

Curriculum Vitae
Michael Lavine

Department of Mathematics and Statistics
Lederle Graduate Research Tower, Box 34515
University of Massachusetts Amherst
Amherst, MA 01003-9305, USA
(413) 545-0560
lavine@math.umass.edu

EDUCATION

Ph.D. 1987, Statistics, University of Minnesota

M.A. 1977, Mathematics, Dartmouth College

B.A. 1974, Mathematics, Beloit College

PROFESSIONAL EXPERIENCE

2011 – 2014 Head, Dept. of Mathematics and Statistics, University of Massachusetts, Amherst

2008 – present Professor, Dept. of Mathematics and Statistics, University of Massachusetts, Amherst

2001 – 2008 Professor, Institute of Statistics and Decision Sciences Duke University

2001 – 2008 Professor, Nicholas School of Earth and Ocean Sciences, Duke University

2000 – 2008 Member, University Program in Ecology, Duke University

2000 Visiting Associate Professor, Department of Biometrics, Cornell University

1995 – 2001 Associate Professor, Nicholas School of Earth and Ocean Sciences, Duke University

1994 – 2001 Associate Professor, Institute of Statistics and Decision Sciences Duke University

- 1991 – 1992** Visiting Assistant Professor, Department of Statistics, Carnegie Mellon University
- 1987 – 1994** Assistant Professor, Institute of Statistics and Decision Sciences, Duke University
- 1983 – 1987** Teaching Assistant, School of Statistics, University of Minnesota
- 1978 – 1981** Research Assistant, Center for Energy and Environmental Studies, Princeton University
- 1975 – 1977** Teaching Assistant, Department of Mathematics, Dartmouth College

BOOKS AND CHAPTERS

1. 2010, *The Bayesian Vantage for Dealing with Uncertainty*, Evans, D. A., Newman, M. C., Lavine, M., Jaworska, J. S., Toll, J., Brooks, B. W., and Brock, T. C. M. in **Application of Uncertainty Analysis to Ecological Risks of Pesticides**, Warren-Hicks, W. J. and Hart, Andy, eds., CRC Press.
2. 2007, one of many contributing authors, *Climate Change 2007 The Physical Science Basis: Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Solomon, Susan; Qin, Dahe; Manning, Martin; Marquis, Melinda; Averyt, Kristen; Tignor, Melinda M. B.; Miller, Henry LeRoy Jr; and Chen, Zhenlin (eds.), Cambridge University Press.
3. 2004, Lavine, M., **Introduction to Statistical Thought**, free internet publication.
4. 2001, Clark, J. S. and Lavine, M., *Bayesian statistics in ecology*, in **Design and Analysis of Ecological Experiments**, S.M. Scheiner and J. Gurevitch (eds), Oxford Univ Press.
5. 2000, Lavine, M., Perone Pacifico, M., Salinetti, G. and Tardella, L., *Linearization Techniques in Bayesian Robustness*, in **Robust Bayesian Analysis**, D. Rios Insua and F. Ruggeri eds., Springer-Verlag, Lecture Notes in Statistics.

REFEREED ARTICLES

1. 2016 Michael Lavine and Joseph Horowitz, *Comment on the ASA's P-value Statement*, **The American Statistician**, April, v70.
2. 2016 Michael Lavine; J. Roger Brothers; Kenneth J. Lohmann; Isaac Lavine, *Sea Turtles: A Case of Animal Magnetism*, **CHANCE**
3. 2016 Mark Hagemann; Minji Park; Varun Srinivasan; David Reckhow; Michael Lavine; Erik Rosenfeldt; Benjamin Stanford, Mi-Hyun Park, *Co-occurrences of EDCs/PPCPs in surface water using Chemometrics*, **J. American Water Works Assoc.**, April, <http://dx.doi.org/10.5942/jawwa.2016.108.0042>.
4. 2015 Michael Lavine; Andrew Bray; Jim Hodges, *Approximately Exact Calculations for Linear Mixed Models*, **Electronic Journal of Statistics**, **6**, 2293–2323.
5. 2014 Aaron Ellison; Michael Lavine; Peter Kerson, Audrey Barker Plotkin; David Orwig, *Building a Foundation: Land-Use History and Dendrochronology Reveal Temporal Dynamics of a Tsuga Canadensis (Pinaceae) Forest*, **Rhodora**, **116**, No. 968.
6. 2014, Park, Minji; Reckhow, David; Lavine, Michael; Rosenfeldt, Erik; Stanford, Benjamin; Park, Mi-Hyun, *Multivariate Analyses for Monitoring EDCs And PPCPs In Lake Water*, **Water Environment Research**, **86**, November.
7. 2014, Michael Lopez and Adrian Esparza and Jenna Marquardt and Michael Lavine, *Your Textbook Can't Help You Here*, **Chance**, 27:2, 13-20.
8. 2014, Aaron Ellison, Nicholas Gotelli, Natalie Hsiang, Michael Lavine, and Adam Maidman, *Kernel Intensity Estimation of 2-Dimensional Spatial Poisson Point Processes from k-Tree Sampling*, **JABES**.
9. 2013, Lisa Friedland, David Jensen, and Michael Lavine *Copy or coincidence? A model for detecting social influence and duplication events*, **Journal of Machine Learning Workshop and Conference Proceedings** **28(3)**, Proceedings of the 30th International Conference on Machine Learning (ICML), pp. 1175-1183.

