

Curriculum Vitae
of
SOUMENDRA NATH LAHIRI
LAST REVISED: 09/05/2007

OFFICE ADDRESS:

Department of Statistics, 525J Blocker, TAMU-3143 Texas A & M University, College Station, TX 77843. *Phone:* (979) 862-7582. *E-mail:* snlahiri@stat.tamu.edu

EDUCATION:

1986-1989: Ph.D. in Statistics, Michigan State University, USA.

1984-1986: M.STAT., Indian Statistical Institute, Calcutta, India.

1981-1984: B.STAT., Indian Statistical Institute, Calcutta, India.

EMPLOYMENT:

2006-present: Professor, Dept. of Statistics, Texas A & M University.

2006-present: Professor, Dept. of Mathematics, Texas A & M University.

1998-2006: Professor, Dept. of Statistics, Iowa State University.

1994-1998: Associate Professor, Dept. of Statistics, Iowa State University.

1989-1994: Assistant Professor, Dept. of Statistics, Iowa State University.

EDITORIAL WORK:

2004- : Associate Editor, Sankhya.

2003- : Associate Editor, Statistical Methodology.

2002-2005: Associate Editor, Statistics and Probability Letters.

HONORS AND DISTINCTIONS:

- Elected member, International Statistical Institute, 2005.
- Received the ISU College of Liberal Arts and Sciences Award for Excellence in Research and Scholarship, 2003.
- Fellow, the American Statistical Association, 2002.
- Fellow, the Institute of Mathematical Statistics, 2001.
- Received the ISU Foundation Award for Early Achievement in Research and Scholarship, 1994.
- Held the first position in the Graduate Aptitude test in Engineering (1986) among all Mathematics/Statistics students at all India level.

RESEARCH INTERESTS:

Bootstrap and Resampling Methods, Edgeworth Expansions, Spatial Statistics, Time series, Wavelets, Wireless Sensor Networks.

PROFESSIONAL EXPERIENCE:

2007: Served on the NSF panel on 'Collaborative research in Mathematics and Geosciences'.

2006-2007: Program chair, Section on Nonparametric Statistics, American Statistical Association.

2005-2007: Program chair, International Indian Statistical Association.

2004-2007: Nomination Committee, International Indian Statistical Association (IISA); (Chair 2005).

2001-2005: Group Leader, NSF VIGRE Grant Work Group in 'Theoretical Statistics and Probability Theory', Dept. of Statistics, ISU.

2000: Served on the NSF panel on Environmental Statistics.

1999-2000: Secretary, Section on Nonparametric Statistics, American Statistical Association.

1998-1999: President, Iowa Chapter, American Statistical Association.

VISITING POSITIONS:

Spring, 2005: Australian National University, Canberra, Australia.

Fall, 1994: Stanford University, Stanford, USA.

Summer, 1994: Oxford University, Oxford, UK.

Spring, 1994: Australian National University, Canberra, Australia.

Winter, 1993: Indian Statistical Institute, Calcutta, India.

GRANTS:

1. NSF research grant 2007-2010 (PI, \$319,000)
2. NSF research grant 2003-2007. (PI, \$226,000).
3. NSF research grant 2000-2004. (PI, \$143,000).
4. NSF-EPA research grant on Environmental Statistics, 1998-2001. (Co-investigator, \$300,000).
5. NSF research grant 1995-1998. (PI, \$75,000).
6. EPA research grant 1994-1997. (Co-investigator, \$900,000).
7. NSF research grant 1991-1994. (PI, \$28,000).
8. NSF/IMS grant for participating in the "writing workshop for young researchers," 1991. (\$750).
9. NSF/CBMS grant for participating in the summer conference on 'Higher Order Asymptotics', 1991. (\$750).

