

CURRICULUM VITAE

SUJAY DATTA

Current Position: Associate Professor, Dept. of Statistics, Buchtel College of Arts & Sciences, University of Akron, Ohio, USA, 2011–present

Past Positions: (1) Senior Staff Scientist, Statistical Center for HIV/AIDS Research & Prevention (SCHARP), Fred Hutchinson Cancer Research Center, Seattle, Washington, USA, 2008–2011 (2) Visiting Research Scientist (funded by a National Cancer Institute R25 training grant; principal investigator: Raymond J. Carroll), Department of Statistics, Texas A& M University, College Station, Texas, USA, 2006–2008, (3) Associate Professor, Department of Mathematics and Computer Science, Northern Michigan University, Marquette, Michigan, USA, 2003–2006, (4) Assistant Professor, Department of Mathematics and Computer Science, Northern Michigan University, Marquette, Michigan, USA, 1997–2003

Education:

- B. Stat. (Hons.), Indian Statistical Institute, Calcutta, 1990
- M. Stat (specialization in mathematical statistics and probability), Indian Statistical Institute, Calcutta, 1992
- M.S. in statistics, University of Connecticut, Storrs, 1994
- Ph.D. in statistics (specialization: sequential/multistage inference & clinical trials), University of Connecticut, Storrs, 1995
- Postdoctoral research fellow (funded by a National Science Foundation grant), University of Michigan, Ann Arbor, 1995–1997

Areas of Interest:

- *Primary Areas:* (1) Statistical models and methods for high-dimensional data; (2) Bioinformatics (in particular, applications of graph and network-based models to genomic, proteomic and metabolomic data); (3) Statistical models and methods for infectious diseases and cancer research; (4) Sequential/multistage designs and their applications (e.g., in clinical trials, ecology, quality control and reliability)
- *Secondary areas:* (1) Bayesian inference; (2) Statistical methods in machine learning

Topic of Doctoral Dissertation: Sequential and multistage inference procedures: the “fine-tuning” aspect and the distribution-free scenario

Topic of Postdoctoral Fellowship: Developing parallel algorithms for designing efficient and optimal patient-allocation strategies in multi-arm bandit problems, with applications to clinical trials

Computing Experience: WINDOWS XP & VISTA, MINITAB, SPSS, S-PLUS, R, BIOCONDUCTOR, SAS/JMP. Limited familiarity with MATLAB. Programming languages used: FORTRAN

Sabbatical Activities:

- Invited participant in the research program “Genomes to Global Health: Computational Biology of Infectious Diseases” at the Statistics and Applied Mathematical Sciences Institute (SAMSI), Research Triangle Park, North Carolina (Program leaders: Thomas Kepler of Duke University for the focus group “Mathematical Genomics for Vaccine Development” and Timothy Elston of the University of North Carolina for the focus group “Modeling of Inter- and Intracellular Communication”). A record of the activities of these groups are available on the web.
- Short-term visiting researcher at the Fred Hutchinson Cancer Research Center (Seattle, Washington) to work with Dr. Robert Gentleman and his Bioconductor software development team in a protein-protein interaction data analysis project, helping them develop distance measures between two graphs or two hypergraphs, useful for comparing two ‘proteomes represented as hypergraphs. (December 2004 and August 2005)

Publications in Refereed Journals:

- Mukhopadhyay, N. & Datta, S. (1994). Replicated piecewise multistage sampling and its applications, *Sequential Analysis*, **13**, 253-276
- Mukhopadhyay, N. & Datta, S. (1995). On fine-tuning a purely sequential procedure and the associated second-order properties. *Sankhya, Series A*, **57**, 100-117
- Mukhopadhyay, N. & Datta, S. (1995). On fine-tuned bounded-risk sequential point estimation for the mean of an exponential distribution. *South African Statistical Journal*, **29**, 9-27
- Mukhopadhyay, N. & Datta, S. (1996). On sequential fixed-width confidence intervals for the mean and second order expansions of the associated coverage probabilities. *Annals Inst. Stat. Math.*, **48**, 497-507. (Research partially supported by an NSF grant)

