
Ana-Maria Staicu

CURRICULUM VITAE

May 15, 2018

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Education

- 2007-2009 Brunel Postdoctoral Research Fellow, Department of Mathematics, University of Bristol*, UK
Research mentors: Ciprian M. Crainiceanu, Johns Hopkins University;
Raymond J. Carroll, Texas A&M University
- 2002-2007 Ph.D. in **Statistics**, University of Toronto, Canada
Thesis title: *On Some Aspects of Likelihood Methods with Applications in Biostatistics*
Ph.D Supervisor: Nancy Reid
- 2001-2002 M.Sc. in **Statistics**, University of Toronto, Canada
- 1996-2000 B.Sc. in **Mathematics**, University of Bucharest, Romania
Thesis title: *Perfect Graphs*, Thesis Supervisor: Dragos Popescu
- 1997-2000 Department of Finance, Insurance, Banks and Stock Exchanges (FABBV),
Academy of Economic Studies, Romania

Employment

- 2015 - Associate Professor, Department of Statistics, North Carolina State University, USA
- 2009-2015 Assistant Professor, Department of Statistics, North Carolina State University, USA
- 2007-2009 Research Associate, Department of Mathematics, University of Bristol*, UK
*Full time, independent research position in the Statistics Group
- 2001-2007 Teaching Assistant, Department of Statistics, University of Toronto, CA
- 2003-2004 Sessional Lecturer, Department of Statistics, University of Toronto, CA
- 2015-2016 Invited Associate Professor, Department of Mathematics and Computer Science,
Babes-Bolyai University, Romania

Research Interests

Functional Data Analysis, Longitudinal Data Analysis, Nonparametric regression, Statistical inference, Likelihood methods. Applications in brain imaging studies, wearable computing, environmental, and animal science studies.

Editorial Services

- Associate Editor: *JASA T&M* (2015-2017)
- Associate Editor: *Biometrics* (2011-2017)
- Associate Editor: *Stat* (2012-present)
- Guest Associate Editor: *Statistica Sinica*
- Reviewer for *Annals of Applied Statistics*, *Biometrics*, *Biometrika*, *Biostatistics*, *Canadian Journal of Statistics*, *Electronic Journal of Statistics*, *JASA*, *Journal of Multivariate Analysis*, *Journal of Statistical Planning and Inference*, *Scandinavian Journal of Statistics*, *JRSSB*, *JRSSC*, *Sankhya B*, *Statistics in Biosciences*, *Statistics in Medicine*, *Statistical Methodology*, *The American Statistician*.
- Grant proposal external reviewer: NSA Mathematical Sciences Grant Program (2012, 2014)
- NSF, DMS: 2014/15, 2015/16
- NSF, Ad hoc reviewer: April 2017 (MMS), Nov 2017 (DMS)
- NIH, BMRD study section: February 2017
- Book reviewer for CRC Press (2012), Chapman & Hall/CRC Press (2014)

Memberships

American Statistical Association; International Biometric Society Eastern North American Region; American Association for the Advancement of Science.

Other research associations include:

Statistical Methods and Applications for Research in Technology (SMART) of Johns Hopkins U;
Penn Statistical Imaging and Visualization Endeavor (PennSIVE) of U of Pennsylvania;
Neuroscience at NC State University of J. Meitzen (from Biological Sciences).

Publications (asterisk indicates PhD student under my supervision)

1. Kim*, J., Maity., and **Staicu, A.M.** (2017+) Additive nonlinear functional concurrent model. *Statistics and its Interface*, to appear.
2. Park*, S.Y., Xiao, L., Wilbur, J.D., **Staicu, A.M.**, and Jumbe, N.L. (2017+) Optimal design for sampling functional data. *Computational Statistics and Data Analysis*. 2016 ICSA Student Paper Award/2017 ENAR Distinguished Student Paper Award
3. Hazra, A*., Reich, B.J., Reich, D.S., Shinohara, R.T., and **Staicu, A.M.** (2017) Longitudinal Functional A spatio-temporal model for longitudinal image-on-image regression *Statistics in Biosciences* to appear.
4. Kang, J., Reich, B.J., and **Staicu, A.M.** (2017+) Scalar-on-image regression via the soft-thresholded Gaussian proces *Biometrika*, to appear.
5. Reich, B.J., Guinness, J., Vandekar, S., Shinohara, R., and **Staicu, A.M.** (2017+) Fully-Bayesian spectral methods for imaging data. *Biometrics*, to appear.
6. Geden, M., **Staicu, A.M.**, and Feng, J. (2017+) The Impacts of Perceptual Load and Driving Duration on Mind Wandering in Driving. *Journal: Transportation Research Part F: Psychology and Behaviour*, to appear.
7. Park*., S.Y., **Staicu, A.M.**, Xiao, L., and Crainiceanu, C.M. (2017) Fixed effects inference in complex functional mixed effects models. *Biostatistics*, to appear.
8. Kim*, J., **Staicu, A.M.**, Maity., A., Carroll, R.J., and Ruppert, D. (2017+) Additive Function-on-Function Regression. *Journal of Computational and Graphical Statistics*, to appear.

