MARIO PERUGGIA

Department of Statistics
The Ohio State University
1958 Neil Avenue
Columbus, Ohio 43210-1247

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

Ph.D. in Statistics, 1990
M.S. in Statistics, 1986

Università degli Studi di Milano, Italy

B.S. in Mathematics, 1983 (cum laude)

PROFESSIONAL POSITIONS

The Ohio State University, Columbus, OH

Department of Statistics
Professor, Oct. 2005 to present
Associate Professor, Oct. 1997 – Sep. 2005
Assistant Professor, Sep. 1990 – Sep. 1997
Department of Psychology
Professor, Aug. 2020 to present (courtesy appointment)
Visiting Associate Professor, (on faculty professional leave from Dept. of Stat.) Jan. – Mar. 2004
Translational Data Analytics Institute
Affiliated Faculty, Aug. 2015 to present
Faculty in Residence, Nov. 2017 – May 2018 and Aug. 2018 – May 2019
General Clinical Research Center
Biostatistician, (25% FTE) Sep. 2004 – Sep. 2008

University of Virginia, Charlottesville, VA

Department of Health Evaluation Sciences, Division of Biostatistics and Epidemiology
Associate Professor, Sep. 1997 – Sep. 1998 (on leave from The Ohio State University)

Carnegie-Mellon University, Pittsburgh, PA

Department of Statistics
Teaching Assistant, Fall 1988, Spring 1989, Fall 1989, and Spring 1990
Statistical Consultant, Summer 1989
Assistant System Manager, Fall 1986 – Fall 1987
Course Assistant, Fall 1985, Spring 1986, and Spring 1988

Istituto per le Applicazioni della Matematica e dell'Informatica, Milan, Italy

Research Associate, Jan. 1985 – Aug. 1985

HONORS AND MEMBERSHIPS
- 2008 Dennis V. Lindley Prize for innovative research in Bayesian Statistics: Honorable Mention for the article "Bayesian Model Diagnostics Based on Artificial Autoregressive Errors."
- Fellow of the American Statistical Association.
- Member of the Institute of Mathematical Statistics.
- Associate Member of Sigma Xi, The Scientific Research Society.
- Member of the International Society for Bayesian Analysis.

FELLOWSHIPS
- Studies at Carnegie-Mellon University were partially supported under fellowship 203.01.36 of the "Consiglio Nazionale delle Ricerche" of Italy, awarded in 1985.
- Research activities at the "Istituto per le Applicazioni della Matematica e dell'Informatica" were supported under fellowship 201.1.104 of the "Consiglio Nazionale delle Ricerche" of Italy, awarded in 1984.

TEACHING

During my academic career, I have taught courses at the undergraduate and graduate level on a wide range of topics.

- At Ohio State, I have taught introductory probability, statistics, and data analysis courses for undergraduate students majoring in statistics, for students majoring in the humanities and social sciences (non calculus-based) and for students majoring in engineering and the sciences (calculus-based). I have also taught more advanced versions of similar introductory courses for graduate students not majoring in statistics.
- At the University of Virginia, I have co-taught a course on Statistical Computing and Graphics for students in the Master program in Health Evaluation Sciences and taught short courses on Bayesian Statistics and Statistical Graphics offered through the Office of Continuing Medical Education.
- At Ohio State, I have taught several courses in the Statistics Master and Ph.D. programs, including the first-year core sequence on mathematical statistics, courses on Time Series Analysis, Stochastic Processes, Decision Theory and Bayesian Analysis, and an advanced topics course on Bayesian Modeling and Markov Chain Monte Carlo Methods.

At Ohio State, in addition to classroom instruction I have engaged in various educational activities.

- I have taught many individual studies courses.
- I have supervised or co-supervised the research activities of several graduate research assistants.

- I have organized or co-organized several offerings of a reading group on Bayesian Analysis with participants drawn from the faculty, visitors, and graduate students of the OSU Departments of Statistics and Psychology.

