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CURRICULUM VITAE

Name: **LEON JAY GLESER**

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Date and Place of Birth: December 17, 1939; St. Louis, Missouri

EDUCATION

Ph.D. (statistics), Stanford University, 1963.
M.S. (statistics), Stanford University, 1962.
B.S. (mathematics), University of Chicago, 1960.

PROFESSIONAL EXPERIENCE

- University of Pittsburgh: Professor of Statistics 1996-2014. Director of Graduate Studies, Department of Statistics, 1996-2013.
- University of Pittsburgh: Professor of Mathematics and Statistics, 1989-1996.
- National Institute of Standards and Technology: Visiting Faculty (Mathematical Statistician), 1988-1996.
- Purdue University, Professor of Statistics, 1977-1989. Associate Professor of Statistics, 1972-1977.
- Sidney Farber Cancer Center and School of Public Health, Harvard University: Visiting Professor, 1979-1980.
- Educational Testing Service: Visiting Research Fellow, 1971-1972.
- The Johns Hopkins University: Associate Professor of Statistics and Biostatistics, 1969-1972. Assistant Professor of Statistics, 1965-1969.
- Columbia University: Assistant Professor of Mathematical Statistics, 1963-1965.
- California State Scholarship Commission (Sacramento, CA): Consultant, 1962-1963.
- Autonetics (Downey, CA): Engineer Research Reliability, June-September, 1960.
- IBM, Cincinnati, Ohio: June-September, 1959.

HONORS

National Science Foundation Graduate Fellowships, 1960-1963.
Sigma XI (elected 1963)
Fellow, American Statistical Association (elected 1972)
Fellow, Institute of Mathematical Statistics (elected 1972)
Fellow, Royal Statistical Society, United Kingdom (elected 1991)
Elected Member, International Statistical Institute (1992)
Statistician of the Year (1995), Pittsburgh Chapter of the American Statistical Association
2008 Provost's Award for Excellence **in** Mentoring**,** University of Pittsburgh**.**

EDITORIAL RESPONSIBILITIES

Psychometrika: Associate Editor, 1972-1979
Journal of the American Statistical Association: Associate Editor, 1971-1974, 1986 -1992, 2003 - 2009
Matrix Analysis and Applications (SIAM): Associate Editor, 1989-1995.
Statistical Science: Editorial Board, 1992-1997, 2002 – 2004; Executive Editor, 1997-2000.

MEMBERSHIPS AND APPOINTMENTS

Societies:

American Statistical Association

Steering Committee for Study of Future Goals, 1970-1971
Publications Committee, 1971-1974
Executive Committee, Section on Statistical Education, 1976-1978
Representative on Management Committee of *Journal of Educational Statistics*, 1978-1980.
Search Committee for Review Editor of the *Journal of the American Statistical Association,* 1994-1995.

International Statistical Institute

Institute of Mathematical Statistics

Program Chairman, 1971 Eastern Regional Meeting
Program Committee, 1977 Central Regional Meeting , 1978 Central Regional Meeting, 1985 ISI Satellite Meeting (Maastricht)
Nominating Committee: Member, 1984; Chairman 1985
Representative on Evaluation Panel for National Science Foundation Postdoctoral Fellowships in the Mathematical Sciences, 1987-1990
Committee on Memorials: Member 1987-1988; Chairman, 1989, ex-officio 1998-1999
Ad Hoc Committee on Double Blind Refereeing, 1991-1992
IMS Council, Publications Committee, Special Invited Papers Committee (Ex-officio), 1997-2000

North American Chapter of International Chemometrics Society (founding member)

Royal Statistical Society

Visiting Lecturer Program in Statistics of the Committee of Presidents of Statistical Societies: Invited Lecturer, 1970-1973, 1980-1987; Operating Committee, 1983-1987.

Government Panels:

National Research Council Graduate Fellowship Evaluation Panel in Application of Mathematics (for National Science Foundation Graduate Fellowships): Invited Participant, 1988.

Government Panels (contd.)