10. 2013, J. Pezet and J. Elkinton and S. Gomez and M. Lavine and E. Preisser, *Hemlock woolly adelgid and elongate hemlock scale induce changes in foliar and twig volatiles of eastern hemlock*, **J. Chem. Ecol.**, **39**:8, 1090–1100.
11. 2013, Marc-Andre Giasson, Aaron M. Ellison, Richard D. Bowden, Patrick M. Crill, Eric A. Davidson, John E. Drake, Serita D. Frey, Julian L. Hadley, Michael Lavine, Jerry M. Melillo, J. William Munger, Knute J. Nadelhoffer, Elizabeth Nicoll, Scott V. Ollinger, Kathleen E. Savage, Paul A. Steudler, Jianwu Tang, Ruth K. Varner, Steven C. Wofsy, David R. Foster, and Adrien C. Finzi, *Soil Respiration in a Northeastern US Temperate Forest: A 22-year Synthesis*, **Ecosphere**, **4**(11).
12. 2012, Peng Wang and Arthur Baines and Michael Lavine and Gretchen Smith, *Modelling Ozone Injury to U.S. Forests*, **Environmental and Ecological Statistics**, **v19, Issue 4**, 461–472, DOI 10.1007/s10651-012-0195-2.
13. 2012, Lavine, Michael and Hodges, James S., *On Rigorous Specification of ICAR Models*, **The American Statistician**, **66**, 42–49, DOI: 10.1080/00031305.2012.654746.
14. 2011, Lavine, Michael, Haglund, Michael M. and Hochman, Daryl W., *Dynamic Linear Model Analysis of Optical Imaging Data Acquired from the Human Neocortex*, **Journal of Neuroscience Methods**, 346–362, DOI: 10.1016/j.jneumeth.2011.05.017.
15. 2009, Scotland C. Leman, Yuguo Chen, and Michael Lavine, *The Multi-set Sampler*, **JASA**, **104**, 1029–1041, DOI: 10.1198/jasa.2009.tm08047
16. 2009, Michael Lavine, Gabriele C. Hegerl and Susan Lozier, *Discussion of Reied Bayesian modelling and inference for physical systems by Michael Goldstein and Jonathan Rougier*, **Journal of Statistical Planning and Inference**, **139**, 1243–1245, DOI: 10.1016/j.jspi.2008.08.011.
17. 2007, Richter D., Hofmockel M. and M Lavine, *Effects of elevated CO₂ on canopy interception of precipitation*. **Global Change Biology**, in prep.

18. 2007, Bonnie E. Lai, Yao Quan Xie, Michael L. Lavine, Andrew J. Szeri, Derek H. Owen, and David F. Katz, *Dilution of microbicide gels with vaginal fluid and semen simulants: effect on rheology and coating flow*, **Journal of Pharmaceutical Sciences**, in press.
19. 2007, Scotland C. Leman, Marcy K. Uyenoyama, Michael Lavine, and Yuguo Chen, *The Evolutionary Forest Algorithm*, **Bioinformatics**, doi: 10.1093/bioinformatics/btm264.
20. 2007, Neung-Hwan Oh, Michael Hofmockel, Michael Lavine, and Daniel Richter, *Did Elevated Atmospheric CO₂ Alter Soil Mineral Weathering?: An Analysis of Five-Year Soil Water Chemistry Data at Duke FACE Study*, **Global Change Biology**, **13**, 2626–2641.
21. 2007, Ana Rappold, Michael Lavine, and Susan Lozier, *Subjective Likelihood for the Assessment of Trends in the Ocean’s Mixed-Layer Depth*, with Comments and Rejoinder, **JASA**, **102**, 771–787.
22. 2007, Marcus H. Henderson, Grace M. Couchman, David K. Walmer, Jennifer J. Peters, Derek H. Owen, Matthew A. Brown, Michael L. Lavine, and David F. Katz, *Optimal imaging and analysis of human vaginal coating by drug delivery gels*, **Contraception**, **75**, 142–151.
23. 2006, J.R. Stapleton, M.L. Lavine, R.L. Wolpert, M.A.L. Nicolelis, and S.A. Simon, *Rapid Taste Responses in the Gustatory Cortex During Licking*, **Journal of Neuroscience**, **26**(15), 4126–4138.
24. 2005, Hille Ris Lambers, J., J.S. Clark, and M. Lavine, *Implications of seed banking for recruitment of southern Appalachian woody species*, **Ecology**, **86** (1), 85–95.
25. 2005, R.F. Shore, D.R. Crocker, H.R. Akcakaya, R.S. Bennett, P.F. Chapman, M. Clook, M. Crane, I.C. Dewhurst, P.J. Edwards, A. Fairbrother, S. Ferson, D. Fischer, A.D.M. Hart, M. Holmes, M.J. Hooper, M. Lavine, A. Leopold, R. Luttik, P. Mineau, D.R.J. Moore, S.R. Mortenson, D.G. Noble, R.J. O’Connor, W. Roelofs, R.M. Sibly, G. C. Smith, M. Spendiff, T. A. Springer, H.M. Thompson, C. Topping, *Case Study Part 1: How to Calculate Appropriate Deterministic Long-Term Toxicity to Exposure Ratios (TERs) for Birds and Mammals*, **Ecotoxicology**, **Dec. 2005**, 1–17.