MENTORING

(a) Undergraduate Students

- Maria Salotti, University of Wisconsin Stevens Point (OSU Department of Statistics REU program, Summer 2003; Co-advisor: Trisha Van Zandt).
- Emily Johnson, Dartmouth College, (OSU Department of Statistics REU program, Summer 2002; Co-advisor: Trisha Van Zandt).

(b) Current and Graduated Ph.D. Students

- Eunseop Kim (Co-advisor: MacEacherns, S.N.).
- Hengrui Luo, Ph.D. 2020 (Co-advisor: MacEacherns, S.N.); Lawrence Berkeley Laboratory.
- Deborah Kunkel, Ph.D. 2018; Clemson University.
- Junyan Wang, Ph.D. 2016, (Co-advisor: Hans, C.); JPMorgan Chase.
- John C. Stettler, Ph.D. 2015; JPMorgan Chase.
- Michael Sonksen, Ph.D. 2011; Eli Lilly.
- Xiuyun Zhang, Ph.D. 2009; Intel Corporation.
- Qingzhao Yu, Ph.D. 2006, (Co-advisor: MacEacherns, S.N.); Biostatistics Program, School of Public Health, Louisiana State University.
- Subharup Guha, Ph.D. 2004, (Co-advisor: MacEacherns, S.N.); Department of Biostatistics, University of Florida.
- Yu-Yun Ho, Ph.D. 1994, (Co-advisor: Santner, T.J.); Novartis Oncology.

(c) Ph.D. Candidacy Exam and Dissertation Committees and Master Thesis Committees

- In addition to those of the student I advised, I have been a member of the Ph.D. Candidacy Exam and/or Dissertation Committees and Master Thesis Committees for 36 students in Statistics and other graduate programs at Ohio State.

(d) Visiting Scholar

- Ilenia Epifani, Assistant Professor, Politecnico di Milano, (2003 and 2005; 2003 visit partially sponsored by Progetto MURST "Metodi Bayesiani non parametrici e loro applicazioni," hosted jointly with MacEachern, S.N.).

PUBLICATIONS

(a) Research Monograph

1. Peruggia, M. (1993), *Discrete Iterated Function Systems*, Wellesley, MA: AK Peters.
   A Japanese translation of the monograph was published in 1995 by Toppan Company, Ltd.