National Institutes of Health
Special Review Panels: March and November, 1989
Special Study Sections: February and September, 1992; November, 1993; February, June, and October, 1994; February, 1995
SNEM 5 Study Section: October 1999, February 2000, June 2000, October 2000

National Science Foundation, Division of Mathematical Sciences
Graduate Research Traineeship (DMS/GRT) Panel, 1992
Interdisciplinary Grants in the Mathematical Sciences Panel, 1999
Focused Research Group (FRG) Panel, 2008
Research Training Groups Panel, 2009

RESEARCH GRANTS

Air Force Office of Scientific Research:

Contract AF49 (638)-1302. Principal Investigator, November 1969-July 1970
Contract F44620-70-C-0066. Principal Investigator, October 1969-July 1972
Grant AFOSR-73-2432. Principal Investigator, August 1972-July 1972
Grant AFOSR-72-2350. Support August 1973-May 1977; Principal Investigator, September 1976-May 1977
Grant AFOSR-77-3291. Principal Investigator, July 1977-November 1979

National Science Foundation:

Grant MCS 79-05815. Co-principal Investigator, June 1979-May, 1982
Grant MCS 81-21948. Principal Investigator, June 1982-May 1985
Grant DMS-8501966. Principal Investigator, June 1985-November 1988
Grant DMS-8901922. Principal Investigator, June 1989-May 1990
Grant DMS-9002847. Principal Investigator, June 1990-November 1992
Grant DMS-9203369. Principal Investigator, August 1992-January 1996
Grant DMS-9504924. Principal Investigator, July 1995-June 1999
Doctoral Dissertation Research: A Realtime statistical approach to the Inverse problem in magnetoencephalography by CUDA computing (Co-principal investigator) Award Number 1061387. July 2011-July 2012.

PUBLICATIONS

Books:

A *Guide to Probability Theory and Application* (with C. Derman and I. Olkin). Holt, Rinehart and Winston, New York, 1973.

Probability Models and Applications (with C. Derman and I. Olkin). Macmillan, New York, 1980. Second Edition, 1994.

PUBLICATIONS
Books (contd.)
:
Contributions to Probability and Statistics. *Essays in Honor of Ingram Olkin* (Co-edited with M. D. Perlman, S. J. Press and A. R. Sampson). Springer-Verlag, New York, 1989.

Advances in Multivariate Statistical Analysis: K C Sreedharan Pillai 1920-1985 (Co-edited with L J Cote, S Gupta, P Puri and S Samuels) . Dordrecht, Boston, 1987.

Journal Publications and Book Chapters:

1. On a measure of test efficiency proposed by R. R. Bahadur. *Ann. Math. Statist.* **35** (1964), 1537-1544.

2. On the asymptotic theory of fixed-size sequential confidence bounds for linear regression parameters. *Ann. Math. Statist*. **36** (1965), 463-467. (See also correction note. *Ann. Math. Statist*. **37** (1966), 1053-1055.)

3. .A note on the sphericity test. *Ann. Math. Statist*. **37 (**1966), 464-467.

4. A k-sample regression model with covariance (with I. Olkin). *Multivariate Analysis* (P. R. Krishnaiah, ed.). Academic Press. New York (1966), 59-73.

5. The comparison of multivariate tests of hypothesis by means of Bahadur efficiency. *Sankhya* **28** (parts 2 and 3) (1967), 157-174.

6. On monotonicities of the generalized mean ratio and related results. *Journ. Math. Analysis and Applications* **21** (1968), 530-536.

7. On testing a set of correlation coefficients for equality: Some asymptotic results. *Biometrika* **55** (1968), 513-517.

8. Testing for equality of means, equality of variances, and equality of covariances under restrictions upon the parameter space (with I. Olkin). *Ann. Instit. Statist. Math*. **21** (1969), 33-48.

9. On limiting distributions for sums of a random number of independent random vectors. *Ann. Math. Statist.* **40** (1969), 935-941.

10. Linear models in multivariate analysis (with I. Olkin). *Essays in Probability and Statistics* (R. C. Boss *et al*., eds.), University of North Carolina Press, Chapel Hill, North Carolina, (1970), 267-292.

