

Luke Bornn

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Research Interests

My research focuses on computational statistics and machine learning applied to large-scale spatial and dynamic data. Applications include structural health monitoring, climate informatics, and sports analytics. I'm also interested in the corresponding computational issues, mainly in the form of stochastic computation (Markov chain Monte Carlo, sequential Monte Carlo, and deterministic variants).

Education

Ph.D. Statistics University of British Columbia
Vancouver, British Columbia 09/2008–07/2012

Supervisors: Dr. Arnaud Doucet and Dr. Jim Zidek

Thesis Title: "Modeling Latent Correlation Structures with Application to Agricultural and Environmental Science"

M.Sc. Statistics University of British Columbia
Vancouver, British Columbia 09/2006–08/2008

Supervisors: Dr. Arnaud Doucet and Dr. Raphael Gottardo

Thesis Title: "Statistical Solutions For and From Signal Processing"

B.Sc. Mathematics and Statistics University of the Fraser Valley
Abbotsford, British Columbia 09/2003–04/2006

Research Experience & Employment

Assistant Professor (Tenure-Track) Simon Fraser University
Department of Statistics and Actuarial Science 01/2015–Present

Visiting Scholar Harvard University
Department of Statistics 09/2015–Present

Assistant Professor (Tenure-Track) Harvard University
Department of Statistics 07/2012–08/2015

Business Analyst Electronic Arts
Football Business Analytics Team 09/2011–05/2012

Visiting Professor/Researcher
Université Paris Dauphine and ENSAE 05/2014–06/2014
Newton Institute, Cambridge University 05/2014
Oxford University 12/2013
University of Bordeaux and INRIA 03/2010–06/2010, 04/2011
Los Alamos National Labs 02/2008–08/2008, 02/2010
Stat. and Applied Math. Sciences Inst. (SAMSI) 09/2008–12/2008

Research Assistant University of British Columbia
Dr. Jim Zidek and Dr. Arnaud Doucet 01/2009–12/2009
Dr. Arnaud Doucet and Dr. Raphael Gottardo 05/2007–02/2008

Teaching Experience

Instructor

	Simon Fraser University
Stat 180: Career Development Seminar	Fall 2016
Stat 350: Linear Models in Applied Statistics	Fall 2015
Stat 440: Learning from Big Data	Fall 2016
Stat 857: Space Time Models	Spring 2016

Instructor

	Harvard University
Stat 183: Learning from Big Data	Spring 2014
Stat 225: Spatial Statistics	Spring 2013, Spring 2014
Stat 303: The Art and Practice of Teaching Statistics	Full-year 2012/2013
Stat 306: Research Topics in Sports Analytics	Fall 2014
Stat 314: Timely Topics in Statistics	Full-year 2013/2014, Fall 2014
Stat 325: Advanced Topics in Environmental Modeling	Spring 2013, Full-year 2013/2014
Stat 328: Bayesian Nonparametrics	Fall 2013

Instructor

	UBC Sauder School of Business
BABS 550: Application of Statistics in Management	Fall 2010, Fall 2011

Head Teaching Assistant

	University of British Columbia
Stat 241/251: Introduction to Statistics	Fall 2007

Teaching Assistant

	University of British Columbia
Stat 443: Introduction to Time Series Analysis	Winter 2009
Stat 241/251: Introduction to Statistics	Fall 2006, Winter 2007, Summer 2007