(b) Peer Reviewed Articles

1. Thompson, R., Forbes, C.S., MacEachern, S.N., and Peruggia, M., (2022), "Familial Inference," (under submission). arxiv:2202.12540.
2. Kim, E., MacEachern, S., and Peruggia, M. (2021), "Empirical Likelihood for the Analysis of Experimental Designs," (under submission). arXiv:2112.09206.
3. Chen, Y., Peruggia, M., and Van Zandt, T., (2021), "Mutual interference in working memory updating: a hierarchical Bayesian model," (in revision).
4. Luo, H., MacEachern, S.N., and Peruggia, M., (2020), "Asymptotics of Lower Dimensional Zero-Density Regions," (in revision). arXiv:2006.02568**.**
5. Sinnott, J.A., MacEachern, S., and Peruggia, M., (2020), "Rediscovering a little known fact about the t-test and the F-test: algebraic, geometric, distributional and graphical considerations," (under submission). arXiv:1907.08703.
6. Kunkel, D. and Peruggia, M., (2019), "Statistical inference with anchored Bayesian mixture of regressions models: An illustrative study of allometric data," (under submission). arXiv:1905.04389.
7. Chen, Y., Breitborde, N.J.K., Peruggia, M., and Van Zandt, T., (2022), "Understanding motivation with the progressive ratio task: A hierarchical Bayesian model," *Computational Brain & Behavior,* 5, 81–102. https://doi.org/10.1007/s42113-021-00114-1.
8. Hans, C. M., Peruggia, M. and Wang, J. (2021, in press), "Empirical Bayes Model Averaging with Influential Observations: Tuning Zellner's g Prior for Predictive Robustness," *Econometrics and Statistics.* https://doi.org/10.1016/j.ecosta.2021.12.003.
9. Kunkel, D., Yan, Z., Craigmile, P. F., Peruggia, M., and Van Zandt, T. (2021), "Hierarchical Hidden Markov Models for response time data," *Computational Brain & Behavior,* 4, 70-86. https://doi.org/10.1007/s42113-020-00076-w. Supplemental material.
10. Kunkel, D. and Peruggia, M., (2020), "Anchored Bayesian Gaussian Mixture Models," *Electronic Journal of Statistics,* 14, 3869-3913. doi:10.1214/20-EJS1756. https://projecteuclid.org/euclid.ejs/1603353627.
11. Kunkel, D., Potter, K., Craigmile, P. F., Peruggia, M., and Van Zandt, T. (2019), "A Bayesian race model for response times under cyclic stimulus discriminability." *The Annals of Applied Statistics*, 13, 271-296. doi:10.1214/18-AOAS1192.
12. Thomas, Z.M., MacEachern, S.N., and Peruggia, M. (2018), "Reconciling Curvature and Importance Sampling Based Procedures for Summarizing Case Influence in Bayesian Modeling," *Journal of the American Statistical Association,* 113*,* 1669-1683. doi:10.1080/01621459.2017.1360777.
13. Kim, S., Potter, K., Craigmile, P.F., Peruggia, M., and Van Zandt, T. (2017), "A Bayesian Race Model for Recognition Memory," *Journal of the American Statistical Association*, 112, 77—91, doi**:**10.1080/01621459.2016.1194844. (Supplementary material posted online at https://github.com/petercraigmile/BayesianRaceModel)

14. Houpt, J.W., MacEachern, S.N., Peruggia, M., Townsend, J.T., and Van Zandt, T. (2016), "Semiparametric Bayesian Approaches to Systems Factorial Technology," *Journal of Mathematical Psychology,* 75, 68—85. doi:10.1016/j.jmp.2016.02.008.

15. Sonksen, M.D. and Peruggia, M. (2014), "Inferences on lung cancer mortality rates based on reference priors under partial ordering," *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 63 (5), 783—800. doi: 10.1111/rssc.12059.

16. Yu, Q., MacEachern, S. N., and Peruggia, M. (2013), "Clustered Bayesian model averaging," *Bayesian Analysis,* 8 (4), 741—908. doi:10.1214/13-BA859.

17. Peruggia, M., Hsu, J. C., and Huang, Y. (2013), "Cartesian Displays of Many Interval Estimates," *The Electronic Journal of Statistics*, 7, 91—104. doi: 10.1214/12-EJS761.

18. Sonksen, M. and Peruggia, M. (2012), "Reference Priors for Constrained Rate Models of Count Data," *Journal of Statistical Planning and Inference*, 142, 11, 3023—3036. doi:10.1016/j.jspi.2012.04.015.

19. Yu, Q., MacEachern, S.N., and Peruggia, M. (2011), "Bayesian Synthesis: Combining subjective analyses, with an application to ozone data," *Annals of Applied Statistics*, 5, 2B, 1678—1698. doi:10.1214/10-AOAS444.

20. Craigmile, P.F., Peruggia, M, and Van Zandt, T. (2010), "Hierarchical Bayes Models for Response Time Data," *Psychometrika*, 75, 613—632. doi:10.1007/s11336-010-9172-6.

21. Epifani, I., MacEachern, S., and Peruggia, M. (2008), "Case-Deletion Importance Sampling Estimators: Central Limit Theorems and Related Results," *The Electronic Journal of Statistics*, 2, 774—806.