11. The paradox of voting: Some probabilist results. *Public Choice* VII (1970), 47-63.

12. On bounds for the average correlation between subtest scores in ipsatively scored tests. *Educational and Psychological Measurement* **32** (1972), 759-765.

Journal Publications and Book Chapters (contd.)

13. Estimation of a regression model with an unknown covariance matrix (with I. Olkin). In *Proc. Sixth Berkeley Symposium on Mathematical Statistics and Probability*, Vol. 1, University of California Press, Berkeley, California (1972), 541-568.

14. On a new class of bounds for the distributions of quadratic forms in normal variates. *Journ. Amer. Statist. Assoc.* **67** (1972), 655-659.

15. Approximating circulant quadratic forms in jointly stationary Gaussian time series (with M. Pagano). *Ann. Statist.* **1** (1973), 322-333.

16. .Estimation of a linear transformation (with G. S. Watson). *Biometrika* **69** (1973), 525-534.

17. Multivariate statistical inference under marginal structure (with I. Olkin). *British Journ. Math. and Statist. Psych.* **26** (1973), 98-123.

18. The estimation of the prevalence of delinquency: Two approaches and a correction of the literature (with Robert A. Gordon). *Journ. of Math. Soc.* **3** (1974), 275-291.

19. On the distribution of the number of successes in independent trials. *Ann. Prob.* **3** (1975), 182- 186.

20. Multivariate statistical inference under marginal structure, II (with I. Olkin). In *A Survey of Statistical Design and Linear Models* (J. N. Srivastava, ed.). North-Holland Publishing Company, Amsterdam,The Netherlands (1975), 165-179.

21. Classical asymptotic properties of a certain estimator related to the maximum likelihood estimator (with James C. Fu). *Ann. Instit. Statist. Math.* **27** (1975), 213-233.

22. A note on Box's general method of approximation for the null distributions of likelihood criteria (with I. Olkin). *Ann. Instit. Statist. Math*. **27** (1975), 319-326.

23. On asymptotically optimal sequential Bayes interval estimation procedures (with Sudhakar Kunte). *Ann. Statist.* **4** (1976), 685-711.

24. A canonical representation for the noncentral Wishart distribution useful for simulation. *Journ. Amer. Statist. Assoc.* **71** (1976), 690-695.

25. Estimating the mean of a normal distribution with known coefficient of variation (with John D. Healy). *Journ. Amer. Statist. Assoc*. **71** (1976), 977-981.

26. Minimax estimation of a normal mean vector for arbitrary quadratic loss and unknown covariance matrix (with J. Berger, M. E. Bock, L. D. Brown, G. Casella). *Ann. Statist*. **5** (1977), 763-771.

27. Minimax estimation of a normal mean vector when the covariance matrix is unknown. *Ann. Statist*. **7** (1979), 838-846.

Journal Publications and Book Chapters (contd.)

28. Estimation in a multivariate “errors in variables” regression model: Large sample results. *Ann. Statist*. **9** (1981), 24-44.

29. Comments on “A Factor Analytic Model for Equating” by Donald Rock. In *Test Equating* (P. Holland and D. Rubin, eds.). Academic Press, New York (1982), 259-270.

30. The effect of dependence on chi-squared and empiric distribution test of fit (with D. S. Moore). *Ann. Statist*. **11** (1983), 1100-1108.

31. Functional, structural and ultrastructural errors-in-variables models. In *1983 Proceedings of the Business and Economic Statistics Section*. American Statistical Association, Washington, D.C. (1983), 57-66. (Note: Invited paper.)

32. Large deviation indices and Bahadur exact slopes. *Statistics and Decisions*. Supplement Issue No. 1 (1984), 193-204.

33. .A note on G. R. Dolby's unreplicated ultrastructural model. *Biometrika* **72** (1985), 117-124.

34. Exact power of goodness-of-fit tests of Kolmogorov type for discontinuous distributions. *Journ. Amer. Statist. Assoc*. **80** (1985), 954-958.