Mathematics Tutor

	University of the Fraser Valley
All Levels	2003–2006

Service and Additional Training

- Organizer of Visualization in Data Science (VDS), 10/2017
- Scientific Program Committee Member, 2017 Bayesian Nonparametrics Meeting, 04/2016 - Present
- Organizer of Banff International Research Station (BIRS) workshop entitled *Validating and Expanding Approximate Bayesian Computation Methods*, 02/2017
- Organizer of the Cascadia Symposium on Statistics in Sports (CASSIS), 09/2016
- Organizer of Visualization in Data Science (VDS), 10/2016
- SFU Committee Service
 - SFU Big Data Academic Advisory Committee, 02/2016 - Present
 - Statistics Big Data Committee, 01/2015 - Present
 - Statistics UG Curriculum Revision Committee, 09/2015 - Present
 - Computer Science Tenure and Promotion Committee, 05/2015 - Present
 - Statistics Tenure and Promotion Committee, 01/2015 - 08/2016
 - Statistics Joint Program Committee, 01/2015 - 01/2016
- Founder and Faculty Advisor, Simon Fraser Sports Analytics Club, 09/2015 - Present
- Member, SFU Sports Analytics Group, 01/2015 - Present
- Associate Editor, *Journal of Quantitative Analysis in Sports*, 05/2014 - Present
- Associate Editor, *Statistics and Computing*, 03/2014 - Present
- Scientific Committee Member, 2016 IMS-ISBA Joint Meeting, 02/2015 - 01/2016

- Member, Prozone Performance Lab Advisory Group, 03/2015 - Present
- Member, Harvard IACS Advisory Board, 04/2014 - Present
- Session organizer
 - *Accelerating Bayesian Computation by Intersecting Monte Carlo and Optimization*. Joint Statistical Meetings, 08/2016
 - *BayesBall: The Bayesian takeover in Sports*. International Society on Bayesian Analysis World Meeting, 06/2016
 - *Eye in the Sky: The Player Tracking Revolution in Sports Analytics*. Joint Statistical Meetings, 08/2014
 - *Recent Developments in Software for MCMC*. MCMSki, 01/2014
 - *Advances in Nonstationary Spatial Modeling*. Joint Statistical Meetings, 08/2013
 - *Identifiability – Pushing Data to the Limits*. Statistical Society of Canada Meeting, 06/2013
 - *Resiliency of Agriculture and Natural Resources to Climate Change and Variability*. Joint Statistical Meetings, 08/2010
- Associate Faculty, Harvard University Center for the Environment, 10/2013–08/2015
- Organizer, Harvard Statistics Colloquium Series, 07/2013–06/2014
- Lead organizer of Banff International Research Station (BIRS) workshop entitled *Advances in Scalable Bayesian Computation*, 03/2014
- Creator and developer of new Harvard course *Stat 183: Learning from Big Data*, 01/2014
- Referee of approximately 10-15 papers per year for *Journal of the American Statistical Association*, *Neural Information Processing Systems (NIPS)*, *Journal of Computational and Graphical Statistics*, *International Conference on Machine Learning (ICML)*, *Annals of Applied Statistics*, *Artificial Intelligence and Statistics (AISTATS)*, *Papers in Regional Science*, *Shock and Vibration*, *Journal of Agricultural, Biological, and Environmental Statistics*, *Structural Health Monitoring*, *Machine Learning*, *Statistics and Computing*, *Neurocomputing*, *WIRE Computational Statistics* and others
- Associate Editor (Student’s Corner), International Society for Bayesian Analysis (ISBA) Bulletin, 08/2007–11/2011
- Head (2008, 2009, 2010, 2011) and Assistant (2007) UBC Dept. of Statistics TA Training Instructor
- Active member of the UBC Dept. of Statistics Short Term Consulting Service, 05/2007–10/2011
- Completed 3-day Instructional Skills Workshop, 09/2009
- Accepted into (and attended) the Summer School on Spatial Statistics. Statistical and Applied Mathematical Sciences Institute (SAMSI), 08/2009
- Accepted into (and attended) the International Graduate Summer School on Statistics and Climate Modeling. National Center for Atmospheric Research (NCAR), 08/2008
- Graduate Representative, UBC Dept. of Statistics, 05/2007–02/2008
- Vice President Internal, Student Union Society, University of the Fraser Valley, 02/2004–04/2005
- Student Representative, Student Union Society, University of the Fraser Valley, 09/2003–01/2004

