HAL S. STERN

University Address: Department of Statistics

University of California, Irvine

2216 Bren Hall

Irvine, CA 92697-1250 Phone: 949-824-1568 email: sternh@uci.edu

http://www.ics.uci.edu/~sternh

Education:

B.S.	Mathematics	1981	Massachusetts Institute of Technology, Cambridge, MA
M.S.	Statistics	1985	Stanford University, Stanford, CA
Ph.D.	Statistics	1987	Stanford University, Stanford, CA

Professional Experience:

2020 – present	Provost & Executive Vice Chancellor, University of California, Irvine (interim 3/20-4/21)
2019 - 2020	Vice Provost for Academic Planning, University of California, Irvine
2018—present	Chancellor's Professor, Department of Statistics, University of California, Irvine, CA
2016 - 2018	Professor, Department of Statistics, University of California, Irvine, CA
2010 - 2016	Ted and Janice Smith Family Foundation Dean and Professor of Statistics,
	Donald Bren School of Information and Computer Sciences, UC Irvine
2002 - 2010	Founding Chair and Professor, Department of Statistics, University of California, Irvine, CA
	(Acting Dean, Donald Bren School of ICS – Oct-Dec 2007, Jan-Apr 2009)
2001 - 2002	Laurence H. Baker Chair in Biological Statistics, Iowa State University, Ames, IA
2000 - 2002	Interim Director, Laurence H. Baker Center for Bioinformatics and Biological Statistics,
	Iowa State University, Ames, IA
1997 - 2002	Professor of Statistics, Iowa State University, Ames, IA
1994 - 1997	Associate Professor of Statistics, Iowa State University, Ames, IA
1991 - 1994	Associate Professor of Statistics, Harvard University, Cambridge, MA
1987 - 1991	Assistant Professor of Statistics, Harvard University, Cambridge, MA
1983 - 1987	Teaching Asst. / Research Asst., Department of Statistics, Stanford University, Stanford, CA
1981 - 1983	Research Associate, Commodities Corporation, Princeton, NJ

Honors and Awards:

Founders Award, American Statistical Association, 2022

(The Founders Award recognizes members who have rendered distinguished service to the association) Fellow, International Society for Bayesian Analysis, 2020

Statistical Partnerships Among Academe, Industry and Government (SPAIG) Award (Center for Statistics and Applications in Forensic Evidence), American Statistical Association, 2018

Chancellor's Professor, UC Irvine, 2018

Interdisciplinary Team Science Award (Conte Center at UCI), ICTS, UC Irvine, 2018

Fellow, American Association for the Advancement of Science, 2016

DeGroot Prize, International Society for Bayesian Analysis – for Bayesian Data Analysis (3rd edition), 2016

Fellow, Institute of Mathematical Statistics, 2011

National Associate of the National Research Council, 2011

Commencement Speaker, Department of Statistics, University of California, Los Angeles, 2011

Teaching Excellence Award (Bren School of ICS), Teaching, Learning and Technology Center, UCI, 2007

Commencement Speaker, Department of Statistics, University of California, Berkeley, 2005

Buckingham Scholar-In-Residence, Miami University, Oxford, OH, September 2001

Laurence H. Baker Chair in Biological Statistics, Iowa State University, 2001-2002

Nominated as Outstanding Faculty of the Year, Iowa State University, 2000

Statistics in Sports Award, American Statistical Association Section on Statistics in Sport, 1999

Fellow, American Statistical Association, 1998

Letter of Instructional Commendation, Technical Education Program, GM, Fall 1996

Alan Abrams Scholarship, Stanford University, 1983

Professional Activities:

2023 – present	Member, Steering Committee, Chief Academic Officer's Group, Association of American Universities (AAU)
2023 – present	Member, Executive Committee, Council on Academic Affairs (CAA), Association of Public and Land-Grant Universities (APLU)
2023 – present 2020	Member, Committee on Law and Justice Statistics, American Statistical Association (ASA) Member, Committee on the Future of the National Institute of Statistical Science
2020	Member, External Review Committee, Department of Statistics and Applied Probability, University of California, Santa Barbara
2019 2019 – 2023	Member, American Statistical Association Task Force on the Future of Chance Magazine Scientific Committee, 11 th International Conference on Forensic Inference and Statistics (ICFIS 2021), Lund, Sweden
2019 – present	Associate Editor, Law, Probability and Risk
2019 - 2021	Associate Editor, Harvard Data Science Review
2018 - 2022	Editorial Committee, Annual Review of Statistics and Its Application
2018 - 2019	Member, Bitemark Steering Committee to Organize 2019 CSAFE Bitemark Thinkshop
2017 - 2019	Chair, Section U (Statistics) of the American Association for the Advancement of Science
	(chair-elect 2017; chair 2018; retiring chair 2019)
2017 – 2018	Member, National Academy of Sciences, Engineering and Medicine Standing Committee To Assist FMCSA in Developing New Motor Carrier Safety Measurement System
2017	Report Review Coordinator, National Research Council (Improving Motor Carrier Safety
	Measurement)
2017	External Reviewer, MS Program, Department of Mathematical Sciences, University of Texas, El-Paso, TX
2016	Member, National Academy of Sciences Committee on Strengthening the Federal Motor Carrier Safety Administration Research and Technology Program
2016	Member External Review Committee, Department of Statistics, University of Pennsylvania, Philadelphia, PA
2015 - 2020	Member, Board of Trustees (Executive Committee), National Institute of Statistical Science, Raleigh, NC
2015	Member, National Academy of Sciences Committee on Strengthening Forensic Science at the National Institute of Justice
2015 - 2017	Chair, American Statistical Association (ASA) Committee on Publications
2015	Chair, External Review Committee, Department of Statistics, University of Pittsburgh, PA
2015	Chair, Editor Search Committee, Journal of the American Statistical Association
2014 - 2020	Member, Scientific Area Committee for Physics/Pattern Forensic Evidence, Organization of Scientific Area Committees, National Institute of Standards and Technology (NIST)
2014 – 2017	Member, Advisory Committee for Arnold Foundation funded "Quality and Gap Analysis of the Forensic Science Literature"

2014	Chair, External Review Committee, College of Natural Sciences, University of Hawaii-Manoa,
	Honolulu, HI
2013 - 2016	Chair, National Academy of Sciences Panel on Research Methodologies for Understanding
	Driver Fatigue
2013 - 2015	Member, Mitchell Prize Committee, International Society for Bayesian Analysis
2013	Member, Committee of Visitors, Social and Economics Sciences Division,
	National Science Foundation
	Mentor, NISS-ASA Writing Workshop (2012, 2013, 2015, 2018, 2019)
2012 - 2022	Member (Chair 2019, 2020), Ad Hoc Advisory Committee on Forensic Statistics,
2011	American Statistical Association
2011	Chair, Charter Review Committee, Section on Bayesian Statistical Science,
2010	American Statistical Association
2010	Chair, National Academy of Sciences Committee on National Statistics Steering Committee for a
2010	Workshop on the Future of Federal Household Surveys
2010	Committee to Visit the Dept. of Applied Mathematics and Statistics,
2010 2012	University of California, Santa Cruz, CA
$2010 - 2012 \\ 2010 - 2012$	Committee on Publications, American Statistical Association Editor, Applications & Case Studies and Coordinating Editor, <i>Journal of the</i>
2010 – 2012	American Statistical Association
2009 –2010	Member, National Academy of Sciences Panel on Missing Data in Clinical Trials
2008 – 2011	Member, NIST-NIJ Expert Working Group on Human Factors in Latent Print Analysis,
2000 2011	National Institute of Standards and Technology and National Institute of Justice
2008 - 2014	Member, Committee on National Statistics (CNSTAT), National Academies of Science
2008 - 2009	Associate Editor, Annals of Applied Statistics
2008 - 2010	Member (Chair in 2010), Fisher Lecture Committee, Council of Presidents of Statistical Societies
2007 - 2008	Chair, National Academy of Sciences Panel on ACS Use for NSF Survey of College Graduates
2007	Member, National Academy of Science Panel to Review the Information Technology Laboratory
	of the National Institute of Standards and Technology (NIST)
2005	Committee to Visit the Department of Statistics, Indiana University
2005	Organizing Committee, Better Policy through Statistics: A Symposium in Honor of John Rolph,
	Costa Mesa, CA
2005	Organizing Committee, Genetics and Epidemiology Research Institute Symposium, Irvine, CA
2005 - 2009	Associate Editor, Bayesian Analysis
2004 - 2006	Member, National Academy of Sciences Panel on American Community Survey (ACS)
2004	Organizing Committee, Decision, Sports and Statistics Conference, Irvine, CA
2004 - 2006	Committee to Visit the Department of Statistics, Harvard University
2004	Chair, American Statistical Association Section on Bayesian Statistical Science
2003 - 2004	Member, Scientific Committee, ISBA 2004 Meeting in Vina del Mar, Chile
2002 - 2003	Member, Savage Thesis Award Committee (Section on Bayesian Statistical Science SBSS)
2002 - 2003	Member, National Academy of Sciences Panel on Evaluation of the Interim Armored Vehicle
2002 - 2003	Member, National Science Foundation, MMS Review Panel member
2002 2002	Organizing/Program Committee Chair, April 2002 Joint ISU/Iowa Bioinformatics Workshop Chair, ISBA Selected Contributed Papers, Valencia 7 Conference on Bayesian Statistics
	Advisory Editor, Chance
2002 - present 2001 - 2002	Chair, American Statistical Association Task Force on the Future of Chance
2001 2002	Chair, American Statistical Association Section on Statistics in Sports
2001	Member, Nominating Committee, International Society for Bayesian Analysis (ISBA)
2000	National Institutes of Health, SNEM-5 Review Panel member
1999 - 2001	Editor, <i>Chance</i> (publication of the American Statistical Association)
1999	National Science Foundation, SBER Infrastructure Panel reviewer
1997 - 2001	Member, Committee on Publications, American Statistical Association
1997 - 1998	Column Editor, "A Statistician Reads the Sports Pages", Chance
1997	Member, Nominating Committee, Institute of Mathematical Statistics

1993 – 1994 Associate Editor, Special Section on Statistics in Sports, *Journal of the*

American Statistical Association

1992 – 1998 Senior Associate Editor, *Chance*

Member, Local Arrangements Committee, 1992 Joint Statistical Meetings

Member: American Association for the Advancement of Science (Fellow, 2016)

American Statistical Association (Fellow, 1998) Institute of Mathematical Statistics (Fellow, 2011)

International Society for Bayesian Analysis (Fellow, 2020)

Referee/reviewer for funding agencies: National Science Foundation, National Security Agency, National Institutes of Health, National Institute of Justice, Oak Ridge National Laboratory

Referee/reviewer for publishers: National Academy of Sciences, National Institute of Standards and Technology, Oxford University Press

Referee/reviewer for conference: Sloan Sports Analytics Conference, American Association for the Advancement of Science

Referee/reviewer for journals: Science, Proceedings of the National Academy of Science (PNAS), Journal of the American Statistical Association (JASA), Biometrika, Journal of the Royal Statistical Society (JRSS Ser. B), Annals of Applied Statistics, Annals of Internal Medicine, Applied Statistics (JRSS Ser. C), Annual Review of Statistics and Its Application, Accident Analysis and Prevention, American Journal of Agricultural Economics, The American Statistician (TAS), Bayesian Analysis, Biometrics, Biostatistics, BMJ Open, Brain and Language, Journal of Business and Economic Statistics (JBES), Case Studies in Bayesian Statistics, Chance, Journal of Chemometrics, Journal of Clinical Epidemiology, Communications in Statistics, Journal of Chemometrics, Journal of Computational and Graphical Statistics, Computational Statistics and Data Analysis, Computers and Mathematics with Applications, Ecological Applications, Ecology, Journal of Educational and Behavioral Statistics (JEBS), Forensic Chemistry, Forensic Science International, International Journal of Biostatistics, Law Probability and Risk, Management Science, Mathematical Intelligencer, Nature Human Behavior, Naval Research Logistics, Journal of Neuroscience Methods, Journal of Official Statistics, Journal of Parallel and Distributed Computing, PLOS One, Population Research and Policy Review, Psychological Methods, Psychometrika, Journal of Quantitative Analysis in Sports, Journal of Regional Science, Journal of Research of NIST, Sankhya, Statistica Sinica, Journal of Statistical Planning and Inference, Statistical Science, Journal of Statistics Education, Statistics in Medicine (SIM), Sociological Methodology, Sociology Methods and Research, Statistical Modeling, Statistics in Biopharmaceutical Research, Statistics in Medicine, Technometrics, TEST, Journal of Theoretical Probability, Wiley Interdisciplinary Reviews in Computational Statistics.

