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EDUCATION

Ph.D., Statistics, July, 2000
Michigan State University, East Lansing, Michigan
Advisor: Professor A. V. Skorokhod

Mgr. (M.S. equivalent), Mathematics, June, 1996
(Concentration in probability and random processes.)
Charles University, Prague, Czech Republic
Advisor: Professor J. Štěpán

PROFESSIONAL EXPERIENCE

- *Chair*, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill, 2024 – 2028

- *Kenan Distinguished Professor/Professor/Associate Professor*, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill, 2025 – present/2013 – 2025/2008 – 2013

- *Visiting Investigator*, Fred Hutchinson Cancer Research Center, Summer 2025, Spring 2017.

- *Faculty Appointee*, National Institute of Standards and Technology, 2018 –2023

- *Associate Professor/Assistant Professor*, Department of Statistics, Colorado State University, 2006 – 2008/2000 – 2006

- *Guest Researcher*, National Institute of Standards and Technology, 2003 – 2008

- *Visiting Assistant Professor*, Department of Statistics, University of Chicago Fall 2006

- *Honorary Fellow, Summer Internship in Probability*, University of Wisconsin-Madison, Summer 2001, 2002

- *Graduate Teaching Assistant*, Michigan State University, 1996 – 2000

- *Statistical Consultant*, Michigan State University, 1999 – 2000

- *Teaching Assistant*, Charles University, Prague, Czech Republic, 1995 – 1996

- *Computer Assistant*, Charles University, Prague, Czech Republic, 1993 – 1996

HONORS & AWARDS

- Kenan Distinguished Professor, University of North Carolina at Chapel Hill, 2025

- Elected Fellow of The Institute of Mathematical Statistics, 2020

- Elected Fellow of The American Statistical Association, 2016

- Kavli Fellow, National Academy of Sciences, 2015

- Elected Member of the International Statistical Institute, 2006

- Graduation with high honors (Summa Cum Laude), Charles University, Prague, 1996

BOOK CHAPTERS

1. **J. Hannig**, Iyer, H., Lee, T.C.M., Cui, Y. (2025). On Fiducial Inference. In: *International Encyclopedia of Statistical Science* 2nd edition, Springer, pp 949–955. doi:10.1007/978-3-662-69359-9_440

2. A. Murph*, **J. Hannig**, J.P. Williams (2024), Introduction to Generalized Fiducial Inference, in *Handbook on Bayesian, Fiducial and Frequentist (BFF) Inferences*, CRC Press, pp. 276 – 299. `http://arxiv.org/abs/2302.14598`

3. D. L. Sonderegger* and **J. Hannig** (2014), Fiducial theory for free-knot splines, in *Contemporary Developments in Statistical Theory, Festschrift in honor of Professor Hira L. Koul*, Springer, pp. 155 – 189. doi:10.1007/978-3-319-02651-0_10

4. **J. Hannig**, H. Iyer, T. C. M. Lee (2011), Fiducial Inference, in *International Encyclopedia of Statistical Science*, Springer, pp. 515-519. doi:10.1007/978-3-642-04898-2_250

5. **J. Hannig**, J. S. Marron, G. Samorodniztky and F. D. Smith (2003), Log-normal durations can give long range dependence, Mathematical Statistics and Applications: Festschrift for Constance van Eeden, *IMS Lecture Notes – Monograph Series*, **42**, pp. 333 – 344. `http://www.jstor.org/stable/4356246`

RESEARCH PAPERS

Refereed Journal Papers

1. H. Flurry*, **J. Hannig**, R.L. Smith, Constrained Fiducial Inference for Gaussian Models, to appear in *Journal of Time Series Analysis* accepted in February 2026.

2. A. C. Murph*, **J. Hannig**, J. P. Williams, Generalized Fiducial Inference on Differentiable Manifolds, to appear in *International Journal of Approximate Reasoning* accepted in December 2025. `https://arxiv.org/abs/2209.15473`

*Graduate student co-author at the time the research was conducted.

3. J.E. Borgert*, **J. Hannig**, J.D. Tucker, L. Arbeeva, A. N. Buck, Y.M. Golightly, S.P. Messier, A.E. Nelson, J.S. Marron, Elastic Shape Analysis of Movement Data, to appear in *Journal of American Statistical Association* accepted in October 2025. `https://arxiv.org/abs/2409.13938`

4. A. Ackerman*, Z. Zhang, **J. Hannig**, J. Prothero, J.S. Marron, Multifaceted Neuroimaging Data Integration via Analysis of Subspaces, to appear in *Psychometrika* accepted in May 2025. doi:10.1017/psy.2025.10020

5. W. Du*, **J. Hannig**, T. C. M. Lee, Y. Su*, and C. Zhang*, AutoGFI: Streamlined Generalized Fiducial Inference for Modern Inference Problems in Models with Additive Errors (2025), *Journal of Computational and Graphical Statistics* **34**, pp. 1214-1225. doi:10.1080/10618600.2024.2441165

6. W. Du*, **J. Hannig**, R. C.S. Lai, T. C.M. Lee and C. Zhang* (2025), Fiducial Selector: Fast and Efficient Inference for High-Dimensional Regression, *Electronic Journal of Statistics*, **19**, pp. 4230-4255. doi:10.1214/25-EJS2435

7. Y. Liu, **J. Hannig** and A. C. Murph* (2025), A Geometric Perspective on Bayesian and Generalized Fiducial Inference, *Statistical Science*, **40**, pp. 219-234. doi:10.1214/24-STS928

8. Y. Cui and **J. Hannig** (2025), Demystifying Inferential Models: A Fiducial Perspective, *Statistical Science*, **40,** pp. 211-218. doi:10.1214/24-STS924

9. S. Lu[†] and **J. Hannig** (2024), Gender Wage Gap Of Assistant Professors in US Public Universities, *Journal of Young Investigators*, **27** (9). doi:10.22186/jyi.27.9.1.1

10. J. Prothero*, M. Jiang*, **J. Hannig**, Q. Tran-Dinh, A. Ackerman*, J.S. Marron (2024), Data Integration Via Analysis of Subspaces (DIVAS), with discussion and rejoinder by the authors, *TEST (SEIO)*, **33**, pp. 633-674. doi:10.1007/s11749-024-00923-z

11. J. Fu[†], J. Prothero* and **J. Hannig** (2024), Algorithm for detection of illegal discounting in North Carolina Education Lottery, *Sankhya B*, **86**, pp. 224 – 240. doi:10.1007/s13571-024-00323-1

12. Y. Cui and **J. Hannig** (2024), A fiducial approach to nonparametric deconvolution problem: discrete case, *Science China Mathematics*, **67**, pp. 2653–2670. doi:10.1007/s11425-021-2086-5

13. Y. Cui and **J. Hannig**, M.R. Kosorok (2024), A unified fiducial approach to interval-censored data, *Journal of the American Statistical Association*, **119**, pp. 2230-2241. doi:10.1080/01621459.2023.2252143

[†]Undergraduate student co-author at the time the research was conducted.

14. X. Yang*, **J. Hannig**, K.A. Hoadley, I. Carmichael and J.S. Marron (2024), Measure of Strength of Evidence for Visually Observed Differences between Subpopulations, *Journal of Computational and Graphical statistics*, **33**, pp. 736-748. doi:10.1080/10618600.2023.2276113

15. J. B. Prothero*, **J. Hannig** and J.S. Marron (2023), New Perspective on Centering, *The New England Journal of Statistics in Data Science*, **1**, pp. 216-236. doi:10.51387/23-NEJSDS31

16. J. P. Williams*, Y. Xie, **J. Hannig** (2023), The EAS approach for graphical selection consistency in vector autoregression models, *Canadian Journal of Statistics*, **51**, pp. 674-703. doi:10.1002/cjs.11726

17. J. P. Williams, D. M. Ommen and **J. Hannig** (2023) Generalized fiducial factor: an alternative to the Bayes factor for forensic identification of source problems, *Annals of Applied Statistics*, **17**, pp. 378-402. doi:10.1214/22-AOAS1632

18. X. Yang*, K.A. Hoadley, **J. Hannig**, J.S. Marron (2023), Jackstraw Inference for AJIVE Data Integration, *Computational Statistics and Data Analysis*, **180**, 107649. doi:10.1016/j.csda.2022.107649

19. E.L. Boone, **J. Hannig**, R. Ghanam, S. Ghosh, F. Ruggeri and S. Prudhomme (2022), Model validation of a single degree-of-freedom oscillator: a case study, *Stats*. **5**, pp. 1195-1212. doi:10.3390/stats5040071

20. Y. Su*, **J. Hannig**, T.C.M. Lee (2022), Uncertainty Quantification in Graphon Estimation using Generalized Fiducial Inference, *IEEE Transactions on Signal and Information Processing over Networks*, **8**, pp. 597-609. doi:10.1109/TSIPN.2022.3188458

21. T. Petty*, **J. Hannig**, T. I. Huszar, H. Iyer (2022), A New String Edit Distance and Applications, *Algorithms*, **15**, 242. doi:10.3390/a15070242

22. S. Wu*, **J. Hannig**, T.C.M. Lee (2022), Uncertainty Quantification for Honest Regression Trees, *Computational Statistics and Data Analysis*, **167**, 107377. doi:10.1016/j.csda.2021.107377

23. **J. Hannig** and H. Iyer (2022), Testing For Calibration Discrepancy of Reported Likelihood Ratios in Forensic Science, *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, **185**, pp. 267-301. doi:10.1111/rssa.12747

24. R. C. S. Lai, **J. Hannig** and Thomas C. M. Lee (2021), Method G: Uncertainty Quantification for Distributed Data Problems using Generalized Fiducial Inference, *Journal of Computational and Graphical Statistics*, **30**, pp. 934-945. doi:10.1080/10618600.2021.1923514

25. I. Carmichael, B. C. Calhoun, K. A. Hoadley, M. A. Troester, J. Geradts, H. D. Couture, L. Olsson, C. M. Perou, M. Niethammer, **J. Hannig** and J.S. Marron (2021), Joint and individual analysis of breast cancer histologic images and genomic covariates, *Annals of Applied Statistics*, **15**, pp. 1697-1722. doi:10.1214/20-AOAS1433