26. 2005, W. Roelofs, D.R. Crocker, R.F. Shore, D.R.J. Moore, G.C. Smith, H.R. Akcakaya, R.S. Bennett, P.F. Chapman, M. Clook, M. Crane, I.C. Dewhurst, P.J. Edwards, A. Fairbrother, S. Ferson, D. Fischer, A.D.M. Hart, M. Holmes, M.J. Hooper, M. Lavine, A. Leopold, R. Luttik, P. Mineau, S.R. Mortenson, D.G. Noble, R.J. OConnor, R.M. Sibly, M. Spendiff, T.A. Springer, H.M. Thompson, C. Topping *Case Study Part 2: Probabilistic Modelling of Long-term Effects of Pesticides on Individual Breeding Success in Birds and Mammals*, **Ecotoxicology**, Dec. 2005, 18–29.
27. 2005, Ballantyne, A. P., Lavine, M., Crowley, T. J., Liu, J., and Baker, P. B., *Meta-analysis of tropical surface temperatures during the Last Glacial Maximum*, **Geophysical Research Letters**, **32**, L05712, doi:10.1029/2004GL021217.
28. 2005, De Iorio, M. and Lavine, M., *Intrinsic Autoregressions at Multiple Resolutions*, **JSPI** **134**, issue 1, September 2005, 102–115.
29. 2004, Ribeiro, S. Gervasoni, D., Soares, E., Zhou, Y., Lin, SC., Pantoja, J., Lavine, M. and Nicolelis, M. *Long-Lasting Novelty-Induced Neuronal Reverberation during Slow-Wave Sleep in Multiple Forebrain Areas*. **PLoS Biology** **2(1)**: e24.
30. 2003, Qian, Song S. and Lavine, M., *Setting Standards for Water Quality in the Everglades*, **CHANCE**, 10–16.
31. 2003, Owen D.H., Peters J.J., Lavine M.L. and Katz D.F., *Effect of temperature and pH on contraceptive gel viscosity*, **Contraception**, **67**, 57–64
32. 2003, Calder, C.A., Lavine, M., Muller, P. and Clark, J.S., *Incorporating Multiple Sources of Stochasticity in Dynamic Population Models*, **Ecology**, **84**, 1395–1402.
33. 2003, Paddock, S., Ruggeri, F., Lavine, M. and West, M., *Randomised Polya Tree Models for Nonparametric Bayesian Inference* **Statistica Sinica**, **13(2)**, 443–460.
34. 2003, Lavine, M., *Discussion of Could Fisher, Jeffreys and Neyman Have Agreed on Testing?*, **Statistical Science** **18(1)**, 16–18.

35. 2002, Lavine, M., *A Marginal Ergodic Theorem*, **Seventh Valencia International Meeting on Bayesian Statistics**, pp. 577–585.
36. 2002, Lavine, M., Beckage, B. and Clark, J., *Statistical Modelling of Seedling Mortality*, **Journal of Agricultural, Biological and Environmental Statistics**, **7**, 21–41.
37. 2001, Casella, G., Lavine, M. and Robert, C., *Explaining the Perfect Sampler* **The American Statistician**, **55**, 299–305.
38. 2000, Jagdish Krishnaswamy, Michael Lavine, Daniel D. Richter and Karl Korfmacher, *Dynamic modeling of long term sedimentation in the Yadkin River Basin*, **Advances in Water Resources**, **23**, 881–892.
39. 2000, Lichter, J., Lavine, M., Mace, K. A., Richter, D. D. and Schlesinger, W. H. *Throughfall chemistry in loblolly pine plantation under elevated atmospheric CO₂ concentrations*, **Biogeochemistry**, **50**, 73–93.
40. 2000, Qian, S. and Lavine, M., *Univariate Bayesian nonparametric binary response regression application in environmental management*, **Environmental and Ecological Statistics**, **7**, 77–91.
41. 1999, Lavine, M., *What is Bayesian Statistics and Why Everything Else is Wrong*, **The Journal of Undergraduate Mathematics and Its Applications**, **20**, 165–174.
42. 1999, Evan DeLucia, Jason Hamilton, Shawna Naidu, Richard Thomas, Jeffrey Andrews, Adrien Finzi, Michael Lavine, Roser Matamala, Jacqueline Mohan, George Hendrey and William Schlesinger, *Net Primary Production of a Forest Ecosystem under Experimental CO₂ Enrichment*, **Science**, **284**, 1177–1179.
43. 1999, Lavine, M. and Lozier, S., *A Markov Random Field Spatio-temporal Analysis of Ocean Temperature*, **Environmental and Ecological Statistics**, **6**, 249–273.
44. 1999, Lavine, M. and Schervish, M., *Bayes Factors: what they are and what they are not*, **The American Statistician**, **53**, 119–122.
45. 1999, Lavine, M., *Another Look at Conditionally Gaussian Markov Random Fields*, **Bayesian Statistics 6**, Bernardo, Berger, Dawid and Smith, eds., 371–387.