- Datta, S. & Mukhopadhyay, N. (1997). On sequential fixed-size confidence regions for the mean vector. *Journal of Multivariate Analysis*, **60**, 233-251 (Research partially supported by an NSF-DMS grant)
- Datta, S. & Mukhopadhyay, N. (1998). Second-order asymptotics for multi-stage methodologies in partitioning a set of normal populations with a common unknown variance. *Statistics & Decisions*, **16**, 191-205
- Datta, S. & Mukhopadhyay, N. (1998). Nonparametric sequential procedures for selecting the largest center of symmetry and some associated second order. *J. Statist. Res.*, **32(2)**, 1-14
- Datta, S. (2001). Sequential and multistage methodologies in regression models: An overview. In *Advances on Theoretical and Methodological Aspects of Probability and Statistics*, pp 427-450, ed. N. Balakrishnan, Taylor & Francis, U.K.
- Datta, S. (2002). Sequential fixed-precision estimation in stochastic linear regression models. *Sequential Analysis*, **21**, 161-190
- Datta, S. & Chattopadhyay, S. (2003). Sequential estimation of the slope in a measurement-error model. In *Applied Sequential Methodologies*, eds. Mukhopadhyay, N., Datta, S. and Chattopadhyay, S., 123-140, Marcel Dekker, New York
- Chattopadhyay, S., Datta, S. & Sengupta, R.N. (2005). Asymmetric penalized prediction using adaptive sampling procedures. *Sequential Analysis*, **24(1)**, 23-43
- Datta, S. (2004). Discussion on “Likelihood ratio identities and their applications to sequential analysis” by Tze Leung Lai. *Sequential Analysis*, **23**,
- Wu, G., Bazer, F.W., Datta, S., Gao, H., Johnson, G.A., Lassala, A., Li, P., Satterfield, M.C. & Spencer, T.E. (2008). Intrauterine growth retardation in livestock: Implications, mechanisms and solutions. *Arch. Tierz., Dummerstorf*, **51**, Special Issue, 4-10
- Li, P., Kim, S.W., Li, X., Datta, S., Pond, W.G. & Wu, G. (2009). Dietary supplementation with cholesterol and docosahexaenoic acid affects concentrations of amino acids in tissues of young pigs. (Accepted in *Amino Acids* as of January 2009)
- Wu, G., Bazer, F.W., Datta, S., Johnson, G.A., Li, P., Satterfield, M.C. & Spencer, T.E. (2008). Proline metabolism in the conceptus: Implications for fetal growth and development. *Amino Acids*, **35**, 691-702

- Dhavala, S.S., Datta, S., Mallick, B.K., Carroll, R.J., Khare, S., Lawhon, S.D. & Adams, L.G. (2009). Bayesian Modeling of MPSS Data: Gene Expression Analysis of Bovine *Salmonella* Infection. (Accepted in the *Journal of the American Statistical Association* as of November 2009)
- Lassala, A., Bazer, F.W., Cudd, T.A., Datta, S., Keisler, D.H., Satterfield, M.C., Spencer, T.E. & Wu, G. (2010). Parenteral administration of L-arginine prevents fetal growth restriction in undernourished ewes. *Journal of Nutrition*, **140**, 1242-1248
- Nagarajan, R., Datta, S., Scutari, M., Beggs, M.L., Nolen, G.T. & Peterson, C.A. (2010). Functional relationships between genes associated with differentiation potential of aged myogenic progenitors. *Frontiers in Systems Biology*, www.frontiersin.org/systems-biology/10.3389/fphys.2010.00021/abstract

Papers Revised and Re-submitted

- Chakraborty, S., Datta, S. & Polash, B.A. (2010). Statistical inference for zero-inflated and generalized Poisson distributions. (Revised for the *Journal of Statistical Planning and Inference*)

Technical Reports and Unpublished Manuscripts:

- Mukhopadhyay, N. & Datta, S. (1993). Centennial homage to P.C. Mahalanobis. (Tech. Report at the Dept. of Statistics, University of Connecticut, Storrs)
- Datta, S., Hardwick, J.P. & Stout, Q.F.(1997). Parallelizing MCMC algorithms for sampling from distributions with isolated modes. (Unpublished colloquium manuscript, the Dept. of Statistics Seminar Series, University of Michigan, Ann Arbor, research partially supported by an NSF grant)
- Zaki, M. & Datta, S. (2002). Endogeneity of the money supply in Egypt: A cointegration approach. (unpublished manuscript, available upon request)
- Datta, S. (2004). A brief overview of hypergraphs—theory and potential applications (unpublished manuscript, available upon request, research conducted during a sabbatical visit to the Fred Hutchinson Cancer Research Center, Seattle)
- Datta, S. & Chiang, T. (2005). Distance measures for protein complex hypergraphs

Selected Ongoing Research Projects:

- Datta, S. & Biswas, A.(2009). To invite or not to invite: The session organizers dilemma. (to be submitted to *Statistics and Decisions*)

- Datta, S., Qin, L., Zhang, H. & Self, S. (2010). Tests of association for longitudinal data: Applications to HIV/AIDS
- Datta, S., Nagarajan, R., Scutari, M. & Lee, K. (2009). Large-sample and small-sample confidence estimation of graphs and networks

Books and Edited Volumes:

- Mukhopadhyay, N., Datta, S. & Chattopadhyay, S. (2003). *Applied Sequential Methodologies* (edited volume of contributed papers), Marcel Dekker, Inc., N.Y.
- Biswas, A., Datta, S., Fine, J. & Segal, M. (2007). *Statistical Advances in the Biomedical Sciences: Clinical Trials, Epidemiology, Survival Analysis and Bioinformatics* (edited volume of contributed papers), John Wiley & Sons.
- Mitra, S., Datta, S., Perkins, T. & Michailidis, G. (2008). *An Introduction to Bioinformatics and Machine Learning*, Chapman & Hall (Taylor & Francis).

Invited Presentations:

- Department of Statistics, University of Connecticut (Storrs), USA, March 1995, *On fine-tuning a purely sequential procedure and the associated second-order properties*
- Department of Statistics, University of Michigan (Ann Arbor), USA, March 1997, *Parallelizing MCMC algorithms for sampling from distributions with isolated modes*
- Department of Mathematical Sciences, Michigan Technological University, Houghton, Michigan, USA, November 1998, *Sequential and multistage inference procedures*
- Department of Statistics, National University of Singapore, Republic of Singapore, December 1998, *A new geometric method of data analysis*
- Department of Statistics, University of Nebraska (Lincoln), USA, February 2001, *An introduction to fuzzy statistics and possibility theory*
- Department of Statistics, University of Georgia (Athens), USA, August 2001, *An introduction to fuzzy statistics and possibility theory*
- Department of Statistics, University of Connecticut (Storrs), USA, March 2002, *Fuzzy statistics: what is it all about?*
- Department of Mathematical Sciences, Indiana University Purdue University (Indianapolis), USA, September 2004, *The omics revolution: Whats going on and why is statistics relevant?*

- Department of Statistics, George Washington University (Washington D.C.), USA, September 2004, *Statistical analysis of spatial patterns and abundance estimation in ecological studies*
- Department of Statistics, North Carolina State University (Raleigh), USA, November 2004, *Applications of Bayesian methodology in Bio-medical sciences: Modeling of HIV/AIDS infection*
- Department of Statistics, University of Connecticut (Storrs), USA, June 2006, *Distance measures for graphs and hypergraphs with applications in bioinformatics* (International Chinese Statistical Association conference)
- Department of Mathematics, Cleveland State University (Cleveland), USA, January 2008
- Department of Biostatistics, East Carolina University (Greenville), USA, February 2008
- Department of Statistics, University of Missouri (Rolla), USA, February 2008
- Department of Mathematics and Statistics, Indiana University Purdue University (Indianapolis), USA, March 2008
- Department of Statistics, University of Washington (Seattle), USA, March 2010, *Measures of association for longitudinal data*
- Department of Biostatistics, University of Nebraska Medical Center (Omaha), USA, 2011, *Statistical genomics of infectious diseases: A tale of two pathogens*
- Department of Mathematics, Embry-Riddle Aeronautical University (Daytona Beach), USA, 2011, *All about the hypergeometric distribution: Didn't mean getting hyper about geometry!*
- Department of Mathematics, Utah Valley University (Orem), USA, 2011, *Gene expression analysis of bovine Salmonella infection via MPSS*