Grants:

July 2021 – June 2024 California Initiative to Advance Prevision Medicine (CIAPM)

Title: Using Precision Medicine to Tackle the Impact of ACEs (including a Novel

Actionable ACE) on Children's Neurodevelopment, \$3,000,000

(Investigator, T. Baram, PI)

June 2020 – May 2025 National Institute of Standards and Technology (NIST)

Title: Center of Excellence in Forensic Statistics, \$20,000,000

(co-PI and PI of UC Irvine subcontract (\$4,000,000); A. Carriquiry, Iowa State, PI)

June 2019 – May 2024 National Institutes of Mental Health – NIMH Conte Center (renewal)

Title: Fragmented Early-Life Experiences, Aberrant Circuit Maturation, and Emotional

Vulnerabilities, \$15,000,000

(co-PI / Head of Biostatistics, Computation and Data Management Core, T. Baram, PI)

Nov 2016 - May 2019 California Initiative to Advance Precision Medicine (CIAPM) Title: Precision Medicine for Early Prostate Cancer: Integrating Biological and Patient Complexity Variables to Predict Treatment Response, \$1,200,000 (Senior Investigator; S. Greenfield, PI) June 2015 – May 2020 National Institute of Standards and Technology (NIST) Title: Center of Excellence in Forensic Statistics, \$20,000,000 (co-PI and PI of UC Irvine subcontract (\$3,700,000); A. Carriquiry, PI) June 2013 – May 2018 National Institutes of Mental Health – NIMH Conte Center Title: Fragmented Early Life Environment and Cognitive and Emotional Vulnerabilities, (co-PI / Head of Biostatistics, Computation and Date Management Core, T. Baram, PI) Sept 2010- Aug 2014 National Science Foundation (ATM) Title: Collaboration in Mathematical Geosciences (CMG): Enhanced EOF Representations and Time-varying Statistical Models for Climate Patterns, \$626,243 (PI with G. Magnusdottir, Y. Yu as co-PIs) July 2010-June 2015 National Institutes of Health – NCRR Title: Irvine Institute for Clinical and Translational Science, \$20,000,000 (Chair of Biostatistics, Ethics and Research Design Unit 2010-2011; D. Cooper, PI) Oct 2005-Sept 2010 National Institutes of Health – NCRR Title: Functional Imaging Research on Schizophrenia Testbed, \$24,300,000 (Co-chair of Statistics Working Group with S. G. Potkin as P.I.) Sept 2005 – Aug 2009 National Science Foundation (ATM-0530926) Title: Collaboration in Mathematical Geosciences (CMG): Characterization of Inter-Tropical Convergence Zone (ITCZ) Dynamics and Breakdown Using Statistical Learning Methods and Satellite Data, \$618,180 (Co-PI with G. Magnusdottir, P. Smyth) Sept 2004 - Aug 2007 National Institutes of Health – NCRR Title: Transdiciplinary Imaging Genetics Center, \$1,673,332 (Co-Investigator with S.G. Potkin as P.I.) Sept 2004 – Aug 2007 Brigham and Women's Hospital, Harvard Title: National Alliance for Medical Imaging, \$913,268 (subcontract of NIH award) (Co-Investigator with S. G. Potkin as P.I.) Sept 2001-Sept 2005 United States Dept. of Agriculture (USDA) – MGET Training Grant (Iowa State Univ.) Title: Computation Biology in Animal Agriculture, \$1,600,000 (Co-PI with C. Tuggle, S. Carpenter, M. Nilsen-Hamilton) Sept 2000-June 2002 National Center for Health Statistics, Title: Small Area Estimates of U.S. Infant Mortality Using Bayesian Methods, \$37,691 Oct 1998-June 2000 Department of Energy/FBI (Ames Laboratory), Title: Statistical Treatment of Class Evidence, \$150,936. (PI with A. Carriquiry, M. Daniels)

July 1998-June 2001 National Institutes of Health,

Title: Disease Maps of Small Areas, \$70,936.

(co-PI with N. Cressie)

July 1996-Mar 1998 Center for Transportation Research and Education, Iowa State Univ.

Title: Evaluation of Electronic Clearance on I-75, \$26,188. (subcontract)

July 1996-June 1997 University Research Grant, Iowa State University,

Title: Inference in Longitudinal Studies with Missing Data, \$9,400.

July 1994-June 1998 National Science Foundation, Division of Mathematical Sciences

Title: Data Analysis using Finite Mixture Models, \$116,000. (co-PI with D.B.Rubin)

July 1991-June 1992 William H. Milton Grant, Harvard University,

Title: A Statistical Analysis of Infant Temperaments, \$3,800

Books and Publications:

Books:

Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D. B., Vehtari, A. and Rubin, D. B., (2013), *Bayesian Data Analysis*, 3rd edition, Chapman and Hall/CRC: Boca Raton.

Peck, R., Casella, G., Cobb, G., Hoerl, R., Nolan, D., Starbuck, R., Stern, H. (Editors), (2006), *Statistics: A Guide to the Unknown*, 4th edition, Thomson/Brooks Cole: Belmont, CA.

Gelman, A., Carlin, J. B., Stern, H. S., and Rubin, D. B., (2003), *Bayesian Data Analysis*, 2nd edition, Chapman and Hall/CRC: Boca Raton.

Gelman, A., Carlin, J. B., Stern, H. S., and Rubin, D. B., (1995), *Bayesian Data Analysis*, Chapman and Hall: London.

Refereed Publications (journals, book chapters, conference proceedings):

- 1. Stern, H. S. (1988), "Gamma Processes, Paired Comparisons and Ranking," *Computing Science and Statistics: Proceedings of the 20th Symposium on the Interface*, pp. 635-639.
- 2. Stern, H. S. and Cover, T. M. (1989), "Maximum Entropy and the Lottery," *Journal of the American Statistical Association*, Vol. 84, pp. 980-985.
- 3. Stern, H. S. (1990), "A Continuum of Paired Comparisons Models," *Biometrika*, Vol. 77, pp. 265-273.
- 4. Stern, H. S. (1990), "Models for Distributions on Permutations," *Journal of the American Statistical Association*, Vol. 85, pp. 558-564.
- 5. Stern, H. S. (1991), "On the Probability of Winning a Football Game," *The American Statistician*, Vol. 45, pp. 179-183.
- 6. Stern, H. S. (1992), "Are all Linear Paired Comparison Models Empirically Equivalent?," *Mathematical Social Sciences*, Vol. 23, pp. 103-117.
- 7. Stern, H. S. (1993), "Probability Models on Rankings and the Electoral Process," in *Probability Models and Statistical Analysis for Ranking Data*, eds. M. A. Fligner and J. S. Verducci, Springer-Verlag: New York, pp. 173-195.

- 8. James, B., Albert, J., and Stern, H. S. (1993), "Answering Questions about Baseball Using Statistics," *Chance*, Vol. 6, No. 2, pp. 17-22,30.
- 9. Stern, H. S., Arcus, D., Kagan, J., Rubin, D. B., and Snidman, N. (1994), "Statistical Choices in Infant Temperament Research." *Behaviormetrika*, Vol. 21, No. 1, pp. 1-17.
- 10. Stern, H. S. (1994), "A Brownian Motion Model for the Progress of Sports Scores," *Journal of the American Statistical Association*, Vol. 89, 1128-1134.
- 11. Rubin, D. B., and Stern, H. S. (1994), "Testing in Latent Class Models Using a Posterior Predictive Check Distribution," in *Latent Variables Analysis: Applications for Developmental Research*, eds. A. von Eye and C. C. Clogg, Sage Publications: Thousand Oaks, CA, pp. 420-438.
- 12. Stern, H. S. (1994), "Estimating the Probabilities of the Outcomes of a Horse Race," *in Efficiency of Racetrack Betting Markets*, eds. W. T. Ziemba, D. B. Hausch, and V. Lo, Academic Press: San Diego, CA, pp. 225-235.
- 13. Rubin, D. B., Stern, H. S., and Vehovar, V. (1995), "Handling 'Don't Know' Survey Responses: The Case of the Slovenian Plebiscite," *Journal of the American Statistical Association*, Vol. 90, pp. 822-828.
- 14. Stern, H. S. (1995), "Who's Number 1 in College Football? ...And How Might We Decide?," *Chance*, Vol. 8, No. 3, pp. 7-14.
- 15. Stern, H. S., Arcus, D., Kagan, J., Rubin, D. B., and Snidman, N. (1995), "Using Mixture Models in Temperament Research," *International Journal of Behavioral Development*, Vol. 18, pp. 407-423.
- 16. Stern, H. S. (1996); "Neural Networks in Applied Statistics" (with discussion), *Technometrics*, Vol. 38, pp. 205-220.
- 17. Babcock, B. A., Carriquiry, A. L., and Stern, H. S. (1996), "Evaluation of Soil Test Information in Agricultural Decision Making," *Applied Statistics*, Vol. 45, pp 447-461.
- 18. Gelman, A., Meng, X.-L., and Stern, H. S. (1996), "Posterior Predictive Assessment of Model Fitness via Realized Discrepancies" (with discussion), *Statistica Sinica*, Vol. 6, pp. 733-807.
- 19. Thurston, G. M., Hayden, D. L., Burrows, P., Clark, J.I., Taret, V. G., Kandel, J., Courogen, M., Peetermans, J. A., Bowen, M. S., Miller, D., Sullivan, K. M., Storb, R., Stern, H., and Benedek, G. B. (1997), "Quasielastic Light Scattering Study of the Living Human Lens as a Function of Age," *Current Eye Research*, Vol. 16, No. 3, pp. 197-207.
- 20. Morduch, J. J., and Stern, H. S. (1997), "Using Mixture Models to Detect Sex Bias in Health Outcomes in Bangladesh," *Journal of Econometrics*, Vol. 77, pp. 259-276.
- 21. Li, H. and Stern, H. S. (1997), "Bayesian Inference for Nested Designs Based on Jeffreys' Prior," *The American Statistician*, Vol. 51, pp. 219-224.
- 22. Glickman, M. E., and Stern, H. S. (1998), "A State-Space Model for National Football League (NFL) Scores," *Journal of the American Statistical Association*, Vol. 93, pp. 25-35.
- 23. Stern, H. S. (1998), "American Football," in *Statistics in Sport* edited by J. Bennett, Arnold: London, pp. 3-23.
- 24. Stern, H. S. (1998), "A Primer on the Bayesian Approach to Statistical Inference," *Stats*, No. 23; pp. 3-9.
- 25. Rubin, D. B., and Stern, H. S. (1998), "Sample Size Determination Using Posterior Predictive Distributions," *Sankhya, Ser. B*, Vol. 60, pp. 161-175.
- 26. Janzen, F. J., and Stern, H. S. (1998), "Logistic Regression for Empirical Studies of Multivariate Selection," *Evolution*, Vol. 52, pp. 1564-1571.
- 27. Stern, H. S. (1999), "The Man Who Makes the Odds: An Interview with 'Roxy' Roxborough," *Chance*, Vol. 12, No. 1, pp. 15-21.

