

Contact Information

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Education

A.B.	(Mathematics)	Cornell University	1971
M.A.	(Mathematics)	Cornell University	1973
Ph.D.	(Mathematics)	Cornell University	1974

Positions Held

1997– Arts and Sciences Professor of Statistics, Duke University
 2011– Visiting Professor (Spring Quarter), University of Chicago
 2011– Honorary Professor, East China Normal University
 2014–2015 Distinguished Adjunct Professor, King Abdulaziz University
 2014–2015 Saw Swee Hock Professor of Statistics, National University of Singapore
 2002–2010 Director of the Statistical and Applied Mathematical Sciences Institute
 1986–1997 Richard M. Brumfield Distinguished Professor of Statistics,
 Purdue University
 1988–1989 Visiting Professor at Duke University
 1980–1986 Professor of Statistics, Purdue University
 1979–1980 Visiting Scholar at Stanford University
 1976–1980 Associate Professor of Statistics, Purdue University
 1976–1977 Assistant Professor of Statistics with tenure, Purdue University
 1974–1976 Assistant Professor of Statistics, Purdue University

Current Research Interests

Multiplicity; Hypothesis Testing and Model Selection; Decision Theory; Multivariate Statistical Analysis; Bayesian Analysis; Foundations of Statistics; Simulation and MCMC Computation; Likelihood; Spatial Statistics; Nonparametric Statistics; Interdisciplinary Research in Astronomy, Geophysics, High-Energy Physics, Medicine, Meteorology, and Validation of Complex Computer Models.

Professional Societies

American Statistical Association; Institute of Mathematical Statistics; International Society for Bayesian Analysis; Bernoulli Society; Canadian Statistical Society; International

Statistical Institute; International Chinese Statistical Association; American Association for the Advancement of Science; Sigma Xi; Society for Industrial and Applied Mathematics.

Awards, Grants, and Fellowships

Awards and Fellowships

Awarded a Guggenheim Fellowship for 1977–78.

Awarded a Sloan Fellowship for 1979–81.

Fellow (1980) of the Institute of Mathematical Statistics.

Fellow (1985) of the American Statistical Association.

Awarded an Erskine Fellowship (New Zealand) in 1985 and 1995.

Received Committee of Presidents of the Statistical Societies “Presidents” Award in 1985.

Fellow (1988) of the American Association for the Advancement of Science.

Elected member of the International Statistical Institute

Sigma Xi Research Award for contribution of the year to science at Purdue University in 1993.

Krishnaiah Visiting Scholar, Penn State University, 2002

Elected as foreign member of the Spanish Real Academia de Ciencias, 2002.

Elected to the USA National Academy of Sciences in 2003.

Honorary Doctor of Science Degree, Purdue University, May 15, 2004.

Frank Wilcoxon Award for the best applied paper in 2005 in *Technometrics*.

North Carolina chapter of the American Statistical Association Award in 2007 for outstanding contributions to statistics.

Jack Youden Prize for the best expository paper in 2007 in *Technometrics*.

Distinguished Service Award, National Institute of Statistical Sciences, 2008.

C. R. and Bhargavi Rao Prize, 2011.

Distinguished Alumni Award, Department of Statistics, Cornell University, 2012

Fellow (2012) of the International Society for Bayesian Analysis

Samuel S. Wilks Memorial Award from the American Statistical Association, 2015

Award for “Most Influential *Bayesian Analysis* paper” in the first 10 years of the journal, 2016

Grants

Awarded individual National Science Foundation Grants on Decision Theory and/or Bayesian Analysis from 1975–2007 and 2010–2018.

Awarded a National Science Foundation Grant on Simulation from 1988–1991.

Awarded Cooperative Basic Research Grant on Reference Priors for 1985–1988 by U.S.–Spain Joint Committee for Scientific Cooperation.

Awarded NSF, NSA, and Army Grants to provide for Group Travel to the Fourth, Fifth, Sixth, and Seventh Valencia Meetings on Bayesian Statistics in 1991, 1994, 1998, and 2002.

Awarded NSF and NSA Grants for the Conference on Multiple Decision Theory and Workshop on Intrinsic Bayes Factors, Purdue University, June 1995.