Honours and Awards

- Post-PhD (Harvard, Simon Fraser)
 - ASA Section on Statistics in Sports Significant Contributor Award, 08/2016
 - ISBA Lifetime Members Junior Researcher Award (750 USD), 06/2016
 - Sloan Sports Analytics Conference Research Paper finalist, 03/2016
 - Work selected for “Breaking News!” Session, IMS-ISBA Meeting, 01/2016
 - Sloan Sports Analytics Conference Research Paper winner (15,000 USD), 03/2015
 - Sloan Sports Analytics Conference Research Poster winner (1,000 USD), 03/2015
 - Sloan Sports Analytics Conference Research Paper finalist, 03/2014
- M.Sc./Ph.D. (University of British Columbia)
 - SSC Pierre Robillard Award (1,000 CDN), 05/2013
 - UBC Faculty of Science Graduate Award (1,000 CDN), 04/2013
 - Michael Smith Foundation for Health Research (MSFHR) Trainee Award (67,500 CDN), 10/2009–09/2012 (*Accepted at reduced amount*)
 - UBC Tuition Award (18,000 CDN), 09/2008–08/2012
 - JSM ENVR Paper Award (125 USD), 07/2012
 - ISBA Kyoto Travel Award (500 USD), 07/2012 (*Declined*)
 - UBC Department of Statistics Marshall Award (500 CDN), 06/2012
 - GeoMed Travel Award (500 CDN), 10/2011
 - Faculty of Science Graduate Award (15,000 CDN), 09/2009–09/2011
 - NSERC PGS-D (63,000 CDN), 09/2008–08/2011
 - UBC Graduate Student Travel Award (800 CDN), 07/2007, 08/2011
 - Faculty of Science Achievement Award for Teaching and Mentorship (1,000 CDN), 04/2011
 - UBC Killam Graduate Teaching Award (1,000 CDN), 04/2009
 - British Columbia Clean Air Fund Scholarship (1,000 CDN), 02/2009
 - PhD Entrance Award (5,000 CDN), 09/2008
 - Best Student Oral Presentation: WNAR/IMS Meeting (300 USD), 06/2008
 - University Graduate Fellowship (8,000 CDN), 09/2007–08/2008
 - BC Ferries Scholarship (500 CDN), 09/2007
 - CMS-MITACS Joint Conference Student Travel Award (600 CDN), 06/2007
 - M.Sc. Entrance Award (1,205 CDN), 09/2006
- B.Sc. (University of the Fraser Valley)
 - Garfield Weston Merit Scholarship (43,000 CDN), 09/2003–06/2006
 - Award for Excellence in 4th Year Mathematics, 04/2006
 - Doug McDowell Scholarship in Mathematics (600 CDN), 01/2006
 - Award in Recognition of Outstanding Volunteer Commitment to the Students of UCFV, 04/2005
 - Toastmaster’s Scholarship for Public Speaking (300 CDN), 04/2004
 - Envision Financial Award for Outstanding School and Community Service (1,000 CDN), 09/2003
 - BC Provincial Scholarship (1,000 CDN), 09/2003

