Curriculum Vitae

Inyoung Kim

Personal Information

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Education

Aug. '97-Aug. '02	Texas A&M University Ph.D. in Statistics Dissertation title "Statistical Methods for Matched Case-Control Studies and cDNA Microarray" Major Advisor: Raymond J. Carroll.	College Station, TX
March '94-Feb. '96	Yonsei university M.S in Applied Statistics	Seoul, Republic of Korea
March '90-Feb. '94	Jeju National University B.S. in Mathematics (*Magna Cum Laude*)	Jeju, Republic of Korea

Honor and Award

- Distinguished Alumni Award, Jeju National University, 2012.
- Travel Award for Conference on Statistical Methods for Complex Data, 2009
- Biometrics Editor's invited paper for Biometrics Showcase, 2007

Professional Experience

- June '12- Present, Associate Professor of Department of Statistics, Virginia Tech, USA.
- Aug. '07- May 12, Assistant Professor of Department of Statistics, Virginia Tech, USA.
- July. '05- June. '07, Postdoctoral Research Associate in Division of Biostatistics, Department of Epidemiology and Public Health, Yale University, USA, Supervisor: Hongyu Zhao.
- Mar. '03- Feb. '05, Research Associate at the Cancer Metastasis Research Center in Yonsei Medical School, Yonsei University, Republic of Korea.

Research Interests

- Semiparametric/Nonparametric modeling using regression/smoothing splines
- Nonlinear/linear mixed effect modeling for correlated/clustered data
- Semiparametric/Nonparametric Bayesian modeling and computation in high dimensional data analysis
- Statistical Kernel Machine Learning
- Biostatistics (Biology, Environmental/Public Health, Epidemiology and Toxicology, Survival analysis)
- Bioinformatics (Functional Genomics, System Biology, Proteomics)

Editorial Activities

- Associate Editor (2012-present) for Communications for Statistical Applications and Methods
- Associate Editor (2012-present) for Korean Journal of Applied Statistics

Grants

- National Institute of Health (NIH-R21R33): PI is Susan W. White and Co-PIs are **Inyoung Kim**, John Richey, Denis Gracanin, Martha Anna Bell; 09/01/2013-08/31/2019; Neurotherapy to Promote Recognition in Autism; Total amount is $1,301,455.(Co-I 5%)
- National Science Foundation-Computer and Network Systems (NSF-CNS): PI is **Inyoung Kim** and Co-PI is Patrick Schaumont, 07/01/2011-06/30/2015; TC: Small: New Directions in Side Channel Attacks and Countermeasures; Total amount is $429,558. (PI 50%)
- National Science Foundation-Computer and Network Systems (NSF-CNS): PI is Patrick Schaumont and Co-PI's are Leyla Nazhandali and **Inyoung Kim**; 08/01/2010-07/30/2015; TC: Medium: From Statistics to Circuits: Foundations for Future On-Chip Fingerprints; Total amount is $675K (Co-PI 33%).
- Institute for Critical Technology and Applied Science (ICTAS): PI is Patrick Schaumont and Co-PI's: Leyla Nazhandali and **Inyoung Kim**; 07/01/2009-07/01/2010, Unique and Unclonable On-chip Identifiers; Total amount is $98K (Co-PI 33%).

Pending Grant

- National Institute of Health (NIH-R01): PI is A. Masoud and Co-PIs are Chenming Zhang, Webster Santos, Jeannine Strobl, **Inyoung Kim**; 09/01/2016-09/01/2021, Microfluidic Bioassay: in vitro predictor for in vivo cancer drug responsiveness; Total amount is $3,013,795.

Publications

Peer-Reviewed Journal Articles

Note: $^{+}$ and * indicate graduate student and corresponding author, respectively.