26. W. J. Shi*, **J. Hannig**, R. C. S. Lai*, T. C. M. Lee (2021), Covariance estimation via fiducial inference, *Statistical Theory and Related Fields*, **4**, pp. 316-331. doi:10.1080/24754269.2021.1877950

27. W, Li*, **J. Hannig** and C. D. Jones (2021), A Note on Optimal Sampling Strategy for Structural Variant Detection Using Optical Mapping, *Communications in Statistics*, **50**, pp. 4763-4777. doi:10.1080/03610926.2020.1723638

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31. Y. Zou*, **J. Hannig** and D. S Young (2021), Generalized fiducial inference on the mean of zero-inflated Poisson and Poisson hurdle models, *Journal of Statistical Distributions and Applications*, **8**, 5. doi:10.1186/s40488-021-00117-0

32. G. Li* and **J. Hannig** (2020), Deep fiducial inference, *STAT*, **9**, e308. doi:10.1002/sta4.308

33. J.P. Williams*, C.B. Storlie, T. M. Therneau, C. R. Jack Jr. and **J. Hannig** (2020), A Bayesian Approach to Multi-State Hidden Markov Models: Application to Dementia Progression, *Journal of American Statistical Association*, **115**, pp. 16-31. doi:10.1080/01621459.2019.1594831

34. S.D. Neupert and **J. Hannig** (2020), BFF: Bayesian, Fiducial, Frequentist Analysis of Age Effects in Daily Diary Data, *Journal of Gerontology: Psychological Sciences*, **75**, pp. 67-79. doi:10.1093/geronb/gbz100

35. Y. Cui* and **J. Hannig** (2019), Nonparametric generalized fiducial inference for survival functions under censoring, with discussion and rejoinder by the authors, *Biometrika*, **106**, pp. 501-518. doi:10.1093/biomet/asz016

36. Y. Liu, **J. Hannig** and A. Pal Majumder (2019), Second-Order Probability Matching Priors for the Person Parameter in Unidimensional IRT Models, *Psychometrika*, **84**, pp. 701-718. doi:10.1007/s11336-019-09675-4

37. K. Hindberg*, **J. Hannig**, F. Godtliebsen (2019), A novel scale-space approach for multinormality testing and the k-sample problem in the high dimension low sample size scenario. *PLoS ONE*, **14**(1): e0211044A. doi:10.1371/journal.pone.0211044

38. J. P. Williams* and **J. Hannig** (2019), Non-penalized variable selection in high-dimensional linear model settings via generalized fiducial inference, *Annals of Statistics*, **47**, pp. 1723-1753. doi:10.1214/18-AOS1733

39. S. Almada Monter, A. Budhiraja, and **J. Hannig** (2018), Source detection algorithms for dynamic contaminants based on the analysis of a hydrodynamic limit, *SIAM Journal Applied Math*, **78**, pp. 2279-2297. doi:10.1137/15M1044497

40. Q. Feng*, M. Jiang*, **J. Hannig** and J. S. Marron (2018), Angle-Based Joint and Individual Variation Explained, *Journal of Multivariate Analysis*, **166**, pp. 241-265. doi:10.1016/j.jmva.2018.03.008

41. **J. Hannig**, Q. Feng*, H. Iyer, J. Wang and X. Liu (2018), Fusion learning for Inter-laboratory Comparisons, *Journal of Statistical Planning and Inference*, **195**, pp. 64-79. doi:10.1016/j.jspi.2017.09.011

42. Y. Liu and **J. Hannig** (2017), Generalized fiducial inference for logistic graded response models, *Psychometrika*. **82**, pp. 1097-1125. doi:10.1007/s11336-017-9554-0

43. L. Liao*, C. Park, **J. Hannig** and K.-H. Kang (2016), Auto-covariance Function Estimation via Penalized Regression, *Journal of Computational and Graphical Statistics*, **25**, pp. 1041-1056 doi:10.1080/10618600.2015.1086356

44. **J. Hannig**, H. Iyer, R. C. S. Lai* and T. C. M. Lee (2016), Generalized Fiducial Inference: A Review and New Results, *Journal of American Statistical Association*, **111**, pp. 1346-1361. doi:10.1080/01621459.2016.1165102

45. Y. Liu* and **J. Hannig** (2016), Generalized Fiducial Inference for Binary Logistic Item Response Models, *Psychometrika*, **81**, pp. 290-324. doi:10.1007/s11336-015-9492-7

46. X. Liu, X. Xu and **J. Hannig**, (2016) Least squares generalized inferences in unbalanced two-component normal mixed linear model, *Computational Statistics*, **31**, pp. 973-988. doi:10.1007/s00180-015-0604-8

47. Q. Feng*, **J. Hannig**, J.S. Marron (2016), A Note on Automatic Data Transformation, *STAT*, **5**, pp. 82 – 87. doi:10.1002/sta4.104

48. P. Borysov*, **J. Hannig**, J.S. Marron, E. Muratov, D. Fourches and A. Tropsha (2016), Activity Prediction and Identification of Mis-annotated Chemical Compounds Using Extreme Descriptors, *Chemometrics*, **30**, pp. 99 – 108. doi:10.1002/cem.2776.

49. S. Bhamidi, **J. Hannig**, C. Y. Lee and J. Nolen (2015), The importance sampling technique for understanding rare events in Erdös-Rényi random graphs, *Electronic Journal of Probability*, **20**, Article 107, pp. 1–30. doi:10.1214/EJP.v20-2696

50. R. C. S. Lai*, **J. Hannig** and T. C. M. Lee (2015), Generalized Fiducial Inference for Ultrahigh-Dimensional Regression, *Journal of American Statistical Association*, **110**, pp. 760 – 772. doi:10.1080/01621459.2014.931237

51. M. Heller, **J. Hannig** and M. R. Leadbetter (2015), Optimal sample planning for system state analysis with partial data collection, *STAT*, **4**, pp. 69 – 80. doi:10.1002/sta4.79

52. C. Park, **J. Hannig** and K-H. Kang (2014), Nonparametric Comparison of Multiple Regression Curves in Scale-Space, *Journal of Computational and Graphical Statistics*, **23**, pp. 657 – 677. doi:10.1080/10618600.2013.822816

53. P. Borysov*, **J. Hannig** and J. S. Marron (2014), Asymptotics of hierarchical clustering for growing dimension, *Journal of Multivariate Statistics*, **124**, pp. 465 – 479. doi:10.1016/j.jmva.2013.11.010

54. **J. Hannig**, R. C. S. Lai* and T. C. M. Lee (2014), Computational Issues of Generalized Fiducial Inference, *Computational Statistics and Data Analysis* special issue on Imprecision in Statistical Data Analysis, **71**, pp. 849 – 858. doi:10.1016/j.csda.2013.03.003

55. Y. Zhang*, E. K. P. Chong, **J. Hannig** and D. Estep (2013), On Continuum Limits of Markov Chains with Applications to Network Modeling, *IEEE Access*, **1**, pp. 577 – 595. doi:10.1109/Allerton.2011.6120369

56. Y. Zhang*, E. K. P. Chong, **J. Hannig** and D. Estep (2013), Continuum Modeling and Control of Large Nonuniform Wireless Networks via Nonlinear Partial Differential Equations, *Abstract and Applied Analysis*, Article ID 262581, 16 pages. doi:10.1155/2013/262581

57. **J. Hannig** (2013), Generalized Fiducial Inference via Discretization, *Statistica Sinica*, **23**, pp. 489 – 514. `http://www3.stat.sinica.edu.tw/statistica/oldpdf/A23n22.pdf`

58. N. Burch*, E. K. P. Chong, D. Estep and **J. Hannig** (2013), Analysis of Routing Protocols and Interference-limited Communication in Large Wireless Networks via Continuum Modeling, *Journal of Engineering Mathematics*, **79**, pp. 183 – 199. doi:10.1007/s10665-012-9566-9

59. **J. Hannig**, T. C. M Lee and C. Park (2013), Metrics for SiZer Map Comparison, *STAT*, **2**, pp. 49 – 60. doi:10.1002/sta4.17

60. J. Cisewski* and **J. Hannig** (2012), Generalized Fiducial Inference for Normal Linear Mixed Models, *Annals of Statistics*, **40**, pp. 2102 – 2127. doi:10.1214/12-AOS1030

61. **J. Hannig** and Min-ge Xie (2012), A note on Dempster-Shafer Recombinations of Confidence Distributions, *Electronic Journal of Statistics*, **6**, pp. 1943 – 1966. doi:10.1214/12-EJS734

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64. C. M. Wang, **J. Hannig**, H. K. Iyer (2012), Fiducial Prediction Intervals, *Journal of Statistical Planning and Inference*, **142**, pp. 1980 – 1990. doi:10.1016/j.jspi.2012.02.021

65. D. Wandler* and **J. Hannig** (2012), Generalized Fiducial Confidence Intervals for Extremes, *Extremes*, **15**, pp. 67 – 87. doi:10.1007/s10687-011-0127-9

66. D. Wandler* and **J. Hannig** (2012), A Fiducial Approach to Multiple Comparisons, *Journal of Statistical Planning and Inference* **142**, pp 878 – 895. doi:10.1016/j.jspi.2011.10.011

67. C. B. Storlie*, **J. Hannig** and T. C. M. Lee (2011), Statistical consistency of the data association problem in multiple target tracking, *Electronic Journal of Statistics*, **5**, 1227 – 1275. doi:10.1214/11-EJS639

68. D. Wandler* and **J. Hannig** (2011), Fiducial Inference on the largest mean of a multivariate normal distribution, *Journal of Multivariate Statistics*, **102**, pp. 87 – 104. doi:10.1016/j.jmva.2010.08.003

69. C. Park, T. C. M. Lee and **J. Hannig** (2010), Multiscale Exploratory Analysis of Regression Quantiles using Quantile SiZer, *Journal of Computational and Graphical Statistics*, **19**, pp. 497 – 513. doi:10.1198/jcgs.2010.09120

70. P. J. Brockwell and **J. Hannig** (2010), CARMA(p, q) Generalized Random Processes, *Journal of Statistical Planning and Inference*, special volume in honor of Manny Parzen, **140**, pp. 3613 – 3618. doi:10.1016/j.jspi.2010.04.028

71. S. S. Lee and **J. Hannig** (2010), Detecting jumps from levy jump diffusion processes, *Journal of Financial Economics*, **96**, pp. 271-290. doi:10.1016/j.jfineco.2009.12.009