Awarded a National Science Foundation Grant on Evaluation of Complex Computer

Models from 2000–2003.
 Awarded a National Science Foundation Grant on Adaptive Experimental Design for Astronomical Exploration, from 2005–2010.
 Awarded a National Science Foundation Grant for the Statistical and Applied Mathematical Sciences Institute for 2002–2007.
 Awarded a National Science Foundation Grant for the Statistical and Applied Mathematical Sciences Institute for 2007–2012.
 Awarded a National Science Foundation Grant on Prediction and Risk of Extreme Events Utilizing Mathematical Computer Models of Geophysical Processes, for 2008–2011.
 Awarded (with researchers from 5 Spanish universities) a Spanish Ministry of Education and Science grant on Objective Bayesian Methods in Public Health and Environment, 2007-2010.
 Awarded a National Science Foundation Grant on Collaborative Research: Bayesian Analysis and Applications, 2010-2014.
 Awarded (with researchers from 4 Spanish universities) a Spanish Ministry of Education and Science grant on Validation and Implementation of Bayesian Models for State-of-the-art Applications, 2010-2013.
 Awarded a Lilly Research Foundation Grant on the Objective Bayesian Approach to Biomarker and Subgroup Identification to Enable Tailored Therapeutics, 2012.
 Awarded a National Science Foundation Grant on Collaborative Research: Statistical and Computational Models and Methods for Extracting Knowledge from Massive Disparate Data for Quantifying Uncertain Hazards, 2012-2014.
 Awarded a National Science Foundation Grant on Bayesian Analysis and Interfaces, 2014-2018.
 Awarded a National Science Foundation Grant on Hazards SEES: Persistent volcanic crises resilience in the face of prolonged and uncertain risk, 2015-2018.
 Awarded a National Science Foundation Grant on Collaborative Research: Advancing Statistical Surrogates for Linking Multiple Computer Models with Disparate Data for Quantifying Uncertain Hazards, 2016-2018.

Professional Activities

Editorial

Associate Editor of the *Annals of Statistics*, 1980-1997.
 Editorial Board of *Statistics and Decisions*, 1980–1988.
 Associate, Coordinating or Advisory Editor of the *Journal of Statistical Planning and Inference*, 1983–
 Editorial Board of *Springer Series in Statistics*, 1987–1992.
 Associate Editor of the *International Statistical Review*, 1987–1992.
 Associate Editor of *Test*, 1992–1998.
 Co-Editor, *Annals of Statistics*, 1997–2001.
 Founding Co-Editor, *Journal on Uncertainty Quantification*, 2012 – 2015.

Professional

President of the Institute of Mathematical Statistics, 1995–1996.
Chair of the Section of Bayesian Statistical Science of the ASA, 1995.
President of the International Society for Bayesian Analysis, 2004.
Chair of the Advisory Committee for the NSF Directorate on Mathematical and Physical Sciences, 2010–2013.
Service on numerous societal, organizational, academic, and governmental councils, committees, panels, and boards.

Conference Organization

1. Program Chairman for the Joint Central and Eastern Regional Meeting of the Institute of Mathematical Statistics at East Lansing, Michigan, June 18–20, 1979.
2. Associate Program Chairman for the Third Purdue Symposium on Statistical Decision Theory and Related Topics, June 1–5, 1981.
3. Organizer of the First Midwest Statistics Conference, 1982.
4. Co-Chairman of the CBMS–NSF Conference on Exchangeability and Partial Exchangeability, July 23–27, 1984.
5. Co-chairman for the Fourth Purdue Symposium on Statistical Decision Theory and Related Topics, June 16–20, 1986.
6. Co-chairman of the Workshop on Bayesian Robustness at Purdue University, March 10–11, 1989.
7. Organizing Committee of the Fourth Valencia Conference on Bayesian Statistics, April 15–20, 1991.
8. Coorganizer of the Fifth Purdue Symposium on Statistical Decision Theory, June 1992.
9. Organizing Committee of the Oberwolfach Conference on Statistical Decision Theory, October 27–November 2, 1991.
10. Organizing Committee of the Milan Workshop on Bayesian Robustness, May 17–21, 1992.
11. Organizing Committee of the Fourth International Meeting on Statistics in the Basque Country, August 3–8, 1992.
12. Organizing Committee of the Fifth Valencia International Meeting on Bayesian Statistics, June 5–10, 1994.
13. Organizing Committee of the Second International Workshop on Bayesian Robustness, Rimini, Italy, May 22–25, 1995.
14. Organizer of the Conference on Multiple Decision Theory and Related Topics, and Workshop on Intrinsic Bayes Factors, Purdue University, June 8–12, 1995.
15. Organizer of the Workshop on Default Bayesian Methodology, Purdue University, November 1–3, 1996.
16. Organizing Committee of the Sixth Valencia International Meeting on Bayesian Statistics, May 30 - June 5, 1998.
17. Organizer of the Workshop on the Interface of Statistical Paradigms, Purdue University, June 17–19, 1998.
18. Organizing Committee of the International Workshop on Objective Bayesian Methodology, June 10–14, 1999.