- 28. Gong, G., Stern, H. S., Cheng, S.-C., Fong, N., Mordeson, J., Deng, H.-W., Johnson, M. L., Recker, R. R. (1999), "The Association of Bone Mineral Density with Vitamin D Receptor Gene Polymorphisms," *Osteoporosis International*, Vol. 9, pp. 55-64.
- 29. Stern, H. S., and Cressie, N. (1999), "Inference for Extremes in Disease Mapping," in *Disease Mapping and Risk Assessment for Public Health*, eds. A. Lawson, A. Biggeri, D. Bohning, E. Lesaffre, J-F. Viel, R. Bertollini, John Wiley and Sons: Chichester, pp. 63-84.
- 30. Carlin, B. P. and Stern, H. S. (1999), "Designing a College Football Playoff System," *Chance*, Vol. 12, No. 3, pp. 21-26.
- 31. Cressie, N, Stern, H. S. and Reber, D. L. (2000), "Mapping Rates Associated with Polygons," *Journal of Geographical System*, Vol. 2, pp. 61-69.
- 32. Reber, D. L., Stern, H. S., and Berger, P. J. (2000), "Comparing Traditional and Bayesian Analyses of Selection Experiments in Animal Breeding," *Journal of Agricultural, Biological, and Environmental Statistics*, Vol. 5, pp. 240-256.
- 33. Stern, H. S. and Cressie, N. (2000), "Posterior predictive Model Checks for Disease Mapping Models," *Statistics in Medicine*, Vol. 19, pp. 2377-2397.
- 34. Sinharay, S. and Stern, H. (2001), "Bayes Factors for Variance Component Testing in Generalized Linear Mixed Models," in *Bayesian Methods with applications to science, policy and official statistics (ISBA 2000 Proceedings)*, pp. 507-516.
- 35. Stern, H. S. (2001), "Bayesian Statistics," in *International Encyclopedia of the Social and Behavioral Sciences*, Vol. 2, pp. 1052-1056.
- 36. Sinharay, S., Stern H. S., and Russell, D. (2001), "The Use of Multiple Imputation for the Analysis of Missing Data," *Psychological Methods*, Vol. 6, pp. 317-329.
- 37. Sinharay, S., and Stern, H. S. (2002), "On the Sensitivity of Bayes Factors to the Prior Distributions," *The American Statistician*, Vol. 56, pp. 196-201.
- 38. Zhang, J., Pu, J., McCalley, J. D., Stern, H. S., and Gallus, Jr., W. A. (2002), "A Bayesian Approach for Short-Term Transmission Line Thermal Overload Risk Assessment," *IEEE Transactions on Power Delivery*, Vol. 17, pp. 770-778.
- 39. Sinharay, S., and Stern H. S. (2003), "Posterior Predictive Model Checking in Hierarchical Models," *Journal of Statistical Planning and Inference*, Vol. 111, 209-221.
- 40. Sarno, R. J., M. S. Bank, H. S. Stern, and W. L. Franklin (2003), "Forced Dispersal of Juvenile Guanacos (Lama guanicoe): causes, variation, and fates of individuals dispersing at different times," *Behavioral Ecology and Sociobiology*, Vol. 54, pp. 22-29.
- 41. Wright, D., Stern, H. S., and Cressie, N. (2003), "Loss Functions for Estimation of Extrema With an Application to Disease Mapping," *Canadian Journal of Statistics*, Vol. 31, pp. 251-266.
- 42. Stern, H. S. (2004), "Statistics and the College Football Championship," *The American Statistician*, Vol. 58, pp. 179-185, 194-195 (with discussion).
- 43. Stern, H. S., and Jeon, Y. (2004), "Applying Structural Equation Models with Incomplete Data," in *Applied Bayesian Modeling and Causal Inference from Incomplete-Data Perspectives*, eds. A. Gelman and X-L Meng, John Wiley and Sons: Chichester, UK, pp. 331-342.
- 44. Zhang, H. and Stern, H. (2005), "Investigation of a Generalized Multinomial Model for Species Data," *Journal of Statistical Computation and Simulation*, Vol. 75, No. 5, pp. 347-362.
- 45. Stern, H. (2005), "Baseball Decision Making By the Numbers", in *Statistics: A Guide to the Unknown, 4th edition*, eds. R. Peck, G. Casella, G. Cobb, R. Hoerl, D. Nolan, R. Starbuck, H. Stern, Thomson Brooks/Cole: Belmont, pp. 393-406.

- 46. Sinharay, S. and Stern, H. S. (2005), "An Empirical Comparison of Methods for Computing Bayes Factors in Generalized Linear Mixed Models," *Journal of Computational and Graphical Statistics*, Vol. 14, No. 2, pp. 415-435.
- 47. Casey, D. S., Stern, H. S., and Dekkers, J. C. M. (2005), "Identification of Errors and Factors Associated With Errors in Data from Electronic Swine Feeders," *Journal of Animal Science*, Vol. 83, pp. 969-982.
- 48. Kim, S., Smyth, P., Stern, H., and Turner, J. (2005), "Parametric Response Surface Models for Analysis of Multi-site fMRI Data," in *Medical Image Computing and Computer-Assisted Intervention 2005 (MICCAI 2005)* (refereed conference proceedings), eds. J. Duncan and G. Gerig, Springer-Verlag: Heidelberg, pp. 352-359
- 49. Stern, H. S. and Sinharay, S. (2005), "Bayesian Model Checking and Model Diagnostics," in *Bayesian Thinking: Modeling and Computation, Handbook of Statistics, Vol. 25*, eds. D.K. Dey and C. R. Rao, Elsevier: Amsterdam, pp. 171-192.
- 50. Stern, H. (2005), "Model Inference or Model Selection: Discussion of Klugkist, Laudy, and Hoijtink" (refereed discussion), *Psychological Methods*, Vol. 10, No. 4, pp. 494-499.
- 51. Cole, S. A., Tobin, W. A., Boggess, L. N., and Stern, H. S. (2005), "A Retail Sampling Approach to Assess Impact of Geographic Concentrations on Probative Value of Comparative Bullet Lead Analysis," *Law, Probability and Risk,* Vol. 4, No. 4, pp. 199-216.
- 52. Sarno, R. J., Bank, M. S., Stern, H. S., and Franklin, W. L. (2006), "Effects of Age, Sex, Season, and Social Dynamics on Juvenile Guanaco Subordinate Behavior," *Journal of Mammalogy*, Vol. 87, No. 1, pp. 41-47.
- 53. Zhang, H, and Stern, H. S. (2006), "Assessment of Ancestry Probabilities in the Presence of Genotype Errors," *Theoretical and Applied Genetics*, Vol. 112, No. 3, pp. 472-482.
- 54. Sinharay, S., Johnson, M. S., and Stern, H. S. (2006), "Posterior Predictive Assessment of Item Response Theory Models," *Applied Psychological Measurement*, Vol. 30, No. 4, pp. 298-321.
- 55. Kim, S., Smyth, P., and Stern, H. (2006), "A Nonparametric Bayesian Approach to Detecting Spatial Activation Patterns in fMRI Data," in *Medical Image Computing and Computer-Assisted Intervention 2006 (MICCAI 2006)* (refereed conference proceedings), eds. R. Larsen, M. Nielsen, J. Sporring, Springer-Verlag: Heidelberg, pp. 217-224.
- 56. Gelman, A. and Stern, H. S. (2006), "The Difference Between "Significant" and "Not Significant" is not Itself Statistically Significant," *The American Statistician*, Vol. 60, No. 4, pp. 328-331.
- 57. Zhong, Q., Lazaridis, I., Deshpande, M., Li, C., Mehrotra, S., Stern, H. (2006), "Supporting Approximate Similarity Queries with Quality Guarantees in P2P Systems," in *International Conference on Management of Data (COMAD 2006)* (refereed conference proceedings).
- 58. Madsen, E. R., and Stern, H. S. (2007), "Time Trends of Methylmercury in Walleye in Northern Wisconsin: A Hierarchical Bayesian Analysis," *Environmental Science and Technology*, Vol. 41, No. 13, pp. 4568-4573.
- 59. Stern, H. S., and Sugano, A. (2007), "Inference About Batter-Pitcher Matchups in Baseball from Small Samples," in *Statistical Thinking in Sports*, eds. J. Albert and R.H. Koning. Chapman and Hall/CRC: Boca Raton, Chapter 9, 153-165.
- 60. Stern, H. S., and Sugano, A. (2007), "Baseball Decisions and Small Samples," *CHANCE*, Vol.20, No. 4, 40-47.
- 61. Friedman, L., Stern, H., Brown, G. G., Mathalon, D., Turner, J., Glover, G. H., Gollub, R. L., Lauriello, J., Lim, K.O., Cannon, T., Greve, D. N., Bockholt, H. J., Belger, A., Mueller, B., Doty, M. H., He, J., Wells, W., Smyth, P., Pieper, S., Kim, S., Kubicki, M., Vangel, M., and Potkin, S. G. (2008), "Test-Retest and Between-Site Reliability in a Multicenter fMRI Study," *Human Brain Mapping*, Vol. 29(8), pp. 958-972.