35. Positive dependence in Markov chains (with D. S. Moore). *Linear Algebra and Its Applications,* Special Issue on Statistics **70** (1985), 131-146.

36. Comparison of least squares and errors-in-variables regression with special reference to randomized analysis of covariance (with R. J. Carroll and P. P. Gallo). *Journ. Amer. Statist. Assoc.* **80** (1985), 929-932.

37. Assessing familiality of cognitive ability. *Intelligence* **9** (1985), 375-385.

38. Discussion of ``The Limitations of Models and Measurements as Revealed Through Chemometric Intercomparison'' by Lloyd A. Currie. *Journal of Research of the National Bureau of Standards* **90** No. 6 (1985), 419-422.

39. The effect of positive dependence on chi-squared tests for categorical data (with D. S. Moore). *Journ. Royal Statist. Soc.* Series B **47** (1985), 459-465.

40. Inference about comparative precision in linear structural relationships (with J. Y. Shyr). *Journ. Statist. Planning and Inference* **14** (1986), 339-358.

41. Improving inadmissible estimators under quadratic loss. *Statistics and Decisions* **4** (1986), 37-43.

42. Minimax estimators of a normal mean vector for arbitrary quadratic loss and unknown covariance matrix. *Ann. Statist.* **14** (1986), 1625-1633.

43. Some notes on refereeing. *The American Statistician* **40** (1986), 310-312.

Journal Publications and Book Chapters (contd.)

44. Invited Comments on “Investigation On the Use of Chemical Mass Balance Receptor Model: Numerical Comparison.” *Chemometrics and Intelligent Laboratory Systems* **1** (1986), 44-48.

45. The limiting distribution of least squares in an errors-in-variables linear regression model (with R. J. Carroll and P. P. Gallo). *Ann. Statist.* **15** (1987), 220-233.

46. The nonexistence of 100(1-α)% confidence sets of finite expected diameter in errors-in-variables and related models (with J.T. Hwang). *Ann. Statist.* **15** (1987), 1351-1362.

47. New estimators for the mean vector of a normal distribution with unknown covariance matrix. In *Statistical Decision Theory and Related Topics IV*, Vol. 1 (S. S. Gupta and J. O. Berger, eds.). Academic Press, New York (1987), 347-360.

48. Confidence intervals for the slope in a linear errors-in-variables regression model. In *Advances in Multivariate Statistical Analysis* (A. K. Gupta, ed.). D. Reidel Publishing Co., Dordrecht, Holland (1987), 85-109.

49. The gamma distribution as a mixture of exponential distributions. *The American Statistician* **43** (1989), 115-117.

50. Some results on convolutions and a statistical application (with M. L.Eaton). In *Contributions to Probability and Statistics. Essays in Honor of Ingram Olkin.* (L. J. Gleser, M. D. Perlman, S. J. Press, A. R. Sampson, eds.). Springer-Verlag, New York (1989), 75-90.

51. Commentary on ``Indoor Air Pollution and Pulmonary Performance: Investigating Errors in Exposure Assessment'' by Nancy A. Hasabelnaby, James H. Ware and Wayne A. Fuller. *Statistics in Medicine* **8** (1989), 1127-1131.

52. A meta-analytic evaluation of couples weight loss programs (with David R. Black and Kimberly J. Kooyers). *Health Psychology* **9** (1990), 330-347.

53. Discussion of ``An Ancillary Paradox Which Appears in Multiple Linear Regression'' by Larry Brown. *Annals of Statistics* **18** (1990), 507-512.

54. T. W. Anderson's contributions to the study of linear statistical relationship models. In *The Collected Papers of T. W. Anderson: 1943-1985* (G.P.H Styan, ed.), John Wiley & Sons, New York (1990), 1607-1613.

55. Improvements of the naive approach to estimation in nonlinear errors-in-variables regression models, *Contemporary Mathematics* **112** (1990), 99-114.

56. Statistical design, models and analysis for the job change framework. *Journal of Career Development* **17** (1990), 41-58.