22. Clark, D.L., Arnold, L.E., Crowl, L., Bozzolo, H., Peruggia, M., Ramadan, Y., Bornstein, R., Hollway, J.A., Thompson, S., Malone, K., Hall, K.L., Shelton, S.B., Bozzolo, D.R., Cook, A. (2008), "Vestibular Stimulation for Attention-De_cit/Hyperactivity Disorder (ADHD): Randomized Controlled Trial of Comprehensive Motion Apparatus," *Journal of Attention Disorders*, 11, 599—611.

23. Peruggia, M. (2007), "Bayesian Model Diagnostics Based on Artificial Autoregressive Errors," *Bayesian Analysis*, 2, 817—842.

24. Peruggia, M. (2007), "Bayesian Model Diagnostics Based on Artificial Autoregressive Errors," *Bayesian Statistics 8*, Bernardo, J.M., Bayarri, M.J., Berger, J.O., Dawid, A.P., Heckerman, D., Smith A.F.M., and West, M. (Eds.), Oxford University Press, 659—654. [This is a synopsis of 13].

25. Elsheikh, B.H., Bollman, E., Peruggia, M., King, W, Galloway, G, and Kissel, J (2007), "Pilot Trial of Diltiazem in Facioscapulohumeral Muscular Dystrophy," *Neurology*, 68, 1428—1429.

26. Suratt, P., Peruggia, M., D'Andrea, L., Diamond, R., Barth, J., Nikova-Draguleva, M., Perriello, V., and Johnson, M. (2006), "Cognitive Function and Behavior in Children with Adenotonsillar Hypertrophy Suspected of Having Obstructed Sleep Disordered Breathing," *Pediatrics*, 118, e771—e781.

27. Huang, Y., Hsu, J.C., Peruggia, M. and Scott, A.A. (2006), "Statistical Selection of Maintenance Genes for Normalization of Gene Expressions," *Statistical Applications in Genetics and Molecular Biology*, Vol. 5: No. 1, Article 4.

28. Guha, S., MacEachern, S.N., and Peruggia, M. (2004), "Benchmark Estimation for Markov Chain Monte Carlo Samples," *Journal of Computational and Graphical Statistics*, 13, 683—701.

29. Peruggia, M., Santner, T.J., and Ho, Y.-Y. (2004), "Detecting Stage-Wise Outliers in Hierarchical Bayesian Linear Models of Repeated Measures Data," *Annals of the Institute of Statistical Mathematics*, 56, 415—433.

30. Peruggia, M., Van Zandt, T., and Chen, M. (2002), "Was it a car or a cat I saw? An Analysis of Response Times for Word Recognition," *Case Studies in Bayesian Statistics, Vol. 6*, New York: Springer-Verlag, 319—334.

31. MacEachern, S.N., and Peruggia, M. (2002), "Bayesian Tools for EDA and Model Building: A Brainy Study," *Case Studies in Bayesian Statistics, Vol. 5*, 345—362, New York: Springer-Verlag.

32. Gray, M., McClain, R., Peruggia, M., Patrie, J., and Steers, W.D. (2001), "A Model for Predicting Motor Urge Urinary Incontinence," *Nursing Research*, 50, 116—122.

33. MacEachern, S.N., and Peruggia, M. (2000), "Importance Link Function Estimation for Markov Chain Monte Carlo Methods," *Journal of Computational and Graphical Statistics*, 9, 99—121.

34. MacEachern, S.N., and Peruggia, M. (2000), "Subsampling the Random Scan Gibbs Sampler: Variance Reduction," *Statistics and Probability Letters*, 47, 91—98.

35. Nass, R., Gilrain, J., Anderson, S., Gaylinn, B., Dalkin, A., Day, R., Peruggia, M., and Thorner, M.O. (2000), "High Plasma Growth Hormone (GH) Levels Inhibit Expression of GH Secretagogue Receptor Messenger Ribonucleic Acid Levels in the Rat Pituitary," *Endocrinology*, 141, 2084—2089.

