butler, C., Taylor, A., **Lin, N.** and Avidan, M. S. (2011), Estimation of the bispectral index by anesthesiologists: An inverse Turing test, *Anesthesiology*, **114**, 1093-1101.
- [21] Fu, Z., Tao, J., Shi, N., Zhang, M. and **Lin, N.** (2011), Analyzing longitudinal item response data via the pairwise fitting method, *Multivariate Behavioral Research*, **46**(4), 669-690.
- [22] Avidan, M. S., Jacobsohn, E., Glick, D., Burnside, B. A., Zhang, L., Villafranca, A., Karl, L., Kamal, S., Torres, B., O'Connor, M., Evers, A. S., Gradwohl, S., **Lin, N.**, Palanca, B. J. and Mashour, G. A. (2011), Prevention of intraoperative awareness in a high-risk surgical population, *The New England Journal of Medicine*, **365**, 591-600.
- [23] Whitlock, E., Villafranca, A., **Lin, N.**, Palanca, B. J., Searleman, A. C., Jacobsohn, E., Finkel, K. J., Zhang, L., Burnside, B. A., Evers, A. S. and Avidan, M. S. (2011), The relationship between bispectral index values and volatile anesthetic concentrations during the maintenance phase of anesthesia in the B-Unaware trial, *Anesthesiology*, **115** (6), 1209-1218.
- [24] Wang, G., **Lin, N.** and Zhang, B. (2012), Functional linear regression after spline transformation, *Computational Statistics and Data Analysis*, **56**, 587-601.
- [25] Xi, R., **Lin, N.**, Chen, Y. and Kim, Y. (2012) Compression and aggregation of Bayesian estimates for data intensive computing, *Knowledge and Information Systems*, **33**(1), 191-212.
- [26] Liu, T., Yuan, X., **Lin, N.** and Zhang B. (2012), Rank-based empirical likelihood inference on medians of k populations, *Journal of Statistical Planning and Inference*, **142**(4), 1009-1026.