19. Organizing Committee of the Second International Workshop on Foundational Issues and Statistical Practice, Bibbiena, Italy, October 14-16, 1999.
20. Organizing Committee of the AMS Summer Research Conference ‘Bayes, Frequentist and Likelihood Inference: a Synthesis’ at Mount Holyoke College, July 14-19, 2000.
21. Organizing Committee of the Third International Workshop on Objective Bayesian Methodology, Ixtapa, Mexico, September 20-23, 2000.
22. Scientific Committee of the Third International Symposium on Sensitivity Analysis of Model Output, Madrid, June 18-20, 2001.
23. Organizing Committee of the Seventh Valencia International Meeting on Bayesian Statistics, June 1–6, 2002.
24. Organizing Committee of the International Granada Workshop on Objective Bayesian Analysis, Granada, Spain, December 6–8, 2002.
25. Organizing Committee of the Workshop on Computational Science and Engineering, Arlington, VA, March 23–25, 2003.
26. Organizing Committee of the Fourth International Workshop on Objective Bayesian Methodology, Aussois, France, June 15–19, 2003.
27. Organizing Committee of the Seventh Purdue Symposium on Statistical Decision Theory and Related Topics, W. Lafayette, June 16–19, 2003.
28. Organizing Committee of the 1st IMS-ISBA Joint meeting, San Juan, Puerto Rico, July 24–26, 2003.
29. Organizing Committee of the Fourth Workshop on Bayesian Nonparametrics, Rome Italy, June, 13-16, 2004.
30. Organizing Committee of the Workshop on Complex Data Structures, Banff, Canada, April 9-14, 2005.
31. Organizing Committee of the Fifth International Workshop on Objective Bayesian Methodology, Branson Missouri, June 5-8, 2005.
32. Organizing Committee of the Statistische und Probabilistische Methoden der Modellwahl Workshop, Oberwolfach, Germany, October 16-22, 2005.
33. Organizing Committee of the Eighth Valencia International Meeting on Bayesian Statistics, June, 2006.
34. Organizing Committee of the Workshop on Complex Data Structures, Banff, Canada, April 8-13, 2007.
35. Organizing Committee of the Sixth International Workshop on Objective Bayesian Methodology, Rome Italy, June 8-12, 2007.
36. Organizing Committee of the 3rd Lehmann Symposium, May 17-19, 2007.
37. Organizing Committee of the NSF Workshop on Discovery in Complex or Massive Data Sets, Washington DC, October 16-17, 2007.
38. Organizing Committee of the Seventh International Workshop on Objective Bayesian Methodology, Philadelphia, June 4-8, 2009.
39. Organizer of the Workshop and Report on Data-Enabled Science in the Mathematical and Physical Sciences, Washington DC, March 29-30, 2010.
40. Organizing Committee of the Ninth Valencia International Meeting on Bayesian Statistics, June 3-8, 2010.

41. Organizing Committee of the Summer School on Computer Models and Geophysical Risk Analysis, Vancouver, August 6-10, 2010.
42. Program Committee of the Joint Bernoulli/IMS annual meeting, August 9-13, 2010.
43. Organizing Committee of the conference on Borrowing Strength: Theory Powering Applications, Philadelphia, December 15-17, 2010.
44. Organizing Committee of PHYSTAT 2011, Geneva, January 17-19, 2011.
45. Organizing Committee of the Eighth International Workshop on Objective Bayesian Methodology, Shanghai China, June 11-15, 2011.
46. Organizing Committee of the SIAM/ASA Conference on Uncertainty Quantification, Raleigh NC, April 1-5, 2012.
47. Organizing Committee of the International Workshop on Bayesian Model Selection, Shanghai China, January 14-18, 2013.
48. Organizing Committee of O-Bayes 2013: Celebrating 250 Years of Bayes, Durham NC, January 15-19, 2013.
49. Organizing Committee of the International Workshop on Multiplicity, Shanghai China, June 8-12, 2014.
50. Scientific Committee of the 2014 Annual Meeting of the Institute of Mathematical Statistics, Sydney, Australia, July 7-11, 2014
51. Organizing Committee of the International Workshop on Multiplicity, Shanghai China, June 8-12, 2014.
52. Scientific Committee of the meeting Statistics and Exoplanets, Honolulu HI, August 3-5, 2015.
53. Co-Chair of the 2016 SIAM/ASA Conference on Uncertainty Quantification, Lausanne, Switzerland, April 5-8, 2016.
54. Program Committee Chair of the 2017 Workshop on Objective Bayesian Analysis, Austin, Texas, December 10-14, 2017.

Special Invited Lectures

1. Presented a Special Invited Paper at the Institute of Mathematical Statistics Annual Meeting in 1981.
2. Was the Principal Lecturer (10 lectures) at the NSF-CBMS Mathematical Sciences Conference on Multivariate Estimation at the University of Florida, January 7-11, 1985.
3. Keynote Speaker at the Pacific Statistical Congress in Auckland, May 20-24, 1985.
4. Keynote Speaker at the Ninth Annual EPA Conference on Statistics, March 4, 1993.
5. Presented a Presidential Invited Address at the 50th Session of the International Statistical Institute, August 22, 1995.
6. Presented a Keynote Address at the Conference on Statistical and Bayesian Methods in Hydrological Science, September 11, 1995.
7. Presented the DeGroot Lecture at the Third Conference on Case Studies in Bayesian Statistics, October 6, 1995.
8. Presented the 1996 Mahalanobis Lectures (three) at the Indian Statistical Institute.
9. Presented the 1997 Taft Lecture at the University of Cincinnati.