36. Goel, P., Peruggia, M., and An, B. (1997), "Computer Aided Teaching of Probabilistic Modeling for Biological Phenomena," *The American Statistician*, 51, 164—169.

37. Peruggia M. (1997), "On the Variability of Case-Deletion Importance Sampling Weights in the Bayesian Linear Model," *Journal of the American Statistical Association*, 92, 199—207.

38. Peruggia M., and Santner, T. (1996), "Bayesian Analysis of Time Evolution of Earthquakes," *Journal of the American Statistical Association*, 91, 1209—1218.

39. Hsu, J., and Peruggia, M. (1994), "Graphical Representations of Tukey's Multiple Comparison Method," *Journal of Computational and Graphical Statistics*, 3, 143—161.

40. Peruggia, M., Santner, T., Ho, Y.Y., and McMillan, N. (1994), "A Hierarchical Bayesian Analysis of Circular Data with Autoregressive Errors: Modeling the Mechanical Properties of Cortical Bone," *Statistical Decision Theory and Related Topics V*, 201—220, New York: Springer-Verlag.

41. Peruggia, M., Schoen, F., and Speranza, M.G. (1986), "Queue Predictors for Stochastic Traffic Flows Control," *Lecture Notes in Control and Information Sciences—Stochastic Programming*, 76, 88—94, Berlin: Springer-Verlag.

(c) Invited Book Chapters (Editor reviewed)

1. Craigmile, P.F., Peruggia, M. and Van Zandt, T. (2013), "A Bayesian Hierarchical Model for Response Time Data Providing Evidence for Criteria Changes Over Time," in M.C. Edwards and R.C. MacCallum (Eds.) *Current topics in the theory and application of latent variable models,* 42—61, New York: Taylor and Francis.

2. Craigmile, P.F., Peruggia, M., and Van Zandt, T. (2010), "Detrending Response Time Series," in S.M. Chow, E. Ferrer, and F. Hsieh (Eds.), *Statistical methods for modeling human dynamics: An interdisciplinary dialogue*, Notre Dame Series on Quantitative Methodology (Vol. 4), 213—240, New York, NY: Taylor and Francis.

3. Peruggia, M., Sun, J., Mullins, M., and Suratt, P. (2004), "Wavelet Modeling and Processing of Nasal Airflow Traces," *Methods in Enzymology: Numerical Computer Methods, Part E*, 384, 106—130.

(d) Invited Discussions

1. Hans, C.M. and Peruggia, M. (2015). "Comment on Article by Dawid and Musio." Invited discussion of "Bayesian Model Selection Based on Proper Scoring Rules" by A. Philip Dawid and M. Musio. *Bayesian Analysis*, 10, (2), 505{509. doi: 10.1214/15-BA942B.
2. MacEachern, S.N., Peruggia, M., and Guha, S. (2003). Discussion of "A Theory of Statistical Models for Monte Carlo Integration," by Kong, A., McCullagh, P., Nicolae, D., Tan, Z., and Meng, X.-L., *Journal of the Royal Statistical Society, Series B*, 65, 612.

(e) Book Reviews

(Note: I wrote these book reviews when I served as an Associate Editor for Reviews for the *Journal of the American Statistical Association* and *The American Statistician.*)

Full Length

1. Peruggia, M., (2006), Review of *Sensitivity Analysis in Practice: A Guide to Assessing Scientific Models,* by A. Saltelli, S. Tarantola, F. Campolongo, and M. Ratto, *Journal of the American Statistical Association,* 101, 398–399.