- 62. Patterson, J. V., Hetrick, W. P., Boutros, N. N., Jin, Y., Sandman, C., Stern, H., Potkin, S., Bunney, W. E. (2008), "P50 Sensory Gating Ratios in Schizophrenics and Controls: A Review and Data Analysis," *Psychiatry Research*, Vol. 158, No. 2, 226-247.
- 63. Friedman, L., Turner, J. A., Stern, H., Mathalon, D. H., Trondsen, L. C., Potkin, S. G. (2008), "Chronic Smoking and the BOLD Response to a Visual Activation Task and a Breath Hold Task in Patients with Schizophrenia and Healthy Controls," *NeuroImage*, Vol. 40, No. 3, 1081-1094.
- 64. Zhang, H. and Stern, H. (2008), "Inferences for Genotyping Error Rate in Ancestry Identification from SSR Marker Profiles," *Journal of Agricultural, Biological and Environmental Statistics*, Vol. 14, 170-187.
- 65. Stern, H. S. (2008), "Pointspread and Odds Betting: Baseball, Basketball, and American Football," in *Handbook of Sports and Lottery Markets*, eds. W. T. Ziemba and D. B. Hausch. North-Holland: Amsterdam. Chapter 11, 223-237.
- 66. Delfino, R. J., Brummel, S., Wu, J., Stern, H., Ostro, B., Lipsett, M., Winter, A., Street, D. H., Zhang, L., Tjoa, T., Gillen, D. L. (2009), "The Relationship of Respiratory and Cardiovascular Hospital Admissions to the Southern California Wildfires of 2003", *Occup Environ Med*, Vol. 66, 187-197.
- 67. Zhang, H. and Stern, H. (2009), "Sample Size Calculation for Finding Unseen Species," *Bayesian Analysis*, Vol. 4, No. 4, 763-792.
- 68. Strong, C., Magnusdottir, G. and Stern, H. (2009), "Observed Feedback between Winter Sea Ice and the North Atlantic Oscillation, *Journal of Climate*, Vol. 22, 6021-6032.
- 69. Scharenbroich, L., Magnusdottir, G., Smyth, P., Stern, H., and Wang, C.-C. (2009), "A Bayesian Framework for Storm Tracking Using a Hidden-State Representation", *Monthly Weather Review*, Vol. 138, 2132-2148.
- 70. Kim, S., Smyth, P, and Stern, H. (2010), "A Bayesian Mixture Approach to Modeling Spatial Activation Patterns in Multi-site fMRI Data", *IEEE Transactions on Medical Imaging*, Vol. 29, #6, 1260-1274.
- 71. Bain, C.L., Magnusdottir, G., Smyth, P., and Stern, H. (2010), "Diurnal Cycle of the Intertropical Convergence Zone in the east Pacific," *Journal of Geophysical Research*, Vol. 115, D23116-D23125.
- 72. Bain, C.L., DePaz, J., Kramer, J., Magnusdottir, G, Smyth, P. J., Stern, H., and Wang, C.-C. (2011), "Detecting the ITCZ in Instantaneous Satellite Data Using Spatial-Temporal Statistical Modeling: ITCZ Climatology in the East Pacific," *Journal of Climate*, Vol. 24, 216-230.
- 73. Brown, G.G., Mathalon, D.H., Stern, H., Ford, J., Mueller, B., Greve, D.N., McCarthy, G., Voyvodic, J., Glover, G., Diaz, M., Yetter, E., Ozyurt, I.B., Jorgensen, K.W., Wible, C.G., Turner, J.A., Thompson, W.K., Potkin, S.G., FBIRN (2011), "Multisite reliability of cognitive BOLD data," *Neuroimage*, Vol. 54, #3, 2163-2175.
- 74. Dey, M.K., Stern, H., Zhang, H. (2011), "Information Content in Small and Large Trades," *Economic Notes*, Vol. 40, No. 1-2, pp. 45-74...
- 75. Chen C, Chen C, Moyzis R, Stern H, He Q, Li H, Li J, Zhu B, Dong Q. (2011), "Contributions of Dopamine-Related Genes and Environmental Factors to Highly Sensitive Personality: A Multi-Step Neuronal System-Level Approach," *PLoS One*, Vol. 6(7), e21636.
- 76. Glover GH, Mueller BA, Turner JA, van Erp TG, Liu TT, Greve DN, Voyvodic JT, Rasmussen J, Brown GG, Keator DB, Calhoun VD, Lee HJ, Ford JM, Mathalon DH, Diaz M, O'Leary DS, Gadde S, Preda A, Lim KO, Wible CG, Stern HS, Belger A, McCarthy G, Ozyurt B, Potkin SG. (2012), "Function Biomedical Informatics Research Network Recommendations for Prospective Multi-Center Functional MRI Studies," *Journal of Magnetic Resonance Imaging*, Vol. 36 (1), pp. 39-54.
- 77. Chen, C, Chen C, Moyzis R, He Q, Li H, Li J, Zhu B, Lessard J, Stern H, Dong Q. (2012), "Genetic Variations in the Dopaminergic System and Alcohol Use: A System-Level Analysis," *Addiction Biology*, Vol. 17(2), pp. 479-489.

- 78. Zhu, B, Chen C, Moyzis, RK, Dong Q, Chen C, He Q, Stern HS, Li, H, Li J, Li J, Lessard J, Lin C. (2012), "Genetic Variations in the Dopamine System and Facial Expression Recognition in Healthy Chinese College Students," *Neuropsychobiology*, Vol. 65(2), pp. 83-89.
- 79. Baram, T. Z., Davis, E. P., Obenaus, A., Sandman, C. A., Small, S. L., Solodkin, A., Stern, H. (2012), "Fragmentation and Unpredictability of Early-Life Experience in Mental Disorders," *American Journal of Psychiatry*, Vol. 169(9), pp. 907-915.
- 80. Little, RJ, D'Agostino, R, Cohen, ML, Dickersin, K, Emerson, SS, Farrar, JT, Frangakis, C, Hogan, JW, Molenberghs, G, Murphy, SA, Neaton, JD, Rotnitzky, A, Scharfstein, D, Shih, WJ, Siegel, JP, Stern H (2012), "The Prevention and Treatment of Missing Data in Clinical Trials," *New England Journal of Medicine*, Vol. 367(14), pp. 1355-1360.
- 81. Wang, Y-H, Magnusdottir, G, Stern, H, Tian, X, Yu, Y (2012), "Decadal Variability of the NAO: Introducting an Augmented NAO Index," *Geophysical Research Letters*, Vol. 39(21).
- 82. Little, RJ, Cohen, ML, Dickersin, K, Emerson SS, Farrar, JT, Neaton, JD, Shih, W, Siegel, JP, Stern, H (2012), "The Design and Conduct of Clinical Trials to Limit Missing Data," *Statistics in Medicine*, Vol. 31(28), pp. 3433-3443.
- 83. Zhou, B, Konstorum, A, Duong, T, Tieu, KH, Wells, WM, Brown, GG, Stern, HS, Shahbaba, B (2013), "A Hierarchical Modeling Approach to Data Analysis and Study Design in a Multi-Site Experimental FMRI Study," *Psychometrika*, Vol. 78, pp. 260-278.
- 84. Wright, CE, Chubb, C, Winkler, A, and Stern, H, (2013) "Equisalience Analysis: A New Window into the Functional Architecture of Human Cognition," in *Human Information Processing* eds. C. Chubb, B. A. Dosher, Z-L Lu, and R. M. Shifrin, pp. 75-91. American Psychological Association: Washington, DC.
- 85. Wang, Y-H, Magnusdottir, G, Stern, H, Tian, X, and Yu, Y (2014) "Uncertainty Estimates of the EOF-Derived North Atlantic Oscillation," *Journal of Climate*, 27, 1290–1301. http://dx.doi.org/10.1175/JCLI-D-13-00230.1
- 86. Heins, KA and Stern, HS (2014) "A Statistical Model for Event Sequence Data," in Proceedings of the Seventeenth International Conference on Artificial Intelligence and Statistics (AISTATS 2014), pp. 338-346.
- 87. Stern, H. S. (2015), "Bayesian Statistics," in *International Encyclopedia of the Social and Behavioral Sciences*, 2nd edition. Vol. 2, pp. 373-377. http://dx.doi.org/10.1016/B978-0-08-097086-8.42003-9
- 88. Liu, T.T., Glover, G.H., Mueller, B. A., Greve, D.N., Rasmussen, J., Voyvodic, J.T., Turner, J.A., van Erp, T.G.M, Mathalon, D.H., Andersen, K., Lu, K., Brown, G.G., Keator, D.B., Calhoun, V.D., Lee, H.J., Ford, J.M., Diaz, M., O'Leary, D.S., Gadde, S., Preda, A., Lim, K.O., Wible, C.G., Stern, H.S., Belger, A., McCarthy, G., Ozyurt, B., Potkin, S.G., and FBIRN (2015) "Chapter 10: Quality Assurance in Functional MRI" in K. Uludag et al. (eds.) fMRI: From Nuclear Spins to Brain Functions (Biological Magnetic Resonance 30), pp. 245-270. Springer: New York. http://dx.doi.org/10.1007/978-1-4899-7591-1_10
- 89. Polson, N.G., and Stern, H.S. (2015) "The Implied Volatility of a Sports Game," *Journal of Quantitative Analysis in Sports*, 11(3), 145-153. http://dx.doi.org/10.1515/jqas-2014-0095
- 90. Keator, D.B., van Erp, T.G.M., Turner, J.A., Glover, G.H., Mueller, B.A., Liu, T.T., Voyvodic, J.T., Rasmussen, J., Calhoun, V.D., Lee, H.J., Toga, A.W., McEwen, S., Ford, J.M., Mathalon, D.H., Diaz, M., O'Leary, D.S., Bockholt, H.J., Gadde, S., Preda, A., Wible, C.G., Stern, H.S., Belger, A., McCarthy, G., Ozyurt, B., Potkin, S.G., and FBIRN (2016) "The Functional Biomedical Informatics Research Network Data Repository", *Neuroimage*, 124, 1074-1079. http://dx.doi.org/10.1016/j.neuroimage.2015.09.003
- 91. Molet, J., Heins, K., Zhuo, X., Mei, Y.T., Regev, L., Baram, T.Z., and Stern, H. (2016) "Fragmentation and High Entropy of Neonatal Experience Predict Adolescent Emotional Outcome," *Translational Psychiatry* (2016) **6**, e702; doi:10.1038/tp.2015.200 (published online 5 January 2016)
- 92. Stern, H. S. (2016) "A Test by Any Other Name: P values, Bayes Factors and Statistical Inference," *Multivariate Behavioral Research*, 51:1, 23-29. http://dx.doi.org/10.1080/00273171.2015.1099032

- 93. Neumann, C., Stern, H. (2016) "Forensic Examination of Fingerprints: Past, Present and Future," *CHANCE*, 29:1, 9-16.
- 94. Saks, M.J., Albright, T., Bohan, T.L., Bierer, B.E., Bowers, C.M., Bush, M.A., Bush, P.J., Casadevall, A., Cole, S. A., Denton, M. B., Diamond, S.S., Dioso-Villa, R., Epstein, J., Faigman, D., Faigman, L., Fienberg, S.E., Garrett, B.L., Giannelli, P.C., Greely, H.T., Imwinkelried, E., Jamieson, A., Kafadar, K., Kassirer, J.P., Koehler, J., Korn, D., Mnookin, J., Morrison, A.B., Murphy, E., Peerwani, N., Peterson, J.L., Risinger, D.M., Sensabaugh, G.F., Spiegelman, C., Stern, H., Thompson, W.C., Wayman, J.L., Zabell, S., Zumwalt, R.E. (2016) "Forensic bitemark identification: weak foundations, exaggerated claims," *Journal of Law and the Biosciences*, 3:3, 538-575. http://dx.doi.org/10.1093/jlb/lsw045
- 95. Stern, H. S. (2017) "Statistical Issues in Forensic Science," *Annual Review of Statistics and Its Applications*, 4:225-244. http://dx.doi.org/10.1146/annurev-statistics-041715-033554
- 96. Glickman, M.E. and Stern, H. S. (2017) "Chapter 5: Estimating Team Strength in the NFL" in J. Albert, M.E. Glickman, T. B. Swartz, R. H. Koning (eds.) *Handbook of Statistical Methods and Analyses in Sports*, 113-135. Chapman & Hall / CRC: Boca Raton. ISBN 9781498737364
- 97. Davis, E.P., Stout, S.A., Molet, J., Vegetabile, B., Glynn, L.M., Sandman, C.A., Heins, K., Stern, H., Baram, T.Z. (2017) "Exposure to unpredictable maternal sensory signals influences cognitive development across species," *Proceedings of the National Academy of Sciences*, 114(39):10390-10395. http://dx.doi.org/10.1073/pnas.1703444114
- 98. Keator, D.B., Chan, J., Nichols, N., Fana, F., Stern, H., Baram, T.Z., Small, S.L. (2017) "A Semantic Cross-Species Derived Data Management Application," *Data Science Journal*, 16:45, 1-10. http://doi.org/10.5334/dsj-2017-045
- 99. Glynn, L.M., Howland, M.A., Sandman, C.A., Davis, E.P., Phelan, M., Baram, T.Z., Stern, H.S. (2018) "Prenatal Maternal Mood Patterns Predict Child Temperament and Adolescent Mental Health," *Journal of Affective Disorders*, 228, 83-90. http://doi.org/10.1016/j.jad.2017.11.065
- 100. Labe, Z., Magnusdottir, G., Stern, H. (2018) "Variability of Arctic sea-ice thickness using PIOMAS and the CESM Large Ensemble," *Journal of Climate*, 31(8), 3233-3247. http://doi.org/10.1175/JCLI-D-17-0436.1
- 101. Stern, H. S., Angel, M., Cavanaugh, M., Zhu, S., Lai, E.L. (2018) "Assessing the Complexity of Handwritten Signatures," *Law, Probability and Risk*, 17(2), 123-132. https://doi.org/10.1093/lpr/mgy007
- 102. Thompson, W.C., Grady, R.H., Lai, E., Stern, H.S. (2018) "Perceived Strength of Forensic Scientists' Reporting Statements about Source Conclusions," *Law, Probability and Risk,* 17(2), 133-155. https://doi.org/10.1093/lpr/mgy012
- 103. Risbrough, V.B., Glynn, L.M., Davis, E.P., Sandman, C.A., Obenaus, A., Stern, H.S., Keator, D.B., Yassa, M.A., Baram, T.Z., and Baker, D.G. (2018) "Does Anhedonia Presage Increased Risk of Posttraumatic Stress Disorder?" *Current Topics in Behavioral Neurosciences*, 38, 249-266. https://doi.org/10.1007/7854_2018_51
- 104. Stern, H. S., Blower, D., Cohen, M.L., Czeisler, C.A., Dinges, D.F., Greenhouse, J.B., Guo, F., Hanowski, R.J., Hartenbaum, N.P., Krueger, G.P., Mallis, M.M., Pain, R.F., Rizzo, M., Sinha, E., Small, D.S., Stuart, E.A., Wegman, D.H. (2019) "Data and Methods for Studying Commercial Motor Vehicle Driver Fatigue, Highway Safety and Long-Term Driver Health," *Accident Analysis & Prevention*, 126, 37-42. (Epub 2018 Feb 22)
- 105. Glynn, L.M., Stern, H.S., Howland, M.A., Risbrough, V.B., Baker, D.G., Nievergelt, C.M., Baram, T.Z., and Davis, E.P. (2019) "Measuring Novel Antecedents of Mental Illness: The Questionnaire of Unpredictability in Childhood," *Neuropsychopharmacology*, 44, 876-882. (Epub 2018 Nov 23) https://doi.org/10.1038/s41386-018-0280-9.