46. 1999, Lavine, M. *The ‘Bayesics’ of Ranked Set Sampling*, **Environmental and Ecological Statistics**, **6**, pp47–57.
47. 1997, Wolpert, R. and Lavine, M., *Markov Random Field Priors for Univariate Density Estimation*, in **Proceedings of the Second International Workshop on Bayesian Robustness**, F. Ruggeri and G. Salinetti, eds., Institute of Mathematical Statistics Press, Hayward, CA.
48. 1996, Lavine, M., *Monte Carlo and Bayesian Statistics*, **Human and Ecological Risk Assessment**, **2** , 666–670.
49. 1995, Lavine, M., *On an approximate likelihood for quantiles*, **Biometrika**, **82**, 220–222.
50. 1995, Lavine, M. and Mockus, A., *A Nonparametric Bayes Method for Isotonic Regression*, **Journal of Statistical Planning and Inference**, **46**, 235–248.
51. 1995, Garth Bissette, Dan Griff, Molly Carnes, Michael Lavine, Brian Goodman and Beth Levant *Apparent Seasonal Rhythms in Hypothalamic Neuropeptides in Rats without Photoperiod Changes*, **Endocrinology**, **136**, 622–628.
52. 1994, Lavine, M., *More Aspects of Polya Tree Distributions for Statistical Modelling*, **Annals of Statistics**, **22**, 1161–1176.
53. 1994, Lavine, M., *An Approach to Evaluating Sensitivity in Bayesian Regression Analyses*, with discussion and reply, **Journal of Statistical Planning and Inference**, **40**, pp. 242–244.
54. 1993, Lavine, M., Wasserman, L. and Wolpert, R., *Linearization of Bayesian Robustness Problems*, **Journal of Statistical Planning and Inference**, **37**, pp. 307–316.
55. 1992, Banks, D. and Lavine, M., *The Minimal Spanning Tree for Nonparametric Regression and Structure Discovery*, **Computing Science and Statistics**, **24**, 370–374.
56. 1992, Lavine, M., *A Note on Bounding Monte Carlo Variances*, **Communications in Statistics, Part A – Theory and Methods**, **21**, #10, pp. 2855–2860.

57. 1992, Lavine, M., *Some Aspects of Polya Tree Distributions for Statistical Modelling*, **Annals of Statistics**, **20**, pp. 1222–1235.
58. 1992, Lavine, M. and West, M., *A Bayesian Method for Classification and Discrimination*, **The Canadian Journal of Statistics**, **20**, pp. 451–461.
59. 1992, Pfister, Charles, Harrington, Brian A. and Lavine, M., *The impact of human disturbance on shorebirds at a migration staging area*, **Biological Conservation**, **60**, pp. 115–126.
60. 1992, Lavine, M., *Local Predictive Influence in Bayesian Linear Models with Conjugate Priors*, **Communications in Statistics, Part B – Simulation and Computation**, **21**, pp. 269–283.
61. 1991, Lavine, M., *Problems in Extrapolation Illustrated With Space Shuttle O-Ring Data*, **Journal of the American Statistical Association**, **86**, pp. 919–921.
62. 1991, Lavine, M., Wasserman, L. and Wolpert, R., *Bayesian Inference with Specified Prior Marginals*, **Journal of the American Statistical Association**, **86**, pp. 964–971.
63. 1991, Lavine, M., *An Approach to Robust Bayesian Analysis for Multidimensional Parameter Spaces*, **Journal of the American Statistical Association**, **86**, pp. 400–403.
64. 1991, Lavine, M., *Sensitivity in Bayesian Statistics: The Prior and the Likelihood*, **Journal of the American Statistical Association**, **86**, pp. 396–399.
65. 1991, Gorback, M. S., Quill, T. J. and Lavine, M., *The Relative Accuracies of Two Automated Noninvasive Arterial Pressure Measurement Devices*, **Journal of Clinical Monitoring**, **7**, pp. 13–22.
66. 1986, M. Fels, M. Goldberg and M. Lavine, *Exploratory Scorekeeping for Oil-heated Houses*, **Energy and Buildings**, **9**, 127–136.
67. 1986, G. S. Dutt, M. Lavine, B. G. Levi and R. Socolow, *The Modular Retrofit Experiment: Design, Scorekeeping and Evaluation*, **Energy and Buildings**, **9**, 21–33.

68. 1981, Socolow, R., Dutt, G. and Lavine, M., *Preliminary Results of the Modular Retrofit Experiment: Tests of the House Doctor Concept by New Jersey's Gas Utilities*, **International Journal for Housing Science**, **5**, 121–129; and in **Energy Resources and Conservation Related to the Built Environment**, Vol. 2, Oktay Ural, ed., Pergamon Press, New York, 576–586.