Telegraphic

2. Peruggia, M., (2009), Review of *Contemporary Psychometrics,* by A. Maydeu-Olivares and J. J. McArdle (eds.), *Journal of the American Statistical Association,* 104, 869-870.
3. Peruggia, M., (2009), Review of *Functional Data Analysis (2nd ed.),* by J. O. Ramsay and B. W. Silverman, *Journal of the American Statistical Association*, 104, 870.
4. Peruggia, M., (2008), Review of *Talking with Computers: Explorations in the Science and Technology of Computing*, by T. Dean, *Journal of the American Statistical Association* 103, 1330.
5. Peruggia, M., (2006), Review of *Monitoring the Health of Populations: Statistical Principles & Methods for Public Health Surveillance*, by R. Brookmeyer and D. F. Stroup (Eds.), *Journal of the American Statistical Association*, 101, 859.
6. Peruggia, M., (2006), Review of *Statistical Analysis of Epidemiologic Data (3rd ed.),* by S. Selvin, *Journal of the American Statistical Association*, 101, 859.
7. Peruggia, M., (2005), Review of *Tools for Constructing Chronologies: Crossing Disciplinary Boundaries,* by C. E. Buck and A. R. Millard (eds.), *Journal of the American Statistical Association,* 100, 1466.
8. Peruggia, M., (2004), Review of *The Analysis of Time Series: An Introduction (6th ed.),* by C. Chatfield, *Journal of the American Statistical Association*, 99, 906{907.
9. Peruggia, M., (2004), Review of *Fractals in Graz 2002: Analysis-Dynamics-Geometry-Stochastics*, P. Grabner and W. Woess (Eds.), *Journal of the American Statistical Association*, 99, 905.

10. Peruggia, M., (2004), Review of *Spatial Statistics and Computational Methods*, by J. Møller, *Journal of the American Statistical Association*, 99, 905.
11. Peruggia, M., (2004), Review of *Numerical Computing with IEEE Floating Point Arithmetic: Including One Theorem, One Rule of Thumb, and One Hundred and One Exercises*, by M. L. Overton, *Journal of the American Statistical Association*, 99, 571.
12. Peruggia, M., (2004), Review of *Performance Optimization of Numerically Intensive Codes*, by S. Goedeker and A. Hoisie, *Journal of the American Statistical Association*, 99, 571.
13. Peruggia, M., (2004), Review of *The Analysis of Gene Expression Data: Methods and Software*, G. Parmigiani, E. S. Garrett, R. A. Irizarry, S. L. Zeger (Eds.), *Journal of the American Statistical Association*, 99, 300.
14. Peruggia, M., (2003), Review of *Model Selection and Multimodel Inference: A Practical Information-Theoretic Approach (2nd ed.)*, by K. P. Burnham and D. R. Anderson, *Journal of the American Statistical Association*, 98, 778.
15. Peruggia, M., (2003), Review of *The Basics of S-PLUS (3rd ed.),* by A. Krause and M. Olson, *Journal of the American Statistical Association*, 98, 499.
16. Peruggia, M., (2003), Review of *Simplicity, Inference and Modelling: Keeping it Sophisticatedly Simple* , A. Zellner, H. A. Keuzenkamp, and M. McAleer Eds., *Journal of the American Statistical Association*, 98, 499.
17. Peruggia, M., (2003), Review of *Total Least Squares and Errors-in-Variables Modeling: Analysis, Algorithms and Applications,* S. Van Huffel and P. Lemmerling Eds., *Journal of the American Statistical Association*, 98, 260.
18. Peruggia, M., (2003), Review of *Experiments with Mixtures: Designs, Models, and the Analysis of Mixture Data (3rd Ed.),* by J. Cornell, *Journal of the American Statistical Association*, 98, 259.
19. Peruggia, M., (2002), *Review of Health & Numbers: A Problems-Based Introduction to Biostatistics (2nd Ed.),* by C. T. Le, *Journal of the American Statistical Association*, 97, 1217.
20. Peruggia, M., (2002), Review of *Biometrika: One Hundred Years,* D. M. Titterington and D. R. Cox Eds., *Journal of the American Statistical Association*, 97, 1215.