- 106. Vegetabile, B.V., Stout-Oswald, S.A., Davis, E.P., Baram, T.Z., Stern, H.S. (2019) "Estimating the Entropy Rate of Finite Markov Chains with Application to Behavior Studies," *Journal of Educational and Behavioral Statistics*, 44(3), 282-308. (Epub 2019 Jan 30) https://doi.org/10.3102/1076998618822540
- 107. Jiang, S., Kamei, N., Bolton, J.L., Ma, X., Stern, H.S., Baram, T.Z., Mortazavi, A. (2019) "Intraindividual Methylomics Detects the Impact of Early-life Adversity," *Life Science Alliance*, Epub 2019 Apr 1. https://doi.org/10.26508/lsa.201800204
- 108. Davis, E.P., Korja, R., Karlsson, L., Glynn, L.M., Sandman, C.A., Vegetabile, B., Kataja, E.-L., Nolvi, S., Sinerva, E., Pelto, J., Karlsson, H., Stern, H.S., Baram, T.Z. (2019) "Across Continents and Demographics, Unpredictable Maternal Signals are Associated with Children's Cognitive Function," *EBioMedicine*, 46, 256-263. https://doi.org/10.1016/j.ebiom.2019.07.025.
- 109. Vegetabile, B.G., Gillen, D.L., Stern, H.S. (2019) "Optimally Balanced Gaussian Process Propensity Scores for Estimating Treatment Effects," *Journal of the Royal Statistical Society, Series A*, 183(1), 355-377. https://doi.org/10.1111/rssa.12502
- 110. Stern HS, Cuellar M, Kaye D (2019) "Reliability and Validity of Forensic Science Evidence," *Significance*, Vol 16(2), 21-24, https://doi.org/10.1111/j.1740-9713.2019.01250.x.
- 111. Howland, MA, Sandman CA, Davis EP, Stern HS, Phelan M, Baram TZ, Glynn LM (2020). "Prenatal Maternal Mood Entropy is Associated with Child Neurodevelopment," *Emotion* (in press), https://doi.org/10.1037/emo0000726
- 112. Galbraith, C, Smyth P, Stern HS (2020). "Quantifying the Association Between Discrete Event Time Series with Applications to Digital Forensics," *Journal of the Royal Statistical Society, Series A*, 183(3), 1005-1027. https://doi.org/10.1111/rssa.12549
- 113. Norona-Zhou, AN, Morgan, A, Glynn, LM, Sandman, CA, Baram, TZ, Stern, HS, Davis EP (2020) "Unpredictable Maternal Behavior Is Associated With a Blunted Infant Cortisol Response," *Developmental Psychobiology*, 62, 882-888. https://doi.org/10.1002/dev.21964 (recognized as a Wiley Top Cited Article 2020-2021)
- 114. Friedman, L, Stern, HS, Price, LR, Komogortsev, OV (2020) "Why Temporal Persistence of Biometric Features, as Assessed by the Intraclass Correlation Coefficient, Is So Valuable for Classification Performance," *Sensors*, 20, 4555. https://doi.org/10.3390/s20164555
- 115. Kaplan SH, Fortier MA, Shaughnessy M, Maurer E, Vivero-Montemayor M, Masague SG, Hayes D, Stern HS, Dai M, Kain ZN (2020), "Development and Initial Validation of Self-Report Measures of General Health, Preoperative Anxiety, and Postoperative Pain in Young Children Using Computer-Administered Animation," *Pediatric Anesthesia*, (in press), https://doi.org/10.1111/pan.14068
- 116. Galbraith, C, Smyth, P, and Stern, HS (2020) "Statistical Methods for the Forensic Analysis of Geolocated Event Data," *Forensic Science International: Digital Investigation* (in press), https://doi.org/10.1016/j.fsidi.2020.301009
- 117. Stern, HS (2020) "Comparing Philosophies of Statistical Inference," Chapter 4 in D. Banks, K. Kafadar, D. Kaye and M. Tackett, editors, *Handbook of Forensic Statistics*, CRC Press: Boca Raton, FL, 91-101
- 118. Kaplan-Damary, N, Stern, HS, Thompson, WC, and Grady RH (2020) "Using Mixture Models to Examine Group Differences Among Jurors: An Illustration Involving the Perceived Strength of Forensic Science Evidence," *Law, Probability and Risk*, 19(3-4), 235-253. https://doi.org/10.1093/lpr/mgaa016
- 119. Granger, SJ, Glynn, LM, Sandman CA, Small, SL, Obenaus, A, Keator, DB, Baram, TZ, Stern, H, Yassa, MA, Davis, EP (2021) "Aberrant Maturation of the Uncinate Fasciculus Follows Exposure to Unpredictable Patterns of Maternal Signals," *J. Neurosci*, 41(6):1242-1250. doi: 10.1523/JNEUROSCI.0374-20.2020. Epub 2020 Dec 16. PMID: 33328295; PMCID: PMC7888232.

- 120. Zou, T, Pan, T, and Stern, HS (2021) "Recognition of Overlapping Elliptical Objects in a Binary Image," *Pattern Analysis and Applications*, 24, 1193-1206. https://doi.org/10.1007/s10044-020-00951-z
- 121. Kangas BD, Short AK, Luc OT, Stern HS, Baram TZ, Pizzagalli DA. (2022) "A cross-species assay demonstrates that reward responsiveness is enduringly impacted by adverse, unpredictable early-life experiences." *Neuropsychopharmacology*. 47(3):767-775. doi: 10.1038/s41386-021-01250-9. Epub 2021 Dec 17. PMID: 34921225; PMCID: PMC8682039.
- 122. Dai M, Stern HS (2022) "A U-Statistic-Based Test of Treatment Effect Heterogeneity", *Journal of Nonparametric Statistics*, 34:1, 141-163, DOI: 10.1080/10485252.2022.2025804
- 123. Dai M, Shen W, Stern HS (2022) "Sensitivity Analysis for the Adjusted Mann-Whitney Test with Observational Studies," *Observational Studies*, Volume 8, Issue 1, 2022, pp. 1-29, https://doi.org/10.1353/obs.2022.000
- 124. Stern HS (2022) "Statistical Considerations for the Analysis and Interpretation of Forensic Evidence," Chapter 9 in AL Carriquiry, JM Tanur, WF Eddy, editors, *Statistics in the Public Interest*, Springer: New York, 153-167.
- 125. Dai M, Shen W, Stern HS (2022) "Nonparametric Tests for Treatment Effect Heterogeneity in Observational Studies," *Canadian Journal of Statistics*, Vol 51(2), 531-558.
- 126. Kaplan SH, Shaughnessy M, Fortier MA, Vivero-Montemayor, Massague SG, Hayes D, Stern H, Dai M, Heim L, Kain Z (2022) "The Role of Parental Health and Distress in Assessing Children's Health Status," *Quality of Life Research*, Vol 31, 3403-3412, https://doi.org/10.1007/s11136-022-03186-z
- 127. Demaestri C, Gallo M, Mazenod E, Hong AT, Arora H, Short AK, Stern H, Baram TZ, Bath KG (2022) "Resource Scarcity but not Maternal Separation Provokes Unpredictable Maternal Care Sequences in Mice and Both Upregulate *Crh*-Associated Gene Expression in the Amygdala," *Neurobiology of Stress*, Vol 20, 100484, https://doi.org/10.1016/j.ynstr.2022.100484.
- 128. Davis EP, McCormack K, Arora H, Sharpe D, Short AK, Bachevalier J, Glynn LM, Sandman CA, Stern HS, Sanchez M, Baram TZ (2022) "Early Life Exposure to Unpredictable Parental Sensory Signals Shapes Cognitive Development Across Three Species," *Frontiers in Behavioral Neuroscience*, Vol 16, 960262, https://doi.org/10.3389/fnbeh.2022.960262.
- 129. Friedman L, Stern H, Prokopenko V, Sjanian S, Griffith H and Komogortsev O (2022) "Biometric Performance as a Function of Gallery Size," *Applied Sciences*, Vol 12, 11144, https://doi.org/10.3390/app122111144.
- 130. Zou, T, Stern HS (2022) "Towards a Likelihood Ratio Approach for Bloodstain Pattern Analysis," *Forensic Science International*, Vol 341, https://doi.org/10.1016/j.forsciint.2022.111512.
- 131. Lindert NG, Maxwell MY, Liu SR, Stern HS, Baram TZ, Davis EP, Risbrough VB, Baker DG, Nievergelt CM, Glynn LM (2022) "Exposure to Unpredictability and Mental Health: Validation of the Brief Version of the Questionnaire of Unpredictability in Childhood (QUIC-5) in English and Spanish," Frontiers in Psychology, Vol 13, 971350, https://doi.org/10.3389/npsyg.2022.971350. (Addendum with minor corrections https://doi.org/10.3389/fpsyg.2023.1241626.)
- 132. Longjohn R, Smyth P and Stern HS (2022) "Likelihood Ratios for Categorical Count Data with Applications in Digital Forensics," *Law, Probability and Risk,* Vol 21:2, 91-122, https://doi.org/10.1093/lpr/mgac016.
- 133. Liu SR, Davis EP, Palma AM, Stern HS, Sandman CA, Glynn LM (2023) "Experiences of COVID-19-Related Racism and Impact on Depression Trajectories Among Racially/Ethnically Minoritized Adolescents," *Journal of Adolescent Health*, Vol 72:6, 885-891, https://doi.org/10.1016/j.jadohealth.2022.12.020.
- 134. Jirsaraie RJ, Palma AM, Small SL, Sandman CA, Davis EP, Baram TZ, Stern H, Glynn LM, Yassa MA (2023) "Prenatal Exposure to Maternal Mood Entropy is Associated with a Weakened and Inflexible Salience

Network in Adolescence," Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, available online pre-proof, https://doi.org/10.1016/bpsc.2023.08.002.