72. **J. Hannig** and T. C. M. Lee (2009), Generalized Fiducial Inference for Wavelet Regression, *Biometrika*, **96**, pp. 847 – 860. doi:10.1093/biomet/asp050

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74. C. Park, A. Vaughan, **J. Hannig** and K.-H. Kang (2009), SiZer Analysis for Comparison of Time Series, *Journal of Statistical Planning and Inference*, **139**, pp. 3974 – 3988. doi:10.1016/j.jspi.2009.05.003

75. **J. Hannig** (2009), On Generalized Fiducial Inference, *Statistica Sinica*, **19**, pp. 491 – 544. http://www.jstor.org/stable/24308841

76. C. B. Storlie*, T. C. M. Lee, **J. Hannig** and D. Nychka (2009), Tracking of Multiple Merging and Splitting Targets: A Statistical Perspective, with comments and rejoinder by the authors, *Statistica Sinica*, **19**, pp. 1 – 52. http://www.jstor.org/stable/24308700

77. L. E*, **J. Hannig** and H. Iyer (2008), Fiducial Intervals for Variance Components in an Unbalanced Two-component Normal Mixed Linear Model, *Journal of American Statistical Association*, **103**, pp. 854 – 865. doi:10.1198/016214508000000229

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79. H. Li*, P. R. Barbosa*, E. K. P. Chong, **J. Hannig** and S. R. Kulkarni, Zero-Error Target Tracking with Limited Communication (2008), *IEEE Journal on Selected Areas in Communications, Special Issue on Control and Communications*, **26**, pp. 686 – 694. doi:10.1109/JSAC.2008.080510

80. **J. Hannig**, H. K. Iyer and C. M. Wang (2007), Fiducial approach to uncertainty assessment: accounting for error due to instrument resolution, *Metrologia*, **44**, pp. 476 – 483. doi:10.1088/0026-1394/44/6/006

81. **J. Hannig** and J. S. Marron (2006) Advanced Distribution Theory for SiZer, *Journal of American Statistical Association*, **101**, pp. 484 – 499. doi:10.1198/016214505000001294

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88. F. Gao, **J. Hannig**, T.-Y. Lee and F. Torcaso (2004) Exact L^2 small balls of Gaussian processes, *Journal of Theoretical Probability*, **17**, pp. 503 – 520. doi:10.1023/B:JOTP.0000020705.28185.4c

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Refereed Proceedings

1. Y. Zhang*, E. K. P. Chong, **J. Hannig** and D. Estep (2010), On Continuum Limits of Markov Chains and Network Modeling, Proceedings of the 49th IEEE Conference on Decision and Control, Atlanta, Georgia, December 15–17, 2010, pp. 6779 – 6784.

2. P. R. Barbosa*, H. Li*, E. K. P. Chong, **J. Hannig**, S. R. Kulkarni (2006), Zero-Error Target Tracking Through Limited Querying of One-Bit Sensors, Proceedings of the Forty-Fourth Annual Allerton Conference on Communication, Control, and Computing, Monticello, Illinois, September 27–29, 2006, pp. 1424 – 1431.

3. **J. Hannig**, E. K. P. Chong and S. R. Kulkarni (2005), Relative frequencies of non-homogeneous Markov chains in simulated annealing and related algorithms, in Proceedings of the Joint 44th IEEE Conference on Decision and Control and European Control Conference, Seville, Spain, December 12–15, 2005 (Invited paper), pp. 6626 – 6631.

Other

1. **J. Hannig** (2024), Discussion of "Connecting Model-Based And Model-Free Approaches To Linear Least Squares Regression" by Dümbgen and Davies, *Statistica*, **84**, pp. 93-95. doi:10.60923/issn.1973-2201/22034

2. Y. Cui, R. Gong, **J. Hannig** and K. Hoffman (2023), Technical Comment on "Policy impacts of statistical uncertainty and privacy", *Science*, **380**, eadf9724. doi:10.1126/science.adf9724

3. K. Hoffman*, **J. Hannig** and K. Zhang (2021), Comments on "A Gibbs sampler for a class of random convex polytopes", *Journal of the American Statistical Association*, **116**, pp. 1206-1210. doi:10.1080/01621459.2021.1950002

4. **J. Hannig**, S. Riman, H. Iyer and P. M. Vallone (2019), Are Reported Likelihood Ratios Well Calibrated? *Forensic Science International: Genetics Supplement Series*, **7**, pp. 572-574 (extended abstract). doi:10.1016/j.fsigss.2019.10.094

5. **J. Hannig** (2019), Discussion of "Prior-based Bayesian Information Criterion (PBIC)" by Bayarri et al, *Statistical Theory and Related Fields*, **3**, pp. 30-31. doi:10.1080/24754269.2019.1611144

6. **J. Hannig** (2017), Discussion of "Beyond objective and subjective in statistics?" by Gelman and Hennig, *Journal of Royal Statistical Society Ser. B*, **180**. p. 1009. doi:10.1111/rssa.12276

7. **J. Hannig** (2015) Review of the Book *Essential Statistical Inference*, by Boos and Stefanski, *Journal of Agricultural, Biological, and Environmental Statistics*, **20**, pp. 299–300. doi:10.1007/s13253-015-0199-0

8. **J. Hannig** (2014), Discussion of "On the Birnbaum Argument for the Strong Likelihood Principle" by D. G. Mayo, *Statistical Science*, **29**, pp. 254 – 258. doi:10.1214/14-STS474

9. **J. Hannig** (2014), Discussion of "On the Birnbaum Argument for the Strong Likelihood Principle" by D. G. Mayo, *Statistical Science*, **29**, pp. 254 – 258. doi:10.1214/14-STS474

10. L. E, **J. Hannig** and H. K. Iyer (2008) Fiducial Generalized Confidence Interval for Median Lethal Dose (LD50), technical report partially included in later work, (82 pages).

11. **J. Hannig** (2005) On Multidimensional Fiducial Generalized Confidence Intervals, CSU Technical Report 2005-1, Department of Statistics, Colorado State University.

12. **J. Hannig** (2000) *On purely discontinuous martingales*, Ph.D. dissertation, Michigan State University, East Lansing, MI, USA.

13. **J. Hannig** (1996) *On conditional distributions as limits of martingales*, Mgr. dissertation, Charles University, Prague, Czech Republic (in Czech).

Currently Reviewed:

1. Z. Zhang[†] and **J. Hannig**, Estimation of Gender Wage Gap in the University of North Carolina System, submitted to *Sankhya A* in October 2025. `https://arxiv.org/abs/2505.24078|`

2. H. Flurry[*], **J. Hannig**, R.L. Smith, Asymptotic Theory for the Estimation of the Husler-Reiss Distribution via Block Maxima Method, revision requested by *Extremes*.

3. Y. Cui, **J. Hannig** and P. Edlefsen, Semiparametric Fiducial Inference, resubmitted to *Journal of the Royal Statistical Society, Series B* in January 2026. `https://arxiv.org/abs/2404.18779`

4. K.L. Thomas[*] and **J. Hannig**, Movement Dynamics in Elite Female Soccer Athletes: The Quantile Cube Approach, re-submitted *Journal of Quantitative Analysis in Sports* in September 2025. `https://arxiv.org/abs/2503.11815`

5. T. Petty[*], **J. Hannig** and H. Iyer, Bayesian Forensic DNA Mixture Deconvolution Using a Novel String Similarity Measure, re-submitted to *PLOS ONE* in October 2025. `http://arxiv.org/abs/2505.00934`

6. E Mitchell[*], W. J. Shi[*], **J. Hannig**, and C. D. Jones, Modeling Changes in Count Distributions Over Time and Treatment with B-SMaRT: A Binary-Split, Merge, and Refine MCMC Technique, revision requested *BMC Bioinformatics*.

7. J. E. Borgert[*] and **J. Hannig**, A Bernstein-von Mises Theorem for Generalized Fiducial Distributions, being revised for *Bayesian Analysis*. `http://arxiv.org/abs/2401.17961`

8. Y. Cui and **J. Hannig**, Fiducial inference for partially identified parameters with applications to instrumental variable models, submitted to *Econometrics* in August 2025. `https://arxiv.org/abs/2501.00837`

9. A. C. Murph[*], C.B. Storlie, P.M. Wilson, J.P. Williams and **J. Hannig**, Bayes Watch: Bayesian Change-point Detection for Process Monitoring with Fault Detection, resubmitted to *Statistical Methods in Medical Research* in November 2025. `http://arxiv.org/abs/2310.02940`

10. W. Du[*], **J. Hannig** and T.C.M. Lee, BinGFI: A Fully Automated Framework for Generalized Fiducial, submitted to *Journal of Statistical Planning and Inference* in July 2025.

11. Y. Liu, Y. Sung, J. Williams and **J. Hannig**. Calibrating Bayesian Inference, submitted to *British Journal of Mathematical and Statistical Psychology* in October 2025. `http://arxiv.org/abs/2510.27144`

12. R. Liu, **J. Hannig** and J.S. Marron, Advanced Distribution Theory for Significance in Scale Space, submitted to *Journal of American Statistical Association* in October 2025. `http://arxiv.org/abs/2510.27023`

PRESENTATIONS

International and National Meetings

1. Generative Fiducial Models, 2025 Roeling Conference, Department of Mathematics, University of Luisiana at Lafayette, October 2025 (special invited)

2. *Generalized Fiducial Inference with applicaton to Forensic Science*, NSF@75, virtual, July 2025 (invited)

3. *Data Integration Via Analysis of Subspaces (DIVAS)*, 3rd Workshop on Game-theoretic Statistics and Sequential, Anytime-Valid Inference (SAVI), BIRS-Chennai Mathematical Institute (CMI), India, July 2025 (special invited)

4. *Generative Fiducial Flows*, 2025 IISA Conference, University of Nebraska-Lincoln, June 2025 (invited).

5. *Generative Fiducial Flows*, 9th Bayesian Fiducial Frequentist Conference, Purdue University in Indianapolis, May 2025 (invited).

6. *Semiparametric Fiducial Inference*, 2024 IMS International Conference on Statistics and Data Science, Nice, France, December 2024 (invited).

7. *Data integration via analysis of subspaces (DIVAS)*, CFE-CMStatistics 2024, London, UK, December 2024 (invited).