Contributed Presentations in Conferences:

- Joint Statistical Meetings of IMS (Institute of Mathematical Statistics), ASA (American Statistical Association), Biometric Society & SSC (Statistical Society of Canada), San Francisco, California, USA, August 1993, *On fine-tuning a purely sequential procedure and the associated second-order properties*
- 57th Annual Meeting of IMS and 3rd World Congress of the Bernoulli Society, University of North Carolina (Chapel Hill), USA, July 1994, *On fine-tuned bounded-risk sequential point estimation for the mean of an exponential distribution*

- Joint Statistical Meetings of IMS, ASA, Biometric Society & SSC, Toronto, Ontario, Canada, August 1994, *Replicated piecewise multistage sampling and its applications*
- Joint Statistical Meetings of IMS, ASA, Biometric Society & SSC, Orlando, Florida, USA, *On sequential fixed-width confidence intervals for the mean and second order expansions of the associated coverage probabilities*
- Sydney International Statistical Congress, Sydney, New South Wales, Australia, June 1996, *Parallelizing MCMC algorithms for sampling from distributions with isolated modes*
- Joint Statistical Meetings of IMS, ASA, Biometric Society & SSC, Chicago, Illinois, USA, August 1996, *Sequential fixed-precision estimation in stochastic linear regression and errors-in-variables models*
- New Researchers Conference (sponsored by ASA), Laramie, Wyoming, USA, July 1997, *On fine-tuning a purely sequential procedure and the associated second-order properties*
- 60th Annual Meeting of the IMS, Park City, Utah, USA, July 1997, *Nonparametric sequential procedures for selecting the largest center of symmetry and some associated second-order properties*
- Joint Statistical Meetings of IMS, ASA, Biometric Society & SSC, Dallas, Texas, USA, August 1998, *Sequential fixed-precision estimation of reliability in a stress-strength model*
- Biennial conference of the International Indian Statistical Association, Hamilton, Ontario, Canada, October 1998, *Sequential and multistage methodologies in regression models: An overview*
- Michigan upper peninsula zonal conference of the Mathematical Association of America (MAA), Michigan Technological University, Houghton, Michigan, USA, October 1998, *A new geometric method of data analysis*
- Michigan upper peninsula zonal conference of the MAA, Northern Michigan University, Marquette, Michigan, USA, October 1999, *Statistical Analysis of shapes*
- Joint Statistical Meetings of IMS, ASA, Biometric Society and SSC, Atlanta, Georgia, USA, August 2001, *Improved sequential inference on the slope parameter in a linear regression model under LINEX loss*
- Conference honoring Wayne Fullers 70th birthday, Iowa State University, Ames, Iowa, USA, June 2001, *Sequential estimation of the slope in a measurement-error model* (contributed poster).