Discussions / Comments / Letters to the Editor:

- D1. Stern, H. S. and Morris, C. N. (1993), "Looking for Small Effects: Power and Finite Sample Bias Considerations," a comment on C. Albright's "A Statistical Analysis of Hitting Streaks in Baseball," *Journal of the American Statistical Association*, Vol. 88, pp. 1189-1194.
- D2. Stern, H. S. (2000), Discussion of papers by Berger and Bayarri, Robins, Ventura and van der Vaart, *Journal of the American Statistical Association*, Vol. 95, 1157-1159.
- D3. Stern, H. S. (2003) Discussion of paper "Identifying Mixtures of Regression Equations by the SAR Procedure", by D. Pena, J. Rodriguez, G C Tiao in *Bayesian Statistics* 7, eds. J. M. Bernardo et al., Oxford University Press: Oxford, pp. 343-345.
- D4. Stern, H. S. (2006) "In Favor of a Quantitative Boycott of the Bowl Championship Series," *Journal of Quantitative Analysis in Sports*, Vol. 2: No. 1, Article 4.
- D5. Stern, H. S. (2009) Discussion of "A Stochastic Partitioning Method to Associate High-dimensional Responses and Covariates" by S. Monni and M. G. Tadesse, *Bayesian Analysis*, Vol. 4: No. 3, pp.453-456. (DOI:10.1214/09-BA416D)
- D6. Stern, H. S. (2011) Discussion of "Statistical Inference: The Big Picture" by R. E. Kass, *Statistical Science*, Vol. 26, #1, 17-18.
- D7. Stern, H. (2012) Discussion of "Quantifying the Weight of Evidence from a Forensic Fingerprint Comparison: A New Paradigm" by C. Neumann, I. W. Evett, and J. Skerrett, *Journal of the Royal Statistical Society A*, Vol. 175, Part 2, pp. 408-409.
- D8. Stern, H. (2014) Comment on "The Need for More Emphasis on Prediction: A "Nondenominational" Model-Based Approach" by D. A. Harville, *The American Statistician*, Vol. 68, No. 2, pp 83-84.
- D9. Salyards, J., Maccrehan, W., Denton, B., Kafadar, K., Lednev, I., Stern, H., Thompson, W. (2019) "Letter to the Editors regarding Rodriguez-Cruz, S.E., and R.S. Montreuil. "Assessing the quality and reliability of the DEA drug identification process. Forensic Chemistry 6 (2017): 36–43.", *Forensic Chemistry*, 13, ePub 2019 Feb 19. https://doi.org/10.1016/j.forc.2019.100147
- D10. Stern, H. (2019) Contribution to "Stephen Elliott Fienberg 1942-2016, Founding Editor of the Annual Review of Statistics and Its Application" by A.L.Carriquiry, N.Reid, A.B.Slavkovic, *Annual Review of Statistics and Its Application*, 6: 1-18 (see pg 10). https://doi.org/10.1146/annurev-statistics-030718-105334
- D11. Stern, HS, Richardson, DJ and Papaefthymiou, M. (2021). "Data Science and Computing: The View From a Sister Campus," *Harvard Data Science Review*, 3(2). https://doi.org/10.1162/99608f92.1a7d19ab
- D12. Advisory Committee on Forensic Science (2023) "ASA Forensic Science Committee Celebrates 10 Years," AmStat News (magazine) (Contributed material along with 6 others).
- D13. Scurich N, Stern H (2023) "Commentary on: Monson KL, Smith ED, Peters EM. Accuracy of Comparison Decisions by Forensic Firearms Examiners published in Journal of Forensci Science 68(1):86-100." https://doi.org/10.1111/1556-4029.15258.

Unrefereed Publications (unrefereed proceedings, columns):

U1. Stern, H. S. (1993), "Who's Number One? - Rating Football Teams," 1992 Proceedings of the Section on Statistics in Sports, American Statistical Association: Alexandria, pp. 1-6..

- U2. Stern, H. S. (1994), "Neural Networks in Applied Statistics," 1993 Proceedings of the Statistical Computing Section, American Statistical Association: Alexandria, pp. 150-155.
- U3. Glickman, M. E., and Stern, H. S. (1995), "Inference from an Autoregressive State-Space Model via Iterative Simulation," *1994 Proceedings of the Section on Statistics in Sports*, American Statistical Association: Alexandria, VA, pp. 72-76.
- U4. Stern, H. S. (1995), "Problems with Logistic Autoregression," 1994 Proceedings of the Biopharmaceutical Section, American Statistical Association: Alexandria, VA, pp. 106-110.
- U5. Stern, H. S., and Cressie, N. (1996), "Bayesian and Constrained Bayesian Inference for Extremes in Epidemiology," *1995 Proceedings of the Section on Epidemiology*, American Statistical Association: Alexandria, VA, pp. 11-20.
- U6. Stern, H. S. (1996), "Who's Hot and Who's Not: Runs of Success and Failure in Sports," 1995 Proceedings of the Section on Statistics in Sports, American Statistical Association, pp. 26-35.
- U7. Stern, H. S. (1997), "Baseball by the Numbers," in the column "A Statistician Reads the Sports Pages", *Chance*, Vol. 10, No. 1, pp. 38-41.
- U8. Stern, H. S. (1997), "Judging Who's Hot and Who's Not," in the column "A Statistician Reads the Sports Pages", *Chance*, Vol. 10, No. 2, pp. 40-43.
- U9. Stern, H. S. (1997), "Shooting Darts," in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 10, No. 3, pp. 16-19.
- U10.Stern, H. S. (1997), "How Accurately Can Sports Outcomes Be Predicted?," in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 10, No. 4, pp. 19-23.
- U11.Stern, H. S. and Mock, B. R. (1998), "College Basketball Upsets: Will a 16-Seed Ever Beat a 1-Seed?," in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 11, No. 1, pp. 26-31.
- U12. Stern, H. S. (1998), "Best-of-Seven Playoff Series," in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 11, No. 2, pp. 46-49.
- U13. Stern, H. S. (1998), "Football Strategy: Go For It!" in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 11, No. 3, pp. 20-24.
- U14. Stern, H. S. (1998), "How Accurate Are the Posted Odds?" in the column "A Statistician Reads the Sports Pages," *Chance*, Vol. 11, No. 4, pp. 17-21.
- U15. Reber, D. L., Stern, H. S., and Berger, P. J., (1999) "Bayesian Analysis of the Mixed Linear Model with Applications to Selection in Animal Breeding," *in 1998 Proceedings of the Section on Bayesian Statistical Science*, American Statistical Association: Alexandria, VA, pp. 48-53.
- U16. Schuckers, M. E., and Stern, H. S., (1999) "A Hierarchical Bayesian Approach for Analyzing a Polychotomous Response From a Cluster Sample," in *1998 Proceedings of the Section on Survey Research Methodology*, American Statistical Association: Alexandria, VA, pp. 387-391.
- U17. Stephenson, W. R. and Stern, H. (2000), "AP Statistics", Stats, No. 28, pp. 23-27.
- U18. Stern, H (2005), "Introduction to the Football Articles," in *Anthology of Statistics in Sports*, eds. J. Albert, J. Bennett, J. J. Cochran, SIAM: Philadeliphia, Chapter 3, pp. 13-15.

Advising:

Ph.D. Students:

Mark E. Glickman "Paired comparison models with time-varying parameters" (Harvard, 1993)

Yoon-Sook Jeon "Missing data in structural equation models" (Iowa State, 1998)

Jianlin Cheng "Finite mixtures of linear regression models" (Iowa State, 1999)

Deanne Reber "Inference for extremes with applications to animal breeding and disease mapping" (Iowa

State, 1999)

Michael Schuckers "Bayesian analysis of hierarchical models for polychotomous data from a multi-stage cluster

sample" (Iowa State, 1999)

Grace Liu "Efficiency of Markov chain Monte Carlo algorithms for Bayesian inference in random

regression models" (Iowa State, co-major with Animal Science, 2000)

Sandip Sinharay "Bayes factors for variance component testing in generalized linear mixed models (Iowa

State, 2001)

Hongmei Zhang "Probability models for design and analysis of genetic data" (Iowa State, 2003)

Thao Duong "Generalized probabilistic biclustering for pattern recognition" (UC Irvine, 2013)

Jie Shen "Bayesian hierarchical models with spatial prior distributions in genome-wide association

studies" (UC Irvine, 2013)

Xu Tian "A time-varying low dimensional representation for spatio-temporal data" (UC Irvine, 2014)

Kevin Heins "A statistical approach to detecting patterns in behavioral event sequences" (UC Irvine,

2014)

Brian Vegetabile "Methods for Optimal Covariate Balance in Observational Studies for Causal Inference"

(UC Irvine, 2018)

Maozhu Dai "Non-Parametric Tests for Treatment Effect Heterogeneity in Randomized Experiments and

Observational Studies" (UC Irvine, 2021)

Hina Arora "Statistical Issues in Measurement with Applications in Forensics and Methylomics"

(UC Irvine, 2023)

Tong Zou (UC Irvine, expected 2024) Corey Katz (UC Irvine, expected 2025)

M.S. Students (sole or primary advisor):

Katherine Sunde "Logistic regression for statistical analyses of natural selection" (1995)

Shawn Bates "A study of rating methods applied to college hockey" (1995) (supervised creative

component with D. Cook as major professor)

Angela Jones "Logistic regression with random effects in a study of in-vitro fertilization" (1996)

Deanne Reber "Bayesian and classical analysis of the mixed linear model" (1996)

James Smith "Modeling the human body's thermoregulatory response to exercise using statistical and

engineering techniques" (1996) (helped supervise thesis with D. Rollins as major professor)

Barbara Mock "On the predictability of college basketball" (1997)

Zach Dietz "Poisson regression in studies of natural selection" (1998) Sandip Sinharay "A study of posterior predictive model checking" (1998)

Hongmei Zhang "Poisson mixture models in finance" (2001)

Conference Presentations, Invited Seminars, Continuing Education Courses:

Continuing Education Courses / Workshops:

August 1996 August 1997 May 2000	"Bayesian Data Analysis," Joint Statistical Meetings, Chicago, IL (53 students) "Bayesian Data Analysis," Joint Statistical Meetings, Anaheim, CA (71 students) "A Workshop in Forensic Statistics," Federal Bureau of Investigation, Washington, DC (26 students)
August 2009	"Bayesian Statistical Methods and Their Application to Clinical Trials," Orange County Regulatory Affairs Group, Irvine, CA
March 2016	"An Introduction to Statistical Thinking for Forensic Practitioners," Florida Society of Crime Laboratory Directors and Palm Beach County Sheriff's Office, West Palm Beach, FL (70 students)
April 2017	"An Introduction to Statistical Thinking for Forensic Practitioners," Virginia Department of Forensic Science, Roanoke, VA (24 students)
April 2017	"An Introduction to Statistical Thinking for Forensic Practitioners," Bellevue WA Police Department, Bellevue, WA (40 students – Kings County, Seattle, Tacoma, Bellevue, other locations)
August 2017	"An Introduction to Statistical Thinking for Forensic Practitioners," International Association for Identification Annual Meeting, Atlanta, GA (8 students)
Feb/Mar 2018	"An Introduction to Statistical Thinking for Forensic Practitioners," Orange County Crime Lab, Santa Ana, CA (75 students)
August 2018	"An Introduction to Statistical Thinking for Forensic Practitioners," International Association for Identification Annual Meeting, San Antonio, TX (15 students)
April 2019	"Bayesian Statistical Analysis," Yau Mathematical Sciences Center, Tsinghua University, Beijing, China (10 students)
April 2019	"Forensic Statistics and the Assessment of Probative Value", Legal Training Workshop, Madison County (IL) Government Center, Edwardsville, IL (40 participants)
May 2019	"Forensic Statistics and the Assessment of Probative Value", Legal Training Workshop, Office of the Cook County (IL) Public Defender, Chicago, IL (7 participants)
August 2019	"An Introduction to Statistical Thinking for Forensic Practitioners," International Association for Identification Annual Meeting, Reno, NV (18 students) (w/ Naomi Kaplan)
September 2019 – N	March 2020
	Statistical Workshop for School of Medicine / School of Biological Science Trainees (4 workshops – September, November, January, March) (20 students)
January 2020	"An Introduction to Statistical Thinking for Forensic Practitioners," San Francisco Police Department, San Francisco, CA (20 students)
March / April 2021	"An Introduction to Statistical Thinking for Forensic Practitioners," CSAFE Short Course (online 3/26, 4/9, 4/23) (approx. 150 students) (w/ Alicia Carriquiry)
August 2021	"An Introduction to Statistical Thinking for Forensic Practitioners," International Association for Identification Annual Meeting, Nashville, TN (21 students) (w/ Naomi Kaplan)