UNREFEREED PUBLICATIONS

1. 2015, Lavine, M. *Comment on Pseudoreplication and the Design of Ecological Field Experiments for the Centennial Special: Notable Papers* of the Ecological Society of America.
2. 1998, Lavine, M., *What is Bayesian Statistics and Why Everything Else is Wrong*, in **Biotic Impacts of Extratropical Climate Variability in the Pacific: Proceedings of the 'Aha Huliko'a Workshop**, Greg Holloway, Peter Müller and Diane Henderson editors, University of Hawaii.
3. 1997, Lavine, M., *Discussion of "Bayesian Hypothesis Testing: a Reference Analysis" by José Bernardo*, in **Proceedings of the Workshop on Model Selection**, (Walter Racugno, ed.), Pitagora Editrice, Bologna.
4. 1995, S.S. Qian, K.H. Reckhow and M. Lavine, *Wetland Modeling Using Nonparametric Bayes Analysis*, **Proceedings of the International Symposium on Water Quality Modeling**.
5. 1995, Lavine, M. and Wolpert, R., *Discussion of "Fractional Bayes factors for model comparison" by A. O'Hagan*, **Journal of the Royal Statistical Society Series B**, **57**, p. 132.
6. 1995, Lavine, M., *Discussion of "Assessment and propagation of model uncertainty" by D. Draper*, **Journal of the Royal Statistical Society Series B**, **57**, p. 85.
7. 1994, Lavine, M., *Discussion of "A Review of Recent Developments in Robust Bayesian Analysis" by Berger*, **TEST**, **3**, #1, 95–97

8. 1994, Lavine, M., *Discussion of "A Review of Recent Developments in Robust Bayesian Analysis" by Berger*, **TEST**, **3**, #1, 95–97
9. 1993, Lavine, M., *Discussion of "Exploring Regression Structure With Graphics" by Cook and Wetzel*, **TEST**, **2**, pp. 78–79.
10. 1992, Lavine, M., *Discussion of "Use of Prior Information to Estimate Costs in a Sewerage Operation"*, in **Bayesian Statistics in Science and Technology: Case Studies**, Gatsonis, C., Hodges, J., Kass, R. and Singpurwalla, N., eds., Springer-Verlag.
11. 1986, M. Benson, K. Larntz, M. Lavine and R. Regal, *The Application of Convex Hulls in Multiple Dimensions*, **Computer Science and Statistics: 1986 Proceedings of the 18th Symposium on the Interface**.
12. 1986, Lavine, M. and Weiss, R., *Necessary and Sufficient Conditions for Ordinary Least Squares Estimators to be Best Linear Unbiased Estimators*, letter to the editor, **The American Statistician**, **40**, pp. 178–179.
13. 1981, Lavine, M., Sachs, H. and Socolow, R., *Performance Indices for Space Heat in Houses* in **Home Remedies: A Guidebook for Residential Retrofit**, Tom Wilson, ed., Mid-Atlantic Solar Energy Association, Philadelphia, PA, 54–56.

OTHER WORK

1. 2015, Lavine, M., *Climate Change, Statistical Significance, and Science*, comment on improper use of statistics in a New York Times opinion piece, posted on stats.org, <http://www.stats.org/climate-change-statistical-significance-and-science>
2. 2001, De Iorio, M. and Lavine, M. *Simplifying Gaussian Networks: An Approximation Algorithm*.
3. 1996, Lavine, M., *Conditionality is Alive and Well*, **Discussion Paper #96-04**, Institute of Statistics and Decision Sciences, Duke University.

4. 1993, Lavine, M. and Parmigiani, G., *Using Probability to Learn from Data*, **Discussion Paper #93-A06**, Institute of Statistics and Decision Sciences, Duke University.
5. 1992, Lavine, M. and Wasserman, L., *Can We Estimate N?*, **Discussion Paper #92A-08**, Institute of Statistics and Decision Sciences, Duke University.
6. 1989, Lavine, M., *A Case Study in Bayesian Sensitivity: Fish Response to Lake Acidification*, **Discussion Paper #89-15**, Institute of Statistics and Decision Sciences, Duke University.
7. 1982, M. Fels, M. Lavine and D. Harwood, *The Modular Retrofit Experiment: Summary Scorekeeping Tables*, **Report 131**, Center for Energy and Environmental Studies, Princeton University, Princeton, NJ, (rev. 1986).
8. 1980, J. Darley, M. Fels, M. Goldberg, M. Lavine and R. Socolow *Scorekeeping for Retrofits: Issues Pertinent to the Management of the 1000 House Pilot Project in Lakewood, NJ*, **Report 106**, Center for Energy and Environmental Studies, Princeton University, Princeton, NJ.

INVITED TALKS

1. 2017 *Models Should Describe Data: Let's Assess Them That Way*, ASA Symposium on Statistical Inference.
2. 2016 *WHIM: Function Approximation Where It Matters*, UMass Amherst.
3. 2016 *Deformation Models for Fingerprints* SAMSI Workshop on Forensic Statistics
4. 2016 *WHIM: Function Approximation Where It Matters*, NCSU.
5. 2015 *WHIM: Function Approximation Where It Matters*, SAMSI.
6. 2015 *On Likelihood*, Department of Statistics, University of Minnesota.
7. 2015 *Approximately Exact Calculations for Linear Mixed Models*, Department of Biostatistics, University of Minnesota.