RESEARCH WORK:

• BOOKS:

1. Lahiri, S.N. (2003). **Resampling Methods for Dependent Data**. Springer-Verlag Inc., New York. (374 pages).
2. Athreya, K.B. and Lahiri, S.N. (2006). **Measure Theory and Probability Theory**. Springer-Verlag Inc., New York. (618 pages)

• RESEARCH PAPERS:

(A) Publications in Refereed Journals

1. Lahiri, S.N. (1991). Second order optimality of stationary bootstrap. **Statistics and Probability Letters** **11**, 335-341.
2. Lahiri, S.N. (1992). Edgeworth expansions for the distributions of M-estimators of a simple regression parameter. **Journal of Multivariate Analysis** **42**, 125-132.
3. Lahiri, S.N. (1992). On Bahadur-Ghosh-Kiefer representation of sample quantiles. **Statistics and Probability Letters** **15**, 163-168.
4. Lahiri, S.N. (1992). On bootstrapping M-estimators. **Sankhya, Ser. A** **54**, 157-170.
5. Lahiri, S.N. (1992). Edgeworth correction by 'moving block bootstrap' for stationary and nonstationary data. In **Exploring the limits of bootstrap**. - Eds. R. Lepage and L. Billard, Wiley, NY, 183-214.
6. Lahiri, S.N. (1992). Bootstrapping M-estimators of a multiple regression parameter. **Annals of Statistics** **20**, 1548-1570.
7. Lahiri, S.N. (1993). Refinements in the asymptotic expansions for sums of weakly dependent random vectors. **Annals of Probability** **21**, 791-799.
8. Lahiri, S.N. (1993). On bootstrapping the studentized sample mean of lattice data. **Journal of Multivariate Analysis** **45**, 247-256.
9. Lahiri, S.N. (1993). On the moving block bootstrap under long range dependence. **Statistics and Probability Letters**. **18**, 405-413.
10. Cressie, N. and Lahiri, S.N. (1993). Asymptotic distribution of REML estimators. **Journal of Multivariate Analysis** **45**, 217-233.
11. Lahiri, S.N. (1994). Rates of bootstrap approximation for the mean of lattice variables. **Sankhya, Ser. A**. **56**, 77-89.
12. Lahiri, S.N. (1994). Two term Edgeworth expansion and bootstrap approximation for multivariate studentized M-estimators. **Sankhya, Ser. A**. **56**, 201-226.
13. Lahiri, S.N. (1994). On second order correctness of Efron's bootstrap without Cramer-type conditions in linear regression models. **Mathematical Methods of Statistics** **3**, 130-148.
14. Koul, H.L. and Lahiri, S.N. (1994). On bootstrapping M-estimated residual processes in multiple linear regression models. **Journal of Multivariate Analysis** **49**, 255-265.
15. Lahiri, S.N. (1995). On the asymptotic behaviour of the moving block bootstrap for normalized sums of heavy-tail random variables. **Annals of Statistics** **23**, 1331-1349.
16. Hall, P., Lahiri, S.N., and J. Polzehl. (1995). On bandwidth choice in nonparametric regression with both short- and long-range dependent errors. **Annals of Statistics** **23**, 1921-1936.