October / November 2021 "An Introduction to Statistical Thinking for Forensic Practitioners," CSAFE Short

Course (online 10/22, 11/5, 11/12) (approx.. 120 students)

June 2022 "An Introduction to Statistical Thinking for Forensic Practitioners," CSAFE Short Course

(online 6/3, 6/10, 6/17) (approx. 60 students per session)

August 2022 "An Introduction to Statistical Thinking for Forensic Practitioners," International

Association for Identification Annual Meeting, Omaha, NE (25 students) (w/ Alicia

Carriquiry)

October / November 2022 "An Introduction to Statistical Thinking for Forensic Practitioners," CSAFE Short

Course (online 10/14, 10/21, 10/28, 11/4) (approx. 45 students per session)

March / April 2023 "An Introduction to Statistical Thinking for Forensic Practitioners," CSAFE Short Course

(online 3/31, 4/7, 4/14, 4/21) (approx. 25 students per session)

August 2023 "An Introduction to Statistical Thinking for Forensic Practitioners," International

Association for Identification Annual Meeting, National Harbour, MD (19 students)

Conference Invited Papers:

April 1986 "On the Probability of Winning A Football Game,"

TIMS/ORSA Annual Meeting, Los Angeles, CA

October 1986 "Maximum Entropy and the Lottery,"

IEEE Information Theory Meeting, Ann Arbor, MI

April 1988 "Gamma Processes, Paired Comparisons, and Rankings,"

20th Interface Symposium, Fairfax, VA

June 1990 "Voting Paradoxes," AMS-IMS-SIAM Conference on Probability Models and Statistical

Analyses for Ranking Data, Amherst, MA

May 1992 "Testing in Latent Class Models Using a Posterior Predictive Check Distribution,"

Conference on Analysis of Latent Variables in Developmental Research, University Park, PA

August 1992 Who's #1: Probability and Statistics in Sports,"

Joint Statistical Meetings, Boston, MA

October 1992 "Who's `# 1: Probability and Statistics in Sports,"

Ohio Statistics Conference, Bowling Green, OH

August 1995 "Who's Hot and Who's Not: Runs of Success and Failure in Sports,"

Joint Statistical Meetings, Orlando, FL

August 1995 "Inference for Extremes in Epidemiology," (with N. Cressie)

Joint Statistical Meetings, Orlando, FL

May 1997 "Bayesian Inference for Extremes in Disease Incidence Rates (with N. Cressie)

Workshop on Spatial Epidemiology, Vancouver, BC, Canada

August 1997 "If a Statistician were the Football Coach,"

Joint Statistical Meetings, Anaheim, CA

October 1997 "Inference for Extremes in Animal Breeding," 50th Anniversary

Conference, Department of Statistics, Iowa State University, Ames, IA

December 1997 "Probability and Statistics in Sports,"

Chance Lectures, Dartmouth College, Hanover, NH

May 1999 "Model Checking, Model Selection and Random Effects,"

Symposium on Model Selection, Empirical Bayes and Related Topics, Lincoln, NE

August 1999 "To Bayes or Not to Bayes,"

Introductory Overview Lecture, Joint Statistical Meetings, Baltimore, MD

May 2000 "Model Checking for Disease Mapping Models,"

International Society for Bayesian Analysis, Hersonissos, Crete, Greece

August 2000 "To Bayes or Not to Bayes,"

Introductory Overview Lecture, Joint Statistical Meetings, Indianapolis, IN

August 2000 "The Basics of Talking Bayes,"

Joint Statistical Meetings, Indianapolis, IN

August 2001 "When it Pays to Go Bayes,"

Introductory Overview Lecture, Joint Statistical Meetings, Atlanta, GA

September 2001 "Markov Chain Baseball", "On the Probability of Winning", "Least Squares Ratings"

Statistics in Sports Conference, Miami University, Oxford, OH

August 2002 "When it Pays to Go Bayes,"

Introductory Overview Lecture, Joint Statistical Meetings, New York, NY

October 2003 "Better Sports through Statistics," "Bayesian Statistics: How? Why?"

Fall Meeting, Southern California American Statistical Association Chapter, Pomona, CA

November 2003 "The Complete Idiot's Guide to Rating Sports Teams"

IMS Mini-Meeting on Sports and Statistics, Worcester Polytechnic Insitute, Worcester, MA

May 2004 "Bayesian EDA is Not an Oxymoron"

International Society for Bayesian Analysis (ISBA) World Meeting, Vina del Mar, Chile

August 2004 "The Probative Value of Bullet Lead Evidence"

Joint Statistical Meetings, Toronto, Canada

October 2004 "The Bullets Match ... But Who Cares"

Decisions and Justice Conference, Institute for Mathematics in the Behavioral Sciences,

Irvine, CA

December 2004 "What is the Point of the Bowl Championship Series"

Decisions, Sports and Statistics Conference, Institute for Mathematics in the Behavioral

Sciences, Irvine, CA

February 2005 "Forensic Statistics: The Bullets Match ... But Who Cares"

Better Policy Through Statistics: A Symposium in Honor of John Rolph

Costa Mesa, CA

May 2005 "Ancestry Probability Assessment in the Presence of Genotyping Errors"

Bayes, Multivariate Analysis, and CASM: A Statistics Conference in Honor of Jim Press,

Riverside, CA

May 2005 "Give Statistics a Chance", Commencement Address

Department of Statistics, University of California

Berkeley, CA

August 2005 "Rating College Football teams and the Bowl Championship Series"

Joint Statistical Meetings, Minneapolis, MN

September 2005 "Bayesian Statistical Methods: How and (Most Important) Why?"

American Fisheries Society, Anchorage, Alaska

May 2006 "Forensic Statistics: On Finding a Needle in a Haystack" (Invited Discussion)

Interface 2006 (38th Symposium on the Interface of Statistics, Computing Science and

Applications), Pasadena, CA

August 2006 "On Model Selection in Variance Components Models"

Joint Statistical Meetings, Seattle, WA

August 2006 Invited Participant, Drug Treatment Heterogeneity Meeting, Pfizer/Center for Health Policy

Research, UCI

July 2007 "Baseball Statistics Meets Mathematical Statistics"

Symposium on Statistics and Operations Research in Baseball, CSU - East Bay, Hayward,

CA

August 2007 "Intra-University Collaborations (How to Win Friends, Influence People and

Get Resources)", Department Chair's Workshop, Joint Statistical Meetings, Salt Lake City,

UT

May 2008 "Use and Abuse of Information in Sports", Elements of Information Theory, Palo Alto, CA

August 2008 "Applying Bayesian Ideas in a Multisite fMRI Study", Joint Statistical Meetings, Denver,

CO

June 2009	"Small Sample Statistics in Baseball: The Batter-Pitcher Matchup", Statistics Society of Canada Meeting, Vancouver, BC
March 2011	Participant, Panel on Research Centers, AAU Dean's Meeting, Gainesville, FL
August 2011	"The Bowl Championship Series: Still Crazy After All These Years"
C	Joint Statistical Meetings, Miami, FL
March 2014	"A Statistical Approach to Detection Patterns in Behavioral Event Sequences"
	Workshop on Recent Advances in Bayesian Inference, UC Irvine, Irvine, CA
April 2014	"Watching Sports Through the Eyes of a Statistician", MAA Southern California – Nevada Spring Meeting, Irvine, CA
July 2014	Participant, Panel on Working with Your Dean, Snowbird Computer Science Chair's Meeting, Snowbird, UT
August 2014	"Statistics in the Practice of Forensic Statistics", Joint Statistical Meetings, Boston, MA
March 2015	"Intro to ICS and Corporate Partnerships", Southern California Society for Information Management (SCSIM), Long Beach, CA
February 2016	"Likelihood Ratios in Forensic Statistics: When or When Not to Use Them", AAAS Meetings, Washington, DC
May 2016	Participant, Panel on Similarity-Based Likelihood Ratio Methods, Technical Colloquium: Quantifying the Weight of Technical Evidence, NIST, Gaithersburg, MD
May 2016	Participant, Panel on Confidence Intervals for Likelihood Ratios, Technical Colloquium: Quantifying the Weight of Technical Evidence, NIST, Gaithersburg, MD
August 2016	"Strengthening the Science in Forensic Science" (discussant), Joint Statistical Meetings, Chicago, IL
March 2017	Participant, Panel on 2016 NASEM Report "Commercial Motor Vehicle Driver Fatigue, Long-Term Health and Highway Safety", 10 th International Conference on Managing Fatigue, San Diego, CA
September 2017	"Characterizing Handwriting Complexity for Forensic Evaluation", Internal Conference on Forensic Inference and Statistics, Minneapolis, MN
January 2018	"Why Error Rates?", CSAFE Error Rate Symposium, Arlington, VA
February 2018	"Science and the Fair Administration of Justice" (discussant), AAAS Meeting, Austin, TX
May 2018	"Getting Beyond the Mean in Predictive Inference", Conference on Predictive Inference and its Applications, Iowa State University, Ames, IA
June 2018	"The Likelihood Ratio and Other Paradigms for Forensic Evidence", ABA Criminal Justice Section's Ninth Annual Prescription for Criminal Justice Forensics Program, New York, NY
June 2018	"Forensic Statistics and the Assessment of Probative Value", NACDL Cardozo Law National Forensic College, New York, NY
August 2018	"The Role of Statistics in Improving Forensic Science", Joint Statistical Meetings, Vancouver, BC
August 2018	"Continuous Improvement in Academic Publishing", Joint Statistical Meetings, Vancouver, BC
August 2018	"Gatekeepers of Statistical Scientific Evidence: Legal, Ethical and Educational Responsibilities of Judges and Lawyers" (panel), American Bar Association, Chicago, IL
August 2018	"Statistics 101: Forensic Statistics and the Assessment of Probative Value", National Forensic Science Symposium, Department of Justice, Washington, DC
October 2018	"The Rise of Data", ICS: The Next 50 Years (panel presentation), University of California, Irvine, CA
December 2018	"Forensic Statistics and the Probative Value of Evidence", Organization of Scientific Area Committees (OSAC) for Forensic Science (in-person meeting), Phoenix, AZ