57. Measurement error models. *Chemometrics and Intelligent Laboratory Systems* **10** (1991), 45-57.

Journal Publications and Book Chapters (contd.)

58. Comments on ``Analysis of chemical structure-biological activity relationships using clustering methods'' by Jurs and Lawson. *Chemometrics and Intelligent Laboratory Systems* **10** (1991), 85-86.

59. A note on the analysis of familial data. *Biometrika* **79** (1992), 412-415. [Correction: *Biometrika* **83** (1996), 247.]

60. The importance of assessing measurement reliability in multivariate regression. *Journ. Amer. Statist. Assoc.* **87** (1992), 696-707.

61. Minimax estimators for location vectors in elliptical distributions with unknown scale parameter and its application to variance reduction in simulation (with Ming Tan). *Annals of the Institute of Statistical Mathematics* **44** (1992), 537-550.

62. Discussion of “Detecting and measuring sources at the noise limit” by Herman L. Marshall. In *Statistical Challenges in Modern Astronomy* (E. D. Feigelson and G. J. Babu, eds.). Springer-Verlag: New York (1993), 263-267.

63. Discussion of ``Physical statistics'' by L. G. Taff. In *Statistical Challenges in Modern Astronomy* (E. D. Feigelson and G. J. Babu, eds.), Springer-Verlag: New York (1993), 484-489.

64. Estimators of slopes in linear errors-in-variables regression models when the predictors have known reliability matrix. *Statistics and Probability Letters*, **17** (1993), 113-121.

65. Empirical Bayes estimation in factor analysis for aerosol mass apportionment (with Hefei Yang). *Analytica Chimica Acta* **277**, No. 2 (1993), 405-419.

66. Improved point and confidence interval estimators of mean response in simulation when control variates are used (with Ming Tan). *Communications in Statistics; Computation and Simulation,* Series B, **22** (1993), 1211-1220.

67. Report of the ad hoc committee on double-blind refereeing (with David Cox, Michael Perlman, Nancy Reid and Kathryn Roeder). *Statistical Science* **8** (1993), 310-317.

68. Stochastically dependent effect sizes (with I. Olkin). Chapter 22 in *Handbook of Research Synthesis* (H. Cooper and L. Hedges, eds.). Russell Sage Foundation, New York,1994.

69. Models for estimating the number of unpublished studies (with I. Olkin). *Statistics in Medicine* **15** (1996), 2493-2507.

70.. Comment on “Bootstrap confidence intervals” by T. J. DiCiccio and B. Efron. *Statistical Science* **11** (1996), 219-221.

71. Some thoughts on chemical mass balance models. *Chemometrics and Intelligent Laboratory Systems* **37** (1997), 15-22.

Journal Publications and Book Chapters (contd.)

72. Some new approaches to estimation in linear and nonlinear errors-in-variables regression models. In *Recent Advances in Total Least Squares Techniques and Error-in-Variables Modeling*. Proceedings of the 2nd International Workshop on Total Least Squares and Errors-in-Variables Modeling (S. Van Huffel, ed.), SIAM, Philadelphia (1997), 69-76.

73. Assessing uncertainty in measurement. *Statistical Science* **13** (1998), 277-290.

74. On the difference in inference and prediction between the joint and independent t-error models for seemingly unrelated regressions (with J. Kowalski, J.R. Mendoza-Blanco, & X M. Tu). *Communications in Statistics: Theory and* Methods **28(9)** (1999), 2119-2140

75. Meta-analysis for 2×2 tables with multiple treatment groups (with I Olkin). Chapter 7 of *Meta-Analysis in Medicine and Health Policy* (D. Berry & D. Stangl, eds.), Marcel Dekker: NY (2000), 179-189.

76. SIMEX approaches to measurement error in ROC studies (with J. Kim). *Communications in Statistics: Theory and Methods* **29(11)** (2000), 2472-2491.

77. Comment on "Setting confidence intervals for bounded parameters" by Mark Mandelkern. *Statistical Science* **17** (2002), 161-163.