17. Hall, P., Lahiri, S.N., and Y. Truong. (1995). On bandwidth choice for density estimation with dependent data. **Annals of Statistics** **23**, 2241-2263.
18. Lahiri, S.N. (1996). Asymptotic expansions for sums of random vectors under polynomial mixing rates. **Sankhya, Series A** **58**, 206 - 224.
19. Lahiri, S.N. (1996). On inconsistency of estimators under infill asymptotics for spatial data. **Sankhya, Series A** **58**, 403-417.
20. Lahiri, S.N. (1996). On Edgeworth expansions and the moving block bootstrap for studentized M-estimators in multiple linear regression models. **Journal of Multivariate Analysis** **56**, 42-59.
21. Cressie, N. and Lahiri, S.N. (1996). Asymptotics for REML estimation of spatial covariance parameters. **Journal of Statistical Planning and Inference** **50**, 327-341. (SOLICITED PAPER FOR A SPECIAL TOPIC ISSUE ON SPATIAL STATISTICS. I.V. BASAWA (ED.)).
22. Lahiri, S.N. (1997). Variance stabilizing transformations, studentization and the bootstrap. **Journal of Statistical Planning and Inference** **61**, 105-123.
23. Lahiri, S.N. (1997). On inconsistency of the Jackknife-After-Bootstrap bias estimator. **Journal of Multivariate Analysis** **63**, 15-34.
24. Karabulut, I.K. and Lahiri, S.N. (1997). Two-term Edgeworth expansion for M-estimators of a linear regression parameter without Cramer-type conditions and an application to the bootstrap. **Proceedings of the Australian Mathematical Society, Ser. A** **62**, 361-370.
25. Kaiser, M., Hsu, N.J., Cressie, N., and Lahiri, S.N. (1997). Inference for spatial processes using subsampling: A simulation study. **Environmetrics** **8**, 485-502.
26. Lahiri, S. N. (1998). On bootstrapping weighted empirical processes that do not converge weakly. **Statistics and Probability Letters** **37**, 295-302.
27. Athreya, K.B., Lahiri, S.N. and Wu, W. (1998). Inference for the parameters of heavy-tail data. **Journal of Statistical Planning and Inference** **66**, 61-75.
28. Hall, P., Jing, B-Y. and Lahiri, S.N. (1998). On the sampling window method under long range dependence. **Statistica Sinica** **8**, 1189-1204.
29. Lahiri, S.N. (1999). On second order properties of the Stationary Bootstrap method for studentized statistics. In **Asymptotics, Nonparametrics, and Time Series**, Ed. S. Ghosh. Mercel-Dekker. 683 - 712.
30. Lahiri, S.N. (1999). Theoretical comparison of block bootstrap methods. **Annals of Statistics** **27**, 386-404.
31. Lahiri, S.N. (1999). Asymptotic distribution of the empirical spatial cumulative distribution function predictor and prediction bands based on a subsampling Method. **Probability Theory and Related Fields** **114**, 55-84.
32. Lahiri, S.N., M.S. Kaiser, N. Cressie, and N-J. Hsu. (1999). Prediction of spatial cumulative distribution functions using subsampling (with discussion.) **Journal of the American Statistical Association** **94**, 86 -110.
33. Athreya, K.B. and Fukuchi, J-I. and Lahiri, S.N. (1999). On the Bootstrap and the Moving Block Bootstrap for the Maximum of a Stationary Process. **Journal of Statistical Planning and Inference** **76**, 1-17.