8. *Semiparametric Fiducial Inference*, AMISTAT/ROBUST, Bardejov, Slovakia, September 2024 (plenary).

9. *Data Integration Via Analysis of Subspaces (DIVAS)*, Joint Statistical Meetings, Portland, OR, August 2024, (invited).

10. *A Geometric Perspective on Bayesian and Generalized Fiducial Inference*, 2023 IMS International Conference on Statistics and Data Science, Lisbon, Portugal, December 2023 (invited).

11. *A Geometric Perspective on Bayesian and Generalized Fiducial Inference*, CMS Statistics 2023, Berlin, Germany, December 2023 (invited).

12. *Generalized Fiducial Inference on Differentiable Manifolds - a geometric perspective*, SIS 2023 - Statistical Learning, Sustainability and Impact Evaluation, Ancona, Italy, July 2023 (invited).

13. *Generalized Fiducial Inference on Differentiable Manifolds*, International Purdue Symposium on Statistics, Purdue University, June 2023 (invited)

14. *Two variants of Generalized Fiducial Inference*, 8th Bayesian Fiducial Frequentist Conference, University of Cincinnati, May 2023 (invited).

15. *Generalized Fiducial Inference on Differentiable Manifolds*, 2022 IMS International Conference on Statistics and Data Science, Florence, Italy , December 2022 (invited).

16. *Generalized Fiducial Inference on Differentiable Manifolds*, 2022 IMS Annual Meeting, London, UK, June 2022 (invited).

17. *Data Integration Via Analysis of Subspaces (DIVAS)*, ISNPS 2022, Paphos, Cyprus June 2022, (invited).

18. *Calibration of likelihood ratios systems in forensic science*, CFE-CMStatistics 2021, London, UK, December 2021/hybrid.

19. *Comparison between generalized fiducial and objective Bayesian inference*, EAC-ISBA conference in honor of J.O. Berger 70th birthday, Atlantic City, NJ/hybrid, 2021 (invited)

20. *Generalized Fiducial Inference*, SRCOS summer research conference, Jekyll Island, GA, October 2021 (invited)

21. *Uncertainty in Estimation of ROC Curves with Applications to Forensic Science*, Joint Statistical Meetings, virtual, August 2021 (invited)

22. *Future of generalized fiducial Inference*, 6.5th Bayesian Fiducial Frequentist Conference, virtual on researchers.one (invited)

23. *Are Bayes factors well calibrated?*, Joint Statistical Meetings, virtual, August 2020 (invited)

24. *On the calibration of Bayes factors*, CFE-CMStatistics 2019, London, UK, December 2019

25. *Fiducial EAS for graphical VAR model*, The 3rd International Conference on Statistical Distributions and Applications, Grand Rapids, MI, October 2019 (invited)

26. *Are Reported Likelihood Ratios Well Calibrated?*, The 28th Congress of the International Society for Forensic Genetics, Prague, Czechia, September 2019 (oral presentation at a very large conference with no parallel sessions).

27. *Generalized Fiducial Inference: A Review*, Data & Information Fusion Conference, Santa Fe, NM, August 2019 (invited).

28. Are Bayes Factors Well Calibrated? The Fifth International Conference on Interface of Statistics and Engineering, Seoul, South Korea, June 2019 (invited).

29. Are Bayes Factors Well Calibrated? 33rd New England Statistical Symposium, Hartford, CT, May 2019 (invited).

30. Are Bayes Factors Well Calibrated? ICSA 2019 Applied Statistics Symposium, Raleigh, NC, June 2019 (invited).

31. *Deep Fiducial Inference* and *Data Integration Via Analysis of Subspaces*, Symposium on Data Science and Statistics, Bellevue, WA, May 2019 (invited).

32. Are Bayes Factors Well Calibrated? MUMS closing workshop & SPUQ, University of North Carolina, May 2019 (invited).

33. Are Bayes Factors Well Calibrated? 6th Bayesian Fiducial Frequentist Conference, Duke University, May 2019 (invited).

34. Deep Fiducial Inference, ENAR Spring Meeting, Philadelphia, PA, March 2019 (invited).

35. *Generalized Fiducial Inference: A Review*, Luisiana ASA Chapter Meeting, Baton Rouge, LA, November 2018 (keynote lecture).

36. *Model Selection without penalty using Generalized Fiducial Inference*, The Third Workshop on Higher-Order Asymptotics and Post-Selection Inference, St. Louis, MO, September 2018.

37. *Angle Based Joint and Individual Variation Explained*, Joint Statistical Meetings, Vancouver, BC, August 2018 (invited)

38. *Generalized Fiducial Inference: A Review*, 2018 International Statistical Academic Forum, Qingdao University, China, June 2018 (invited).

39. *Deep Fiducial Inference*, 2018 ICSA China Conference with focus on Data Science, Qingdao, China, June 2018 (invited)

40. *Deep Fiducial Inference*, 5th IMS Asia-Pacific Rim Meeting, Singapore, June 2018 (invited)

41. *Could descendants of Jeffreys, Fisher and Neyman become Best Friends Forever?* ICSA 2018 Applied Statistics Symposium, New Brunswick, NJ, June 2018 (featured invited session).

42. *Deep Fiducial Inference*, Vårens Vakreste Variabler: the FocuStat Conference, Oslo, Norway, May 2018 (invited)

43. *Short course on Generalized Fiducial Inference*, Fifth Bayesian, Fiducial, and Frequentist Conference, University of Michigan, Ann Arbor, MI, May 2018.

44. *Generalized Fiducial Inference and model selection*, Workshop on Lévy processes and time series, Ulm, Germany, September 2017 (invited)

45. *Application of Generalized Fiducial Inference to Biological Sciences*, Joint Statistical Meetings, Baltimore, MD, August 2017 (invited)

46. *Generalized Fiducial Inference and model selection*, 61th ISI World Statistics Congress, Marrakech, Morocco, July 2017 (invited talk and invited discussion)

47. *Generalized Fiducial Inference without penalty in High D*, ICSA Applied Statistics Symposium, Chicago, IL, June 2017 (invited),

48. *Challenges in Generalized Fiducial Inference*, Fourth Bayesian, Fiducial, and Frequentist Conference, Harvard University, Cambridge, MA, May 2017 (invited panelist and speaker).

49. *Generalized Fiducial Inference: A Review*, 11th Probability and Statistics Day, University of Maryland Baltimore County, Baltimore, April 2017 (keynote speaker).

50. *Generalized Fiducial Inference for High Dimensional Problems*, ICSA international conference, Shanghai, China, December 2016 (invited).

51. *Fusion Learning for Inter-laboratory comparisons*, Joint Statistical Meetings, Chicago, IL, August 2016 (invited).

52. *Generalized Fiducial Inference: A Review*, ISBA 2016 World Meeting, Cagliary, Italy, June 2016 (invited).

53. *Generalized Fiducial Inference for Non Parametric Problems*, 3rd conference of the International Society for Non-Parametric Statistics , Avignon France, June 2016 (invited).

54. *Fusion Learning for Inter-laboratory comparisons*, 48th meeting of the Italian Statistical Society, Salerno, Italy, June 2016 (invited).

55. *Generalized Fiducial Inference for High Dimensional Problems*, Conference on Statistical Learning and Data Mining, University of North Carolina, Chapel Hill, NC, June 2016 (invited).

56. *New Challenges in Generalized Fiducial Inference*, Workshop on Fusion Learning, BFF inferences and Statistical Foundations, Rutgers, New Brunswick, NJ, April 2016 (invited).

57. *Generalized Fiducial Inference for Massive data with application to Solar Science*, Joint Statistical Meetings, Seattle, WA, August 2015 (invited).

58. *Generalized Fiducial Inference: A Review*, 60th ISI World Statistics Congress, Rio de Janeiro, Brazil, July 2015 (invited).

59. *Generalized Fiducial Inference for Volatility Estimation*, 2nd Korean-American Kavli Frontier of Science Symposium, Jeju Island, Korea, June 2015 (invited poster).

60. *Generalized Fiducial Inference: A Review*, 11th International Workshop on Objective Bayes Methodology O'Bayes15, Valencia, Spain, May 2015 (invited).

61. *Generalized Fiducial Inference: A Review*, Inference with Confidence Workshop, Oslo, Norway, May 2015 (invited).

62. *Generalized Fiducial Inference*, The first workshop on BFF inference and statistical foundations, Shanghai, China, November 2014 (invited).

63. *Discussion in the Distributional Inference Session*, Joint Statistical Meetings, Boston, MA, August 2014 (topic contributed).

64. *Volatility Estimation using Generalized Fiducial Inference*, IMS Annual Meeting, Sydney, Australia, July 2014 (invited).

65. *Uncertainty Quantification for Massive Data Problems using Generalized Fiducial Inference*, Challenges and Advances in Analysis of Complex High Dimensional Data, Taichung, Taiwan, July 2014 (invited).

66. *Uncertainty quantification for ultrahigh dimensional regression using Generalized Fiducial Inference*, 3rd IMS Asia-Pacific Rim Meeting, Taipei, Taiwan, July 2014 (invited).

67. *Higher order asymptotics for Generalized Fiducial Inference*, Joint ICSA KISS Applied Statistics Symposium, Portland, OR, June 2014 (invited).

68. *Generalized Fiducial Inference and Confidence Distributions*, The Ninth ICSA International Conference, Hong-Kong, December 2013 (invited).

69. *Generalized Fiducial Inference for Volatility Estimation for High Frequency Data*, O'Bayes 2013, Durham, NC, December 2013 (poster).

70. *On Dempster-Shafer combination of confidence distributions*, 59th ISI World Congress, Hong-Kong, August 2013 (invited).

71. *Inference based on Inverse Structural Equation*, Joint Statistical Meetings, San Diego, CA, July 2012 (topic contributed).

72. *Generalized Fiducial Inference for Wavelet Regression*, 2nd IMS Asia-Pacific Rim Meeting, Tsukuba, Japan, July 2012 (invited).

73. *Model Penalized Inference*, ISBA 2012 World Meeting, Kyoto, Japan, June 2012 (poster).

74. *Inference based on Inverse Structural Equation*, SIAM Uncertainty Quantification Conference, Raleigh, NC, March 2012 (invited).

75. *On Generalized Fiducial Inference*, ICSA Applied Statistics Symposium, New York City, NY, June 2011 (invited).