9. Laber, E.B. and **Staicu, A.M.** (2017+) Functional feature construction for individualized treatment regimes. *Journal of the American Statistical Association*, to appear.
10. Gruen, M.E., Alfaro-Córdoba*, M., Thompson, A.E., Worth, A., **Staicu, A.M.**, and Lascelles, B.D. (2017) The use of functional data analysis to evaluate activity in a spontaneous model of degenerative joint disease associated pain in cats. *PLOS ONE*, **12**, e0169576.
11. Pomann* G.-M., **Staicu, A.M.**, Lobaton, E., Mejia, A., Dewey, B., Reich, D.S., Sweeney, E., and Shinohara R. (2016) A lag functional linear model for prediction of magnetization transfer ratio in multiple sclerosis. *Annals of Applied Statistics*, **10**, 2325–48.
12. Gertheiss, J., Goldsmith, J., and **Staicu, A.M.** (2016) A note on modeling sparse exponential-family functional response curves. *Computational Statistics and Data Analysis* **105**, 46–52.
13. Kong*, D., **Staicu, A.M.** and Maity, A. (2016) Classical testing in functional linear models. *Journal of Nonparametric Statistics* **28**, 813–838.
14. Zhang*, Y., **Staicu, A.M.**, and Maity, A. (2016) Testing for additivity in nonparametric regression. *The Canadian Journal of Statistics* **44**, 445–462.
15. Wrobel, J., Park* S.Y., **Staicu, A.M.**, and Godsmith, J. (2016) Interactive graphics for functional data analyses *Stat* **5** 108–118.
16. Usset*, J., **Staicu, A.M.**, and Maity, A. (2016) Interaction Models for Functional Regression. *Computational Statistics & Data Analysis* **94**, 317–329.
17. Pomann*, G.-M., **Staicu, A.M.**, and Ghosh, S. (2016) A Two Sample Distribution-Free Test for Functional Data with Application to a Diffusion Tensor Imaging Study of Multiple Sclerosis. *Journal of the Royal Statistical Society Series C*, **65**, 395–414.
18. Park*, S.Y. and **Staicu, A.M.** (2015) Longitudinal Functional Data Analysis. *Stat* **4**, 212-226.
19. Gertheiss, J. , Maier, V., Hessel, E.F., and **Staicu, A.M.** (2015) Marginal functional regression models for analyzing the feeding behavior of pigs. *Journal of Agricultural, Biological, and Environmental Statistics* **20**, 353–370.
20. Usset*, J., Maity, A., **Staicu, A.M.**, and Schwartzman, A. (2015) Glacier Terminus Estimation from LandSat Images. *Journal of Agricultural, Biological, and Environmental Statistics* **20**, 279–298..
21. Pomann*, G.-M., Sweeney, E.M., Reich, D.S., **Staicu**⁻, **A.M.**, and Shinohara⁻, R.T. (2015) Scan Stratified Case-Control Sampling for Modeling Blood-Brain Barrier Integrity in Multiple Sclerosis. *Statistics in Medicine* **34**, 2872–2880. (-Equal author contribution.)
22. Li*, M., **Staicu, A.M.**, and Bondell, H. (2015) Incorporating Covariates in Skewed Functional Data Models. *Biostatistics* **16**, 413-426.
23. Zhao, N., Bell, D.A., Maity, A., **Staicu, A.M.**, Joubert, B.R. London, S.J., Wu, M.C. (2015) Global Analysis of Methylation Profiles from High Resolution CpG Data. *Genetic Epidemiology* **39**, 53-64.
24. Ivanescu, A.E., **Staicu, A.M.**, Scheipl, F., and Greven, S. (2015) Penalized function-on-function regression. *Computational Statistics* **30**, 539-568.
25. **Staicu, A.M.**, Lahiri, S.N. and Carroll, R.J. (2015) Significance tests for functional data with complex dependence structure. *Journal of Statistical Planning and Inference* **156**, 1-13.
26. **Staicu, A.M.** and Lu, X. (2014) Analysis of AneuRisk65 Data: Classification and Curve Registration. *Electronic Journal of Statistics. Special edition* **8**,1914–1919.
27. Scheipl, F., **Staicu, A.M.**, and Greven, S. (2014) Additive mixed models for correlated functional data. *J Computational Graphical Statistics* **24**, 477-501.
28. McLean, M., Hooker, G., **Staicu, A.M.**, Scheipl, F., and Ruppert, D. (2014) Functional Generalized Additive Models, *J Computational Graphical Statistics*, **23**, 249–269.