Refereed Publications

- †Franks, A., †D'Amour A., †Cervone, D., **Bornn, L.** (2017) Meta-Analytics: Tools for Understanding the Statistical Properties of Sports Metrics. To appear in *The Journal of Quantitative Analysis in Sports*.
- †van Bommel, M., **Bornn, L.** (2017) Adjusting for Scorekeeper Bias in NBA Box Scores. To appear in *Data Mining and Knowledge Discovery*.
- †Gerber, M., **Bornn, L.** (2017) Improving Simulated Annealing through Derandomization. To appear in *The Journal of Global Optimization*.
- **Bornn, L.**, Pillai, N., Smith, A., Woodard., D. (2017) The Use of a Single Pseudo-Sample in Approximate Bayesian Computation. To appear in *Statistics and Computing*.
- †Antonelli, J., Cefalu, M., **Bornn, L.** (2016) The Positive Effects of Population Based Preferential Sampling in Environmental Epidemiology. *Biostatistics*. Vol. 17, 764-778.
- †Cervone, D., †D'Amour, A., **Bornn, L.**, Goldsberry, K. (2016) A Multiresolution Stochastic Process Model for Predicting Basketball Possession Outcomes. *Journal of the American Statistical Association*. Vol. 111, 585-599.
- **Bornn, L.**, Farrar, C., Higdon, D., Murphy, K. (2016) Modeling and Diagnosis of Structural Systems through Sparse Dynamic Graphical Models. *Mechanical Systems and Signal Processing*. Vol. 74, 133143.
- †Bojinov, I., **Bornn, L.** (2016) The Pressing Game: Optimal Defensive Disruption in Soccer. *Sloan Sports Analytics Conference 2016 (Finalist)*.
- Chen, Y., **Bornn, L.**, De Freitas, N., Eskelin, M., Fang, J., Welling, M. (2016) Herded Gibbs Sampling. *Journal of Machine Learning Research*. Vol. 17, 1-29.
- †Franks, A., †Miller, A., **Bornn, L.**, Goldsberry, K. (2015) Counterpoints: Advanced Defensive Metrics for NBA Basketball. *Sloan Sports Analytics Conference 2015 (Finalist and Co-Winner)*.
- †Gopalan, G., Vrtilek, S., **Bornn, L.** (2015) Classifying X-ray Binaries: A Probabilistic Approach. *The Astrophysical Journal*. Vol. 809, No. 1.
- †Director, H., **Bornn, L.** (2015) Connecting Point-Level and Gridded Moments in the Analysis of Climate Data. *Journal of Climate*. Vol. 28, 34963510.
- †Franks, A., †Miller, A., **Bornn, L.**, Goldsberry, K. (2015) Characterizing the Spatial Structure of Defensive Skill in Professional Basketball. *Annals of Applied Statistics*. Vol. 9, No. 1, 94-121.
- †Yuan, L., †Liu, A., †Yeh, A., †Kaufman, A., †Reece, A., †Bull, P., †Franks, A., †Wang, S., †Illushin, D., **Bornn, L.**, (2015) A Mixture-of-Modelers Approach to Forecasting NCAA Tournament Outcomes. *Journal of Quantitative Analysis in Sports*. Vol. 11, Issue 1, 13-27.
- †Cervone, D., †D'Amour, A., **Bornn, L.**, Goldsberry, K. (2014) POINTWISE: Predicting Points and Valuing Decisions in Real Time with NBA Optical Tracking Data. *Sloan Sports Analytics Conference 2014 (Finalist)*.
- †Miller, A., **Bornn, L.**, Adams, R., Goldsberry, K. (2014) Factorized Point Process Intensities: A Spatial Analysis of Professional Basketball. *International Conference on Machine Learning (ICML)*.
- **Bornn, L.**, Jacob, P., Del Moral, P., Doucet, A. (2013) An Adaptive Interacting Wang-Landau Algorithm for Automatic Density Exploration. *Journal of Computational and Graphical Statistics*. Vol. 22, Issue 3, 749-773.
- **Bornn, L.** (2013) PAWL-Forced Simulated Tempering. *Proc. Bayesian Young Statisticians Meeting*.
- **Bornn, L.**, Shaddick, G., Zidek, J. (2012) Modeling Non-Stationary Processes Through Dimension Expansion. *Journal of the American Statistical Association*. Vol. 107, No. 497, 281-289.