1. Z. Fang^{+} and **I. Kim*** (2016). Flexible variable selection for recovering the sparsity in nonadditive multivariate nonparametric model. *Biometrics*, to appear.
2. A. Trubanova, **I. Kim**, M.C. Coffman, M. Bell, J. A. Richey, S. LaConte, D. Gracanin, S. White (2016). Perspective-taking and fear recognition, *Current Research in Psychology*, to appear.
3. Z. Fang^{+} and **I. Kim*** (2015). Bayesian Ising Graphical Model for Variable Selection. *Journal of Computational and Graphical Statistics*, DOI:10.1080/10618600.2015.1035438.
4. C. Park and **I. Kim*** (2015). Efficient Resolution and Basis Selection in Wavelet Regression. *Computational Statistics*, 30, 957-986.
5. H. Zhang^{+}, Y. Wu, L. Cheng^{+}, and **I. Kim** (2015). Hit and Run ARMS: adaptive rejection metropolis sampling with Hit and Run Random Direction. *Journal of Statistical Computation and Simulation*, 86, 973-985.
6. S. W., White, J. A. Richey, D. Gracanin, M. A. Bell, LaConte, S. La, Coffman, M., Trubanova, A., **I. Kim** (2014). The promise of neurotechnology in clinical translational science. *Clinical Psychological Science*, 1-19, DOI: 10.1177/2167702614549801.
7. H. Zhang^{+}, **I. Kim***, and C. Park (2014). Semiparametric Bayesian Hierarchical Models for Nonlinear Mixed Effects Model, with application to gastric emptying studies. *Journal of Applied Statistics*, 41,2743-2760.
8. J. Chen^{+}, **I. Kim**, G. Terrell, L. Liu, and G. Toth (2014). Generalized single-index mixed model for repeated measures data. *Journal of Nonparametric statistics*, 26, 291-302.
9. Y. Xu^{+}, **I. Kim***, and P. Schaumont (2014). Adaptive Bayes Sum Test for the Equality of Two Nonparametric Functions. *Journal of Applied Statistics*, 41, 2639-2657.
10. H. Pang, **I. Kim**, and H. Zhao (2014). Random Effects Model for Multiple Pathway Analysis with Applications to Type II Diabetes Microarray Data. *Statistics in Biosciences*, DOI 10.1007/s12561-014-9109-1.
11. H. Zhang^{+} and **I. Kim*** (2016). Adaptive Rejection Metropolis Simulated Annealing for Detecting Global Maximum Region. *Methodology and Computing in Applied Probability*, 18, 1-19.
12. **I. Kim***, H. Pang, and H. Zhao (2013). Statistical properties of semiparametric methods for evaluating pathway effects. *Journal of Statistical Planning and Inference*, 143, 745-763.
13. S. White, T. Ollendick, A. Albano, D. Oswald, C. Johnson, M. Southam-Gerow, **I. Kim**, L. Scahill (2013). Randomized Controlled Trial: Multimodal Anxiety and Social Skill Intervention for Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 43, 382-394.
14. C. Park, **I. Kim***, and Y. Lee (2012). Error Variance Estimation in Nonparametric Regression under Lipschitz Condition and Small Sample Size. *Journal of Statistical Planning and Inference*, 142, 2369-2385 (* corresponding author).
15. **I. Kim***, H. Pang, and H. Zhao (2012). Bayesian semiparametric regression models for evaluating pathway effects on clinical continuous and binary outcomes. *Statistics in Medicine*, 31, 1633-1651.
16. A. Maiti, **I. Kim**, and P. Schaumont (2012). A Robust Physical Unclonable Function with Enhanced Challenge-Response Set. *IEEE Transaction on Information Forensics and Security*, 7, 333-345.