8. 2015 *On Likelihood*, Department of Statistics, North Carolina State University.
9. 2015 *Approximately Exact Calculations for Linear Mixed Models*, Department of Statistics, Duke University.
10. 2015 *Approximately Exact Calculations for Linear Mixed Models*, Department of Biostatistics, Harvard University.
11. 2014, *What is Bayesian Statistics and Why Everything Else is Wrong*, Department of Mathematical Sciences, Worcester Polytechnic Institute.
12. 2014, *A Poisson Process Model for k-tree Sampling*, Virginia Tech University
13. 2014, *Before You Analyze, Know Y*, Sigma Xi, Smith College
14. 2014, *Before You Analyze, Know Y*, ISSR, UMass Amherst
15. 2013, *Subjective Likelihood for the Ocean's Mixed Layer*, UConn
16. 2012, *Habits of Consulting Clients*, JSM
17. 2011, *Spike Trains and Human Brains*, Department of Mathematics and Statistics, Eastern Kentucky University.
18. 2011, *What is Bayesian Statistics and Why Everything Else is Wrong*, Department of Mathematics and Statistics, Eastern Kentucky University.
19. 2011, *State Space Models for Optical Images of the Brain During Surgery*, Harvard University, Department of Biostatistics.
20. 2011, *What is Bayesian Statistics and Why Everything Else is Wrong*, Mount Holyoke College.
21. 2010, *Subjective Likelihood For An Assessment of Climate Change in the Ocean*, Department of Statistics, Harvard University.
22. 2009, *Spike Trains and Human Brains*, Annual Sigma Xi meeting, Mount Holyoke College.

23. 2009, *Subjective Likelihood For An Assessment of Climate Change in the Ocean*, Department of Biostatistics, Harvard University.
24. 2009, *Subjective Likelihood For An Assessment of Climate Change in the Ocean*, Department of Statistics and Applied Probability, UCSB.
25. 2008, *Spike Trains and Human Brains*, Department of Mathematics, Smith College.
26. 2008, *State Space Models for Optical Images of the Brain During Surgery*, Department of Statistics, Virginia Tech University.
27. 2008, *Spike Trains and Human Brains*, Department of Mathematics, Haverford College.
28. 2008, *What is Bayesian Statistics and Why Everything Else is Wrong*, Haverford College.
29. 2008, *State Space Models for Optical Images of the Brain During Surgery*, Department of Statistics, University of Pennsylvania.
30. 2008, *State Space Models for Optical Images of the Brain During Surgery*, Department of Statistics, Pennsylvania State University.
31. 2008, *The Multiset Sampler, a New MCMC Scheme*, Department of Statistics, Boston University.
32. 2008, *The Multiset Sampler, a New MCMC Scheme*, Department of Statistics, University of Connecticut.
33. 2008, *Subjective Likelihood for the Assessment of Trends in the Ocean's Mixed-Layer Depth*, JASA, Applications and Case Studies Invited Session, Joint Statistical Meetings.
34. 2008, *Subjective Likelihood For An Assessment of Climate Change in the Ocean*, International Conference on Interdisciplinary Mathematical & Statistical Techniques, Memphis.
35. 2007, *Subjective Likelihood for the Assessment of Trends in the Ocean's Mixed-Layer Depth*, Department of Biostatistics, Johns Hopkins School of Public Health.

36. 2007, *Spike Trains and Human Brains*, Department of Mathematics and Computer Science, Beloit College.
37. 2007, *Spike Trains and Human Brains*, Department of Mathematics and Statistics, University of Massachusetts.
38. 2006, *Subjective Likelihood for the Assessment of Trends in the Ocean's Mixed-Layer Depth*, Department of Mathematics and Statistics, University of Vermont.
39. 2006, *Subjective Likelihood for the Assessment of Trends in the Ocean's Mixed-Layer Depth*, Department of Mathematics and Statistics, University of Massachusetts.
40. 2006, *Subjective Likelihood for the Assessment of Trends in the Ocean's Mixed-Layer Depth*, Department of Statistical Science, Cornell University.
41. 2005, *An Assessment of Climate Change in the Ocean*, Case Studies in Bayesian Statistics Workshop 8.
42. 2005, *An Assessment of Climate Change in the Ocean, Mixed-Layer Depth, and Subjective Likelihood*, OBayes5 - The Fifth International Workshop on Objective Bayes Methodology.
43. 2005, *Paternity Testing for Baboons and Biologists*, Department of Mathematics and Statistics, Swarthmore College.
44. 2004, *Paternity Testing for Baboons and Biologists*, Department of Mathematics and Statistics, UNC-W.
45. 2004, *Paternity Testing for Baboons and Biologists*, SRCOS summer research conference, Virginia Tech University.
46. 2003, *An Assessment of Climate Change in the Ocean*, The Mu Sigma Rho Society, Virginia Tech University.
47. 2003, *An Assessment of Climate Change in the Ocean*, Department of Statistics, The Pennsylvania State University.
48. 2003, *An Assessment of Climate Change in the Ocean*, School of Statistics, University of Minnesota.