29. **Staicu, A.M.**, Li, Y., Crainiceanu C.M. and Ruppert, D. (2014) Likelihood ratio tests for dependent data with applications to longitudinal and functional data analysis. *Scandinavian Journal of Statistics*, **41**, 932–949.
30. Serban N., **Staicu, A.M.**, and Carroll, R.J. (2013) Multilevel cross-dependent binary longitudinal data. *Biometrics*, **69**, 903–913.
31. Gertheiss, J., Maity, A., and **Staicu, A.M.** (2013) Variable selection in generalized functional linear model. *Stat*, **2**, 86–101.
32. Crainiceanu, C.M., **Staicu, A.M.**, Ray, S., and Punjabi, N.M. (2012) Bootstrap-based inference on the difference in the means of two correlated functional processes, *Statistics in Medicine*, **31**, 3223–3240.
33. Crainiceanu, C.M. and **Staicu, A.M.** (2012) Comments on "Clustering random curves under spatial interdependence with application to service accessibility" by H. Jiang and N. Serban, *Technometrics*, **54**, 120–122.
34. **Staicu, A.M.**, Crainiceanu, C.M., Reich, D.S., and Ruppert, D. (2012) Modeling functional data with spatially heterogeneous shape characteristics, *Biometrics*, **68**, 331–343.
35. **Staicu, A.M.** (2010) On the equivalence of the prospective and retrospective likelihood methods in case-control studies. *Biometrika* **97**, 990–996.
36. Fraser, A.M., Fraser, D.A.S. and **Staicu, A.M.** (2010) The second order ancillary: A differential view. *Bernoulli* **16**, 1208–1223.
37. **Staicu, A.M.**, Crainiceanu C.M. and Carroll, R.J. (2010) Fast analysis of spatially correlated multilevel functional data. *Biostatistics* **11**, 177–194.
38. **Staicu, A.M.** and Fraser, D.A.S. (2010) The second order ancillary is rotation based. *Journal of Statistical Planning and Inference* **140**, 831–836.
39. Crainiceanu C.M., **Staicu, A.M.** and Di, C. (2009) Generalized multilevel functional regression. *Journal of the American Statistical Association* **104**, 1550–1561.
40. **Staicu, A.M.** (2009) Higher order approximations for interval estimation in binomial settings. *Journal of Statistical Planning and Inference* **139**, 3393–3404.
41. **Staicu, A.M.** and Reid, N. (2008) On probability matching priors. *The Canadian Journal of Statistics* **36**, 613–622.

Other publications

- **Staicu, A.M.** (2017) Interview with Nancy Reid. *International Statistical Review*.
- Tidermann-Miller*, B.A., Reich, B., and **Staicu, A.M.** (2014) Modeling Multivariate Mixed-Response Functional Data <http://arxiv.org/abs/1601.02461>
- **Staicu, A.M.** (2007) *On Some Aspects of Likelihood Methods with Applications in Biostatistics*. Ph.D. Dissertation. University of Toronto, Canada: 1-208
- **Staicu, A.M.** (2005) Applications of Higher Order Inference: Case-Control Studies. *Proceedings, SOS-GSSD Conference*. <http://www.math.yorku.ca/sosgssd>
- **Nicola, A.M.** (2000) *Perfect Graphs*. Honours Dissertation. University of Bucharest, Romania: 1-74

Conference Talks and Seminars

- Department of Biostatistics, University of Washington. Variable selection in functional linear model with varying smooth effects. May 10 2018.