†Indicates students and other HQP

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- **Bornn, L.**, Caron, F. (2012) Bayesian Clustering in Decomposable Graphs. *Bayesian Analysis*. Vol. 6, No. 4, 829–846.
- **Bornn, L.**, Zidek, J. (2011) Efficient Stabilization of Crop Yield Prediction in the Canadian Prairies. *Agricultural and Forest Meteorology*. Vol. 152, Pages 223-232.
- Atamturktur, S., **Bornn, L.**, Hemez, F. (2011) Vibration Characteristics of Vaulted Masonry Monuments Undergoing Differential Support Settlement. *Engineering Structures*. Vol. 33, 2472–2484.
- El-Zammar, D., Yan, M., Huang, C., Fang, D., Petigara, F., **Bornn, L.**, Ngai, T., and others (2011) Assessment and Management of Anemia in a Population of Children Living in the Indian Himalayas: A Student-Led Initiative. *UBC Medical Journal*. Vol. 2, Issue 2, 12-18.
- **Bornn, L.**, Farrar, C.R., Park, G. (2010) Damage Detection in Initially Nonlinear Systems. *International Journal of Engineering Science*. Vol. 48, 909-920.
- **Bornn, L.**, Doucet, A., Gottardo, R. (2010) An Efficient Computational Approach for Prior Sensitivity and Cross-validation. *The Canadian Journal of Statistics*, Vol. 38, Issue 1, 47-64.
- **Bornn, L.**, Farrar, C., Park, G., Farinholt, K. (2009) Structural Health Monitoring with Autoregressive Support Vector Machines. *Journal of Vibration and Acoustics*. 131:021004.

Invited Book Chapters and Comments

- **Bornn, L.**, †Cervone, D., †Franks, A., †Miller, A. (2016) Studying Basketball Through the Lens of Player Tracking Data. To appear in *The Handbook of Sports Analytics*.
- Caron, F., **Bornn, L.** (2014) Comment on Article by Finegold and Drton. *Bayesian Analysis*. Vol. 9, 551-556.
- **Bornn, L.**, Cornebise, J. (2010) Comment on “Riemann manifold Langevin and Hamiltonian Monte Carlo methods”. *Journal of the Royal Statistical Society Series B*. Vol. 73, 123-214.
- **Bornn, L.**, Tabet, A. (2010) Comment on “Particle Markov Chain Monte Carlo”. *Journal of the Royal Statistical Society Series B*. Vol. 72, 269-342.

Proceedings, Reports, Etc.

- **Bornn, L.**, Shephard, N., †Solgi, R. (2016) Nonparametric Hierarchical Bayesian Quantiles. *arXiv:1605.02385*.
- †Cervone, D., **Bornn, L.**, Goldsberry, K. (2016) NBA Court Realty. *Sloan Sports Analytics Conference 2016*.
- †van Bommel, M., **Bornn, L.**, (2016) The Van Exel Effect: Adjusting for Scorekeeper Bias in NBA Box Scores. *Sloan Sports Analytics Conference 2016*.
- †Gerber, M., **Bornn, L.** (2015) Convergence Results for a Class of Time-Varying Simulated Annealing Algorithms. *arXiv:1511.07304*.
- **Bornn, L.**, Shephard, N., †Solgi, R. (2015) Moment Conditions and Bayesian Nonparametrics. *arXiv:1507.08645*.
- †Gopalan, G., **Bornn, L.** (2015) FastGP: An R Package for Gaussian Processes. *arXiv:1507.06055*.
- †D’Amour, A., †Cervone, D., **Bornn, L.**, Goldsberry, K. (2015) Move or Die: How Ball Movement Creates Open Shots in the NBA. *Sloan Sports Analytics Conference 2015*.
- †Yang, J., †Wang, X., Protopapas, P. **Bornn, L.** Fast and Optimal Nonparametric Sequential Design for Astronomical Observations. *arXiv:1501.02467*.
- †Batmanghelich, N., Quon, G., Kulesza, A., Kellis, M., Golland, P., **Bornn, L.** Diversifying Sparsity Using Variational Determinantal Point Processes. *arXiv:1411.6307*.
- **Bornn, L.**, †Cherkassky, M. Sequential Monte Carlo Bandits. *arXiv:1310.1404*.