GRANT FUNDING

Funded

- "Bayesian Empirical Likelihood: Data Analysis Tools with Applications in Econometrics," NSF SES-1921523, ($540,000, 09/01/2019 - 08/31/2022, Mario Peruggia, PI, Catherine Forbes CO-PI, Steven MacEachern, CO-PI, Submitted 1/31/2019).
- "New Methods for the Analysis of Human Performance Data," NSF SES-1424481, ($349,981, 09/01/2014 - 08/31/2017 plus 24 months no-cost extension, Trisha Van Zandt, PI, Peter Craigmile CO-PI, Mario Peruggia, CO-PI).
- "Modeling Trends, Dependence and Tail Structure in Sequential Response Time Data," NSF SES-1024709, ($379,998, 10/01/2010 - 09/30/2013 plus 24 months no-cost extension, Mario Peruggia, PI, Peter Craigmile, CO-PI, Trisha Van Zandt, CO-PI).
- "Computational Issues in Model Elaboration, Diagnostics and Estimation," NSF DMS-0605052 ($150,000, 9/1/06 - 8/31/09 plus 12 months no-cost extension, Mario Peruggia, PI).

- "Hierarchical Bayesian Methods in Psychology of Consumer Behavior," NSF SES-0437251, ($609,100, 10/1/04 - 9/30/08 plus 12 months no-cost extension, Angela Dean, PI, Greg Allenby, Mario Peruggia, Steven MacEachern, and Trisha Van Zandt CO-PIs).
- "Bayesian Analysis of Chronometric Data," NSF Division of Social and Economic Sciences, NSF SES-0214574, ($210,000, 8/1/02 - 7/31/05 plus 15 months no-cost extension, Trisha Van Zandt PI, Mario Peruggia CO-PI).
- NSF-SCREMS: Enhancing Statistical Analyses Using Dynamic Graphics ($65,356 for computing equipment, with L. Mark Berliner, Jason Hsu, John Klein, and Thomas Santner) — Awarded May, 1993.
- OSU Seed Grant ($16,000), awarded March, 1991, for research on "Iterated Function Systems, Image Encoding, and Fractal Sets."

NOTABLE LOCAL SERVICE ACTIVITIES

Departmental Level

- I contributed to the management of our graduate programs and to course and program curricular development. Significant contributions include:
  - Served as a member of the Graduate Admissions Committee (twice).
  - Served as a member of the departmental Curriculum Committee (multiple times).
  - Served twice a year as a member and/or chair of one of our graduate exam committees (Qualifier I and II, and Master of Applied Statistics).
  - Developed (with Christopher Hans) the curriculum of the course Stat 6201, "Mathematical Statistics," (theory course for the Graduate Minor in Statistics).
  - Served as member of an ad hoc committee for the development of graduate courses in Bayesian statistics.
  - Chaired the Curriculum Subcommittee on graduate interdisciplinary specializations, graduate minors, and other graduate service courses.
  - Collaborated with colleagues in Statistics, Marketing and Psychology toward the establishment of a graduate interdisciplinary specialization Program in Quantitative Methods in Consumer Behavior.
  - Served as the Statistics department contact for the Graduate Interdisciplinary Specialization Program in Quantitative Methods in Consumer Behavior.
- I contributed to faculty mentoring, evaluation, and governance and to departmental growth in several roles. Significant contributions include:
  - Served a two-year term as an elected member of the Executive Committee.
  - After receiving tenure, I served regularly as a research and teaching mentor of junior faculty members.
  - Chaired the departmental Promotion and Tenure Committee and served as the Procedures Oversight Designee for the departmental Promotion and Tenure Committee (multiple times).
  - Served as a member of an ad hoc Joint Statistics/CEEGS Hiring Committee and of an ad hoc Hiring Committee for a joint Assistant Professor position with duties in the Program in Spatial Statistics and Environmental Sciences.