- Department of Mathematics and Statistics, University of Old Dominion. Variable selection in functional linear model with varying smooth effects. April 18 2018.
- *ENAR*, Atlanta, GA. Spectral methods for image regression. March, 2018
- *SAMSI: Astronomy Program Transition Workshop* Raleigh, NC, May 2017
- *Third Annual Statistical Methods in Imaging conference* Pittsburgh, PA, May 2017
- *Celebration of the 40th anniversary of the Department of Statistical Science, University of Toronto*, Toronto, ON, Canada. April 2017
- *SAMSI* Durham NC. Tutorial on functional data analysis. April 2017
- *ENAR*, Washington, DC. Additive function-on-function regression. March, 2017
- *Faculty in Action* Seminar Series. College of Science. NCSU. November 2016
- *SMART* Structural Imaging. A spatio - temporal regression model for MTR in relation to MS. October 2016
- *JSM*, Chicago, IL. Longitudinal Functional Data Analysis. (invited, Highlights from the journal *STAT*). August, 2016
- *IBC* Victoria VA Canada. Scalar-on-Image Regression via Soft-Thresholded Gaussian Processes. July 2016
- *IBC* Victoria VA Canada. Inference for fixed effects in dependent functional data. July 2016
- Department of Mathematical Science, University of Copenhagen, Denmark. New directions in longitudinal functional data analysis. June, 2016
- Measurement Error and Complex Data Workshop, College Station, TX. Longitudinal functional data analysis. April, 2016
- Department of Biostatistics and Bioinformatics, Applied Biostatistics Core Series, Duke University School of Medicine. Diffusion tensor imaging study of MS - an illustration of a two sample distribution-free test for functional data. March 22 2016.
- *ENAR*, Austin, TX. Modern analysis of longitudinal functional data. March, 2016
- *CMStatistics* 2015, London, UK Ohio State University. Functional quantile regression. Dec 12-14, 2015
- Department of Statistics, Ohio State University. Longitudinal functional data analysis. Dec 1, 2015
- Undergraduate workshop on computational neuroscience. A primer on Diffusion Tensor Imaging Study of Multiple Sclerosis. October 19, 2015
- Biometrics Research department, Merck, New Jersey. From longitudinal data analysis to longitudinal functional data analysis. October 9, 2015
- Department of Biostatistics, Columbia University. Longitudinal functional data analysis. October 1, 2015
- Workshop on Recent Developments in Statistics for Complex Dependent Data, Loccum, Germany, August 27-30 2015.
- Workshop on Frontiers in Functional Data Analysis at the Banff International Research Station, CA, June 28-July 03 2015.
- *SSC*, Halifax CA. Testing for Additivity in Nonparametric Regression. June 14-17 2015.
- *Statistical Methods in Imaging*, Ann Arbor MI. Scalar-on-Image Regression via Soft-Thresholded Gaussian Processes. May 28-29 2015
- Department of Statistical Sciences and Operations Research, Virginia Commonwealth University, VA, USA. April, 2015
- Department of Statistics, Texas A&M University. College Station, TX, USA. October, 2014

- Department of Statistics, University of Munich. Munich, Germany. September, 2014
- *Statistische Woche 2014*, Hannover, Germany. Modeling multilevel cross-dependent binary data observed longitudinally (invited talk). September, 2014.
- *JSM*, Boston, MA. Likelihood ratio tests for multiple variance components. (invited, topic-contributed). August, 2014
- *ENAR*, Baltimore, MD. Testing hypotheses in functional linear models using classical methods. (invited talk). March, 2014
- Department of Statistics and Operations Research, The University of North Carolina at Chapel Hill. Chapel Hill, NC, USA. October, 2013
- Department of Statistics, University of South Carolina. Columbia, SC, USA. October, 2013
- *JSM* Montreal, QC, CA. Functional interaction model. (invited, topic-contributed). August, 2013
- *SAMSI: Neuroimaging data analysis*, NC. Two way interaction model with functional covariates. (invited talk). June, 2013
- *SRCOS* Louisville, KY. Functional interaction model. (invited talk). June, 2013
- *MBI Workshop: Statistics of Time Warpings and Phase Variation* Columbus, OH. AneuRisk Vascular Data: joint modeling of amplitude and phase variation. (invited talk). November, 2012
- *International Conference on Advances in Interdisciplinary Statistics and Combinatorics*, Greensboro, NC. Penalized function-on-function regression. (invited talk). October, 2012
- *Statistische Woche 2012: Young Researchers Mini-Symposium*, Vienna Austria. Pseudo Likelihood Ratio Tests for Longitudinal and Functional Data Analysis. (invited talk). September, 2012
- *JSM*, San Diego, CA. Pseudo Likelihood Ratio Tests for Dependent Data with Applications in Longitudinal and Functional Data Analysis. (invited talk). July, 2012
- *ENAR*, Washington, DC. Penalized function-on-function regression. (invited talk). April, 2012
- Department of Electrical and Computer Engineering, NCSU, Raleigh, USA. February, 2012
- Department of Mathematics and Statistics, University of Montreal, Quebec, CA. November, 2011
- Department of Statistics, University of Georgia. Athens, GA, USA. August, 2011
- Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA. August, 2011
- *Statistical Methods for Very Large Datasets Conference 2011*, Baltimore, MD, USA. Skewed Functional Processes and Their Applications (poster). June, 2011
- *Statistical Inverse Problems in the Biosciences*, College Station, TX. Adjusting for covariate information in multilevel functional data (invited talk). May, 2011
- *ENAR*, Miami, FL. Functional data with spatially varying shape parameters (invited talk). March, 2011
- Department of Biostatistics, East Carolina University, Greenville, NC, USA. February, 2011
- *OOD: Interface Functional and Longitudinal Data Analysis*, NC, USA. Functional data with spatially varying shape parameters (invited talk). November, 2010
- *SAMSI*, Research Triangle Park, NC, USA. November, 2010
- *JSM* Functional data with spatially varying shape parameters (contributed topic talk). August, 2010
- Department of Biostatistics, MD Anderson Cancer Center, The University of Texas. Spatially Correlated Multilevel Functional Data. July, 2010
- *Southern Regional Council on Statistics Summer Research Conference*. Norfolk, VA, Generalized Multilevel Functional Regression (invited talk). June, 2010