34. N. Cressie, M.S. Kaiser, M.J. Daniels, J. Aldworth, J. Lee, S.N. Lahiri, and L.H. Cox. (1999). Spatial analysis of particulate matter in an urban environment. In **geoENV II- Geostatistics for Environmental Applications**. Eds.- J. Gómez-Hernández, A. Soares, and R. Froidevaux. Kluwer Academic Publishers, Boston. Pages 41-52.
35. Lahiri, S.N. (2001). Effects of block lengths on the validity of block resampling methods. **Probability Theory and Related Fields** **121**, 73-97.
36. Zhu, J., Lahiri, S.N., and Cressie, N. (2001). Asymptotic Distribution of the empirical cumulative distribution function predictor under nonstationarity. In **Spatial Statistics: Methodological Aspects and Applications**, Editor - Marc Moore. Lecture Notes in Statistics, no. 159, Springer, New York. Pages 1-20.
37. Lahiri, S.N. (2002). On the Jackknife after Bootstrap method for dependent data and its consistency properties. **Econometric Theory** **18**, 79-98.
38. Lahiri, S.N. (2002). Discussion of the paper, "Sieve bootstrap for categorical time series." by P. Bühlmann. **Journal of the American Statistical Association** **97**, 460-462.
39. Lee, Y-D. and Lahiri, S.N. (2002). Least squares variogram fitting by spatial subsampling. **Journal of the Royal Statistical Society, Series B** **64**, 837-854.
40. Zhu, J., Lahiri, S.N., and Cressie, N. (2002). Asymptotic inference for spatial CDFs over time. **Statistica Sinica** **12**, 843-861.
41. Lahiri, S.N., Lee, Y-D. and Cressie, N.A.C. (2002). Asymptotic distribution and asymptotic efficiency of least squares estimators of variogram parameters. **Journal of Statistical Planning and Inference** **103**, 65-85. SOLICITED PAPER FOR A SPECIAL VOLUME HONORING PROF. C.R. RAO ON HIS 80TH BIRTHDAY.
42. Lahiri, S.N. (2003). A necessary and sufficient condition for asymptotic independence of discrete Fourier transforms under short- and long-range dependence. **Annals of Statistics** **31**, 613-641.
43. Lahiri, S.N. (2003). Central Limit Theorems for weighted sums under some stochastic and fixed spatial sampling designs. **Sankhya, Ser. A** **65**, 356-388.
44. Nordman, D. and Lahiri, S.N. (2003). On optimal variance estimation under different spatial subsampling schemes. In **Recent Advances and Trends in Nonparametric Statistics**, Elsevier, San Diego, CA. 421-436.
45. Lahiri, S.N. and Mukherjee, K. (2004). Asymptotic distributions of M-estimators in a spatial regression model under some fixed and stochastic spatial sampling designs. **Annals of the Institute of Statistical Mathematics** **56** 225-250.
46. Nordman, D. and Lahiri, S.N. (2004). On optimal spatial subsample size for variance estimation. **Annals of Statistics**. **32** 1981-2027.
47. Chan, V., Lahiri, S.N., and Meeker, W.Q. (2004). Block bootstrap estimation of the distribution of cumulative outdoor degradation. **Technometrics** **46** 215-224.
48. Lahiri, S.N. (2005). Consistency of the Jackknife after bootstrap variance estimator for bootstrap quantiles. **Annals of statistics** **33** 2475-2506.
49. Jeng, S-L, Lahiri, S.N. and Meeker, W.Q. (2005). Asymptotic properties of bootstrap likelihood ratio statistics for censored data. **Statistica Sinica** **15** 35-57.
50. Nordman, D. and Lahiri, S.N. (2005). Validity of the sampling window method for long-range dependent linear processes. **Econometric Theory** **21** 1087-1111.

51. Lahiri, S.N. (2006). Bootstrap for dependent data- a review. In **Frontiers in Statistics A Festschrift Honoring Prof. Peter Bickel on his 65th Birthday**. Eds. - J. Fan and H. L. Koul. 231- 255.
52. Lahiri, S.N., Chatterjee, A., and Maiti, T. (2006). Normal approximation to the Hypergeometric distribution in non-standard cases and a sub-Gaussian Berry-Esseen Theorem. **Journal of Statistical Planning and Inference**. SOLICITED PAPER FOR A SPECIAL VOLUME HONORING PROF. S.N. JOSHI.
53. Lahiri, S.N. and Zhu, J. (2006). Resampling methods for spatial regression models under a class of stochastic designs. **Annals of Statistics** **34** 1774-1813.
54. Nordman, D. and Lahiri, S.N. (2006). A frequency domain empirical likelihood for short- and long-range dependence. **Annals of Statistics** **34** 3019-3050.
55. Sun, S. and Lahiri, S.N. (2006). Bootstrapping the sample quantile of a weakly dependent sequence. **Sankhya** **68** 130-166.
56. Lahiri, S.N. (2007). Asymptotic expansions for sums of block-variables under weak dependence. **Annals of Statistics** **35** 1324-1350.
57. Lahiri, S.N. and Chatterjee, A. (2007). A Berry-Esseen theorem for Hypergeometric probabilities under minimal conditions. **Proceedings of the American Mathematical Society** **135** 1535–1545.
58. Lahiri, S.N., Furukawa, K., and Lee, Y-D. (2007). A nonparametric plug-in method for selecting the optimal block length. **Statistical Methodology**. (*In Press*).
59. Lahiri, S.N., Maiti, T., Katzoff, M. and Parsons, V. (2007). Resampling based empirical prediction: An application to small area estimation. **Biometrika** **94** 469-485.
60. Nordman, D., Lahiri, S.N. and Fridley, B.L. (2007). On the optimal block size for a spatial block bootstrap method. **Sankhya**. (*In Press*).
61. Nordman, D., Sibbertsen, P. and Lahiri, S.N. (2007). Empirical likelihood confidence intervals for the mean of a long range dependent process. **Journal of Time series Analysis** **28** 576-599.
62. Zhu, J. and Lahiri, S.N. (2007). Weak convergence of the spatial empirical process and its bootstrap version. **Statistical Inference from Stochastic Processes**. **10** 107-145.
63. Hall, P. and Lahiri, S.N. (2008). Estimation of distributions, moments and quantiles in deconvolution problems. **Annals of Statistics**.
64. Banerjee, P., Lahiri, S.N. and D. Jacobson. (2008). A grid based secure routing protocol for wireless sensor networks. **Proceedings of the Mobi-Hoc conference on distributed computing**.