March 2019	"The Rise of Data in Science and Society" (keynote address), Halcioglu Data Science Institute 1 year anniversary symposium, University of California, San Diego
May 2019	"To P-value or Not to P-value: What is a Scientist to Do", UCI Biological Sciences/School of Medicine Faculty Retreat, Costa Mesa, CA
May 2019	"Statistics 1 & 2: A case-based introduction to probability theory", ABA Criminal Justice Division's Tenth Annual Prescription for Criminal Justice Forensics Program, New York, NY
May 2019	"An Update from the Center for Statistics and Applications in Forensic Evidence", ABA Criminal Justice Division's Tenth Annual Prescription for Criminal Justice Forensics Program, New York, NY
June 2019	"Statistical Issues in Forensic Science", NACDL Cardozo Law National Forensic College, New York, NY
August 2019	"CSI at the JSM: Forensic Statistics and Assessing the Probative Value of Evidence," (Introductory Overview Lecture), Joint Statistical Meetings, Denver, CO
August 2019	"Statistics and the Fair Administration of Justice," Joint Statistical Meetings, Denver, CO
August 2019	"A Discussion about Conclusion Language - Changes, Trends and Where We Are Heading" (invited panel), International Association for Identification Annual Meeting, Reno, NV
October 2019	NIST-CSAFE Thinkshop on Bitemark Evidence (organizer and participant)
September 2020	"Statistical Approaches for Studying Early-Life Experiences and Their Impact," Southern California AI & Biomedicine Symposium", UC Irvine
October 2020	"Forensic Statistics and The Assessment of Probative Value," 2020 Scientific Association of Forensic Examiners (SAFE) International Conference
October 2021	"Statistical Approaches for Studying Early-Life Experiences and Their Impact," 5 th Annual Scientific Meeting, Great Plains IDeA-Clinical and Translational Research
March 2022	"Panel on Schools of Computing and Data Science" (invited panel), Haalcioglu Data Science Institute 4 th Anniversary Symposium, University of California, San Diego
November 2022	Keynote Speaker, Bio-Convergence 2030, joint meeting UCI HSSoE and TAU
December 2022	"Statistics and the Fair Administration of Justice: Assessing Bloodstain Pattern Evidence," 2022 IMS International Conference on Statistics and Data Science, Florence, Italy
June 2023	"Statistics and the Fair Administration of Justice: Assessing Bloodstain Pattern Evidence," 2023 International Indian Statistical Association (IISA) Conference, Colorado School of Mines
June 2023	"Assess Bloodstain Pattern Evidence," Center for Statistics and Applications in Forensic Evidence (CSAFE) 2023 All Hands Meeting
September 2023	"A Rose by Any Other Name: Statistics, Machine Learning and Artificial Intelligence," 75 th Anniversary Distinguished Lecture, Department of Statistics 75 th Anniversary Research Conference, Ames, IA

Conference Contributed Papers:

August 1988	"Maximum Entropy and the Lottery,"
-	Joint Statistical Meetings, New Orleans, LA
August 1989	"Distributions on Permutations,"
-	Joint Statistical Meetings, Washington, DC
August 1991	"A Posterior Predictive Randomization Test for the Number of Classes
-	in a Mixture Model," Joint Statistical Meetings, Atlanta, GA
August 1992	"Testing in Mixture Models Using a Posterior Predictive Check Distribution,"
	Joint Statistical Meetings, Boston, MA

August 1993	"Neural Networks in Applied Statistics,"
	Joint Statistical Meetings, San Francisco, CA
August 1994	"Some Difficulties in Logistic and Probit Regressions,"
	Joint Statistical Meetings, Toronto, Canada
April 1996	"Who's Hot and Who's Not: Runs of Success and Failure in Sports,"
	Annual Meeting, Iowa Chapter of the ASA, Mt. Vernon, IA
August 1998	"Posterior Predictive Sample Size Determination,"
	Joint Statistical Meetings, Dallas, TX
March 2000	"Model Checking for Disease Mapping Models,"
	Biometric Society -ENAR, Chicago, IL
August 2001	"Posterior Predictive Model Checking in Hierarchical Models,"
	Joint Statistical Meetings, Atlanta, GA
June 2002	"Sample Size Calculation for Finding Unseen Species,"
	Valencia 7 Conference on Bayesian Statistics, Tenerife, Spain
May 2004	"Variance Components Analysis of a Multi-Site fMRI Study," (poster)
	International Society for Bayesian Analysis, Vina del Mar, Chile
August 2004	"Variance Components Analysis of a Multi-Site fMRI Study",
	Joint Statistical Meetings, Toronto, Canada
August 2006	"Batter-Pitchier Matchups in Baseball,"
-	Joint Statistical Meetings, Salt Lake City, UT
August 2013	Discussant, Session on Statistical Inference in Forensic Statistics
	Joint Statistical Meetings, Montreal, Canada
August 2019	"Forensic Statistics and the Probative Value of Evidence,"
-	International Association for Identification Annual Meeting, Reno, NV
August 2022	Discussant, Session on Statistics for Strengthening Inferences from Forensic Evidence
-	Joint Statistical Meetings, Washington, DC

Invited Department/ Organization Seminars:

	8
March 1987	Department of Statistics, Pennsylvania State University, University Park, PA
March 1987	Department of Statistics, Harvard University, Cambridge, MA
March 1987	Department of Statistics, Rutgers University, New Brunswick, NJ
October 1987	Department of Statistics, Harvard University, Cambridge, MA
March 1988	Department of Statistics, University of Connecticut, Storrs, CT
November 1988	Montreal Statistics Colloquium, Montreal, Quebec, Canada
October 1989	Department of Biostatistics, Harvard Univ. School of Public Health, Boston, MA
October 1990	Department of Statistics, Carnegie-Mellon University, Pittsburgh, PA
October 1990	Department of Statistics, Yale University, New Haven, CT
October 1990	Department of Mathematics, University of Massachusetts, Lowell, MA
February 1992	Department of Statistics, University of Pennsylvania, Philadelphia, PA
October 1992	Department of Mathematics and Statistics, Bowling Green State Univ., Bowling Green, OH
January 1993	Department of Mathematics, Dartmouth College, Hanover, NH
November 1993	Institute of Statistics and Decision Sciences, Duke University, Durham, NC
December 1993	Boston Chapter of the ASA, Cambridge, MA
January 1994	Department of Mathematics, Williams College, Williamstown, MA
January 1994	Department of Statistics, Iowa State University, Ames, IA
January 1994	Iowa Stat-er's Seminar, Department of Statistics, Iowa State University, Ames, IA
February 1994	Graduate School of Business, University of Southern California, Los Angeles, CA
September 1994	Animal Breeding and Genetics Seminar, Iowa State University, Ames, IA
October 1994	Department of Biostatistics, School of Public Health, University of Minnesota, Minneapolis,
	MN
November 1994	Department of Mathematics and Computer Science, Grinnell College, Grinnell, IA

April 1995 Department of Statistics, University of Iowa, Iowa City, IA May 1995 Department of Statistics, University of Chicago, Chicago, IL September 1995 MRC Biostatistics Unit, Institute of Public Health, Cambridge, United Kingdom September 1995 Department of Statistics, Trinity College, Dublin, Ireland Animal Breeding and Genetics Seminar, Iowa State University, Ames, IA December 1995 March 1996 Department of Statistics, Rice University, Houston, TX March 1996 Department of Statistical Science, Southern Methodist University, Dallas, TX Iowa Stat-er's Seminar, Department of Statistics, Iowa State University, Ames, IA April 1996 October 1996 Young Investigator Series, Precollegiate Programs for Talented and Gifted, Iowa State Univ., March 1997 John M. Olin School of Business, Washington University, St. Louis, MO March 1997 Department of Statistics, Carnegie-Mellon University, Pittsburgh, PA October 1998 Undergraduate Math Club, Iowa State University, Ames, IA November 1998 Twin Cities Chapter of the ASA, Bloomington, MN February 1999 Department of Statistics and Operations Research, New York University, New York, NY **April** 1999 Department of Statistics, North Carolina State University, Raleigh, NC January 2000 RAND Corporation, Santa Monica, CA January 2000 Department of Statistics, UCLA, Los Angeles, CA February 2000 Science Bound (HS), Iowa State University, Ames, IA March 2000 Department of Biostatistics, University of Michigan, Ann Arbor, MI Washington Statistical Society, Washington, DC May 2000 September 2000 Bioinformatics and Computational Biology Program, Iowa State University, Ames, IA October 2000 Department of Statistics, Ohio State University, Columbus, OH October 2000 Department of Econometrics and Statistics, Graduate School of Business, University of Chicago, Chicago, IL RAND Corporation, Washington, DC January 2001 March 2001 School of Nursing and School of Social Work, University of Washington, Seattle, WA March 2001 Departments of Statistics and Biostatistics, University of Washington, Seattle, WA Laurence H. Baker Center for Bioinformatics and Biological Statistics, Iowa State Univ. Ames. April 2001 December 2001 Department of Statistics, University of California, Irvine, CA December 2001 Division of Biostatistics, University of Minnesota, Minneapolis, MN February 2002 Department of Statistics, University of Iowa, Iowa City, IA February 2002 Department of Statistics, Iowa State University, Ames, IA October 2002 Departments of Statistics and Biostatistics, UCLA, Los Angeles, CA February 2003 Department of Statistics, University of California, Riverside, CA May 2003 Marshall School of Business, University of Southern California, Los Angeles, CA June 2003 Department of Mathematics, University of California, San Diego, CA IMBS Decisions Group, University of California, Irvine, CA December 2003 February 2004 IMBS Social Dynamics Group, University of California, Irvine, CA March 2005 Department of Mathematics, Pomona College, Claremont, CA April 2005 Pittsburgh Chapter of the American Statistical Association, Pittsburgh, PA May 2005 Applied Mathematics Seminar, Department of Mathematics, University of California, Irvine, June 2005 Commencement Address, Department of Statistics, University of California, Berkeley, CA October 2005 Institute of Mathematical Behavioral Science, University of California, Irvine, CA March 2006 Department of Statistics, Brigham Young University, Provo, UT May 2006 Department of Statistics and Applied Probability, UCSB, Santa Barbara, CA June 2006 Continuing Learning Experience, Cal State Univ. Fullerton, CA May 2007 Department of Biostatistics, University of California, San Diego, CA April 2008 Demography Program, University of California, Irvine, CA January 2009 Department of Statistics, Cal Poly, San Luis Obispo, CA

Department of Statistics, University of California, Riverside, CA

May 2009

February 2010	Artificial Intelligence / Machine Learning Seminar, University of California, Irvine
February 2011	UCI Libraries Luncheon, University of California, Irvine, CA
June 2011	Commencement Address, Department of Statistics, University of California, Los Angeles, CA
December 2011	Department of Applied and Computational Mathematics and Statistics, Notre Dame University,
	Notre Dame, IN
April 2012	Statistical Sciences Group, Los Alamos National Laboratory, Los Alamos, NM
October 2012	Department of Mathematics – Undergraduate Colloquium, University of California, Irvine, CA
February 2013	Committee on National Statistics, Irvine, CA
June 2013	FBI Laboratory, Quantico, VA
June 2014	Department of Statistics, University of California, Irvine, CA
October 2014	Data Science Initiative, University of California, Irvine, CA (Kickoff event)
November 2014	Department of Biostatistics, University of California, San Diego, CA
January 2017	Center for Statistics and Applications in Forensic Evidence (CSAFE) Webinar
February 2018	San Diego Chapter of the American Statistical Association, San Diego, CA
January 2019	"Optimal Covariate Balance for Causal Inference in Observational Studies",
	Johnson and Johnson, Irvine, CA
September 2019	"The Role of Data in the Fair Administration of Justice", Department of Mathematics
	and Statistics, San Diego State University, San Diego, CA
September 2019	"Feature-Based Analysis of Blood Stain Patterns," Center for Statistics and
	Applications in Forensic Evidence (CSAFE) Webinar
September 2019	"The Role of Statistics in Modern Data Analysis," Panel presentation,
	National Institute of Statistical Science (NISS) Webinar
January 2020	"Probability, Statistics and the Fair Administration of Justice", OC Forensic Expert Witness
	Association
November 2020	"A Statistician Reads the Sports Pages", UCI Sports Statistics Group, Irvine, CA
November 2022	Department of Statistics and Operations Research, Tel Aviv University, Israel