78. On the usefulness of knowledge of error variance in the consistent estimation of an unreplicated ultra structural model (with Shalabh and O. Rosen). *Journal of Statist. Comp. & Sim.* **74** (2004), 391-417.

79. A calculus of two-stage adaptive procedures (with T. Koyama and A.R.Sampson). *Journ. Amer. Statist. Assoc.* **100** (2005), 197-203.

80. A framework for two-stage adaptive procedures to simultaneously test non- inferiority and superiority (with T. Koyama and A.R. Sampson). *Statistics in Medicine* **25** (2006).

81. Stochastically dependent effect sizes (with I Olkin). Chapter 19 of *The Handbook of Research Synthesis and Meta-Analysis*, 2nd edition (H. Cooper, L. V. Hedges, and J. C. Valentine eds.), Russell Sage Foundation: NY (2009),357-376.

82. A numerical likelihood-based approach to combining correlation matrices(with Myung Soon Song). *Communications In Statistics---Simulation and Computation* **41**(2012), 1679-1692.

83. University of Pittsburgh: Departments of Biostatistics and Statistics (with Howard Rockette and Carol Redmond). Chapter 35 in *Strength in Numbers: The Rising of Academic Statistics Departments in the United States* (ed. Xiao Li Meng and Alan Agresti). Springer: NY (2012).

84. Simultaneous confidence bands for comparisons to placebo, with application to Detecting the minimum effective dose (with Julia N. Soulakova, Allan R Sampson and Gang Jia) *Journal of Biopharmaceutical Statistics* **22** (2012), 93-108

Journal Publications and Book Chapters (contd.)

85. Discussion on "Five examples of assessment and expression of measurement uncertainty" by Antonio Possolo. *Applied Stochastic Models in Business and Industry* **29** (2013), 19-23.

Book Reviews and Letters

1. Review *of Probability and Statistics for Engineers by I. Miller and J. E. Freund. Journ. of the Franklin Institute* **279** (1965), 474-475.

2. Review of *Intermediate Correlation Analysis* by A. Baggeley. *Journ. Amer. Statist. Assoc.* **61** (1966), 527-529.

3. Review of *Improving Experimental Design and Statistical Analysis* (Julian Stanley, ed.). *Journ. Amer. Statist. Assoc*. **63** (1968), 1536-1538.

4. Review of *Statistics: Uncertainty and Behavior* by I. Richard Savage. Mathem*atical Reviews* **40** (1970), 668-669.

5. Review of *Statistics: Probability, Inference and Decision* by William L. Hays and Robert L. Winkler. *Journ. Amer. Statist. Assoc.* **68** (1973), 491.

6. Review of *Probability and Statistics: An Undergraduate Course* by Meyer Dwass. *Mathematical Reviews* **45**, No. 4 (1973), 1130-1131.

7. Review of *Mathematical Statistics*: *An Introduction Based on the Normal Distribution* by Simeon M. Berman. *Mathematical Reviews* **46**, No. 1 (1974), 169-170.

8. Review of *Sequential Tests of Statistical Hypotheses* by B. K. Ghosh, *Mathematical Reviews* **47**, No. 5 (1974), 1369-1370.

9. Review of *Mathematics through Statistics* by Louis Auslander, et al. *Journ. Amer. Statist. Assoc.* **69** (1974), 578.

10. Review of *Applied Multivariate Analysis* by S. James Press. *Journ. Amer. Statist. Assoc.* **70** (1975), 956.

11. Review of *Aspects of Multivariate Statistical Theory* by Robb J. Muirhead. *Technometrics* **26** (1984), 191-192.

12. Review of *Multivariate Statistics: A Vector Space Approach* by M. L. Eaton. *Journ. Amer. Statist. Assoc.* **80** (1985), 1069-1070.

13. Review of *Statistical Methods for Meta-analysis* by L. V. Hedges and I. Olkin. *Mathematical Reviews* (1987), Issue 87e, 2628-2629.

14. Review of *Multivariate Statistical Simulation* by M. E. Johnson. *The American Scientist* **7** (1988), 314-315.

Book Reviews and Letters (contd.)