10. Keynote Speaker at the Workshop on Empirical Bayes Analysis in Montreal, November 9–15, 1997.
11. Presented the 1999 Buehler-Martin lectures (three) at the University of Minnesota.
12. Presented the Keynote Lecture at the International Conference on Recent Advances in Statistics and Combinatorics, Mobile, Alabama, December 18-21, 1999.
13. Presented the 2000 Eugene Lukacs lectures at Bowling Green State University.
14. 2001 Fisher Lecturer at the Joint Statistical Meetings
15. Presented a Keynote Lecture at the XXXIV^{èmes} Journées de Statistique, Brussels, May 16, 2002.
16. Presented a Science Symposium Lecture at Los Alamos National Laboratory, February 28, 2002.
17. Keynote speaker at the Fourth Winemiller Symposium on Applied Statistics, University of Missouri, April 8, 2003.
18. Presented the 2003 Krishnaiah Lectures (two) at Pennsylvania State University, April 25, 2003.
19. Keynote address at the Spring Session of the Korean Statistical Society, Cheju Korea, May 23, 2003.
20. Keynote Address at J&J Biostatistics Conference, Sept. 25, 2003.
21. Presented the 2004 Craig Lectures (three), University of Iowa, April 8-9, 2004.
22. Presented the 2004 Bradley Lecture, University of Georgia, April 30, 2004.
23. Presented the 2004 Pillai Lecture, Purdue University, May 14, 2004.
24. Plenary Lecture at the Conference on The Future of Statistical Theory, Practice and Education, Hyderabad, India: December 31, 2004.
25. Keynote Lecture at the International Workshop/Conference on Bayesian Statistics and its Applications, Varanasi, India: January 7, 2005.
26. Keynote lecture at ProGic 2005, London, July 7, 2005
27. H.O. Hartley Lectures (3), Texas A&M University, August 31 – September 2, 2005.
28. First Geisser memorial lecturer, Univ. Minnesota, September 22, 2005.
29. Keynote Presentation at the Workshop on Bayesian Inference in Complex Stochastic Systems, University of Warwick, May 29, 2006.
30. Keynote Lecture at the 2006 International Chinese Statistical Association Applied Statistics Symposium, Stours, June 16, 2006
31. Pacific Institute of Mathematical Sciences (PIMS) 10th Anniversary Lecturer, Spring, 2007.
32. Chhotey Lal and Mohra Devi Rustagi Memorial Lecture, Ohio State University, May 24, 2007
33. Wald Lectures (three) of the Institute of Mathematical Statistics, Salt Lake City, July 31 – August 2, 2007.
34. Plenary Speaker, International Conference on Multiple Decision Theory, Statistical Inference and Applications, Taipei, December 28, 2007.
35. University of Maryland Statistics Consortium Distinguished Lecture, April 30, 2008.
36. Keynote speaker at the 2008 World Meeting of the International Society of Bayesian Analysis, Hamilton Island, Australia, July 21, 2008.
37. D. R. Fulkerson Lectures (3), Cornell University, April 20 – 23, 2009.

38. Keynote Lecture, New England Statistics Symposium, April 25, 2009
39. Plenary talk at the Conference in honor of John Hartigan, May 15, 2009.
40. Keynote Address at the Tenth Islamic Countries Conference on Statistical Sciences ICCS-X, Cairo Egypt, December 22, 2009.
41. Plenary talk at the German Joint Statistical Meeting, March 26, 2010.
42. Ted and Janice Smith Distinguished Lecture, Irvine CA, May 17, 2010.
43. Raj Bahadur Lectures (2), University of Chicago, April, 2011.
44. Keynote speaker at the 7th International Conference on Multiple Comparison Procedures, Washington DC, August 2011.
45. Keynote speaker at the Fifth Annual Bayesian Biostatistics Conference, January 23, 2012.
46. Presidential Invited Address, Statistical Society of Canada 2012 Annual Meeting, Guelph Canada, June 4, 2012
47. Plenary address, 8th International Purdue Symposium on Statistics, West Lafayette IN, June 21, 2012
48. Principle Lecturer (eight lectures) at the CBMS Regional Conference in the Mathematical Sciences on Model Uncertainty and Multiplicity, UC Santa Cruz, July 23-27, 2012
49. Plenary address, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro NC, October 6, 2012
50. Keynote address, International Workshop/Conference on Bayesian Theory and Applications, Varanasi India, January 6, 2013
51. Keynote address, 2013 Minghui Yu Memorial Conference, New York NY, April 13, 2013
52. Microsoft distinguished lecturer, University of Washington, April 22, 2013
53. Special Annals of Statistics Invited Session, Joint Statistical Meetings, Montreal, August 7, 2013
54. Burack Lecturer, University of Vermont, September 12-13, 2013
55. Keynote address, Frontiers in Methodological and Applied Statistics Conference, University of Missouri, September 19, 2013
56. Challis Lecturer, University of Florida, November 14-15, 2013
57. Keynote address, Fourth Singapore Conference on Statistical Science, February 7, 2014.
58. Plenary address, SIAM/ASA Conference on Uncertainty Quantification, Savannah GA, April 2, 2014.
59. Foundation Lecture, World Meeting of the International Society for Bayesian Analysis, Cancun, Mexico, July 14, 2014.
60. Barnett Lecture, University of Cincinnati, November 3, 2014.
61. Keynote address, Spanish Statistical and Operations Research Conference, Pamplona Spain, May 26, 2015.
62. Grand Rounds Presentation, Eli Lilly and Co., July 29, 2015.
63. Keynote address, Workshop on Fusion Learning, BFF inferences and Statistical Foundations, Rutgers Univ., April 11, 2016.