17. **I. Kim***, Cheong, H. K., and H. Kim (2011). Semiparametric regression models for detecting effect modification in matched case-crossover Studies, *Statistics in Medicine*, 96, 1458-1468.
18. S. Ha, **I. Kim***, Y. Wang, and J. Xuang (2011). Applications of Different Weighting Schemes To Improve Pathway Based Analysis. *Comparative and Functional Genomics*, 2011, 1-15.
19. **I. Kim***, N. D. Cohen, A. Roussell, and N. Wang (2010). A two-component nonlinear mixed effects model for longitudinal data, with application to gastric emptying studies, *Statistics in Medicine*, 29, 1839-1859.
20. L. Yuan, S. Honmab, **I. Kim**, S. I. Ishidad, J. T., Patton, A. Z., Kapikian, and Y. Hoshino (2009). Resistance to rotavirus infection in adult volunteers challenged with a virulent G1P1A[8],NSP4[B] virus correlated with serum IgG antibodies to homotypic VP7 and VP4, *Journal of Infectious Diseases*, 200, 1443-1451
21. **I. Kim**, T. Park, and B. Kim (2009). The reanalysis of the donation data using the zero-inflated Poisson regression, *Korean Journal of Applied Statistics*, 22, 819-827.
22. Y. Liu, **I. Kim**, and H. Zhao (2008). Protein interaction prediction from diverse sources, *Drug Discovery Today*, 13, 409-416.
23. Y. Wang and **I. Kim** (2008). A bootstrap-based simple probability model for classifying network traffic and detecting network intrusion, *Security Journal*, 21, 278-290.
24. Y. Wang, M., Nathaniel, and **I. Kim** (2007). Profiling user behavior for intrusion detection using item response modeling, *Journal of Information Privacy and Security*, 3, 3-17.
25. **I. Kim**, Y. Liu and H. Zhao (2007). Bayesian methods for predicting interacting protein pairs using domain information, *Biometrics*, 63, 824-833. (Biometrics Editor's invited paper for "Biometrics Showcase")
26. Y. Wang, **I. Kim**, G. Mbateng and S. Y. Ho (2006). A latent class modeling approach to detect network intrusion, *Computer Communications*, 30, 93-100.
27. B. Kim, **I. Kim**, S. Lee, S. Rha, and H. Chung (2006). Ranking candidate genes for the biomarker development in a cancer diagnostics, *Communications for Statistical Applications and Methods*, 14, 169-182.
28. **I. Kim**, S. Rha and B. Kim (2006). Bayesian multilevel mixed effect model for analysis of gene expression data, *Communications for Statistical Applications and Methods*, 13, 701-718.
29. **I. Kim**, S. Lee, S. Kim, S. Rha, H. Chung and B. Kim (2006). Hotelling's T^2 statistic for feature subset selection in a cDNA microarray, *Bioinformatics and Biosystems*, 3, 165-170.
30. **I. Kim**, B. Kim and T. Park (2006). The analysis of the number of donations based on the mixture of Poisson regression models, *Korean Journal of Applied Statistics*, 19, 1-12.
31. B. Kim, **I. Kim**, S. Lee, S. Kim, S. Rha and H. Chung (2005). Statistical methods of translating microarray data into clinically relevant diagnostic information in colorectal cancer, *Bioinformatics*, 21 (4), 517-528.
32. **I. Kim**, Y. Choi, H. Chung, S. Rha and B. Kim (2005). Statistical method of determining a cut off value between normal and disease groups, *Bulletin of Informatics and Cybernetics: Research Association of Statistical Sciences*, 36, 63-72.
33. W. S. Lim, S. L. Payne, J. F. Edwards, **I. Kim**, J. M. Ball (2005), Differential effects of virulent and avirulent equine infectious anemia virus on macrophage cytokine expression, *Virology*, 295-306.

34. J. L. Cargile, J. A. Burrow, **I. Kim**, N. D. Cohen and A. M. Merritt (2004). Effect of dietary corn oil supplement on equine gastric acid, sodium and PGE2 content before and during pentagastrin infusion, *Journal of Veterinary Internal Medicine*, 18, 545-549.
35. N. Metayer, M. Lhote, A. Bahr, N. D. Cohen, **I. Kim**, A. J. Roussel and V. Jullian (2004). Meal size and starch content affect gastric emptying in horses, *Equine Veterinary Journal*, 36, 436-440.
36. **I. Kim*** and N. Cohen (2004). Semiparametric and nonparametric modeling of effect modification in matched studies, *Computational Statistics and Data Analysis*, 46, 631-643.
37. **I. Kim**, N. Cohen and R. J. Carroll (2003). Semiparametric regression splines in matched case-control studies, *Biometrics*, 59, 1158-1169.
38. **I. Kim**, N. Cohen and R. J. Carroll (2002). Effect heterogeneity by a matching covariate in matched case-control studies: A method for graphs-based representation, *American Journal of Epidemiology*, 156, 463-470 .