15. Letter: Reply to ``Some notes arising from Gleser (1989)" by Johnson and Kotz. *American Statistician* **44** (1990), 185.

17. Letter: The fate worse than death and other curiosties and stupidities. *American Statistician* **44** (1990), 187.

18.. Review of *Design and Analysis of Reliability Studies* by G. Dunn. *Technometrics* **33** (1991), 478-480.

19. Letter: Accounting for interactions. *Journ. Amer. Statist. Assoc*. **87** (1992), 912.

20. Review of *The Total Least Squares Problem*. *Computational Aspects and Analysis* by S. Van Huffel and J. Vanderwalle, *Short Book Reviews* **12** (1992), 6.

21. Review of *Measurement, Regression, and Calibration* by Philip J. Brown. *Technometrics* **38** (1996), 75.

22. A brief biography and appreciation of Ingram Olkin (with M. D. Perlman, S. J. Press and A. R. Sampson). *Linear Algebra and Its Applications* **199** (1994), 1-16.

Unpublished and Submitted Technical Reports

1. The sequential estimation of the mean of a normal population by confidence interval of prescribed width (with N. Starr). Columbia University Technical Report, January 28, 1964.

2. Some asymptotic properties of fixed-width sequential confidence intervals for the mean of a normal population with unknown variance (with H. Robbins and N. Starr). Columbia University Technical Report, April 24, 1964.

3. On a fixed-width confidence interval for the common mean of two distributions having unequal variances: I. The case of one variance known (with S. Zacks). Johns Hopkins University, Department of Statistics, Report No. 58, 1965.

4. On some results concerning stopping rules (with S. Zacks). Johns Hopkins University, Department of Statistics, Report No. 83. Abstract in February 1968, *Ann. Math. Statist.*

5. The attenuation paradox and internal consistency. Talk presented at Symposium, Division D, American Educational Research Association annual meeting, February, 1971. ERIC Document.

6. On asymptotically optimal and asymptotically pointwise optimal stopping rules (with S. Kunte). Purdue University, Department of Statistics, Mimeo Series No. 341, 1973.

7. On sequential asymptotically optimal Bayes confidence interval procedures (with S. Kunte). Purdue University, Department of Statistics, Mimeo Series No. 396, 1975.

Unpublished and Submitted Technical Reports (contd.)

8. Minimax estimation of a multivariate normal mean with unknown covariance matrix. Purdue University, Department of Statistics, Mimeo Series No. 460, 1976.

9. Calculation and simulation in errors-in-variables regression problems. Purdue University, Department of Statistics, Mimeo Series No. 78-5, 1978.

10. Confidence regions for the slope in a linear errors-in-variables regression model. Purdue University, Department of Statistics, Mimeo Series No. 82-23, 1982.

11. Improved estimators of mean response in simulation when control variates are used. Purdue University, Department of Statistics, Mimeo Series No. 87-32, 1987.

12. Improved estimators of mean response in simulation when control variates with unknown covariance matrix are used. Purdue University, Department of Statistics, Mimeo Series No. 87-34, 1987.

13. Another perspective on Stein's Paradox. Unpublished paper, 1990.

14. A characterization of the Rayleigh distribution (with José R. Mendoza-Blanco and Ted Walenius), June 13, 1994.

15. Comparing regression coefficients between models: Concepts and illustrative examples (with S. Raudenbush, L. Hedges, E. Johnson and E. Petkova). National Institute of Statistical Sciences Technical Report (1997).

16. A linear measurement error model applicable to longitudinal analysis (with H. Gao).

17. A Bayesian semi-parametric approach to errors-in-variables regression models (with J. Kim and K. Kleinmen).

18. Measuring and Reporting Uncertainty. Keynote talk at New England Statistical Symposium, New Haven, CT, April 2002.

PH.D. DISSERTATIONS DIRECTED

1. On Some Topics in Sequential Multiparameter Estimation. Janice De Moulin Callahan, 1969.

2. On the Robustness of Optimum Designs for Polynomial Regression Problems. Joseph N. Skwish, 1969.

3. Some Aspects of a Two-Dimensional Periodogram. Marcello Pagano, 1970.

4. On Some Large-Sample Methods in Statistical Point Estimation. James C. Fu, 1971.

5. Asymptotically Pointwise Optimal and Asymptotically Optimal Stopping Rules for Sequential Bayes Confidence Interval Estimation. Sudhakar Kunte, 1973.