64. Bernard G. Greenberg Distinguished Lecture Series (3 lectures), University of North Carolina, Chapel Hill, May 12 - 13, 2016.

Doctoral Dissertations Directed

1. Robust Bayes Estimation, by James H. Albert, Purdue University, 1979.
2. Improving Upon Inadmissible Estimators in Discrete Exponential Families, by Jiunn T. Hwang, Purdue University, 1979.
3. On the Choice of Coordinates in Simultaneous Estimation of Normal Means, by Dipak Dey, Purdue University, 1980.
4. Estimation in a Statistical Control Problem, by Lloyd Mark Berliner, Purdue University, 1980.
5. Restricted Risk Bayes Estimation, by Shun Yu Chen, Purdue University, 1983.
6. Testing a Precise Hypothesis: Interpreting P-Values from a Robust Bayesian Viewpoint, by Mohan Delampady, Purdue University, 1986. (Savage Award Co-Winner)
7. Robust Bayesian Analysis with ε -Contaminated Priors, by S. Sivaganesan, Purdue University, 1986. (Savage Award Co-Winner)
8. Development of Robust Bayes Estimators for a Multivariate Normal Mean, Jean-Francois Angers, Purdue University, 1987.
9. Ranking and Estimation of Exchangeable Means in Balanced and Unbalanced Models: A Bayesian Approach, King-Hoi Fong, Purdue University, 1987.
10. The Estimated Loss Frequentist Approach, Kun-Liang Lu, Purdue University, 1987.
11. Convolution of t -Densities with Application to Bayesian Inference for a Normal Mean and Scientific Reporting, Tsai-Hung Fan, Purdue University, 1989.
12. Statistical Multiple Integration via Monte Carlo Importance Sampling, Man-Suk Oh, Purdue University, 1989.
13. Bayesian Robustness With Shape-Constrained Priors and Mixture Priors, by Sudip Bose, Purdue University, 1990.
14. Noninformative Priors in Bayesian Analysis, by Ke-Ying Ye, Purdue University, 1990.
15. Numerical Integration in Bayesian Analysis, by Peter Müller, Purdue University, 1991.
16. Bayesian Sequential Reliability for Weibull and Related Distributions, by Dongchu Sun, Purdue University, 1991.
17. Monte Carlo Markov Chain Sampling for Bayesian Computation, with Applications to Constrained Parameter Spaces, by Ming-Hui Chen, Purdue University, 1993.
18. Contributions to Maximum Penalized Likelihood Estimation, by Chunfu Qiu, Purdue University, 1993.
19. Development of Noninformative Priors for Bayesian Analysis, by Ruoyong Yang, Purdue University, 1994.
20. On the Development of Intrinsic Bayes Factors, by Julia Varshavsky, Purdue University, 1995.
21. Contributions to Bayesian Nonparametrics and Bayesian Robustness, by N. Shyamkumar, Purdue University, 1996. (Savage Award Winner)
22. Unified Frequentist and Bayesian Testing of Precise Hypotheses in Fixed Samples and Sequential Settings, by Yinping Wang, Indiana University and Purdue University at Indianapolis, 1996.