Book Chapter

39. **I. Kim**, A. Maiti, L. Nazhandali, P. Schaumont, V. Vivekraja, and H. Zhang (2010). From Statistics to Circuits: Foundations for future physical unclonable functions, 55-78, *Towards Hardware Intrinsic Security : Foundation and Practice*, edited by A. Sadeghi, Springer Information Security and Cryptography Series.
40. **I. Kim**, Y. Liu, and H. Zhao (2009). Sparsity priors for protein-protein interaction Bayesian methods, *Bayesian Modeling in Bioinformatics*, Chapter 10, edited by Dipak Day, Bani K. Mallick, and Samiran Ghosh, Chapman& Hall/CRC.
41. Y. Liu, **I. Kim** and H. Zhao (2009). Protein interaction predictions from diverse source, *New Development in Biostatistics and Bioinformatics: Frontiers of Statistics*, 159-178, Chapter 7, edited by Jianqing Fan, Xihong Lin, and Jun S. Liu, Chapman& Hall/CRC.
42. H. Pang, **I. Kim** and H. Zhao (2008). Pathway-based methods for analyzing microarray Data., *Analysis of Microarray Data: A Network-Based Approach*, Chapter 13, edited by M. Dehmer and F. Emmert-Streib, John Wiley& Sons, Ltd.
43. B. Kim, S. Lee, **I. Kim**, S. Kim, S. Rha and H. Chung (2004). Statistical issues in search for biomarkers of colorectal cancer using microarray experiments. *Recent Advances in Quantitative Methods for Cancer and Human Health Risk Assessment*, Chapter 20, edited by L. Edler and C. Kitsos, John Wiley& Sons, Ltd.

Peer-Reviewed Conference Proceedings Articles

44. S. Ha, **I. Kim**, and J. Xuang (2009). Enhancing pathway based analysis with different weighting schemes. *Proc. IEEE International Conference on Bioinformatics& Biomedicine*, Washington D. C., USA, Nov. 2009, 384-387 (Acceptance rate : 19%)

Peer-Reviewed Conference Abstract and Poster

1. Orloff MA, Coffman MC, Trubanova A, Ruloff M, White SW, Gracanin D, **Kim I**, Bell MA, LaConte SM, Richey JA (2015). Increased dorsomedial prefrontal cortex and precuneus activation precede correct emotion identification. Society for Neuroscience; October, 2015; Chicago, Illinois, USA.
2. Lee, E., Bernardo, N.L., Ho C., **Kim, I.**, Estacio, G (2015). Predictive Value of Ankle-Brachial Index in Diagnosing CAD in Patients at High Risk for Cardiovascular Disease: Comparison with Cardiac Stress Test; **1st Place, Winner of the Best Abstract**

Award of Poster Session at 2015 Annual Conference of Virginia Council of Nurse Practitioner.

Manuscripts: Under Revision and Review

1. A. Ortega Villa^{+} and **I. Kim*** (2015). Semiparametric time varying coefficient model for matched case-crossover studies, Revision is submitted to *Statistics in Medicine*
2. A. Ortega Villa^{+} and **I. Kim*** (2015). Semiparametric spatial-temporal varying coefficient model for matched case-crossover studies, Submitted to *Environmetrics*
3. L. Cheng^{+} and **I. Kim*** (2015). A Bayesian semiparametric regression for pathway based analysis with zero inflated clinical outcomes. Under revision for *Journal of Agricultural, Biological, and Environmental Statistics*
4. H. Mahmoud^{+} and **I. Kim*** (2015). Semiparametric Single index multi change points model with an application of environmental health study on mortality and temperature. Under revision for *Environmetrics*
5. Z. Fang^{+}, **I. Kim***, and J Jung (2015). Semiparametric Mixed Models for Evaluating Pathway-Environment Interaction. Under revision for *Journal of Agricultural, Biological, and Environmental Statistics*
6. L. Cheng^{+}, L Shan^{+}, and **I. Kim*** (2016). Multilevel Gaussian Graphical Model. Submitted to *Journal of Statistical Planning and Inference*
7. N. Johnson^{+} and **I. Kim*** (2016). Generalized Linear Models with Covariate Measurement error and Unknown Link Function. Revision is submitted to *Journal of Applied Statistics* (* corresponding author)
8. C. Park and **I. Kim*** (2015). The difference based outlier detection method in multiple regression. Submitted to *Electronic Journal of Statistics*
9. S. Peng^{+} and **I. Kim*** (2016). Dual-Semiparametric regression using Weighted Dirichlet Process Mixture. Submitted to *Journal of Business and Economic Statistics*
10. S. Peng^{+} and **I. Kim*** (2016). Probabilistic Weighted Dirichlet Process Mixture. Submitted to *JASA T&M*
11. S. Peng^{+} and **I. Kim*** (2016). Weighted Dirichlet Mixture GARCH. Submitted to *JASA C&A* (* corresponding author)
12. N. Johnson^{+} and **I. Kim*** (2015). Semiparametric approaches for matched case-control studies with error-in-covariates. Revision is submitted to *Journal of Applied Statistics*
13. E. Park, **I. Kim**, and C. Spiegelman (2015). Source-specific exposure assessment by using Bayesian spatial multivariate receptor modeling for spatially correlated multi-pollutant data. Submitted to *Technometrics*
14. Y. Xu^{+}, **I. Kim***, and R. J. Carroll (2016). Hybrid omnibus test for semiparametric single index model with high dimensional data. Submitted to *Biometrics*
15. F. Guo**, **I. Kim****, and S. Klauer (2016). Semiparametric Bayesian models for evaluating time-variant driving risk factors using naturalistic driving data and case-crossover approach. To be submitted to Statistics in Medicine. ($**$ equally contributed first author)
16. H. Mahmoud^{+} and **I. Kim*** (2016). Semiparametric Spatial Single index model. Submitted to *JRSS-C*
17. Q. Li, F. Guo, **I. Kim**, and S. Klauer (2016). A Bayesian Latent Class Change-Point Model for Novice Teenage Driving Risk. Submitted to *Technometrics*.
18. Lee, E., **Kim, I.**, Bernardo, N.L., Estacio, G. (2015) Frequency and predictive value of the abnormal ankle brachial index with the presence of coronary artery disease requiring coronary interventions in veterans. Submitted to Journal *Circulation*