- [27] Ji, Y., **Lin, N.** and Zhang, B. (2012), Model selection in binary and tobit quantile regression using the Gibbs sampler, *Computational Statistics and Data Analysis*, **56**, 827-839. ([special issue on quantile regression and semiparametric methods](#))
- [28] Xu, L., **Lin, N.**, Zhang, B. and Shi, N. (2012), A finite mixture model for working correlation matrices in generalized estimating equations, *Statistica Sinica*, **22**(2), 755-776.
- [29] **Lin, N.** and Chang, C. (2012) Comment on Article by Lum and Gelfand, *Bayesian Analysis*, **7**(2), 263-270.
- [30] Mashour, G. A., Shanks, A., Tremper, K., Kheterpal, S., Turner, C., Ramachandran, S., Picton, P., Schueller, C., Morris, M., Vandervest, J., **Lin, N.** and Avidan, M. S. (2012), Prevention of intraoperative awareness with explicit recall in an unselected surgical population: A randomized comparative effectiveness trial, *Anesthesiology*, **117**(4), 693-695.
- [31] Wang, G., **Lin, N.** and Zhang, B. (2013), Functional contour regression, *Journal of Multivariate Analysis*, **116**, 1-13.
- [32] Wang, G., **Lin, N.** and Zhang, B. (2013), Dimension reduction in functional regression using mixed data canonical correlation analysis, *Statistics and Its Interface*, **6**, 197-196.
- [33] Aranake, A., Gradwohl, S., Ben-Abdallah, A., **Lin, N.**, Shanks, A., Helsten, D., Glick, D., Jacobson, E., Evers, A. S., Avidan, M. S. and Mashour, G. A. (2013), Increased risk for intraoperative awareness in patients with a history of awareness, *Anesthesiology*, **119**, 1275-1283.
- [34] Zhang, B.*, Zhou, Y.*, **Lin, N.***, Lowdon, R. F., Hong, C., Nagarajan, R. P., Cheng, J. B., Li, D., Stevens, M., Lee, H. J., Xing, X., Zhou, J., Sundaram, V., Gu, J., Gascard, P., Sigaroundinia, M., Tisty, T. D., Kadlecsek, T., Weiss, A., O'Green, H., Farnham, P. J., Marie, C. L., Ligon, K. L., Madden, P. A. F., Tam, A., Moore, R., Hirst, M., Marra, M. A., Zhang, B., Castello, J. and Wang, T. (2013), Functional DNA methylation differences between tissues, cell types, and across individuals discovered using the M&M algorithm, *Genome Research*, **23**, 1522-1540. (*: co-first author)
- [35] Whitlock, E. L., Torres, B. A., **Lin, N.**, Helsten, D., Nadelson, M. R., Mashour, G. A. and Avidan, M. S. (2014), Postoperative delirium in a substudy of cardiothoracic surgical patients in the BAG-RECALL clinical trial, *Anesthesia & Analgesia*, **118**(4):809-817.
- [36] Wang, G., **Lin, N.** and Zhang, B. (2014), Functional k -means inverse regression, *Computational Statistics and Data Analysis*, **70**, 172-182.
- [37] Kaiser HA, Ben Abdallah A, **Lin N**, Tellor BR, Helwani M, Smith JR, Moon MR, Avidan MS. (2014). Contaminated heparin and outcomes after cardiac surgery: a retrospective propensity-matched cohort study. *PLoS One* **9**(8):e106096.
- [38] McCloskey C, Rada C, Bailey E, McCavera S, van den Berg HA, Atia J, Rand DA, Shmygol A, Chan YW, Quenby S, Brosens JJ, Vatish M, Zhang J, Denton JS, Taggart MJ, Kettleborough C, Tickle D, Jerman J, Wright P, Dale T, Kanumilli S, Trezise DJ, Thornton S, Brown P, Catalano R, **Lin N**, England SK, Blanks AM. (2014). The inwardly rectifying K⁺ channel KIR7.1 controls uterine excitability throughout pregnancy. *EMBO Mol Med* **6**(9):1161-1174.
- [39] Willingham, M., Abdallah, A. B., Gradwohl, S., Helsten, D., **Lin, N.**, Villafranca, A., Jacobson, E., Avidan, M. S. and Kaiser, H. (2014), The association between intraoperative electroencephalographic suppression and postoperative mortality, *British Journal of Anaesthesia*, **113**(6):1001-1008.

- [40] Zhang B, Xing X, Li J, Lowdon RF, Zhou Y, **Lin N**, Zhang B, Sundaram V, Chiappinelli KB, Hagemann IS, Mutch DG, Goodfellow PJ, Wang T. (2014). Comparative DNA methylome analysis of endometrial carcinoma reveals complex and distinct deregulation of cancer promoters and enhancers. *BMC Genomics* 15(1):868.
- [41] Zhou Y, **Lin N**, Zhang B. (2014). An iteration normalization and test method for differential expression analysis of RNA-seq data. *BioData Mining*, 7:15.
- [42] Gradwohl SC, Aranake A, Abdallah AB, McNair P, **Lin N**, Fritz BA, Villafranca A, Glick D, Jacobsohn E, Mashour GA, Avidan MS. (2015). Intraoperative awareness risk, anesthetic sensitivity, and anesthetic management for patients with natural red hair: a matched cohort study. *Canadian Journal of Anesthesia*, 62(4):345-355.
- [43] Zhao, S., Tao, J., Shi, N. and **Lin, N.** (2015), A note on the comparison of the Stein estimator and the James-Stein estimator, *Communications in Statistics – Theory and Methods*, in press.

Paper submitted or under revision

- [44] Xi, R. and **Lin, N.** (2014), Direct regression modelling of higher-order moments in big data, under revision, *Statistics and Its Interface*.
- [45] Yuan, X., Liu, T. and **Lin, N.** (2014), Weighted quantile regression using empirical likelihood, submitted to *Journal of Multivariate Analysis*.