- o Served as member (twice) and chair (twice) of the departmental Faculty Search Committee.
- Additional significant activities:
  - o Chaired the External Review Committee charged with preparing the documents for an external review of the department.
  - o Served as a member and/or chair of the Computer Advisory Committee (multiple times).
  - o Served as Colloquium Series Organizer (multiple times).
  - o Served as Co-Editor of a Graduate Brochure for the Department of Statistics.

University Level

- I participated in mentoring and program development activities. Significant contributions include:
  - o Served as a member of the General Clinical Research Center Mentoring Program for the submission of training grants for clinical research by young faculty (2004-2007).
  - o Served as a member of the College of Arts and Sciences Decision Sciences Initiative implementation group
  - o Faculty in Residence of the Translational Data Analytics Institute. Worked on the development and implementation of a Professional Science Master degree in Translational Data Analytics, aimed at a student population of working professionals.
- I performed the following faculty evaluation activities.
  - o Served as a member of the College of Mathematical and Physical Sciences Promotion, Tenure and 4th Year Review Committee (Multiple times).
  - o Served as a member of the College of Natural and Mathematical Sciences Promotion, Tenure and 4th Year Review Advisory Committee (multiple times).
  - o Served as a member of the University Promotion and Tenure Advisory Committee (Non-consecutive, three-year term).

EDITORIAL AND PROFESSIONAL ACTIVITIES

- President of the Columbus Chapter of the American Statistical Association, Spring 1994 – Spring 1996.
- Co-Editor (Graphics Section) of the "Statistical Computing & Statistical Graphics Newsletter" of the American Statistical Association, Jan. 1996 – Dec. 1997.
- Section on Statistical Graphics (SSG) of the American Statistical Association:
  - o Program Chair Elect, Sep. 2000 – Aug. 2001.
  - o Program Chair, Sep. 2001 – Aug. 2002 (Organized the SSG program for the 2002 Joint Statistical Meetings, New York, NY).
  - o Section Chair-Elect, Jan. 2004 – Dec. 2004, Section Chair, Jan. 2005 – Dec. 2005, Section Past-Chair, Jan. 2006 – Dec. 2006.
- Elected member of the International Society for Bayesian Analysis Board of Directors (three-year term beginning on 1/1/2021).
- Representative of the International Society for Bayesian Analysis on the Program Committee of 2018 Joint Statistical Meetings, Vancouver, Canada.

- Member of the scientific committee for Bayes Comp 2020 (biennial conference sponsored by ISBA), January 7-10, 2020, University of Florida, Gainesville, FL.
- Organizer of several scientific sessions at major international conferences.

- Associate Editor for Reviews of the *Journal of the American Statistical Association* and *The American Statistician*; Jan. 2002 – Dec. 2007.
- Associate Editor of *Bayesian Analysis;* Jun. 2004 – Feb. 2016.
- Co-Editor of *Bayesian Analysis;* Nov. 2015 to present.

- Reviewer for: NSF (proposals to DMS Statistics and Probability Program and SES Methodology, Measurement, and Statistics Program); AMS/NSA (grant proposal); ISBA 2020 Lindley Prize; ISBA 2019 Mitchell Prize; ASA-SBSS 2015 Student Paper Competition; IEEE Transactions on Systems, Man, and Cybernetics; Journal of Statistical Planning and Inference; Journal of Computational and Graphical Statistics; Computational Statistics and Data Analysis; Journal of Statistical Computation and Simulation; The American Mathematical Monthly; Journal of the American Statistical Association; Biometrics; Technometrics; Psychometrika; Health Services and Outcomes Research Methodology; Communications in Statistics (Series A); The American Statistician; Marketing Science; Scandinavian Journal of Statistics; Bayesian Analysis; Psychonomic Bulletin & Review; Journal of Mathematical Psychology; Statistics and Probability Letters; Annals of the Institute of Statistical Mathematics; Electronic Journal of Statistics; Journal of Quantitative Analysis of Sports; Behavior Research Methods; Addison Wesley; Springer-Verlag.