19. T. Bui, G. Li, **I. Kim**, K. Wen, E. Twitchell, S. Lei, A. Ramesh, M. Weiss, X. Yang, S. Clark-Deener, R. Choy, L. Yuan (2016) Racecadotril reduces human rotavirus diarrhea and prevents body weight loss in neonatal gnotobiotic pigs. Submitted to *Virology*

Technical Reports

- **I. Kim**, S. Lee, S. Rha and B. Kim (2006). Developing a molecular prognostic predictor of a cancer based on a small sample of survival outcomes, Yonsei University in Republic of Korea, Technical report.
- **I. Kim**, S. Kim, Rha, H. Chung and B. Kim (2006). Statistical method of determining a cut off value between normal and disease groups in comparative genomic hybridization (CGH) array, Yonsei University in Republic of Korea, Technical report.
- **I. Kim** (2002). The lognormal distribution for ratio-based decisions and the quantitative analysis of cDNA microarray, Texas A& M University, Technical report.
- **I. Kim** and N. Cohen (2002). A graphical method for effect modification of geographic region in matched case-control studies, Texas A& M University, Technical report.

Work in Progress

- **I. Kim** and R. J. Carroll (2016). Semiparametric Omnibus test for multi-pathway analysis
- **I. Kim** and H. Zhao (2016). Nonparametric Bayesian approach for protein-protein complex
- **I. Kim** and H. Kim (2016). Semiparametric functional analysis for the association between temperature and mortality in east Asia.
- **I. Kim**, K. Lee, and N Cohen (2016). A Semiparametric dynamic functional model for Gastric emptying study.
- **I. Kim** (2015). Bayesian hierarchical model with unknown link for unbalanced matched case-crossover studies
- L. Shan^{+} and **I. Kim*** (2016). Joint Gaussian Graphical Model for unbalanced classes.
- L. Shan^{+}, L. Cheng^{+}, and **I. Kim*** (2016). Multilevel-Multiclass Gaussian Graphical Model.
- L. Zhang^{+} and **I. Kim*** (2016). Semiparametric Bayesian survival model for pathway based analysis.
- C. Park, E. Lee, and **I. Kim*** (2016). Robust Difference based Outliers Detection

Invited Talk

- Department of Mathematical Science, Seoul National University 2015: Semiparametric Bayesian Approach using Weighted Dirichlet Process Mixture for Finance Statistical Models, Seoul, Korea.
- Collaborative Research Center, Spectral Structures and Topological Methods in Mathematics, Bielefeld University 2014: Flexible variable selection for recovering the sparsity in nonadditive multivariate nonparametric model, Bielefeld, German.