†Indicates students and other HQP

- **Bornn, L.**, Anghel, M., Steinwart, I. (2012) Forecasting with Historical Data or Process Knowledge under Misspecification: A Comparison. *arXiv:1205.3845*.
- Caron, F., **Bornn, L.**, Doucet, A. (2012) Sparsity-Promoting Bayesian Dynamic Linear Models. *arXiv:1203.0106*.
- **Bornn, L.** (2012) Modeling Latent Correlation Structures with Application to Agricultural and Environmental Science. *Ph.D. Thesis*.
- Farrar, C., Park, G., Anghel, M., Bement, A., **Bornn, L.** (2011) Structural Health Monitoring, Data Analysis and Modeling for Ship Structures. *Los Alamos Technical Report*. LA-UR-11-05494.
- Jacob, P., **Bornn, L.** (2011) PAWL: An R Package for Automated Monte Carlo. Available on CRAN at <http://cran.r-project.org/web/packages/PAWL/index.html>.
- **Bornn, L.**, Gottardo, R., Doucet, A. (2010) Grouping Priors and the Bayesian Elastic Net. *UBC Department of Statistics Technical Report #254*. Also available on arXiv.
- Farrar, C.R., **Bornn, L.**, Park, G., Farinholt, K.M. (2009) Damage Detection in Initially Nonlinear Systems. *Proceedings of 7th International Workshop on Structural Health Monitoring*. September 9-11 2009, Stanford, CA.
- **Bornn, L.**, Farrar, C.R., Park, G., Farinholt, K.M. (2009) Support Vector Autoregression in the Structural Health Monitoring Paradigm. *Proceedings of 7th International Workshop on Structural Health Monitoring*. September 9-11 2009, Stanford, CA.
- Bornn, L. (2008) Statistical Solutions For and From Signal Processing. *M.Sc. Thesis*.
- Higdon, D., Anderson-Cook, C., Gattiker, J., Huzurbazar, A., Moore, L., Picard, R., Press, W., Williams, B., **Bornn, L.**, Nelson, R. (2008) QMU for Advanced Certification: Identifying Existing Limitations with Discussion of Solution Strategies. *Los Alamos Technical Report*. LA-UR-08-06887.

Media Recognition

- 10/2015 - AMS What's Happening in the Mathematical Sciences "Sports Analytics"
- 03/2015 - Columbia Journalism Review "In Defense of Defense"
- 02/2015 - Grantland.com "Department of Defense"
- 02/2015 - Ultimo Uomo "La Rivincita dei Nerd"
- 11/2014 - Wired "Meet the Mapmakers Who are Changing the NBA"
- 04/2014 - Harvard Gazette "For Big Data, Big Thinking"
- 03/2014 - SiriusXM Radio Interview
- 03/2014 - Boston Globe "A New (More Accurate?) Way to Evaluate NBA Players"
- 03/2014 - Harvard Gazette "Bringing Order to the Court"
- 03/2014 - NBA.com "Putting Player Tracking to Work"
- 02/2014 - Bleacher Report "Debating the Value of the NBA's Latest Data Breakthrough"
- 02/2014 - Deadspin "This New NBA Stat is a Huge Step Forward for Basketball Analysis"
- 02/2014 - ESPN Magazine "What's the Big Idea"
- 02/2014 - Grantland.com "DataBall"