23. Default Bayesian Analysis of Mixture Models, by Chimei Shui, Purdue University, 1996.
24. Unified Bayesian and Conditional Frequentist Testing Procedures, by Sarat Dass, Purdue University, 1998.
25. Semiparametric Bayesian Analysis : Selection Models and Meteorological Applications, by Jaeyong Lee, Purdue University, 1998.
26. Development of Conventional Prior Distributions for Model Comparisons, by Jose-Miguel Perez, Purdue University, 1998.
27. Bayesian and Empirical Bayesian Model Selection, by Nitai Mukhopadhyay, Purdue University, 2000.
28. Choice of Priors for Hierarchical Models: Admissibility and Computation, by Dejun Tang, Purdue University, 2001.
29. Problems on the Bayesian/Frequentist Interface, by Rui Paulo, Duke University, 2002.
30. Bayesian Stochastic Computation, with Application to Model Selection and Inverse Problems, by German Molina, Duke University, 2003.
31. Bayesian Functional Data Analysis for Computer Model Validation, by Fei Liu, Duke University, 2007.
32. Bayesian Adjustment for Multiplicity, by James Scott, Duke University, 2009. (Savage Award Winner.)
33. Development and Implementation of Bayesian Computer Model Emulators, by Danilo Lopes, Duke University, 2011.
34. Bayesian Modeling Using Latent Structures, by Xiaojing Wang, Duke University, 2012.
35. Interfaces Between Bayesian and Frequentist Multiple Testing, by Shih-Han Chang, Duke University, 2015.
36. Robust Uncertainty Quantification and Scalable Computation for Computer Models with Massive Output, by Mengyang Gu, Duke University, 2016.

Publications – Books, Monographs, and Special Volumes

1. *Statistical Decision Theory: Foundations, Concepts, and Methods*. Springer–Verlag, New York, 1980.
2. Editor (with S.S. Gupta) of *Statistical Decision Theory and Related Topics III*, Volumes 1 and 2. Academic Press, New York, 1982.
3. *The Likelihood Principle: A Review and Generalizations* (with R. Wolpert), Institute of Mathematical Statistics Monograph Series, 1984.
4. *Statistical Decision Theory and Bayesian Analysis*, Springer–Verlag, New York, 1985.
5. Editor (with S.S. Gupta) of *Statistical Decision Theory and Related Topics IV*, Volumes 1 and 2, Springer–Verlag, New York, 1987.
6. *The Likelihood Principle: A Review and Generalizations* (2nd edition, with R. Wolpert), IMS Monograph Series, Hayward, California, 1988.
7. Editor (with J. M. Bernardo, A. P. Dawid, and A. F. M. Smith) of *Bayesian Statistics 4*, Oxford University Press, London, 1992.
8. Editor (with S.S. Gupta) of *Statistical Decision Theory and Related Topics V*, Springer–Verlag, New York, 1994.

9. Editor of the *Special Issue on Bayesian Analysis*, *J. Statist. Planning and Inference* 40, Number 2/3, pp. 161-389, 1994.
10. Editor (with J. M. Bernardo, A. P. Dawid, and A. F. M. Smith) of *Bayesian Statistics 5*, Oxford University Press, London, 1996.
11. Editor (with B. Betro, E. Moreno, L. Pericchi, F. Ruggeri, G. Salinetti, and L. Wasserman) of *Bayesian Robustness*, Lecture Notes in Statistics Volume 29, Institute of Mathematical Statistics, Hayward, 1996.
12. Editor (with J. M. Bernardo, A. P. Dawid, and A. F. M. Smith) of *Bayesian Statistics 6*, Oxford University Press, London, 1999.
13. Editor (with J.M. Bernardo, M.J. Bayarri, A.P. Dawid, D. Heckerman, A.F.M. Smith and M. West) of *Bayesian Statistics 7*, Oxford University Press, Oxford, 2003.
14. Editor (with J.M. Bernardo, M.J. Bayarri, A.P. Dawid, D. Heckerman, A.F.M. Smith and M. West) of *Bayesian Statistics 8*, Oxford University Press, Oxford, 2007.
15. Editor (with T. Tony Cai, and Iain M. Johnstone) of *Borrowing strength: theory powering applications: A Festschrift for Lawrence D. Brown*, Institute of Mathematical Statistics Collections, Volume 6, Beachwood, Ohio, 2010.
16. Editor (with J.M. Bernardo, M.J. Bayarri, A.P. Dawid, D. Heckerman, A.F.M. Smith and M. West) of *Bayesian Statistics 9*, Oxford University Press, Oxford, 2011.

Publications — Articles

1. Berger, J. (1976). Inadmissibility results for generalized Bayes estimators of coordinates of a location vector. *Ann. Statist.*, **4**, 302–333.
2. Berger, J. (1976). Admissibility results for generalized Bayes estimators of coordinates of a location vector. *Ann. Statist.*, **4**, 334–356.
3. Berger, J. (1976). Admissible minimax estimation of a multivariate normal mean with arbitrary quadratic loss. *Ann. Statist.*, **4**, 223–226.
4. Berger, J. (1975). Minimax estimation of location vectors for a wide class of densities. *Ann. Statist.*, **3**, 1318–1328.
5. Berger, J. (1976). Tail minimaxity in location vector problems and its applications. *Ann. Statist.*, **4**, 33–50.
6. Berger, J. and Bock, M. E. (1976). Combining independent normal mean estimation problems with unknown variances. *Ann. Statist.*, **4**, 642–648.
7. Berger, J. (1976). Minimax estimation of a multivariate normal mean under arbitrary quadratic loss. *J. Multivariate Anal.*, **6**, 256–264.
8. Berger, J. and Bock, M. E. (1976). Eliminating singularities of Stein-type estimators of location vectors. *J. Roy. Statist. Soc., B*, **38**, 166–170.
9. Berger, J. (1976). Inadmissibility results for the best invariant estimator of two coordinates of a location vector. *Ann. Statist.*, **4**, 1065–1076.
10. Berger, J. and Bock, M. E. (1977). Improved minimax estimators of normal mean vectors for certain types of covariance matrices. S.S. Gupta and D.S. Moore (Eds.) *Statistical Decision Theory and Related Topics II*, Academic Press.