- Michigan upper peninsula zonal conference of the MAA, Northern Michigan University, Marquette, Michigan, USA, November 2001, *Can you believe it—a confidence interval from a sample of size one?*
- Annual meeting of the Statistical Society of Canada, McMaster University, Hamilton, Ontario, Canada, May 2002, *Improved sequential estimation using Zellner-type estimators under LINEX loss for some exponential family distributions* (contributed poster)
- Biennial meeting of the International Indian Statistical Association, DeKalb, Illinois, USA, June 2002, *Improved sequential inference under the LINEX loss*
- Joint Statistical Meetings of IMS, ASA, Biometric Society and SSC, New York City, New York, USA, August 2002, *A comparison of various approaches to sequential fixed-precision estimation in a measurement error model*
- International conference on Statistics, Combinatorics and Related Areas (SCRA-2003), Portland, Maine, USA, October 2003, *Grobner bases and their applications in statistics and related fields*
- International conference on the analysis of genomic data, Harvard University Medical School, Cambridge, Massachusetts, USA, May 2004, *Hidden Markov models and their applications in statistical genomics* (poster presentation)
- IUFRO 4.11 Conference on the Applications of Statistics, Information Systems and Computers in Natural Resources Monitoring and Management, National University of Taiwan, Taipei, Taiwan, June 2004, *Analysis of spatial patterns in plant and animal populations in ecological studies*
- Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Toronto, Ontario, Canada, August 2004, *Hidden Markov models and their applications in statistical genomics* (poster presentation)
- International Biometric Society ENAR Spring Meeting, Austin, Texas, USA, March 2005, *Statistical Modeling of HIV/AIDS: An Overview*
- IMS Annual Meeting and Meeting of the Brazilian School of Probability, Rio de Janeiro, Brazil, July 2006, *To Invite or Not to Invite: The Session Organizers Dilemma*
- Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Seattle, Washington, USA, August 2006, *Predicting the 3-D Structure of a Protein: A Brief Overview*
- International Indian Statistical Association Conference, Kochi, Kerala, India, January 2007, *Predicting the 3-D Structure of a Protein: A Brief Overview*

- International Biometric Society ENAR Spring Meeting, Atlanta, Georgia, USA, March 2007, *Some statistical methods for analyzing non-microarray gene-expression data*
- International Symposium on Molecular Biology (sponsored by the International Society for Computational Biology), Vienna, Austria, July 2007, *Quantitative analysis of bovine salmonella infection via MPSS* (poster presentation)
- International Biometric Society ENAR Spring Meeting, New Orleans, Louisiana, USA, March 2010, *Testing for association in longitudinal data: Application to HIV/AIDS research*

Other Types of Participation in Conferences

- Organizer and Chair of a special-topic contributed session (on real-life applications of sequential and multistage methodologies) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Toronto, Ontario, Canada, August 2004
- Organizer of an introductory overview lecture session (on sequential analysis and its applications) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Toronto, Ontario, Canada, August 2004
- Organizer and Chair of a special-topic contributed session (on statistical genomics in the 21st century: New challenges and techniques in the post-HGP era) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Minneapolis, Minnesota, USA, August 2005
- Organizer and Chair of a special-topic contributed session (on some recent developments in biostatistics) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Seattle, Washington, USA, August 2006
- Organizer and Chair of a special-topic contributed session (on statistical and machine-learning techniques in bioinformatics) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Salt Lake City, Utah, USA, August 2007
- Organizer and Chair of a special-topic contributed session (on applications of graphical and network models in bioinformatics) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Washington DC, USA, August 2009
- Organizer and Chair of a special-topic contributed session (on proteomics and metabolomics) at the Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Vancouver, British Columbia, Canada, July-August 2010