76. *Classification of unknown substance using a SVM Classification Algorithm*, NSF/DTRA Algorithms Workshop, Boston, MA, June 2011 (poster).

77. *Comparison Between Fiducial and Objective Bayesian Inference*, International Workshop on Objective Bayes Methodology, Shanghai, China, June 2011 (invited).

78. *Comparison Between Fiducial and Objective Bayesian Inference*, Spatial program transition workshop, SAMSI, October 2010 (poster).

79. *On Fiducial Inference in Linear Mixed Models*, First Joint Biostatistics Symposium, Beijing, China, July 2010 (invited).

80. *Comparison Between Fiducial and Objective Bayesian Inference*, International Conference on Statistics and Society, Beijing, China, July 2010 (invited)

81. *Generalized Fiducial Inference for Wavelet Regression*, ISBIS, Portoroz, Slovenia, July 2010 (invited).

82. *On Fiducial Inference in Linear Mixed Models*, Joint Research Conference, NIST Gaithesburg, MD, May 2010 (invited).

83. *On Generalized Fiducial Inference*, Workshop on Objective Bayesian for Spatial and Temporal Models, San Antonio, TX, March 2010

84. *Continuum Modeling of Large Networks*, Workshop on Stochastic Analysis, Charles University, Prague, Czech Republic, January 2010.

85. *Sequential Monte Carlo in Generalized Fiducial Inference*, SMC Transition Workshop, SAMSI, Raleigh NC, November 2009.

86. Northeast Probability Seminar, New York City, NY, November 2005, (informal talk on current research).

87. *Generalized Fiducial Inference for Wavelet Regression*, Joint Statistical Meetings, Washington DC, August 2009 (topic contributed).

88. *Generalized Fiducial Inference for Sparse Linear Systems with Application to Wavelet Regression*, IMS Asia-Pacific Rim Meeting, Seoul, South Korea, June 2009 (invited).

89. *On Problems Arising From Fiducial Inference*, 2009 Barrett lectures, The University of Tennessee, Knoxville, TN, April 2009 (contributed).

90. *Detecting Jumps from Lévy Jump Diffusion Processes*, Workshop on Stochastic Analysis V, Charles University, Prague, Czech Republic, January 2009.

91. *Generalized Fiducial Inference for Sparse Linear Systems with Application to Wavelet Regression*, Winter Workshop on Mathematical Statistics, Bratislava, Slovakia, December 2008 (invited).

92. *On Generalized Fiducial Inference*, Opening Workshop For Program on Sequential Monte Carlo, SAMSI, Research Triangle Park, NC, September 2008 (poster).

93. *On Generalized and Fiducial Inference*, Joint Statistical Meetings, Denver, CO, August 2008 (invited).

94. *On Generalized Fiducial Inference*, MCMSki, Bormio, Italy, January 2008 (poster).

95. *Continuum Modeling of Large Networks*, Workshop on Stochastic Analysis IV, Charles University, Prague, Czech Republic, January 2008

96. *On Generalized Fiducial Inference*, Workshop on Uncertainty of Measurements, National Institute of Standards and Technology, Gaithersburg, MA, February 2007.

97. *Relative Frequencies of Generalized Simulate Annealing*, Markov Processes and Related Topics, Madison, WI, July 2006 (contributed).

98. *Continuum Models for Large Stochastic Networks*, Conference on Stochastic Networks, Urbana-Champaign, IL, June 2006 (poster).

99. *Extreme Value Theory for SiZer*, Graybill Conference V, Fort Collins, CO, June 2006 (invited).

100. *Small Deviations*, Front Range Probability Day, Boulder, CO, May 2006, (invited).

101. *Extreme Value Theory for SiZer*, Small Deviations and Related Problems, St. Petersburg, Russia, September 2005 (invited).

102. *On Fiducial Generalized Confidence Intervals*, Joint Statistical Meetings, Minneapolis, MN, August 2005, (contributed).

103. *On Fiducial Generalized Confidence Intervals*, Perspectives in Modern Statistical Inference III, Mikulov, Czech Republic , July 2005, (contributed).

104. *Advanced Distribution Theory for SiZer*, The Fourth International Conference on High Dimensional Probability, Santa Fe, NM, June 2005.

105. *Stochastic Processes and Information* Information Science and Technology Colloquium, Colorado State University, Fort Collins, CO, April 2005 (invited).

106. *Advanced Distribution Theory for SiZer*, Seminar on Stochastic Processes, Ithaca, NY, March 2005, (contributed).

107. *Small Deviations*, Workshop on Stochastic Analysis and Applications, Charles University, Prague, Czech Republic, January 2005, (invited).

108. Northeast Probability Seminar, New York City, NY, November 2004, (informal talk on current research).

109. *Advanced Distribution Theory for SiZer*, Workshop on Congestion Control and Heavy Traffic Modeling, SAMSI, Research Triangle Park, NC, June 2004, (invited)

110. *Small Deviations*, Fifth Biennial International Conference on Statistics, Probability and Related Areas, IISA, Athens, GA, May 2004, (invited).

111. Northeast Probability Seminar, New York City, NY, November 2003, (informal talk on current research).

112. *Five minute madness talk on current research*, Workshop on Congestion Control and Heavy Traffic Modeling, SAMSI, Research Triangle Park, NC, October 2003.

113. *Laplace transforms of L_2-ball, Comparison Theorems and Integrated Brownian motions*, Mini-Workshop: Small Deviation Problems for Stochastic Processes and Related Topics, Mathematical Institute Oberwolfach, Germany, October 2003, (invited).

114. Seminar on Stochastic Processes, Seattle, WA, March 2003, (informal talk on current research).

115. *On Filtrations Related to Purely Discontinuous Martingales*, 24th European Meeting Of Statisticians, Prague, Czech Republic, August 2002, (contributed).

116. *Kullback-Leibler Discrepancy based bandwidth choice for Non-Gaussian Errors*, Perspectives in Modern Statistical Inference II, Brno, Czech Republic, August 2002, (contributed).

117. Seminar on Stochastic Processes, Princeton, NJ, March 2002, (informal talk on current research).

118. Seminar on Stochastic Processes, Gainesville, FL, March 2001, (informal talk on current research).

119. *Kullback-Leibler Discrepancy based bandwidth choice for Non-Gaussian Errors*, Joint Statistical Meetings, Atlanta, GA, August 2001, (contributed).

Colloquia & Seminars

1. Generative Fiducial Models, Colloquium, Department of Statistics and Probability, Michigan State University, February 2026.

2. *Generalized fiducial Inference with application to forensic science*, Statistics Seminar, Center for Data Science, Zhejiang University, China, May 2024.

3. *Calibration of likelihood ratios systems in forensic science*, Netherlands Forensic Institute, The Hague, Netherlands, March 2024.

4. *Generalized fiducial Inference with application to forensic science*, Statistics Seminar, Department of Statistics, Colorado State University, October 2023.

5. *Generalized fiducial Inference with application to forensic science*, Statistics Seminar, Department of Statistics, Kansas State University (via zoom), March 2023.

6. *Calibration of likelihood ratios systems*, Data Science Seminar, Department of Data Science, University of Erlangen, Germany, December 2022.

7. *Generalized Fiducial Inference on Differentiable Manifolds*, Statistical Theory and Related Fields keynote series talk #3, East China Normal University (via zoom), November 2022

8. *Generalized Fiducial Inference*, Statistics Seminar, Department of Statistics and Data Science, National University of Singapore, March 2022.

9. *Generalized Fiducial Inference*, Statistics Seminar, Department of Statistics, University of Virginia (via zoom), February 2022.

10. *Calibration of likelihood ratios systems in forensic science*, Forensic Science Seminar, Virginia Commonwealth University (via zoom), February 2022.

11. *Short Course on Generalized Fiducial Inference*, Summer School in Statistics, East China Normal University (via zoom), July 2020.

12. *Generalized Fiducial Inference*, Statistics Seminar, Department of Mathematical Sciences, Norwegian University of Science and Technology (via zoom), June 2020.

13. *Data Integration Via Analysis of Subspaces*, Statgen Seminar, Department of Biostatistics and Bioinformatics, Duke University, May 2019.

14. *Generalized Fiducial Inference*, Statistical Seminar, Department of Probability & Mathematical Statistics, Charles University, Prague, Czech Republic, April 2019.

15. *Data Integration Via Analysis of Subspaces*, Colloquium, Department of Biostatistics, University of North Carolina at Chapel Hill, April 2019.

16. *Fusing information using Generalized Fiducial Inference*, Data fusion working group, SAMSI, March 2019.

17. *Are reported likelihood ratios well calibrated?*, model uncertainty working group, SAMSI, March 2019.

18. *Data Integration Via Analysis of Subspaces*, rethinc.ml workshop series, University of North Carolina at Chapel Hill, February 2019.

19. *Model Selection without penalty using Generalized Fiducial Inference*, Mathematics Department Colloquium, University of Luisiana at Lafayette, November 2018.

20. *Angle-based joint and individual variation explained*, Statistics Seminar, Department of Statistics & Biostatistics, University of California at Davis, October 2018.

21. *Fusing information using Generalized Fiducial Inference*, Data fusion working group, SAMSI, October 2018.

22. *Generalized Fiducial Inference: A Review*, Statistics Seminar, Department of Mathematics, Washington University at St. Louis, March 2018.

23. *Generalized Fiducial Inference: A Review*, Department Seminar, Department of Statistics & CSAFE, Iowa State University, March 2018.

24. *Generalized Fiducial Inference: A Review*, Microsoft Distinguished Seminar, University of Washington, May 2017.

25. *Generalized Fiducial Inference: A Review*, Seminar, National Institute of Science and Technology, April 2017.

26. *Generalized Fiducial Inference: A Review*, BBE Seminar, Fred Hutch Cancer Center, March 2017.

27. *Generalized Fiducial Inference: A Review*, Seminar, Department of Statistics, Yale University, October 2016.

28. *Generalized Fiducial Inference: A Review*, Biostatistics Seminar, Department of Biostatistics, Georgetown University, January 2016.

29. *Generalized Fiducial Inference: A Review*, Statistics Seminar, Department of Statistics, George Mason University, December 2015.

30. *Generalized Fiducial Inference: A Review*, Colloquium, Department of Probability and Statistics, Michigan State University, October 2015.

31. *Generalized Fiducial Inference*, Graduate Seminar, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill, October 2014.