Invited Presentations

- 08/2016 - SFU Symposium on Mathematics and Computation (Burnaby, BC)
- 08/2016 - Microsoft Azure (Redmond, WA)
- 06/2016 - ISBA World Meeting (Sardinia, Italy)
- 05/2016 - Statistical Society of Canada Meeting (St. Catharines, ON)
- 05/2016 - Perspectives on High-dimensional Data Analysis (Toronto, ON)
- 05/2016 - Spring Research Conference (Chicago, IL)
- 03/2016 - Department of Statistics, University of British Columbia (Vancouver, BC)
- 03/2016 - Department of Statistics, University of Toronto (Toronto, ON)
- 02/2016 - Workshop on Computational Statistics and Molecular Simulation (Paris, France)
- 11/2015 - FC Barcelona Sports Technology Symposium (Barcelona, Spain)
- 10/2015 - Visualization in Data Science (Chicago, IL)
- 08/2015 - Workshop on Applied Topology and High-Dimensional Data Analysis (Victoria, BC)
- 08/2015 - Joint Statistical Meetings (Seattle, WA)
- 06/2015 - Probabilistic Programming and Machine Learning (Portland, OR)
- 05/2015 - Big Data in Environmental Sciences (Vancouver, BC)
- 04/2015 - New England Statistics Symposium (Storrs, CT)
- 08/2014 - Joint Statistical Meetings (Boston, MA)
- 06/2014 - Meeting of the International Chinese Statistical Association (Portland, OR)
- 05/2014 - Big'MC (Paris, FR)
- 04/2014 - New England Statistics Symposium (Cambridge, MA)
- 04/2014 - Department of Statistics, University of Washington (Seattle, WA)
- 04/2014 - Machine Learning Seminar Series, Duke University (Durham, NC)
- 04/2014 - Department of Statistics, Simon Fraser University (Burnaby, BC)
- 04/2014 - Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing (Leuven, BE)
- 03/2014 - Advances in Scalable Bayesian Computation (Banff, AB)
- 01/2014 - Institute for Applied Computer Science Symposium (Cambridge, MA)
- 01/2014 - MCMSki (Chamonix, France)
- 11/2013 - Department of Statistics, Oxford University (Oxford, UK)
- 10/2013 - Centre de Recherches Mathématiques (Montreal, QC)
- 10/2013 - Booth School of Business, University of Chicago (Chicago, IL)
- 10/2013 - Department of Statistics, Boston University (Boston, MA)
- 08/2013 - Joint Statistical Meetings (Montreal, QC)
- 05/2013 - Statistical Society of Canada Meeting (Edmonton, AB)
- 04/2013 - Department of Biostatistics, Harvard University (Boston, MA)
- 03/2013 - Los Alamos National Labs (Los Alamos, NM)
- 02/2013 - Department of Applied Mathematics, Brown University (Providence, RI)
- 10/2012 - ENSAE (Paris, France)
- 10/2012 - Ecole Polytechnique (Palaiseau, France)
- 06/2012 - Bayesian Inference for Latent Gaussian Models (Trondheim, Norway)
- 05/2012 - Spring Research Conference (Cambridge, MA)

- 03/2012 - Department of Mathematics, University of Victoria (Victoria, BC)
- 03/2012 - Department of Statistics, Simon Fraser University (Vancouver, BC)
- 02/2012 - Department of Statistics, Harvard University (Cambridge, MA)
- 02/2012 - Department of Statistics, Columbia University (New York, NY)
- 02/2012 - Department of Statistics, University of British Columbia (Vancouver, BC)
- 04/2011 - INRIA Bordeaux South-West (Bordeaux, France)
- 01/2011 - MCMSki (Park City, UT)
- 01/2011 - AdapSkIII: Advances in Monte Carlo (Park City, UT)
- 05/2010 - Institut de Mathématiques de Bordeaux (Bordeaux, France)
- 01/2010 - Sustainable Agriculture Environmental Systems Workshop (Vancouver, BC)
- 09/2008 - UBC Statistics Seminar Series (Vancouver, BC)
- 07/2008 - Los Alamos National Laboratory (Los Alamos, NM)
- 04/2008 - Conference on Monte Carlo Methods: Theory and Applications (Providence, RI)
- 11/2007 - UBC/SFU Joint Student Workshop (Burnaby, BC)
- 10/2007 - University of the Fraser Valley seminar series (Abbotsford, BC)
- 07/2007 - Banff International Research Station (Banff, AB)