- *Workshop on Functional Data Analysis*. Logan, UT, Spatially Correlated Multilevel Functional Data. Utah State University. (invited talk). May, 2010
- *Data Analysis and Statistical Foundations III*. Toronto, CA. Spatially Correlated Multilevel Functional Data (invited talk). April, 2010
- Department of Biostatistics, Columbia University. Spatially Correlated Multilevel Functional Data. April, 2010
- Department of Statistical Science, Cornell University. Spatially Correlated Multilevel Functional Data. April, 2010
- Department of Statistics and Operations Research, University of North Carolina at Chapel Hill University. Generalized Multilevel Functional Linear Models. March, 2010
- Department of Statistical Science, Duke University. Generalized Multilevel Functional Linear Models. February, 2010
- *The 57th Session of the International Statistical Institute*, Durban, South Africa. Generalized Multilevel Functional Regression (invited talk). August, 2009
- MRC Biostatistics Unit, University of Cambridge, Cambridge, UK. Generalized Multilevel Functional Linear Models. June, 2009
- *ENAR*, San Antonio, Texas USA. Generalized Multilevel Functional Regression. March, 2009
- Department of Pure Mathematics and Mathematical Statistics, Statistical Laboratory, University of Cambridge, Cambridge, UK. Spatially Correlated Multilevel Functional Models. January, 2009
- Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA. Spatially Correlated Multilevel Functional Models. January, 2009
- Department of Mathematical Sciences, Indiana University Purdue University Indianapolis, Indianapolis, USA. Spatially Correlated Multilevel Functional Models. January, 2009
- Department of Mathematics and Statistics, University of Montreal, Montreal, CA. Spatially Correlated Multilevel Functional Models. January, 2009
- Department of Statistics, North Carolina State University, Raleigh, USA. Spatially Correlated Multilevel Functional Models. January, 2009
- Centre for Computational Statistics and Machine Learning, University College London, London, UK. Spatially Correlated Multilevel Functional Model. December, 2008
- Department of Statistics, University of Warwick, Coventry, UK. Spatially Correlated Multilevel Functional Model. November, 2008,
- Department of Mathematics and Statistics, McGill University, Montreal, CA. Spatially Correlated Multilevel Functional Models. November, 2008
- *Joint Statistical Meetings*, Denver, Colorado USA. An approach to the analysis of spatially correlated multilevel functional data. August, 2008
- *Eleventh Meeting of New Researchers in Statistics and Probability*, Boulder, Colorado, USA. On the equivalence of the prospective and retrospective likelihood methods in case-control studies. July, 2008
- *International Biometric Conference*, Dublin, Ireland. An approach to the analysis of spatially correlated multilevel functional data. July, 2008
- Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, MD, USA. Generalized Multilevel Functional Linear Models. May, 2008
- Statistical Laboratory, University of Cambridge, UK. Equivalence of prospective and retrospective likelihood methods in case-control studies. February, 2008

- Statistics Group, University of Bristol, UK. *New Faces Seminar*. Multilevel functional analysis with application to colon carcinogenesis. November, 2007
- *The 6-th Congress of Romanian Mathematicians*, Bucharest, Romania. Small sample inference for cohort and case-control studies. July, 2007
- *Connecting Women in Mathematics Across Canada*, Toronto, Fields Institute. On the uniqueness of probability matching priors (poster). December, 2006
- *Joint Statistical Meetings*, Seattle, WA. Bayesian inference with matching priors. August, 2006
- University of Toronto, *Department of Statistics*. On the uniqueness of probability matching priors. March, 2006
- University of York. *Southern Ontario Statistics Graduate Student Seminar Days*. Applications of Higher Order Inference: Case-Control Studies. May, 2005
- University of Toronto. *Joint Statistics and Biostatistics Graduate Student Seminar Series*. Accuracy of different methods when testing a binomial parameter. November, 2004
- *Statistical Society of Canada*, Montreal, Canada. Accuracy of different methods when testing a binomial parameter. June, 2004
- University of Toronto, *Department of Statistics*. Methods for forecasting a critical day at Peterborough hospital. March, 2004
- *Statistical Society of Canada*, Halifax, Canada. Analysis of the blood pressure data set. June, 2003

Invited Panels: work-life integration & NSF Career award

- Catalyst program: CAREER Awardee Panel, *University of North Carolina-Charlotte*, NC. June 2017.
- NSF Career Award Panel, Proposal Development Unit. Guest speaker on successful strategies in preparing NSF Career proposal. *NCSU*, Raleigh NC, March 25 2016
- Professional development workshop for the postdocs at the Statistical and Applied Mathematical Sciences Institute (SAMSI). Informal discussion on what search committees are looking for in faculty applicants. *SAMSI*, Durham NC, May 15 2015
- On NSF Career award experience. Grant Workshop, Department of Statistics. *NC State University*. May 8, 2015
- Women in Statistics Networking Meeting. *Department of Statistics, NC State University*. Informal discussion on work-life integration. October, 2012
- Preparing for faculty careers: workshop for graduate students and postdocs. *NC State University*. March, 2012