(B) Non-Refereed Papers/Book Reviews:

1. Majure, J., Cook, D., Cressie, N., Kaiser, M. S., Lahiri, S. N., and Symanzik, Jürgen (1995). Spatial CDF estimation and visualization with applications to forest health monitoring. **Proceedings of the 27th Symposium on the Interface**, 93-101.
2. Lahiri, S.N. (1999). Resampling methods for spatial prediction. In the **Proceedings of the 31st Symposium of the Interface**, 462-466.
3. Lahiri, S.N. (2000). Book review of "Bootstrap Methods: A practitioner's guide" by M.R. Chernick. **Journal of Statistical Planning and Inference** **91**, 171-172.

4. Lahiri, S.N. (2003). Selecting optimal block lengths for block bootstrap methods. **Proceedings of the 35th Symposium of the Interface.**

(C) Papers under review/submitted:

1. Nordman, D. and Lahiri, S.N. (2006). On the approximation of differenced lattice point counts and statistical bias expansions. **Proceedings of the American Mathematical Society.** (REVISED).
2. Lahiri, S.N. and Sun, T. (2006). A Berry-Esseen theorem for sample quantiles of weakly dependent random variables. **Annals of Applied Probability.**
3. Lahiri, S.N. and Maiti, T. (2005). Nonnegative estimation of the mean squared prediction error in small area estimation. **Sankhya.**
4. Banerjee, P. and Lahiri, S.N. (2007). Optimal configuration of the LEACH protocol for wireless sensor networks. **IEEE Transactions on wireless communications**
5. Lahiri, S.N. (2007). Edgeworth expansions for studentized statistics under weak dependence. **Annals of Statistics.**
6. Kaiser, M.S. and Lahiri, S.N. (2007). A goodness of fit test for conditionally specified spatial models and its asymptotic properties. **Annals of Statistics.**
7. Lahiri, S.N. (2007). Higher order properties of block bootstrap confidence intervals. **Journal of the American Statistical Association.**

TEACHING & ADVISING:

(A) Students Advised:

Ph.D.

1. Soutir Banerjee
(A current Ph.D. student).
2. Arindam Chatterjee, Summer, 2007.
(Currently a post-doctoral fellow at Texas A & M university.)
3. Shuxia Sun, Ph.D. Summer, 2004.
(Currently an Assistant Professor, Wright State University, OH).
4. Dan Nordman, Ph.D. Summer, 2002.
(Currently an Assistant Professor, Iowa State University).
5. Jun Zhu, Ph.D., Summer 2000. (Co-Major Professor: N. Cressie).
(Currently an Assistant Professor, University of Wisconsin-Madison)
6. Y-D. Lee, Ph.D., Fall'98.
(Currently an Assistant Professor, Seoul National University, South Korea).
7. Fukuchi, Jun-Ichiro, Ph.D., Fall 1994. (Co-major Professor: K.B. Athreya)
(Currently a Professor, Hiroshima University, Japan).

8. Tiro, Arif Mohammad. Ph.D., Summer 1991.
(Currently a faculty member, Ujung Pandang University, Indonesia).

M.S.

1. Yunfeng Li, M.S. (nonthesis), Summer 2000.
2. Karabulut, Ishan. M.S. (thesis), Fall 1991.
3. Al-Shiha, Abdulla. M.S. (nonthesis), Summer 1991.