49. 2003, *An Assessment of Climate Change in the Ocean*, Department of Statistics, Iowa State University.
50. 2002, *Statistical Modelling of Seedling Mortality*, Department of Statistics, Florida State University.
51. 2002, *A Marginal Ergodic Theorem*, Department of Statistics, University of British Columbia.
52. 2002, *A Marginal Ergodic Theorem*, Department of Statistics, Iowa State University.
53. 2002, *A Marginal Ergodic Theorem*, Los Alamos National Laboratory Statistics Group, Los Alamos, New Mexico.
54. 2001, *A Marginal Ergodic Theorem*, Department of Statistics, University of North Carolina, Chapel Hill.
55. 2001, *The Climatology and Climatic Variability of the North Atlantic*, IMS mini-meeting on Statistical Approaches to the Ocean Circulation Inverse Problem, Florida State University.
56. 2001, *A Marginal Ergodic Theorem*, ISDS, Duke University.
57. 2001, *P-values and Hypothesis Tests*, University Program in Ecology, Duke University.
58. 2001, *Statistical Modelling of Seedling Mortality*, Department of Statistics, North Carolina State University.
59. 2001, *Statistical Modelling of Seedling Mortality*, Department of Statistics and Actuarial Science, University of Iowa.
60. 2001, *Statistical Modelling of Seedling Mortality*, Department of Mathematics and Statistics, University of Nebraska.
61. 2001, *What is Bayesian Statistics and Why Everything Else is Wrong*, Pacific Northwest National Laboratory.
62. 2001, *Statistical Modelling of Seedling Mortality*, Department of Mathematics and Statistics, University of Otago.

63. 2001, *What is Bayesian Statistics and Why Everything Else is Wrong*, Department of Mathematics and Statistics, University of Otago.
64. 2000, *What is Bayesian Statistics and Why Everything Else is Wrong*, Department of Biometry, Cornell University.
65. 2000, *Statistical Modelling of Seedling Mortality*, Department of Biometry, Cornell University.
66. 2000, *Another Look at Conditionally Gaussian Markov Random Fields*, Department of Statistics, Cornell University.
67. 1999, *The Bayesics of Gibbs Sampling*, American Sociological Association, Methodology Section, Durham, NC.
68. (1999) *What is Bayesian Statistics and Why Everything Else is Wrong*, Beloit College.
69. 1999, *What is Bayesian Statistics and Why Everything Else is Wrong*, Grinnell College.
70. 1999, *Another Look at Conditionally Gaussian Markov Random Fields*, Department of Statistics, University of Wisconsin — Madison.
71. 1999, *Another Look at Conditionally Gaussian Markov Random Fields*, Department of Statistics, Iowa State University.
72. 1998, *Another Look at Conditionally Gaussian Markov Random Fields*, Department of Operations Research, The George Washington University.
73. 1998, *Ocean Temperatures from Africa to Bahamas*, Department of Statistics, Harvard University.
74. 1998, *Another Look at Conditionally Gaussian Markov Random Fields*, Sixth Valencia International Meeting on Bayesian Statistics.
75. 1998, *What is Bayesian Statistics and Why Everything Else is Wrong*, Aha Huliko'a Hawaiian Winter Workshop in Oceanography, University of Hawaii, Manoa.

76. 1997, *What is Bayesian Statistics and Why Everything Else is Wrong*, Theory Group, Department of Physics, Duke University.
77. 1997, *Ocean Temperatures from A(frica) to B(ahamas)*, Department of Statistics and Probability, Michigan State University.
78. 1996, *Multivariate Statistics*, Statistical School for Anthropologists, Vallombrosa, Italy.
79. 1995, *What is Bayesian Statistics*, Pellston Workshop on Uncertainty Analysis in Environmental Risk Assessment, Society for Environmental Toxicology and Chemistry, August, 1995.
80. 1994, *Dirichlet Processes, Polya Trees and Random Distributions*, Department of Statistics, NYU.
81. 1994, Invited discussion at the Valencia meeting.
82. 1993, *Can We Estimate N?* Spring Statistical Meetings of the Biometric Society (ENAR), Philadelphia, PA, 22, March, 1993.
83. 1992, *Dirichlet Processes, Polya Trees and Random Distributions*, International Workshop on Bayesian Robustness, CNR-IAMI, Milano, Italy.
84. 1992, *Dirichlet Processes, Polya Trees and Random Distributions*, Statistics Department, The University of Chicago Graduate School of Business.
85. 1991, *Dirichlet Processes, Polya Trees and Random Distributions*, Statistics Department, The Ohio State University.
86. 1990, *Bayesian Inference With Fixed Prior Marginals*, at the ASA annual meeting.
87. 1989, *Fish Response to Lake Acidification: A Case Study in Bayesian and Fish Robustness*, Statistics Department, Carnegie Mellon University.
88. 1989, *Bayesian Robustness: Sensitivity to the Prior, the Likelihood and the Regression Function*, at the Workshop on Bayesian Robustness, Purdue University.

89. 1988, *Robust Bayesian Analysis with Periparametric Priors*, at the NBER–SBIE meetings, April.