11. Berger, J., Bock, M. E., Brown, L. D., Casella, G., and Gleser, L. (1977). Minimax estimation of a normal mean vector for arbitrary quadratic loss and unknown covariance matrix. *Ann. Statist.*, **5**, 763–771.
12. Berger, J. (1978). Minimax estimation of a multivariate normal mean under polynomial loss. *J. Multivariate Anal.*, **8**, 173–180.
13. Berger, J. (1980). A robust generalized Bayes estimator and confidence region for a multivariate normal mean. *Ann. Statist.*, **8**, 716–761.
14. Berger, J. and Srinivasan, C. (1978). Generalized Bayes estimators in multivariate problems. *Ann. Statist.*, **6**, 783–801.
15. Berger, J. (1979). Multivariate estimation with nonsymmetric loss functions. *Optimizing Methods in Statistics*. J.S. Rustagi (ed.). Academic Press, New York.
16. Berger, J. (1980). Improving on inadmissible estimators in continuous exponential families with applications to simultaneous estimation of gamma scale parameters. *Ann. Statist.*, **8**, 545–571.
17. Berger, J. (1980). A modification of Brown’s technique for proving inadmissibility. *Recent Developments in Statistical Inference and Data Analysis*. North–Holland, Amsterdam.
18. Berger, J., Berliner, L. M., and Zaman, A. (1982). General admissibility and inadmissibility results for estimation in a control problem. *Ann. Statist.* **10**, 838–856.
19. Berger, J. (1982). Selecting a minimax estimator of a multivariate normal mean. *Ann. Statist.* **10**, 81–92.
20. Berger, J. and Dey, D. (1983). Combining coordinates in simultaneous estimation of normal means. *J. Statist. Planning and Inference* **8**, 143–160.
21. Berger, J. (1982). Bayesian robustness and the Stein effect. *J. Amer. Statist. Assoc.* **77**, 358–368.
22. Berger, J. and Haff, L. (1983). A class of minimax estimators of a normal mean vector for arbitrary quadratic loss and unknown covariance matrix. *Statistics and Decisions* **1**, 105–129.
23. Berger, J. and Wolpert, R. (1983). Estimating the mean function of a Gaussian process and the Stein effect. *J. Multivariate Analysis* **13**, 401–424.
24. Berger, J. (1983). Estimation in continuous exponential families: Bayesian estimation subject to risk restrictions and inadmissibility results. *Statistical Decision Theory and Related Topics III* (S.S. Gupta and J. Berger Eds.). Academic Press, New York.
25. Wolpert, R. and Berger, J. (1983). Incorporating prior information in minimax estimation of the mean of a Gaussian process. *Statistical Decision Theory and Related Topics III* (S. S. Gupta and J. Berger Eds.). Academic Press, New York.
26. Berger, J. (1984, 1995) The Robust Bayesian Viewpoint. In *Robustness in Bayesian Statistics* (J. Kadane ed.). North–Holland, Amsterdam, 1984. Reprinted in *The International Library of Critical Writings in Econometrics and Bayesian Inference* (N. Polson and G. Tiao, Eds.). Elgar Publishing, Cheltenham (1995).