Technical reports

- [46] Xi, R., Kim, Y., **Lin, N.** and Chen, Y. (2009), Bayesian analysis in data cubes, Technical Report WUCSE-2009-81, Washington University in St. Louis, Department of Computer Science and Engineering.

Software Development

- R package `ORIClust`, <http://cran.r-project.org/web/packages/ORIClust/>
Co-developer: Tianqing Liu and Baoxue Zhang

`ORIClust` is a user-friendly R-based software package for gene clustering. Clusters are given by genes matched to pre-specified profiles across various ordered treatment groups. It is particularly useful for analyzing data obtained from short time-course or dose-response microarray experiments.

- R package `methyLMnM`, <http://epigenome.wustl.edu/MnM/>
Co-developer: Yan Zhou, Bo Zhang, Baoxue Zhang, and Ting Wang

`methyLMnM` is an R package for joint analysis of methylated DNA immunoprecipitation (MeDIP) experiments [Weber et al., 2005] followed by sequencing (MeDIP-seq) and methyl-sensitive restriction enzymes experiments for unmethylated CpGs (MRE-seq).

Invited Presentations

2015

- Department of Mathematics, Hong Kong University of Science and Technology
- Department of Mathematics, Hong Kong Baptist University

- College of Mathematics and Computational Science, Shenzhen University, Shenzhen, China
- College of Economics, Jinan University, Guangzhou, China
- The 10th International Conference on Frontiers of Statistics, Beijing, China
- The 4th International Symposium on Biopharmaceutical Statistics, Beijing, China
- School of Mathematics, Southwest Jiaotong University, Chengdu, China
- Beijing University of Civil Engineering and Architecture, Beijing, China

2014

- The Banff Workshop on Statistical and Computational Theory and Methodology for Big Data Analysis, Banff, Canada

2013

- School of Mathematical Sciences, University of Chinese Academy of Sciences, Beijing, China
- School of Mathematics and Statistics, Northeast Normal University, Changchun, China
- School of Mathematical Sciences, Capital Normal University, Beijing, China

2012

- The 2nd Institute of Mathematical Statistics Asia Pacific Rim Meeting, Tsukuba, Japan

2011

- School of Mathematics and Statistics, Northeast Normal University, Changchun, China
- School of Information Sciences, University of Science and Technology of China, Hefei, China
- Department of Statistics, Fudan University, Shanghai, China
- The 2011 IMS-China International Conference on Statistics and Probability, XiAn, China
- The 2011 Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), St. Louis, Missouri
- The 2011 China National Statistics Workshop, Beijing, China

2010

- Microsoft Research Asia (MSRA), Beijing, China
- The Graduate University of Chinese Academy of Sciences, Beijing, China
- The ICSA 2010 Applied Statistics Symposium, Indianapolis, Indiana
- The 20th Annual Meetings of the Midwest Econometrics Group, St. Louis, Missouri

2009

- Division of Biostatistics, School of Medicine, Washington University in St. Louis
- Department of Mathematics and Statistics, Bowling Green State University
- Department of Electrical and System Engineering, Washington University in St. Louis
- The First Seminar in Applied Probability and Statistics, Changchun, China
- The Graduate University of Chinese Academy of Sciences, Beijing, China

2008

- The Annual Meeting of the Classification Society of North America, St. Louis, Missouri

- The 17th annual International Chinese Statistical Association Applied Statistics Symposium, Piscataway, New Jersey
- International Meeting of the Psychometric Society, Durham, New Hampshire

2007

- Department of Statistics, University of Hong Kong
- Institute of System Sciences, Chinese Academy of Sciences, Beijing, China
- Department of Statistics and Finance, University of Science and Technology of China, Hefei, China
- The 15th International Conference of Forum for Interdisciplinary Mathematics on Interdisciplinary Mathematical and Statistical Techniques, Shanghai, China
- Department of Statistics, University of Missouri at Columbia
- Department of Statistics, University of Virginia