CONTRIBUTED TALKS

1. 2013, *On Rigorous Specification of ICAR Models*, spatial statistics conference, Columbus, OH
2. 2002, *A Marginal Ergodic Theorem*, poster session at the Valencia meetings.
3. 2001, *What is Bayesian Statistics and Why Everything Else is Wrong*, North Carolina School of Science and Mathematics.
4. 1997, *What is Bayesian Statistics and Why Everything Else is Wrong*, Department of Statistics and Probability, Michigan State University.
5. 1997, *Bayes Factors: what they are and what they are not*, Joint Statistical Meetings; Anaheim, CA.
6. 1996, *Ocean Temperatures from A(frica) to B(ahamas)*, Modelling longitudinal and spatially correlated data: methods, applications and future directions, Nantucket, Massachusetts.
7. 1995, *SIM City: Reconstructing the Demographics*, SPRUCE III, Merida, Mexico.
8. 1994, *On Bayesian Analysis of Wavelets*, Annual Meeting of ASA, IMS, Biometric Society.
9. 1994, *Discussion of Session on Bayesian Robustness*, Annual Meeting of ASA, IMS, Biometric Society.
10. 1993, *Nonparametric Bayesian Inference for Quantiles*, Annual Meeting of ASA, IMS, Biometric Society.
11. 1993, *Discussion of Session 68 on Robust Bayesian Statistics*, Annual Meeting of ASA, IMS, Biometric Society.
12. 1993, *Bayesian Inference for Isotone Regression* Meeting of the International Society for Bayesian Analysis, San Francisco.

13. 1991, *Some Aspects of Polya Tree Distributions for Statistical Modelling*, poster session at the Valencia meetings.
14. 1991, *Some Aspects of Polya Tree Distributions for Statistical Modelling*, poster session at the NBER-SBIE meetings.
15. 1990, *Local Predictive Influence*, at the NBER-SBIE meetings.

MAJOR GRANTS

1. 2009–2015 PI, *An Innovative Model for Workforce Development in Statistics*, NSF, \$600,000
2. 2002–2006 PI, *Ocean Circulation*, NSF, \$289,500
3. 1995–2004 Co-PI, *Forest-Atmosphere Carbon Transfer and Storage* DOE, \$6,249,804
4. 1993–1996 PI, *Polya Trees for Nonparametric Bayesian Analysis*, NSF, \$60,000

MEMBERSHIPS

1. ASA
2. IMS
3. ISBA

PROFESSIONAL ACTIVITIES

1. member NIST's OSAC subcommittee on Friction Ridge evidence
2. chair, Savage award committee, 2017
3. leader and committee member for writing ASA's statement on p-values
4. Editorial Advisory Board, **Stats.org**, 2015 – present
5. Editorial Board, **Ecosystem Health and Sustainability**, 2014 – present

6. President-Elect, President, Past President, **Caucus of Academic Representatives, ASA**, 2011–2014
7. Associate Editor, **Electronic Journal of Statistics**, 2010 – 2013
8. Editorial Board, **Journal of Probability and Statistics**, 2008 – 2011
9. Advisory Editor, **Chance**, 2007 – present
10. Executive Editor, **Chance**, 2005 – 2007
11. Subject Matter Editor, **Ecology & Ecological Monographs**, 2004 – present
12. Associate Editor, **JSPI**, 2004 – present
13. Associate Editor, **JASA**, 2003 – 2006
14. Associate Editor, **Environmental and Ecological Statistics**, 2003 – present
15. member, review panel for NSF’s CMG panel
16. member, Science Advisory Panel to EPA’s ECOFRAM, 1999
17. Associate Editor, **Biometrics**, 1997 – 2000
18. review panel member for NSF regional conferences
19. organizing a meeting session for the Bayesian section of the ASA
20. review panel member for the Conference Board of Mathematical Sciences
21. member of the Scientific Committee of the second annual ISBA meeting

PROFESSIONAL HONORS and AWARDS

1. Fellow, ASA
2. Finalist, 2010 ggplot2 case study competition

UNIVERSITY SERVICE

1. member iCons admission committee, 2016
2. Head, Department of Mathematics and Statistics, 2011 – 2014
3. member Faculty Search Committee, 2009 – 2011
4. chair Statistics Search Committee, 2008 – present
5. member departmental Personnel Committee, 2008 – 2011
6. member Undergraduate Judicial Board, 2005 – 2007
7. member Academic Council, 2005 – 2007
8. member Faculty Research Council, 2002 – 2005
9. member Executive Committee of the Center on Global Change, 2001 – 2004
10. member Faculty Compensation Committee, 2000 – 2007; chair 2003 – 2007
11. member Executive Committee of the Arts and Sciences Council, 1998 – 1999; 2003 – 2004
12. Faculty Associate, 1995 – 1997
13. Pre-Major Advisor, 1995 – 1999
14. Director of Graduate Studies, 1995 – 1999
15. member Arts and Sciences Council, 1993 – 1999; 2003 – 2008
16. member Executive Committee of the Graduate Faculty, 1994 – 1998
17. consulting, 1987 – present