27. Dey, D. and Berger, J. (1983). On truncation of shrinkage estimators in simultaneous estimation of normal means. *J. Amer. Statist. Assoc.* **78**, 865–869.
28. Berger, J. (1985). Minimax Estimation. In the *Encyclopedia of Statistical Sciences*, S. Kotz and N. L. Johnson (Eds.). Wiley, New York.
29. Berger, J. (1988). The Stein Effect. In the *Encyclopedia of Statistical Sciences*, S. Kotz and N. L. Johnson (Eds.). Wiley, New York.
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3. Discussions of the following articles in *Bayesian Statistics II* (J.M. Bernardo, M.H. DeGroot, D.V. Lindley, and A.F.M. Smith, Eds.). North–Holland, Amsterdam, 1985.
 - (i) “Ways of specifying prior opinions” by Persi Diaconis.
 - (ii) “Subjective probability modeling with elliptic distributions” by J.M. Dickey and C. Chong–Hong.
 - (iii) “Bayesian analysis of survival curves for cancer patients following treatment” by Bruce Hill.
 - (iv) “Highly informative priors” by E. T. Jaynes.
4. Discussion of “Abraham Wald’s work on aircraft survivability” by M. Mangel and F. Samaniego. *J. Amer. Statist. Assoc.*, **79**, 267–270. (1984)
5. Book review of *Theory of Point Estimation* by E. L. Lehmann. *J. Amer. Statist. Assoc.* **79**, 941–942. (1984)
6. Book review of *Good Thinking: The Foundation of Probability and Its Applications*. by I. J. Good. *J. Amer. Statist. Assoc.* **80**, 232–233. (1985)
7. Discussion of “On the consistency of Bayes estimates” by P. Diaconis and D. Freedman. *Ann. Statist.* **13**, 30–36. (1986)
8. Discussion of “On rereading Jeffreys” by D. Lindley. In *Pacific Statistical Congress* (I. Francis et. al. Eds.). North–Holland, Amsterdam, 1986.
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18. Extended Abstract: “Bayesian testing of precise hypothesis,” in *Methods of Operations Research 62*, Proceedings of the XIV Symposium on Operations Research, pp. 499–501.
19. Introduction to *Statistical Multiple Integration*, Volume 115 of *Contemporary Mathematics* (1991).
20. Discussion of “Replication and meta–analysis in parapsychology,” by J. Utts. *Statistical Science* **6**, 379–382.
21. Discussions of the following article in *Bayesian Statistics IV* (J.M. Bernardo, et al., Eds.). Oxford University Press, Oxford (1992).
 - (i) M.J. Bayarri’s “A BAD view of weighted distributions and selection models.”
 - (ii) J.K. Ghosh’s “Noninformative Priors.”
 - (iii) J. Hodges’s “Who knows what alternative lurks in the heart of significance tests.”
 - (iv) D. Lindley’s “Is our view of Bayesian statistics too narrow?”
 - (v) R. Royall’s “The elusive concept of statistical evidence.”
 - (vi) L. Wasserman’s “Recent methodological advances in robust Bayesian inference.”
22. Extended Abstract: “Testing precise hypotheses: the conflict between classical and Bayesian approaches,” in *Séminaire de Mathématique Rouen*, Publications de L’Université de Rouen, N° 167, 1991, pp 121–125.
23. Extended Abstract: “A review of Bayesian function estimation,” in *Estimation Fonctionnelle*, Prépublications 91–55, Mathématiques, Université de Paris-Sud, Orsay, pp 71–79.
24. Discussion of “Fractional Bayes factors for model comparison,” by A. O’Hagan. *J. Roy. Statist. Soc. B.* **57**, 130–131.
25. Discussion of “Some issues in the foundations of statistics,” by David Freedman. *Foundations of Science* **1**, 41–44.

26. Discussion of “Modelling and robustness issues in Bayesian time series analysis,” by Mike West. In *Bayesian Robustness*, Berger, et.al.(Eds.), Volume 29 of the Institute of Mathematical Statistics Lecture Note Series, Hayward, California.
27. Letter: Comment on “Simple counterexamples against the conditionality principle,” by I. S. Helland, *American Statistician*, **50**, 382–383.
28. Discussion of “Statistical inference and Monte Carlo algorithms,” by George Casella. *Test*, **5**, 293–295.
29. Discussion of “Why should clinicians care about Bayesian methods,” by Robert A.J. Matthews. *J. Statist. Planning and Inference*, **94**, 65–67.
30. Discussion (with G. Molina) of “ A case study in model selection” by K. Viele, R. Kass, M. Tarr, M. Behrmann and I. Gauthier. To appear in *Case Studies in Bayesian Statistics* (A. Carriquiri, et. al., Eds.). Springer-Verlag, New York, 112–125.

Consulting Experience

1. In house consulting with colleagues from departments of Agricultural Economics, Agricultural Engineering, Education, Electrical Engineering, Industrial Engineering, Management, and Political Science.
2. Work on discriminant and pattern recognition with the Laboratory for Remote Sensing, West Lafayette.
3. Work on the analysis of longitudinal studies with the Regenstrief Health Center, Indianapolis.
4. Work with the Center for Competency Development, Miami, Florida:
 - (a) Development of Competency profiles for Florida Power and Light Company.
 - (b) Development and analysis of Training Effectiveness profiles for the U.S. Air Force.
5. Work with the Center for Health Policy, Duke University.
6. Work with Allison Transmission on Bayesian quality control.
7. Work with Ford Motor Company on the effect of technological improvements on fuel efficiency and on evaluation and diagnosis of computer simulation models.
8. Work with the National Center for Atmospheric Research on climate signal detection and modelling.
9. Work with General Motors on the validation of complex computer models.
10. Work with MetaMetrics on development of educational assessment tools.