2006

- Division of Biostatistics, Washington University of St. Louis, School of Medicine
- Department of Biostatistics, Columbia University

2005

- Pacific Northwestern National Laboratory, Richland, Washington
- Frontiers in Integrative Biological Research (FIBR) Workshop, Washington University in St. Louis
- Department of Genetics, Washington University in St. Louis, School of Medicine

2004

- Department of Statistics, University of North Carolina at Chapel Hill
- Department of Mathematics, Washington University in St. Louis
- Department of Statistics, University of Kentucky
- Department of Internal Medicine, University of New Mexico
- Department of Mathematics and Statistics, Arizona State University
- Department of Mathematics and Statistics, Utah State University
- Department of Mathematics and Statistics, University of Maryland at Baltimore County
- The Eleventh Annual Spring Research Conference on Statistics in Industry and Technology, Gaithersburg, Maryland

Contributed Presentations

2014

- (poster) The Washington University CER 2014 Symposium, St. Louis, Missouri
- (presented by Chao Chang) The 2014 Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), Chicago, Illinois
- (presented by Chao Chang) The 2014 Annual Conference for the Midwest Econometrics Group, Iowa City, Iowa

2012

- (poster) SAMSI open workshop for the Program on Statistical and Computational Methodology for Massive Datasets, Research Triangle Park, North Carolina

2010

- The 2010 Joint Statistical Meeting, Vancouver, Canada
- International Conference on Statistics and Society, Beijing, China

2007

- The 2007 Taipei International Statistical Symposium and ICOSA International Conference, Taipei, Taiwan

2006

- The Joint Statistical Meeting, Seattle, Washington
- (poster) The University of Florida Winter Workshop: Frontiers in Theoretical Statistics, Gainesville, Florida

2005

- The Joint Statistical Meetings, Minneapolis, Minnesota
- The WNAR/IMS Meeting, Fairbanks, Alaska
- The Joint Annual Meetings of the Interface and the Classification Society of North America, Saint Louis, Missouri

2004

- The Seventh North American New Researchers Conference (NRC04) at York University, Toronto, Canada

2002

- The International Conference on Robust Statistics (ICORS02), Vancouver, Canada

Teaching

Classroom Teaching at Washington University in St. Louis

| | |
|------------------------------|--------------------------------------|
| Spring 2008, Summer 2013 | Math 2200 (Elementary Statistics) |
| Spring 2007 | Math 320 (Elementary Statistics) |
| Spring 2009, 2012, Fall 2010 | Math 3200 (Intermediate Statistics) |
| Spring 2011 | Math 408 (Nonparametric Statistics) |
| Spring 2010, 2012 | Math 420 (Experimental Design) |
| Fall, 2012 | Math 439 (Linear Statistical Models) |
| Spring, 2015 | Math 4392 (Advanced Linear Models) |
| Spring 2008-2015 | Math 459 (Bayesian Statistics) |
| Fall 2009, 2012 | Math 475 (Statistical Computation) |
| Fall 2004 | Math 493 (Probability) |
| Spring 2005 | Math 494 (Mathematical Statistics) |
| Fall 2005, 2006, 2013 | Math 5061 (Theory of Statistics I) |

Spring 2006, 2007, 2014

Math 5062 (Theory of Statistics II)

Invited Short Courses

| | |
|-----------|---|
| June 2005 | Systems Biology (invited for the NSF Frontiers In Biological Research summer school at Washington University) |
| June 2009 | Bayesian Statistics and Its Applications (at Northeastern Normal University, Changchun, China) |
| May 2010 | Modern Classification Methods (at Center of Statistical Sciences, Brown University) |
| June 2010 | Bayesian Statistics with Applications in Bioinformatics and Data Mining (at Chinese Academy of Science, Beijing, China) |
| July 2010 | Bayesian Statistics with Applications in Bioinformatics and Data Mining (at Lanzhou University, Lanzhou, China) |
| June 2012 | Topics in Bayesian Statistics (at Chinese Academy of Science, Beijing, China) |

Course Development at Washington University

1. Math5061-5062 (Theory of Statistics I-II), since fall 2005

A two-semester series course on fundamental theory of mathematical statistics for Ph.D. students. This course is one of the qualifying exam core courses for Department of Mathematics, Washington University.