32. *Generalized Fiducial Inference*, Statistics Seminar, Department of Decision Sciences, Bocconi University, Milan, Italy, October 2014.

33. *Generalized Fiducial Inference*, Statistics Seminar, Department of Mathematics and Statistics, University of North Carolina at Greensboro, February 2014.

34. *Generalized Fiducial Inference*, Research Colloquium, Department of Statistics, Purdue University, January 2014.

35. *Generalized Fiducial Inference*, Seminar, Department of Statistical Sciences and Operations Research, Virginia Commonwealth University, December 2013.

36. *Generalized Fiducial Inference*, Bayesian Seminar, Department of Statistics, North Carolina State University, October 2013.

37. *Generalized Fiducial Inference*, Statistics Seminar, Department of Mathematical Sciences, Clemson University, October 2013.

38. *On Generalized Fiducial Inference*, Statistics Seminar, Department of Mathematics, Statistics and Computer Science, University of Illinois at Chicago, October 2013.

39. *Continuum modeling of large networks*, Department of Applied Mathematics, Faculty of Information Technology, Czech Technical University in Prague, Czech Republic, May 2013.

40. *Inference Based on Inverse of the Data Generating Equation*, AMCS Seminar, Division of Computer, Electrical and Mathematical Sciences and Engineering, King Abdullah University of Science and Technology, Saudi Arabia, November 2012.

41. *Inference Based on Inverse of the Data Generating Equation*, Statistics Seminar, Department of Statistics & Biostatistictics, University of California at Davis, October 2012.

42. *Inference Based on Inverse of the Data Generating Equation*, Graduate Seminar, Department of Statistics & Operations Research, University of North Carolina at Chapel Hill, September 2012.

43. *On Generalized Fiducial Inference for linear mixed models*, Colloquium, Department of Statistics, University of Toronto, November 2011.

44. *On Generalized Fiducial Inference for linear mixed models*, Colloquium, Department of Statistics and Biostatistics, Rutgers University, October 2011.

45. *On Generalized Fiducial Inference*, Colloquium, Department of Applied Mathematics and Statistics, Johns Hopkins University, October 2011.

46. *On Generalized Fiducial Inference*, Department of Statistics, University of New South Wales, Sydney, Australia, March 2011.

47. *On Generalized Fiducial Inference*, Stochastic seminar, Department of Mathematics, University of Utah, November 2010.

48. *Continuum modeling of large networks*, Probability seminar, Department of Statistics and Operations Research, University of North Carolina at Chapel Hill, February 2010.

49. *Continuum modeling of large networks*, Probability seminar, Department of Statistics, Columbia University, New York, NY, December 2009.

50. *On Generalized Fiducial Inference*, Department of Statistics, Chinese University of Hong Kong, October 2009.

51. *On Generalized Fiducial Inference*, Department of Statistical Science, Duke University, September 2009.

52. *On Generalized Fiducial Inference*, Institute of Statistical Science, Academia Sinica, Taipei, Taiwan, July 2009.

53. *On Generalized Fiducial Inference*, Institute of Measurement Science, Slovak Academy of Sciences, Slovakia, December 2008.

54. *On Generalized Fiducial Inference*, Department of Statistics, Seoul National University, S. Korea, June 2008.

55. *Statistical Model for Tracking with Applications*, Department of Statistic, Hankuk University of Foreign Studies, S. Korea, June 2008.

56. *On Generalized Fiducial Inference*, Colloquium, Department of Mathematics and Statistics, Utah State University, October 2007.

57. *On Generalized Fiducial Inference*, Department of Statistics & Operation Research, University of North Carolina at Chapel Hill, April 2007.

58. *Statistical Model for Tracking with Applications*, Colloquium, Department of Mathematics, University of Idaho, April 2007.

59. *Statistical Model for Tracking with Applications*, Probability Seminar, Department of Mathematics, University of Wisconsin-Madison, December 2006.

60. *On Generalized Fiducial Inference*, Department of Statistics Colloquium, Department of statistics & Probability, Michigan State University, December 2006.

61. *Extreme value theory for SiZer*, Stochastic Processes Seminar, Department of Applied Mathematics and Statistics, University of Copenhagen, Denmark, November 2006.

62. *Statistical Model for Tracking with Applications*, Jaroslav Hájek Center for Theoretical and Applied Statistics and Department of Probability & Mathematical Statistics, Charles University, Prague, Czech Republic, November 2006.

63. *On Generalized Fiducial Inference*, Statistics Seminar, Institute of Statistics, Université catholique de Louvain, Louvain-la-Neuve, Belgium, November 2006.

64. *Statistical Model for Tracking with Applications*, Seminar, Department of Statistics, Northwestern University, October 2006.

65. *On Fiducial Inference*, Colloquium, Department of Statistics, University of Toronto, Canada, October 2006.

66. *Statistical Model for Tracking with Applications*, Colloquium, Department of Statistics, University of Georgia, October 2006.

67. *On Fiducial Inference*, Colloquia Series, Department of Statistics, Harvard University, October 2006.

68. *Statistical Model for Tracking with Applications*, Seminar Series, Department of Statistics, The University of Chicago, September 2006.

69. *On Fiducial Inference*, Jaroslav Hájek Center for Theoretical and Applied Statistics and Department of Probability & Mathematical Statistics, Charles University, Prague, Czech Republic, May 2006.

70. *On Fiducial Inference*, SOAR Seminar, Department of Statistics, Colorado State University, April 2006.

71. *Extreme value theory for SiZer*, Probability & Statistics Seminar, Department of Mathematics, University of Utah, October 2005.

72. *Small Deviations*, Applied Mathematics Seminar, Department of Mathematics, Colorado State University, September 2004.

73. *Advanced Distribution Theory for SiZer*, Probability Seminar, Department of Mathematical Sciences, University of Delaware, August 2004.

74. *Relative Frequencies of Generalized Simulated Annealing*, Probability Seminar, Department of Statistics & Probability, Michigan State University, April 2004.

75. *Small Deviations, Comparison Theorems, and Laplace Transforms for the L_2 norm of a stochastic process*, Departmental Colloquium, Department of Statistics & Probability, Michigan State University, April 2004.

76. *Small Deviations, Comparison Theorems, and Laplace Transforms for the L_2 norm of a stochastic process*, Departmental Seminar, Department of Statistics, Colorado State University, February 2004.

77. *Integrated Brownian motions, Laplace transforms of L_2-ball and Exact L_2-small balls*, Probability & Harmonic Analysis Seminar, Department of Mathematics, University of Utah, August 2003.

78. *Integrated Brownian motions, Laplace transforms of L_2-ball and Exact L_2-small balls*, Probability & Statistics Seminar, Department of Applied Mathematics, University of Colorado - Boulder, March 2003.

79. *Eigenvalues of m-times integrated Brownian motion and Exact L_2-small balls*, Summer internship in Probability, Department of Mathematics, University of Wisconsin - Madison, Summer 2002.

80. *Eigenvalues of m-times integrated Brownian motion and Exact L_2-small balls*, Probability Seminar, Department of Statistics, Columbia University, Spring 2002.

81. *Eigenvalues of m-times integrated Brownian motion and Exact L_2-small balls*, Probability Seminar, Department of Mathematics, Cornell University, Fall 2001.

82. *Eigenvalues of m-times integrated Brownian motion and Exact L_2-small balls*, Statistics Seminar, Department of Statistics, Colorado State University, Fall 2001.

83. *On Filtrations Related to Purely Discontinuous Martingales*, Summer internship in Probability, Center for Mathematical Sciences, University of Wisconsin - Madison, Summer 2001.

84. *Are Filtrations Really Information?*, Statistics Seminar, Department of Statistics, CSU, Spring 2001.

85. *On Filtrations Related to Purely Discontinuous Martingales*, Departmental Colloquium, Department of Statistics, Michigan State University, Spring 2000.

86. *On Filtrations Related to Purely Discontinuous Martingales*, Statistics Seminar, Department of Statistics, Purdue University, Spring 2000.

87. *On Filtrations Related to Purely Discontinuous Martingales*, Statistics Seminar, Department of Statistics, Colorado State University, Spring 2000.

88. *On Filtrations Related to Purely Discontinuous Martingales*, Statistics Seminar, Department of Statistics, University of Pennsylvania, Spring 2000.

89. *On Filtrations Related to Purely Discontinuous Martingales*, Statistics Seminar, Department of Statistics, University of North Carolina - Chapel Hill, Spring 2000.

90. *On Filtrations Related to Purely Discontinuous Martingales*, Statistics Seminar, Department of Statistics, Florida State University, Spring 2000.

COURSES TAUGHT

At the University of North Carolina at Chapel Hill

Graduate level: Mathematical Statistics I, STOR 654 – F22(12)‡, F21(14), F18(22), F17(26), F16(30), F14(15), F13(15), F09(20), F08(11); Mathematical Statistics II, STOR 655 – S25 (xx), S21(14), S20(11), S16(13), S15(9); S12(10), S11(26); Mathematical Statistics III, STOR755 – F20(6); Bayesian Statistics, STOR 757 – S20(21), S16(9), S14(11), S10(19); Statistical Computing, STOR 890 – F11(26), Topics in Foundations of Statistics, STOR 892 – F25 (5), S18(7).

Undergraduate level: First Year Seminar, STOR054 – F16(20), S16(20), S14(21); Introduction to Statistics, STOR155 – F12(207), S11(108), F09(97); Data Science, STOR320 – S21(81); Probability, STOR435 – F17(96), S09(54); Regression, STOR455 – F19(90), F18(73), F10(66); Mathematical Statistics, STOR555 – F22(32), F21(54), F20(52).

At Colorado State University

Graduate level: Stochastic processes ST721 (3 times), Probability ST720 (2 times), Advanced Topics in Inference ST740 (once), Probability ST520 (7 times), Mathematical Statistics ST530 (7 times).
Undergraduate level: Statistics and Probability for Engineers ST309 (once).

At Michigan State University

Undergraduate level: Statistical Methods STT200 (once), Introduction to Business Statistics STT315 (6 times).