Other Workshops/Conferences attended

- *Women in Statistics Conference*. Cary, NC. May 2014.
- *Statistical Methods for Complex Data: A conference in honor of the 60th birthday of Raymond J. Carroll*. College Station, Texas USA, March 2009
- *Future Directions in High Dimensional Data Analysis: new methodologies, new data types and new applications*. Cambridge, UK, June 2008

- *Modern Challenges of Curve Modelling: Inverse Problems and Qualitative Constraints*. Bristol, UK, November 2007
- *Joint Statistical Meeting*, ASA. Salt Lake City, USA, August 2007
- *Conference on Statistical Methods in Epidemiology and Observational Studies. In Honor of Norman E. Breslow*. Seattle, USA, August 2006
- *Workshop on Data Mining Methodology and Applications*, The Fields Institute. Toronto, Canada, October 2004.
- *Joint Statistical Meeting*, ASA. Toronto, Canada, August 2004
- *Workshop on Statistical Learning and Data Mining*, Statistical Society of Canada. Montreal, Canada, May 2004
- *Workshop on Statistical Genomics*, The Fields Institute. Toronto, Canada, September 2003
- *Workshop on Generalized Linear Mixed Effects Models*, Statistical Society of Canada. Halifax, Canada, June 2003

Academic visits (1-2 weeks)

- SAMSI, Program on Astrostatistics, Spring 2017
- University of Copenhagen, Department of Mathematical Sciences, Denmark: 2016/06.
- Johns Hopkins University, Bloomberg School of Public Health, Department of Biostatistics: 2010/02, 2007/08, 2008/05
- Texas A&M University, Department of Statistics: 2008/11, 2009/12

Outreach activity

- Collaboration with SMILE camp (<http://smilecamp.org/>) 2016/04 – now
- K12 collaboration: Discussion with high-school students on the issue of increasing the female presence in STEM fields
- Teaching one-week course at Babes-Bolyai University, Romania. “Short course in Applied Functional Data Analysis” 2016/05
- K12 outreach: W.G. Enloe Highschool in Raleigh (Summer 2016)
- Undergraduate supervision: Ruixuan Song, Nikita Chaudhary, Zuriya Haider (Summer 2016)

Research Grants

NIH, NCI: (grant number 5P01 CA142538-09) *Statistical methods for Cancer Clinical Trials*, 2018-2020
Role/Amount: Co-Investigator (PI: Marie Davidian, NCSU; Michael Kosorok, UNC; Kouros Owzar, Duke)/

The Danish Council for Independent Research, Natural Sciences: 2017-2020
Role/Amount: co-PI / DKK 2,177,699

NSF CAREER (grant number DMS: 1454942): *Next Generation Functional Methods for the Analysis of Emerging Repeated Measurements* 2015-2020

Role/Amount: PI / \$400,000

NIH, NIMH: (grant number 2R01MH086633-05A1) *Statistical Analysis of Biomedical Imaging Data in Curved Space*, 2014-2019

Role/Amount: Co-Investigator (PI: Hongtu Zhu, MD Anderson Cancer Center)/ \$1,912,000

NIH, NINDS: (grant number 1R01NS085211-01) *Statistical methods for large and complex databases of ultra-high-dimensional imaging*, 2013-2018

Role/Amount: Co-Investigator (PI: Taki Shinohara, University of Pennsylvania)/ \$1,776,000

NCSU Faculty Research and Professional Development (FRPD) grant, 2012-2013

Multiple Functional Linear Regression Models for Moderate and Big Data

Role/Amount: Principal Investigator / \$2,000

NSF (grant number: DMS 1007466): *Statistical methods for spatially correlated hierarchical functional data*, 2010-2013

Role/Amount: Principal Investigator / \$125,000

NSERC Canada Graduate Scholarships (**CGS D**), 2005-2007

Awarded to the highest-ranked PGS D applicants of Canada

Role/Amount: Principal Investigator / CAN70,000

NSERC Postgraduate Scholarships (**PGS M**), 2003-2005

Role/Amount: Principal Investigator / CAN42,000

Ontario Graduate Scholarship (**OGS**), 2002-2003

Role/Amount: Principal Investigator / CAN15,000

Honors and Awards

Stat Showcase Session, JSM 2017

NCSU Faculty Scholar Award, 2016

Stat Showcase Session, JSM 2016

NSF CAREER Award 2015

Recipient of the NCSU Thank-a-Teacher recognition program 2012, 2015, 2016

Department of Statistics Doctoral Award, University of Toronto, 2006

Teaching Assistant Award, University of Toronto. 2004

Award Certificate, Statistics Graduate Students Union, University of Toronto, 2004