PH.D. DISSERTATIONS DIRECTED (contd.)

6. Estimation of a Linear Transformation and Associated Distributional Problems. Anil Kishore Bhargava, 1975.

7 Estimation and Tests for Unknown Linear Restrictions in Multivariate Linear Models. John Douglas Healy, 1976.

8. Minimax Ridge Regression Estimation. George Casella, 1977.

9. Asymptotically Optimal Multiparameter Sequential Bayes Regional Estimation Procedures. Richard A. Sundheim, 1979.

10. A Bayesian Approach to the Symmetric Multiple Comparisons Problem in the Two-Way Liwen Alice Sun, 1981.

11. Comparative Precision in Linear Structural Relationships. Jing-Yun Shyr, 1984.

12. Towards Agreement: Bayesian Experimental Design. Jameson Burt, 1989.

13. Shrinkage, GMANOVA, Control Variates and Their Applications. Ming Tan, 1990.

14. Quadrature Approximation in Nonlinear Structural Errors-in-Variables Regression Models. Ca Sing Lee, 1993.

15. Confirmatory Factor Analysis and its Application to Receptor Modeling. Hefei Yang, 1994.

16. The Box-Cox and Other Transformation Families for Inference in Errors-in-Variables Regression Models. Wing-Lit Wong, 1994.

17. Bayesian Analysis for Seemingly Unrelated Regression Models with t-Distributed Errors. José Rodolfo Mendoza-Blanco, 1995.

18. Linear Latent Covariate Models With Applications to Longitudinal Analysis. Haitao Gao, 1998.

19. Simulation-Based Approaches to Nonlinear Measurement Error Models. Johngyeon Kim, 2000.

20. Estimation of a Common Mean Through a Series of Similar Interlaboratory Experiments. Marc Sylvester, 2001.

21. A Framework for Design of Two-Stage Adaptive Procedures. Tatsuki Koyama, 2003 (co-chair with Allan Sampson).

22. Improving Coverage of Rectangular Confidence Regions. Hakan Gogtas, 2004.

23, Use of Simultaneous Inference Under Order Restriction, Stepdown Testing Procedure and Stage – Wise Sequential Optimal Design in Clinical Dose Study. Gang Jia, 2005.

PH.D. DISSERTATIONS DIRECTED (contd.)

24. Reporting Uncertainty by Spline Function Approximation of Loglikelihood. Ahmet Sezer, 2006.

25. *Markov Models for Longitudinal Course of Youth Bipolar Disorder*. Adriana Lopez 2008 (co-chair with Satish Iyengar).

26. Numerical Algorithms for Stock Option Valuation. Scott B. Nickleach 2008.

27. Mapping underlying dynamic effective connectivity in neural systems using the deconvolved neuronal activity. Seo Hyon Baik 2010 (co-chair with Wesley Thompson).

28. The Effect of Student-Driven Projects on the Development of Statistical Reasoning. Melissa M. Sovak, 2010.

29. Unconventional Approach with the Likelihood of Correlation Matrices. Myung Soon Song 2011.

30. A Statistical Approach to the Inverse Problem in Magnetoencephalography. Zhigang Yao 2011 (co-chair with Bill Eddy).

31. Optimal Procedures in High-Dimensional Variable Selection. Qi Zhang 2013 (co-chair with Jiashun Jin).

CURRENT RESEARCH INTERESTS

Data mining; measurement and reporting of uncertainty; linear and nonlinear measurement error regression models; statistical meta-analysis; Bayesian and non-Bayesian theories of inference; multivariate statistical analysis and distribution theory; applications of statistical ideas and methods to the biological, physical and social sciences.