STUDENTS

Ph.D. Students

1. Rui Liu, Ph.D. 2025, University of North Carolina at Chapel Hill, (co-adivsed with J.S. Marron), *Improvements and Applications of Scale Space and Image Analysis*

2. Emma Mitchel, Ph.D. 2025, University of North Carolina at Chapel Hill, (co-advised with Corbin Jones), *Statistical Methods For Genomic Data Analysis*

3. Andrew Ackerman, Ph.D. 2025, University of North Carolina at Chapel Hill, (co-advised with Zhegwu Zhang), *High Dimensional Neuroimaging Data Integration And Inference*

4. Hank Flurry, Ph.D. 2025, University of North Carolina at Chapel Hill, (co-advised with Richard L. Smith), *Estimation Of Spatial Gaussian Dependencies With A Focus On Extremes*

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‡semester taught (student enrollment)

5. J. Elyse Borgert, Ph.D. 2024, University of North Carolina at Chapel Hill, (co-advised with J. S. Marron), *Foundational Methods for Object Oriented Data Analysis and Statistical Inference*

6. Taylor Petty, Ph.D. 2023, University of North Carolina at Chapel Hill, (co-advised with Hari Iyer) *Bayesian Forensic DNA Mixture Deconvolution With a Novel String Similarity Measure*

7. Alexander Murph, Ph.D. 2023, University of North Carolina at Chapel Hill, (co-advised with J. Williams and C.B. Storlie) *Fiducial Statistics on Differentiable Manifolds*

8. Samopriya Basu, Ph.D. 2021, University of North Carolina at Chapel Hill. *Inverse Problems For A Class Of Stochastic Ordinary Differential Equations Using A Generalized Fiducial Framework*

9. Jack Prothero, Ph.D 2021, University of North Carolina at Chapel Hill, (co-advised with J.S. Marron), *Data Integration Via Analysis of Subspaces*

10. Xi Yang, Ph.D. 2021, University of North Carolina at Chapel Hill, (co-advised with J.S. Marron and K.A. Hoadley), *Machine Learning Methods in HDLSS Settings.*

11. Gang Li, Ph.D. 2021, University of North Carolina at Chapel Hill (co-advised with Yun Li), *Coupling Machine Learning with Fiducial Inference and Genetics*

12. Weiwei Li, Ph.D. 2020, University of North Carolina at Chapel Hill, (co-advised with Corbin Jones & Sayan Mukherjee) *Data Science Methods With Applications To Genetic Sequencing*

13. Jonathan Williams, Ph.D. 2019, University of North Carolina at Chapel Hill, *Non-penalized model selection via generalized fiducial inference and Bayesian hidden Markov models*

14. Meilei Jiang, Ph.D. 2018 University of North Carolina at Chapel Hill, (co-advised with J. S. Marron) *Statistical Learning and Integrative Analysis*

15. Yifan Cui, Ph.D. 2018, University of North Carolina at Chapel Hill, (co-advised with M. Kosorok) *Tree-based survival models and precision medicine*

16. Qing Feng, Ph.D. 2016, University of North Carolina at Chapel Hill, (co-advised with J.S. Marron), *Statistical Integration of Information*

17. Dimitris Katsoridas, Ph.D. 2015, University of North Carolina at Chapel Hill, *Applications of Generalized Fiducial Inference in High Frequency Data*

18. W. Jenny Shi, Ph.D. 2015, University of North Carolina at Chapel Hill (co-advised with C.J. Jones), *Bayesian Viral Substitution Analysis and Covariance Estimation via Generalized Fiducial Inference*

19. Abhishek P. Majumder, Ph.D. 2015, University of North Carolina at Chapel Hill (co-advised with A. Budhiraja), *Long time asymptotics of some weakly interacting particle systems and higher order asymptotics of generalized fiducial distribution*

20. Petro Borisov, Ph.D. 2013, University of North Carolina at Chapel Hill (co-advised with J.S. Marron) *Statistical methods in chemoinformatics*

21. Jessi J. Cisewski, Ph.D. 2012, University of North Carolina at Chapel Hill *Generalized Fiducial Inference for Mixed Linear Models*

22. Damian Wandler, Ph.D. 2010, Colorado State University *A Fiducial Approach to Extremes and Multiple Comparisons*

23. Derek Sonderegger, Ph.D. 2010, Colorado State University, (co-advised with H. Wang) *Nonparametric function smoothing: Fiducial inference of free knot splines and ecological applications*

24. Lidong E, Ph.D. 2008, Colorado State University, (co-advised with H. Iyer) *On Applications of Generalized Fiducial Inference*

25. Paul Patterson, Ph.D. 2006, Colorado State University, (co-advised with H. Iyer) *Generalized Confidence Intervals for Mixed Linear Model Problems.*

26. Curt Storlie, Ph.D. 2005, Colorado State University, (co-advised with T.C.M. Lee) *Tracking of Multiple Merging and Splitting Targets with Application to Convective Systems.*

27. Amany Abdel-Karim, Ph.D. 2005, Colorado State University, (co-advised with H. Iyer), *Applications of Generalized Inference.*

M.S. Students

1. Grace V. Smith, MS 2025, University of North Carolina at Chapel Hill, *LDA: fiducial reformulation*

2. Yiqing Wei, M.S. 2020, University of North Carolina at Chapel Hill, (co-advised with Corbin Jones), *Using Dirichlet mixtures to detect evolution in SARS-CoV-2.*

3. David Benusa, M.S. 2016, University of North Carolina at Chapel Hill, *Bayesian And Fiducial Methods For Logistic Regression With The Logit Link Function*

4. Yang Liu, M.S. 2014, University of North Carolina at Chapel Hill, *Generalized Fiducial Inference for Binary Logistic Item Response Models*

5. Bouy Chamnan, M.S. 2012, Royal University of Phnom Penh, Cambodia, *Intrinsic Simulation Approach to Generalized Fiducial inference*

6. Dongquiu Pu, M.S. 2012, University of North Carolina at Chapel Hill, (co-advised with J. S. Marron), *Statistical Analysis of Art Auction Data*

7. Diana Hall, M.S. 2011,University of North Carolina at Chapel Hill, (co-advised with C. Jones), *Linear Model for Differential Expression*

8. Douch Makara, M.S. 2010, Royal University of Phnom Penh, Cambodia *Simulation Study Of The Property Of Fiducial Distribution For Multinomial Data*

9. Yuriy Glagolskiy, M.S. 2006, Colorado State University, (completed via distance) *Construction of Fiducial Confidence Intervals for the Mixture of Cauchy and Normal Distributions*

10. Sean Sebastian, M.S. 2003, Colorado State University *Estimating people's willingness to pay to preserve a local historical landmark*

11. Jeremy Wilhelm, M.S. 2002, Colorado State University *A Simulation Study on Competing Distributions for the Maxima of Stationary Normal Processes*

Undergraduate Students

1. Zihan Zhang, 2023, undergraduate research project, University of North Carolina at Chapel Hill, *Structural Gender Pay Inequities in Academia: Causal Evidence from a Public University System*

2. Jiayi Fu, 2020, undergraduate research project, University of North Carolina at Chapel Hill, *Algorithm for detection of illegal discounting in North Carolina Education Lottery*

3. Shiting Lu, 2020, undergraduate research project,. University of North Carolina at Chapel Hill, *Gender Wage Gap of Assistant Professors in U.S public Universities*

4. Svetak Sundhar, 2019, undergraduate research project, University of North Carolina at Chapel Hill, *Probabilistic Programing approach to Modeling Generalized Fiducuai Inference*

5. Hanlu Zhang, 2016, University of North Carolina at Chapel Hill, *Anaysis of NC Lottery Pick 4 data.*

6. Aaron Hansley, 2010, University of North Carolina at Chapel Hill
Obtaining the fiducial distribution of a Brownian motion through Gibbs sampling

Current Students

1. Kendall L. Thomas, Ph. D. candidate, University of North Carolina at Chapel Hill

2. Charles Zhao, Ph. D. candidate, University of North Carolina at Chapel Hill

3. Ruiduo Luo, Ph.D. candidate, University of North Carolina at Chapel Hill, (co-adivsed with J.S. Marron)

GRANTS AND AWARDS

9/2025 – 8/2028 *Hierarchical Bayes framework for Binary Expansion Statistics.*United States - Israel Binational Science Foundation (BSF) 2024055, PIs: D. Yekutelli (Tel Aviv University), **J. Hannig**, and K. Zhang, (total for both universities $199,500).

9/2025 – 8/2028 *Collaborative Research: Generalized Fiducial Inference in Complex Systems: Causal Inference, Networks, and Normalizing Flows.* National Science Foundation DMS-2515303, PI: **J. Hannig**, in collaborations with T. C. M. Lee at University of California at Davis DMS-2515305 (total of the two projects $250,000).

9/2022 – 8/2026 *Collaborative Research: Emerging Variants of Generalized Fiducial Inference*, National Science Foundation DMS-2210337, PI: **J. Hannig**, in collaborations with T. C. M. Lee at University of California at Davis DMS-2210388 (total of the two projects $330,000).

9/2021 – 8/2024 *Data Integration Via Analysis of Subspaces (DIVAS)*, National Science Foundation DMS-2113404, PI: J. S. Marron and **J. Hannig**, ($500,000).

8/2019 – 7/2023 *Collaborative Research: Generalized Fiducial Inference in the Age of Data Science*, National Science Foundation DMS-1916115 , PI: **J. Hannig**, in collaborations with T. C. M. Lee at University of California at Davis DMS-1916125 (total of the two projects $270,000).

9/2016 – 8/2020 *BIGDATA: F: Statistical Approaches to Big Data Analytics*, National Science Foundation IIS-1633074, PI: J. S. Marron and **J. Hannig**, ($500,000).

9/2015 – 8/2019 *Collaborative Research: Generalized Fiducial Inference for Massive Data and High Dimensional Problems*, National Science Foundation DMS-1512893, PI: **J. Hannig**, in collaborations with T. C. M. Lee at University of California at Davis DMS-1512945 (total of the two projects $300,000).

$10/2010 - 9/2015$ *ATD: Stochastic algorithms for countering chemical and biological threats*, National Science Foundation DMS-1016441, PI: **J. Hannig**, Amarjit Budhiraja, M. Ross Leadbetter, ($896,249).

$9/2010 - 8/2014$ *Collaborative Research: Generalized Fiducial Inference – An Emerging View*, National Science Foundation DMS-1007543, PI: **J. Hannig**, in collaborations with T. C. M. Lee at University of California at Davis DMS-1007520 and H. Iyer at the Colorado State University DMS-1007543 (total of all three projects $300,000).