NSERC Canada Graduate Scholarships, 2005

NSERC Postgraduate Scholarships, 2003

Ontario Graduate Scholarship, 2002

Merit Fellowship, University of Bucharest, 1998-2000

Entrance Scholarship, Academy of Economic Studies, 1997

Entrance Scholarship, University of Bucharest, 1996

2nd & 3rd Prize at the National Mathematical Olympiad, Romania, 1995, 1996

Consulting Experience

2013- Faculty Advisor for the Statistical Consulting Seminar, Department of Statistics, NC State University
2003-2004 Consultant, Consulting Program, Department of Statistics, University of Toronto

Departmental Service

- Member, Advisory Committee (2018-2021)
- Chair, Search Committee (2015-2016)
- Member, Advisory Committee (2015)
- Member, Search Committee (2014)
- Member, Written Prelim Committee (2014)
- Member, Departmental Seminar Committee (2013-2014)
- Chair, Functional Data Seminar (2013-NOW)
- Member, Big Data Committee (2012-2016)
- Member, Departmental Seminar Committee (2012-2013)
- Member, Written Prelim Committee (2012)
- Member, Awards Committee (2012-2016)
- Member, Basic Exam Committee (2012)
- Member, Statistics Department Head Search Committee (2010-2011)
- Member, Search Committee (2009-2010)
- Member, Departmental Seminar Committee (2010-2011)

Professional Service

- Organizing committee member of Junior Researchers Workshop, ENAR (2017)
- Member, Best paper award committee for the best Nonparametric Statistics Journal paper award, ASA Section on Nonparametric Statistics (2016)
- Secretary, ASA Section on Nonparametric Statistics (2014)
- Treasurer-Elect, ASA Section on Nonparametric Statistics (2013-2014)
- Member (jury), Best poster committee, ENAR 2014
- Member, Best paper award committee, ASA Section on Nonparametric Statistics 2013
- Organizer of the Invited Session, ENAR 2011, 2012, 2013, 2017
- Organizer of the Topic-Contributed Session, JSM 2010, 2015
- Coordinator of the Nonparametric and Time Series Reading Group, Department of Mathematics, University of Bristol (Winter 2008; Fall 2008-Winter 2009)
- Co-Organizer of the Southern Ontario Statistics Graduate Student Seminar Days (2007)
- Coordinator of the Informal Meeting with the weekly Seminar Speaker (2004-2005), Department of Statistics, University of Toronto
- Ph.D. Representative (2003-2004), Statistics Graduate Student Executive Committee, University of Toronto
- Co-Organizer of the Joint Statistics and Biostatistics Graduate Student Seminar Series (2003-2004), University of Toronto

Teaching Experience

PhD (Co-)Supervisor

Zekun Xu (Jack), Doctoral student (with E Laber), Statistics (expected, 2020)
Stephanie Chen, Doctoral student (with L Xiao), Statistics (expected, 2020)
Meredith King, Doctoral student, Statistics (expected, 2018)
Arnab Hazra, Doctoral student (with B Reich), Statistics (expected, 2018)
Susheela Singh, Doctoral student (with B Reich), Statistics (expected, 2018)
Robert Pehlman, Doctoral student (with E Laber), Statistics (expected, 2019)
Saebitna Oh, Doctoral student, Statistics (expected, 2018)
Merve Tekbudak, Doctoral student (with A Maity), Statistics (expected, 2018)

PhD (Co-)Supervisor - graduated

Md Islam, PhD Statistics (with J Stallings). Graduated in 2018
First job: Research Associate: Data Science, Savvysherpa, MN
Arkaprava Roy, PhD Statistics (with S Ghoshal). Graduated, 2018
First job: Post-doc Duke Statistics
Cai Li, PhD Statistics (with L. Xiao). Graduated, 2017
First job: Post-doc NCSU Statistics
So Young Park, PhD Statistics (graduated, Dec 2016)
First job: Research Scientist, NeuroImaging, Eli Lilly and Company, Indianapolis, Indiana
Janet Kim, PhD Statistics (graduated, May 2016)
First job: Associate statistic manager, Astellas Pharma Inc., Northbrook, IL
Gina-Maria Pomann, PhD Statistics (graduated, May 2015)
First job: Senior Biostatistician, Duke Translational Medicine Institute, Durham, NC
Beth Ann Tidemann-Miller, PhD Statistics (with B. Reich), (graduated, August 2014)
First job: Statistician, Biogen Idec, Cambridge, MA