Other Conferences and Workshops Attended

- IMS Workshop on Sequential Analysis, University of North Carolina, Chapel Hill, North Carolina, USA, July 1994
- Norbert Wiener Centennial Conference, Massachusetts Institute of Technology, Massachusetts, USA, 1994
- R.C. Bose Memorial Symposium on Combinatorics and Designs of experiments, Colorado State University, Fort Collins, Colorado, USA, June 1995
- NSF-CBMS Lecture Series on Probability, Combinatorics and Optimization, Michigan Technological University, Houghton, Michigan, USA, July 1995
- A Short Course on Categorical Data Analysis, University of Pennsylvania, Philadelphia, Pennsylvania, USA, June 1998
- Golden Jubilee Conference of the Department of Statistics, Virginia Polytechnic Institute, Blacksburg, Virginia, August 1999
- International Workshop on Stochastic Optimization, University of Florida, Gainesville, Florida, USA, February 2000
- Workshop on Bayesian Hierarchical Modeling, Ohio State University, Columbus, Ohio, USA, June 2000
- Annual Meeting of the MAA (Michigan Section), Central Michigan University, Mt. Pleasant, Michigan, USA, May 2000
- NSF-CBMS Lecture Series on Multiple Comparisons, Temple University Philadelphia, Pennsylvania, USA, August 2001
- Annual Meeting of the MAA (Michigan Section), Lawrence Technological University, Southfield, Michigan, USA, May 2002
- A Seminar on Data Mining (organized by the Chicago Chapter of the ASA), Loyola University, Chicago, Illinois, USA, May 2002
- Workshop on Data Mining (organized by the International Indian Statistical Association), DeKalb, Illinois, USA, June 2002
- Workshop on Active Learning in the Classroom (by Prof. Chuck Bonwell of Southeast Missouri State University), Northern Michigan University, Marquette, Michigan, USA, April 2002
- International Biometric Society ENAR Spring Meeting, Pittsburgh, Pennsylvania, USA, March 2004

- Statistical Modeling in Finance: Modeling Uncertain Behavior of Returns from Investments (one-day mini-conference organized by the Dept. of Statistics and the Fox School of Business, Temple University), Philadelphia, Pennsylvania, USA, March 2006
- International Biometric Society ENAR Spring Meeting, Tampa, Florida, USA, March 2006
- The Bioconductor Conference, Fred Hutchinson Cancer Research Center, Seattle, Washington, August 2006
- The Human Nutrition Conference, Texas A & M University, College Station, Texas, February 2007
- The 39th Symposium on the Interface: Computing Science and Statistics, Philadelphia, Pennsylvania, USA, May 2007
- Experimental Biology Conference, Washington DC, May 2007
- Joint Statistical Meetings of IMS, ASA, International Biometric Society and SSC, Salt Lake City, Utah, USA, August 2007
- International Biometric Society ENAR Spring Meeting, Arlington, Virginia, USA, March 2008
- Experimental Biology Conference, San Diego, California, USA, April 2008
- Annual retreat of the Consortium for HIV/AIDS Vaccine and Immunology, Durham, North Carolina, USA, September 2008
- AIDS Vaccine 2008 Conference, Cape Town, South Africa, October 2008
- International Biometric Society ENAR Spring Meeting, San Antonio, Texas, USA, March 2009
- One-day workshop on the Ingenuity Pathway Analysis software, Boston, Massachusetts, USA, May 2009
- The Bioconductor Conference, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA, August 2009
- AIDS Vaccine 2009 Conference, Paris, France, October 2009
- International Biometric Society ENAR Spring Meeting, Miami, Florida, USA, March 2011
- Symposium on statistical and computational techniques for analyzing very large datasets, Baltimore, Maryland, USA, June 2011

Popular Colloquia and Presentations for a Wider Audience:

- *Statistical Genetics*, Northern Michigan University, November 1997
- *Statistics—Taming the Uncertain and Claiming the Truth*, Northern Michigan University, March 1998
- *The Geometry of Statistical Data Analysis*, Northern Michigan University, January 1999
- *Statistics You Cant Count On—An Overview of Misleading Statistics*, Northern Michigan University, December 1999
- *An Introduction to Bayesian Inference*, Northern Michigan University, November 2000
- *Fuzzy Statistics*, Northern Michigan University, April 2001
- *To switch or not to switch—that is the question (the “three doors” problem or the “prisoners dilemma”)*, Northern Michigan University, November 2002
- *Abstract algebraic techniques in statistics and probability*, MAA Michigan Upper Peninsula Zonal Conference, October 2003
- *Statistics in clinical and biological sciences—an overview*, Northern Michigan University, March 2004
- *From microbes to microarrays—the doctors new assistant*, Northern Michigan University, April 2005

Articles Refereed for Professional Journals:

- “Improving the post-experimental properties of Steins two-stage procedure” for *Sequential Analysis*, 1997
- “A sequential procedure with elimination for partitioning a set of normal populations having a common unknown variance” for *Sequential Analysis*, 2000
- “Covariance Formulas for Quadratic Forms in Variates with Subscript-Invariant Moments” for *American Statistician*, 2002
- “Multi-Step Sequential and Accelerated Sequential Methodologies for a Replicable Linear Model” for *Sequential Analysis*, 2002
- “A Two-Stage Selection and Testing Design for Comparing Several Normal Means with a Standard” for *Sequential Analysis* (Wald Centennial Issue), 2003

- “An Asymptotic Second-Order Lower Bound for the Bayes Risk of a Sequential Procedure” for *Sequential Analysis* (Wald Centennial Issue), 2003
- “Optimal Sequential Estimation with Fixed Relative Precision” for *The Annals of Statistics*, 2004
- “Milton Sobel and Selection of the Best Treatment: Past, Present and Future” for *Sequential Analysis*, 2004
- “Shrinkage Testimators for the Shape Parameter of Pareto Distribution Using LINEX Loss Function” for *Communications in Statistics*, 2005
- “Exploring Gene Causal Interactions Using an Enhanced Constraint-Based Method” for *Pattern Recognition*, 2005
- “Sequential Determination of Sample Size for Microarray Studies: Application to a Dose-Response Experiment” for the *Journal of the American Statistical Association*, 2007
- For *Statistics and Probability Letters*, 2008
- “Conditional Density Estimation via Least-Squares Density Ratio Estimation” for the proceedings of the Artificial Intelligence and Statistics (AISTAT) conference in Sardinia, Italy, 2010
- “Nonlinear Functional Regression: A Functional RKHS Approach” for the proceedings of the Artificial Intelligence and Statistics (AISTAT) conference in Sardinia, Italy, 2010
- “Variance Function Estimation in Quantitative Mass Spectrometry” for *Biometrics*, 2011
- “Sequential Stopping for High-Throughput Experiments” for *Biostatistics*, 2011

Books Reviewed:

- Calculus by Smith & Minton, McGraw-Hill Publishing Company, Fall 1999
- Quantitative Methods for Business—A Conceptual EXCEL-Based Approach by M. Lehmann and P. Zeitz, McGraw-Hill Publishing Company, Winter 2001
- Finite Mathematics: An Applied Approach by Long, P., Graening, J., Young, P.G. & Lee, J.T., Addison Wesley, Summer 2002.
- Mathematica Laboratories for Mathematical Statistics, with an Emphasis on Simulations and Computer-Intensive Methods by Baglivo, J., SIAM, Fall 2003
- Finite Mathematics by undisclosed authors, McGraw-Hill, Summer 2005

Grants and Awards:

- Doctoral Dissertation Fellowship from the University of Connecticut Graduate School, July-August 1995
- National Science Foundation (NSF) travel mini-grant for attending the NSF-CBMS Lecture Series on Probability, Combinatorics and Optimization, July 1995
- National Science Foundation Grants NSF-G-ASC-9504041 and NSF-DMS-9157715 to support postdoctoral fellowship at the Department of Statistics, University of Michigan (Ann Arbor), jointly with Janis Hardwick and Quentin Stout
- An NMU faculty mini-grant to support the book-editing project (i.e., editing a volume of contributed papers on applications of sequential methodology for Marcel Dekker, Inc.), Winter 2002.
- An NMU faculty mini-grant to support the book-editing project (i.e., editing a volume of contributed papers on the state-of-the-art applications of statistics in the biomedical sciences for John Wiley & Sons), Summer 2006.
- A National Cancer Institute grant (CA90301, principal investigator Prof. Raymond J. Carroll) at the Department of Statistics, Texas A& M University, July 2006 – June 2008
- A National Institute of Drug Abuse/ Life Sciences Discovery Fund (NIDSA/LSDF) grant (principal investigator Dr. Michael Katze, a sub-award through the University of Washington) at the Fred Hutchinson Cancer Research Center, September 2009 – June 2011

Membership of Professional Organizations:

Institute of Mathematical Statistics