Contributed Presentations

- 01/2016 - MCMSki (Lenzerheide, Switzerland)
- 08/2014 - Joint Statistical Meetings (Boston, MA)
- 09/2013 - Bayesian Inference for Latent Gaussian Models (Reykjavik, Iceland)
- 09/2013 - New England Symposium on Statistics in Sports (Boston, MA)
- 07/2013 - IMS New Researcher Conference (Montreal, QC)
- 06/2013 - Bayesian Young Statisticians Meeting (Milan, Italy)
- 06/2013 - Meeting on Bayesian Nonparametrics (Amsterdam, NL)
- 06/2013 - Bayesian Inference in Stochastic Processes (Milan, Italy)
- 05/2013 - New England Machine Learning Day (Cambridge, MA)
- 04/2013 - New England Statistics Symposium (Storrs, CT)
- 08/2012 - Joint Statistical Meetings (San Diego, CA)
- 10/2011 - GeoMed (Victoria, BC)
- 08/2011 - SAMSI Climate Modeling Opening Workshop (Pleasanton, CA)
- 08/2011 - Joint Statistical Meetings (Miami, FL)
- 04/2011 - International Biometric Society (Bordeaux, France)
- 04/2011 - PIMS Young Researcher Meeting (Vancouver, BC)
- 01/2011 - MCMSki (Park City, UT)
- 08/2010 - Joint Statistical Meetings (Vancouver, BC)
- 06/2010 - Valencia Meeting on Bayesian Statistics (Valencia, Spain)
- 06/2010 - Sparse Structures: Statistical Theory and Practice (Bristol, UK)
- 06/2009 - Statistical Methods for Dynamic System Models (Vancouver, BC)
- 05/2009 - Statistical Society of Canada Annual Meeting (Vancouver, BC)
- 07/2008 - LANL Student Symposium (Los Alamos, NM)

- 06/2008 - WNAR Annual Conference (Davis, CA). Winner, Best Student Presentation
- 06/2008 - Second Canada-France Congress (Montreal, QC)
- 10/2007 - Pacific Northwest Statistics Meeting (Vancouver, BC)
- 05/2007 - CMS-MITACS Joint Conference (Winnipeg, MB)

Research Funding

- 09/2016: NSERC Engage Grant (25,000 CAD), PI
- 01/2016: SFU TLC Development Grant (5,000 CAD), PI
- 10/2015: Amazon Research Award (15,000 USD), PI
- 04/2015: NSERC Discovery Grant (110,000 CAD), PI
- 04/2015: ARO Young Investigator Award (237,472 USD), PI
- 01/2015: NSF (330,000 USD), Co-PI (w/ Luke Miratrix)
- 04/2014: DARPA Probabilistic Programming & Machine Learning (207,000 USD), PI
- 12/2013: William F. Milton Fund (40,000 USD), PI
- 04/2013: Harvard Center for the Environment, Faculty Grant for Exploratory Research (32,800 USD), Co-PI (w/ Natesh Pillai, Art Dempster, and Peter Huybers)

Highly Qualified Personnel

- Students
 - Nathan Sandholtz (Simon Fraser PhD)
 - Jacob Mortensen (Simon Fraser PhD)
 - Matthew van Bommel (Simon Fraser MSc)
 - Yatao Zhong (Simon Fraser MSc – primary supervisor Greg Mori)
 - Andrew Miller (Harvard PhD – primary supervisor Ryan Adams)
- Postdoctoral Fellows
 - Reza Solgi (Harvard – jointly supervised with Neil Shephard)
- Alumni
 - Mathieu Gerber (Harvard Postdoc 2016), now Assistant Professor at *University of Bristol*
 - Alexander D'Amour (Harvard PhD 2016 – primary supervisor Edo Airoldi), now Visiting Assistant Professor at *UC Berkeley*
 - Alexander Franks (Harvard PhD 2015 – primary supervisor Edo Airoldi), now Postdoc at *University of Washington*
 - Daniel Cervone (Harvard PhD 2015 – primary supervisor Natesh Pillai), now Postdoc at *NYU*
 - Giri Gopalan (Harvard AM 2015), now PhD student at *University of Iceland*
 - Hannah Director (Harvard AM 2015), now PhD student at *University of Washington*
 - David Zhang (Harvard AB 2015), now at *AQR Capital Management*
 - Ryan Grossman (Harvard AB 2015), now at *Tinder*
 - Anthony Liu (Harvard AB 2014), now at *Analytics Operations Engineering*
 - Eric Hendey (Harvard AB 2014), now at *Evercore*
 - Michael Cherkassky (Harvard AB 2013), now at *Pipewave, Inc.*
 - Eunice Kim (Harvard Research Fellow 2013), now at *Amherst College*

Professional Memberships

Statistical Society of Canada, American Statistical Association, International Society for Bayesian Analysis, Institute of Mathematical Statistics, International Biometric Society