- Department of Mathematical Science, Seoul National University 2013: Flexible variable selection for recovering the sparsity in nonadditive multivariate nonparametric model, Seoul, Korea.
- Department of Mathematics, Jeju National University 2012: Statistical research problems in Applied Mathematics, Jeju, Korea
- The 3rd international conference 2012 organized research center for data science in Korea: Flexible variable selection for recovering the sparsity in nonadditive multivariate nonparametric model, Seoul, Korea.
- The 21st ICSA Applied Statistics Symposium 2012: The mixture of nonlinear mixed effects models for gastric emptying curves, Boston, MA
- International Conference and Exhibition 2012 on Biometrics & Biostatistics: Flexible variable selection for recovering the sparsity in nonadditive multivariate nonparametric model, Omaha, Nebraska.
- Joint Statistical Meeting 2007: Biometrics Editor-Invited Papers: Bayesian Methods for Predicting Interacting Protein Pairs Using Domain Information, Salt Lake City, UT
- 39th Symposium on the Interface: Computing Science and Statistics 2007: Semiparametric methods for pathway analysis, Philadelphia, PA

Contributed Talk

- Joint Statistical Meeting 2015: Semiparametric Weighted Dirichlet Process Mixture Model, Seattle, WA.
- Eastern North American Region/International Biometric Society 2014: Semiparametric nonseperable single index model for spatial-temporal model, Baltimore, MD.
- Joint Statistical Meeting 2014: Semiparametric Varying Coefficient model for matched case-crossover studies, Boston, MA.
- Joint Statistical Meeting 2013: Semiparametric single index change point, Montreal Canada
- Joint Statistical Meeting 2012: Error Variance Estimation in Nonparametric Regression under Lipschitz Condition and Small Sample Size, San Diego, CA
- Joint Statistical Meeting 2011: Conditional logistic mixed effects model for matched case-control studies with traffics accident application, Miami, FL
- Eastern North American Region/International Biometric Society 2010: Conditional logistic mixed effects model for unbalanced matched case-control studies, New Orleans, LA
- Joint Statistical Meeting 2009: Semiparametric regression spline models for detecting effect modification in matched crossover studies, Washington, DC
- Eastern North American Region/International Biometric Society 2009: Sparsity prior for protein-protein interaction, San Antonio, TX
- US-Korea Conference on Science, Technology and Entrepreneurship 2008: Statistical methods for protein-protein interaction, San Diego, CA

- Eastern North American Region/International Biometric Society 2009: The mixture of nonlinear mixed effects models for gastric emptying curves, Arlington, VA
- Eastern North American Region/International Biometric Society 2007: Semiparametric methods for pathway analysis, Atlanta, GA.
- Joint Statistical Meeting 2006: Statistical methods for protein-protein interaction, Seattle, WA.
- International Chinese Statistical Association Symposium, 2006: Statistical methods for protein-protein interaction, Storrs, CT.

Invited Poster

- (Travel Award) Conference on Statistical Methods for Complex Data in Honor of Raymond Carroll 2009: Sparsity prior for protein-protein interaction, College Station, TX.

Teaching

- Stat6514: Advanced Topics in Regression (spring 12, 14, 16), Virginia Tech.
- Stat 6474: Advanced Topics Bayesian Statistics (spring 08, 09, 10, 12, 13), Virginia Tech.
- Stat5514: Topics in Regression (fall 15), Virginia Tech.
- Stat5404: Nonparametric Statistics (spring 11,13), Virginia Tech.
- Stat 5044: Regression and ANOVA (fall 07-15), Virginia Tech
- Stat 4505/5504G: Applied Multivariate Analysis (fall 13), Virginia Tech.

Former and Current Ph.D Students

- 11. Lin Zhang (2012-present): PhD. Candidate, Semiparametric Bayesian Approach for evaluating high-dimensional pathway effects on survival time.
- 10. Peng Sun (2011-2016): PhD., Weight Dirichlet Process in semiparametric regression, KPMG, Quantitative Modeling Analyst.
- 9. Liang Shan (2010-2016): PhD., Joint Gaussian Graphical Model, Biostatistician, Edward Via College of Osteopathic Medicine (VCOM)
- 8. Ana Maria Ortega Villa (2010-2015): PhD., Semiparametric time varying spatial model in matched case-crossover. Postdoc associate at NIH
- 7. Yangyi Xi (2009-2014): PhD., Frequentist-Bayesian Hybrid Tests in Semiparametric and Non-parametric Models, Quantitative Modeling Analyst, Bank of America.
- 6. Hamdy Mahmound (2009-2014): PhD., Some Advanced Semiparametric Single-Index Modeling for Spatially-Temporally Correlated Data. Assistant professor at Assiut University, Egypt.
- 5. Lulu Cheng (2008-2013): PhD., Multilevel Gaussian Graphical Model, Senior Statistician in Monsanto

- 4. Zaili Fang (2008-2012): PhD., Some Advanced Model Selection Problems on Nonparametric/Semiparametric Models for High Dimensional Data, Senior Statistician in Freddie Mac
- 3. Nels Johnson (2008-2012): PhD., Semiparametric Regression Methods with Covariate Measurement Error, Postdoc research associate in Colorado State University
- 2. Huaiye Zhang (2008-2011): PhD., Bayesian Approach to Dealing with Mixture Model Problems, Senior Statistician in Monsanto
- 1. Jinsong Chen (2007-2010): PhD., Semiparametric methods for the Generalized Linear Models, Senior Biostatistician in UIC medical school.