PhD Committee Member

Matthew Austin, Department of Statistics
An-Ting Jhuang, Doctoral student, Department of Statistics
Chong Wang, Doctoral student, Department of Statistics
Zhentao Tong, Doctoral student, Department of Statistics
Michael Geden, Doctoral student, Department of Psychology
Dan Chen, Doctoral student, Department of Statistics
Yingzi Xu, Doctoral student, Department of Statistics
Zhou Li, Doctoral student, Department of Statistics
Marcela Alfaro Cordoba, Doctoral student, Department of Statistics
Merve Tekbudak, Doctoral student, Department of Statistics
Yu Xie, Doctoral student, College of Textiles (Expected, 2016)
Christopher C. Krut, Doctoral student, Statistics (Expected 2016)

Han Na Lee, Doctoral student, Department of Statistics (graduated, 2016)
Santa Mendoza Benavides, Doctoral student, Department of Animal Science (graduated, 2016)
Kehui Wang, Doctoral student, Statistics (graduated, 2015)
Joseph Usset, Doctoral student, Statistics (graduated, 2014)
Ander Wilson, Statistics (graduated, 2014)
Clemontina Alexander, Statistics (graduated, 2014)
Xiaoshan Li, Statistics (graduated, 2014)
Laura Boehm, Statistics (graduated, 2013)
Bo Zhang, Statistics (graduated, 2013)
Matthew Avery, Statistics (graduated, 2012)

MS Committee Member (thesis option)

Varun Mohan, MSc student, Textile (graduated, 2011)

MS Chair (non-thesis option)

Rui Zhu, Statistics, 2017
Yue Yang, Statistics, 2017
Wanying Ma, Statistics, 2016
Merve Y. Tekbudak, Statistics, 2015
Brian P. Naughton, Statistics, 2015
Brain Gaines, Statistics, 2014
Yang, Yue, Statistics, 2012
Janet Kim, Statistics, 2012

MS Co-Chair (non-thesis option)

Joshua Katz, Statistics, 2013
John Ihrie, Statistics, 2013
Manhong Choi, Statistics, 2012
Ang Zhou, Statistics, 2012
Runchao Jiang, Statistics, 2012
Amanda Welter, Statistics, 2012
Fan Wu, Statistics, 2012
Kasturi Talapatra, Statistics, 2011
Dehan Kong, Statistics, 2010
Roy Siddharth, Statistics, 2010

Research Projects (not related to PhD thesis)

Moumita Chakraborty, Doctoral student, Statistics (Summer 2015 - Winter 2016)
Marcela Alfaro Cordoba, Doctoral student, Statistics (Spring 2015 - Spring 2017)
Zhen Han, Doctoral student, Statistics (Spring 2015 - Fall 2016)
Kehui Wang, Doctoral student, Statistics (Winter 2013 - Summer 2015)
Meng Li, Doctoral student, Statistics (Fall 2012 - Summer 2015)
Yichi Zhang, Doctoral student, Statistics (Winter 2013 - Spring 2014)
Jennifer Bartsch, Doctoral student, Statistics (Winter 2013)
Jing Zhao, Doctoral student, Statistics (Winter 2013)
Wenjing Lu, Doctoral student, Statistics (Winter 2013)
Meng Li, Doctoral student, Statistics (Spring 2011-Spring 2013)
Dehan Kong, Doctoral student, Statistics (Fall 2011 - Spring 2013)
Kristin Linn, Doctoral student, Statistics (Fall 2011)

Classroom instruction

North Carolina State University

- STA 437/537: Applied Multivariate and Longitudinal Data Analysis (undergrad Stat/grad other majors), Spring 2018.
- STA 515: Experimental Statistics for Engineers I (grad other majors), Fall 2016.
- STA 590: Applied Multivariate and Longitudinal Data Analysis (undergrad Stat/grad other majors), Spring 2016.
- STA 790: Applied Functional Data Analysis (PhD elective), Fall 2014.
- STA 810: Applied Functional Data Analysis (Special topic, PhD elective), Fall 2012.
- STA 372: Introduction to Statistical Inference and Regression (3rd year undergraduate level), Fall 2012, Fall 2013, Spring 2014, Fall 2015.
- STA 732: Applied longitudinal data analysis (PhD core elective), Spring 2012, Spring 2013, Spring 2014, Spring 2015.
- STA 370: Probability and Statistics for Engineers (3rd year undergraduate level), Fall 2009. Spring 2010. Fall 2010, Spring 2011, Fall 2011, Spring 2012.

University of Bristol

- MATH 35610: Theory of Inference (3rd year undergraduate level), Winter 2008, Winter 2009

University of Toronto

- STA 250F: Statistical Concepts (2nd year undergraduate level), Summer 2004

Short courses

- Department of Mathematics and Computer Science, University Babes Bolyai, Applied functional data analysis (graduate level, 1 week), May 2016

Additional Information

Language skills: English (fluent), Romanian (native), French (intermediate)
Personal information: Citizenship: American/Canadian/Romanian
Career breaks (maternity): May-August 2002, July-August 2005