$8/2007 - 7/2010$ *Generalized Fiducial Inference for Modern Statistical Problems*, National Science Foundation DMS-0707037, PI: **J. Hannig**, co-PIs T. C. M. Lee, H. Iyer ($243,760).

$5/2007 - 4/2010$ *Partial Differential Equation Models for Large Networks*, National Science Foundation ECCS-0700559, PI: E. K. P. Chong, co-PIs **J. Hannig**, D. Estep ($276,833).

$6/2005 - 5/2008$ *Problems related to Gaussian Processes*, National Science Foundation DMS-0504737, sole PI ($96,000)

2003 IBM Faculty Award ($7,500)

10/2003 US Junior Oberwolfach Fellow ($500)— NSF travel award to attend Mini-Workshop: Small Deviation Problems for Stochastic Processes and Related Topics

$8/2002 - 5/2003$ Travel grant for participants of Summer Internship in Probability ($2,000)

$8/2001 - 5/2002$ Travel grant for participants of Summer Internship in Probability ($2,500)

GRANT REVIEWS

NSF panel member 2010, 2016, 2017, 2019, 2022, 2024
NSF ad hoc reviewer 2020; *NSERC reviewer* 2020

EDITORIAL WORK

Associate Editor

Journal of American Statistical Association, 2017 – present
Journal of Computational and Graphical Statistics, 2012 – present
Sankhya, 2017 – present
Stat – The ISI's Journal for the Rapid Dissemination of Statistics Research, 2012 – present
Statistica Sinica, guest associated editor for three papers 2007, 2008, 2013
Electronic Journal of Statistics, 2008 – 2013
Journal of Probability and Statistical Science, 2002 – 2008
Statistical Theory and Related Fields, 2019 – present

Journal Papers Referee

Advances in Statistical Analysis (once), American Statistician (three times), Annals of Applied Statistics (twice), Annals of the Institute of Statistical Mathematics (once), Annals of Probability (once), Annals of Statistics (four times), ASTIN Bulletin (once), Axioms (once), Australian and New Zealand Journal of Statistics (once), Bernoulli (three times), Biometrics (three times), Biometrika (seven times), Canadian Journal of statistics (three times), Central European Journal of Mathematics (once), Communications in Statistics (eight times), Communication Networks (once), Computational Statistics (twice), Computational Statistics and Data Analysis (seven times), Chemometrics and Intelligent Laboratory Systems (once), Econometrics (twice), Electronic Journal of Statistics (four times), Entropy (three times), Forensic Science International (once), Harvard Data Science Review (once), IEEE Transactions on Reliability (once), International Statistical Reviews (twice), International Journal of Computer Vision (once), International Journal of Environmental Research and Public Health (once), Journal of Agricultural, Biological and Environmental Statistics (three times), Journal of American Statistical Association (nine times), Journal of Applied Statistics (once), Journal of Banking and Finance (once), Journal of Business & Economic Statistics (once), Journal of Computational and Graphical Statistics (twice), Journal of Computer Networks (once), Journal of Econometrics (twice), Journal of Empirical Finance (once), Journal of Gerontology (three times), Journal of Mathematical Analysis and Applications (once), Journal of Multivariate Analysis (four times), Journal of Nonparametric Statistics (twice), Journal of Royal Statistical Society B (four times), Journal of Statistical Computation and Simulation (four times), Journal of Statistical Planning and Inference (eleven times), Journal of Statistical Theory and Practice (once), Journal of Theoretical Probability (twice), Law, Probability and Risk (once), Metrika (twice), Probability Theory and Related Fields (once), Proceedings of the American Mathematical Society (twice), Sankhya (three times), Scandinavian Journal of Statistics (twice), Science in China, Series A: Mathematics (once), SIAM/ASA Journal on Uncertainty Quantification (once), South African Journal of Statistics (once), STAT (twice), Statistics in Medicine (once), Statistica Sinica (three times), Statistical Methods & Applications (once) Statistics and Probability Letters (seven times), Statistical Methodology (once), Statistical Papers (twice), Statistical Science (six times), Statistics (twice), Stochastic Processes and their Applications (once), REVSTAT (twice), Risk (once), Tatra Mountains Mathematical Publications (once), Technometrics (twice), TEST (SEIO) (twice), WIREs Computational Statistics (twice)

Proceedings

American Control Conference 2007, 2008, 2009, 2010, 2012 Festschrift for Thomas Kurtz, IEEE Conference on Decision and Control 2005, 2008, IEEE Conference on Management System 2009, Perspectives in Modern Statistical Inference III

Books

Statistics textbooks by Springer (four times), Houghton Mifflin (once), Wiley (once), and Chapman & Hall Handbook on BFF inference.

Reviews

Mathematical Reviews (thirteen times), Zentralblatt MATH (twice)

CONFERENCES ORGANIZATION

Extreme Value Analysis, local organizing committee, May 2025
Triangle Statistics Symposium, member of the organizing committee, May 2025
CMStatistics 2021, organized session on Bayesian, Fiducial and Frequentist inference, London, December 2021.
CMStatistics 2019, organized session on Bayesian, Fiducial and Frequentist inference, London, December 2019.
BFF 2019, Program co-chair, 2019.
SAMSI program on Model Uncertainty, Local Scientific Coordinator, 2018-2019. *ICSA Applied Symposium*, Invited session on inference for discrete data, Rutgers, June 2018.
ISI 2017, Invited session on Bayesian, Fiducial and Frequentist inference, Marrakech, Morocco, July 2017
JSM 2016, IMS Program Chair, Chicago, IL 2016
AISC 2014, Invited session on Foundations of Statistics, Greensboro, NC, October 2014.
JSM 2014, Topic contributed session on Distributional Inference, Boston, MA, August 2014.
IMS 2014 Annual Meeting, Invited Session on Foundations of Objective Inference, Sydney, Australia, July 2014.
JSM 2012, Invited session on Distributional Inference & Topic Contributed Session on Stochastic Inverse Problems and Model Validation, San Diego, CA, August 2012.
JSM 2012, Replacement IMS representative to the contributed sessions organizational meeting, February 2012.
SAMSI program on Uncertainty Quantification, Local Scientific Coordinator, 2011-2012.
ISBIS-2010, Session on Object Data Analysis, Portoroz, Slovenia, July 2010.
WNAR/IMS Western Regional Meeting. 2003, Golden, CO, June 2003—IMS local chair.
Frontier Probability Days 2007, Colorado Springs, CO, May 2007

ADMINISTRATIVE SERVICE

University Committees

At The University of North Carolina at Chapel Hill
UNC System Faculty Assembly (elected), alternate 2020 –2021, delegate 2021 – 2027, chair of UNC CH delegation 2021 – 2024
UNC Faculty Council Agenda Committee, 2023 – 2024
UNC Student Stores Advisory Committee, 2019 – 2022
UNC Grievance Committee (elected), 2018 – 2021
UNC Faculty Council Member (elected), 2014 – 2020
Masters in Applied Data Science planning committee, 2016 – 2022
Dean's Distinguished Dissertation Award Review Committee. 2016, 2018 – 2022
STOR Director of Graduate Admissions, 2022 – 2023
STOR Graduate Studies, 2022 – present
STOR Target of Opportunity Identification Committee, 2015 – 2019 (chair), 2020 – 2022
STOR Diversity liaison, 2019 – 2022
STOR Department Advisory Committee, 2014 – 2019
STOR Department MDS Committee & Advising, 2014 – 2019
STOR Department Promotion & Post Tenure Review, 2014, '15, '17, '19 – present
STOR Department Instructional Mentoring, 2013 – 2019
STOR Department Hotelling Lectures, 2008 – 2022
STOR Department Colloquium Committee, 2008 – 2014, 2023
STOR Faculty Search Committee, 2011 – 2013, 2017 – 2019 (chair), 2019 – 2020, 2022-2023
STOR Department Chair Search Committee, 2008

At Colorado State University
Distance Program Director, 2003 – 2006. *Executive Committee*, 2007 – 2008
Tenure and Promotion Committee, 2006 – 2008
Graduate Committee, 2000 – 2002; 2003 – 2007
Graduate Screening Committee, member: 2001 – 2002; 2003 – 2006; chair: 2007
Faculty Position Search Committees, 2004 – 2005; 2005 – 2006; 2007 – 2008
Statistics Department Chair Search Committee, 2005
ISTeC Research Advisory Committee, 2004 – 2005

At Michigan State University
Statistics Department, Student Representative (elected), 1997 – 2000

Professional Board Membership

ASA Advisory Committee on Forensic Science, 2022 – 2025
NISS UNC representative to the board, 2018 – present
ENAR Regional Advisory Board, 2018 – 2020

COMMUNITY ENGAGEMENT

International development project

- *Royal University of Phnom Penh, Cambodia,* May 2008, 2009, June 2010, May 2011 Taught a mathematical statistics course as a part of MS in mathematics organized by CIMPA Laos-Cambodia project and Volunteer Lecturer Program of the International Mathematical Union.

State government

- *North Carolina State Crime Laboratory*, member of the Forensic Science Advisory Board, 2022 – present

Media

- *WPTF*, local radio live interview about Powerball odds, Spring 2023

- *WRAL*, local TV interview about Powerball odds, Spring 2023

- *WRAL*, local TV interview about Powerball odds, Fall 2022

- *Penn Live*, provided comments for an article on irregularities in the Pennsylvania Lottery, Spring 2018. `http://www.pennlive.com/news/2018/02/auditor_general_finds_no_fault.html`

- *What Matters in North Carolina* guest interview to discuss statistical assessment of people who have won the lottery multiple times. `http://freedomactionnetwork.com/index.php/2016/12/08/what-matters-for-thursday-december-08-2016/` (The segment is approximately at the 44 minute mark.)

- *Charlotte News & Observer*, consulted for free on an article on irregularities in the NC Education Lottery, Fall 2016 `http://www.charlotteobserver.com/news/special-reports/against-all-odds/article103038972.html`

PROFESSIONAL SOCIETIES MEMBERSHIP

Institute of Mathematical Statistics, 2000 - present
Bernoulli Society, 2002 - present
International Statistical Institute, 2006 - present
American Statistical Association, 2009 - present
International Society for Bayesian Analysis, 2012 - present
International Biometrics Society (Eastern North American Region), 2017 – present