Former MS. Students

- 2. Chongrui Yu (2007-2012): MS, Data Analyst, Farmers Insurance.
- 1. Yi Chao (2007-2008): MS, China

Professional Activities

- Program committee in Bioinformatics 2010-present ("International conference on Bioinformatics Models, Methods and Algorithms")
- Associate Editor (2012-present) for Communications for Statistical Applications and Methods
- Associate Editor (2012-present) for Korean Journal of Applied Statistics
- Program organizer of poster section in Korean-American Scientists and Engineers Association Virginia Regional Conference 2013
- Chair of section " Clustered data methods" in Eastern North American Region (ENAR) 2010
- Chair of section " Categorical data analysis" in ENAR 2010
- Chair of section " Statistical analysis of metabolomics data" in ENAR 2009
- Chair of section "Biostatistics" in International Chinese Statistical Association (CSA) 2006
- Reviewer for NSF career proposals in 2009, 2010
- Reviewer panelist for NIH proposal in 2015
- Referee for
  - *American Journal of Veterinary Research*,
  - *American Statistician*,
  - *Annals of Applied Statistics*,
  - *Biometrics*,
  - *Bioinformatics*,
  - *BMC Bioinformatics*

- *Canadian Journal of Fisheries and Aquatic Sciences*,
- *Communication in Statistics of Simulation and Theory*,
- *Computational Statistics and Data Analysis*,
- *Cryptographic Hardware and Embedded Systems*,
- *IEEE Transactions on Reliability*,
- *Journal of American Statistical Association*,
- *Journal of Applied Statistics*,
- *Journal of Computational and Graphical Statistics*,
- *Journal of Econometrics*,
- *Journal of Korean Statistical Society*,
- *Journal of Nonparametric Statistics*,
- *Mathematical Methods for Statistics*,
- *Journal of Modern Applied Statistical Methods*
- *Journal of Multivariate Analysis*,
- *Statistics in Biosciences*,
- *Statistics& Probability Letters*,
- *Statistical Applications in Genetics and Molecular Biology*,
- *Technometrics*
- *Korean Journal of Applied Statistics*

Departmental/University Services

- Qualifying exam committee (2007-present) and chair (2010-present), Search committee (2009, 2011-present), Personal committee (2015-present), Co-chair of Mu Sigma Research Seminar for the Corporate Partners conference (2008-2009, 2013-2014), Master oral exam committee (2007-present).
- Ph.D committee in Dept of Statistics for the following students: Ning Wang, Yajuan Chen, Mark Seiss, Zhibing Xu, Youjia Fang, Yuanyuan Duan, Dengfeng Zhang, Khaled Bedair, Qing Li, Yimeng Xie, Stephen Loftus, Xiaoning Kang, Angang Zhang, Yuhyun Song, Mia Yuan, Tianlei Chen
- Ph.D committee in Other Depts for the following students:
  - Dept. of Electrical and Computer Engineering: Sook Ha (2008-2012), Vidya Rajagopalan (2009-2010), Abhranil Maiti (2008-2011), Byung O Kang (2012-2014), Jaesung Jung (2012-2014), Mostafa (2012-2014), Ganta Dinesh (2014-2015), Saidhiraj Amuru (2014-)
  - Dept. of Plant Pathology, Physiology, & Weed Science: Rongman Cai (2008-2012)
  - Dept of Forest Resource and Environmental Conservation: Gavin Corral (2014-2015), Micky Allen (2014-2016), Ram Thapa (2011-2013), Sheng-I Yang (2014-2016)
  - Educational Research & Evaluation: Sarah Wang (2010-2013), Sunha Kim (2010-2014)

Membership

- American Statistical Association
- International Biometric Society
- Mu Sigma Rho, National Statistics Honor Society
- Sigma Xi
- Korean International Statistical Society (KISS).