2. Math459 (Bayesian Statistics), since spring 2008

A one-semester course on fundamental theory of Bayesian statistics for senior undergraduates and first-year graduate students.

University and Department Services

Member, Program Committee of Master in Biostatistics, Division of Biostatistics, WashU (2010-present)

Faculty mentor, Transdisciplinary Research in Energetics and Cancer Center, WashU (2012)

Member, Search Committee of Department of Psychology, WashU (2012-2013)

Member, Department Graduate Committee (2005-2006, 2010-2011, 2012-2013)

Member, Department Statistics Committee (2004-2009, 2012-2013)

Member, Search Committee of Department of ESE, WashU (2011-2012)

Chair, Department Statistics Committee (2006-2007, 2009-2011, 2013-2014)

Member, Department Computing Committee (2004-2005)

Member, Department Library Committee (2008-2010)

Member, Department Search Committee (2005-2006, 2013-2014)

Member, Department Calculus Lab Reformation Committee (2005-2006)

Graduate Student Committees (*thesis advisor):

Liana Jacobi, Ph.D., Economics, 2005

Tom King, Ph.D., Economics, 2005

Gang Shi, Ph.D., Electrical Engineering, 2006

Tong Zhao, Ph.D., Electrical Engineering, 2006

*Xiaoqiong Yu, M. A., Statistics, 2006
Jian Wang, Ph.D., Electrical Engineering, 2006
Haochen Li, Ph.D., Physics, 2006
Zhi Liu, Ph.D., Electrical Engineering, 2007
Amei Amei, Ph.D., Mathematics, 2007
Martin Hurtado, Ph. D., Electrical Engineering, 2007
Zhao Xing, Ph. D., Computer Science, 2008
Long Chen, Ph. D., Business Administration, 2008
Yanni Sun, Ph. D., Computer Science, 2008
Yu Tang, Ph.D., Business Administration, 2008
*Zhiyong Huang, M.A., Statistics, 2008
Haley J. Abel, Ph.D., Mathematics, 2009
*Ruibin Xi, Ph.D., Mathematics, 2009
Haiyan Wang, Ph.D., Business Administration, 2009
*Jia Wang, M.A., Statistics, 2009
Adam Hafdahl, M.A., Statistics, 2009
Xun Pang, Ph.D., Political Science, 2010
Patricio S. La Rosa, Ph.D., Electrical Engineering, 2010
Michael Malecki, Ph.D., Political Science, 2010
Satyabrata Sen, Ph.D., Electrical Engineering, 2010
Murat Akcakaya, Ph.D., Electrical Engineering, 2010
*Qing Li, Ph.D., Mathematics, 2010
Xiao Huang, Ph.D., Mathematics, 2011
Andrew Womack, Ph. D., Mathematics, 2011
Sandeep Gogineni, Ph.D., Electrical Engineering, 2012
Tao Li, Ph.D., Electrical Engineering, 2012
*Haeri Lee, M.A., Statistics, 2012
Tsung-Han Tsai, Ph.D., Political Science, 2013
Lan Xu, M.A., Statistics, 2013
Phani Chavali, Ph.D., Electrical Engineering, 2013
Yuanxin Hu, M.A., Statistics, 2013
Zheng Chen, Ph.D., Computer Science, 2013
Tianhui Gu, M.A., Statistics, 2014
Chong Bian, M.A., Statistics, 2014
Yuyang Zhang, M.A., Statistics, 2014
Hao Zhao, M.A., Statistics, 2014
Eddie Xu, Ph.D., Computer Science, 2014