(B) Teaching: Courses numbered 100-499 are undergraduate courses, 500-599 are M.S. level graduate courses for Statistics majors, and 600-699 are Ph. D. level courses, also for Statistics majors. *Updated through Fall, 2005.* (F= Fall, S= Spring.)

Course	Semesters	Total No. of students	Ave. stud. evaluation*
STAT 105	F91,F93,F95	138	3.61
STAT 231	S90	47	3.71
STAT 305	F96,F96,S01,S01	151	3.47
STAT 333	S91,S92,S93	136	3.42
STAT 542	F89,F99,F00,F00 [†]	343	4.14
STAT 543	F02,F02 [†] , F04,F04 [†] S91,S93,S97,S97 [†] S99,S99 [†]	222	4.01
STAT 642	S95,S96,S98,S00 S02	66	4.44
STAT 643	F90,F91,F93,F97 F03,S04	53	4.33
STAT 648	F92,F95,F00,F05	22	4.53

[†]Videotaped for the ISU Distant-Learning M.S. Program in Statistics.

*On a 1-5 scale.

PRESENTATIONS:

(A) Special Invited Paper

- Bootstrap for irregularly spaced spatial data. (**Special Invited Lecture**). At the **Fifth IISA Biennial International Conference on Statistics, Probability and Related Areas**, Athens, GA, May 14-16, 2004.

(B) Invited Papers

- 2007** Higher order properties of block bootstrap confidence intervals. At the **Joint statistical meetings of the ASA, ENAR/WNAR, IMS, SSC**, Salt Lake City, UT, July 29-Aug 2.
- 2007** Spatial and time series methods for national security applications. At the **Quantitative methods for defence and national security**, Fairfax, VA, Feb. 7-8.

- 2007** Choice of tapers in the tapered block bootstrap for higher order accurate distributional approximations. At the **IISA joint statistical societies meeting**, Kochi, India, Jan 2-5.
- 2006** A goodness of fit test for markov random fields. At the **international conference of multivariate statistical methods** celebrating the birth centenary of Professor S.N. Roy. Kolkata, India, Dec. 28-29.
- 2006** A nonparametric plug-in rule for smoothing parameter selection. At the **Joint statistical meetings of the ASA, ENAR/WNAR, IMS, SSC**, Seattle, WA, August 6-10.
- 2005** Block Bootstrap for irregularly spaced spatial data. At the **third world congress of the International Association of Statistical Computing**, Limassol, Cyprus, October 28-31.
- 2004** Discussant for an invited paper session on ‘Bootstrap Methods and Time Series Data’. At the **Joint Statistical meetings of the ASA, ENAR/WNAR, IMS, SSC**, Toronto, Canada, Aug. 8-12.
- 2003** Block bootstrap for periodic time series. At the **Fifth International Triennial Calcutta Symposium on Probability and Statistics**. Calcutta, India, Dec. 28-31.
- 2003** A nonparametric plug-in rule for selecting the optimal block length for block bootstrap methods. At the **35th Symposium of the Interface**, Salt Lake City, Utah, March 12-15.
- 2002** On optimal choice of the subsampling block length for spatial processes. At the **Current Advances and Trends in Nonparametric Statistics**, Crete, Greece, July 15-19.
- 2002** On the effect of studentization on normal approximation under weak dependence. Presented at the **Fourth IISA Biennial International Conference on Statistics, Probability and Related Areas**, DeKalb, IL. June 14-16.
- 2001** Asymptotic expansions for studentized statistics under weak dependence. At the **IMS Western Regional Meeting (WNAR/SSC)**, Vancouver, BC, Canada, June 11-15.
- 2000** Resampling methods for spatial data. At the **International Conference on Statistics in the 21st Century**, Orono, Maine, June 29-July 1.
- 1999** Resampling methods for spatial prediction. At the **31st meeting of the Interface**, Illinois, June 9-12.
- 1999** Theoretical comparisons of block bootstrap methods. At the **1999 Annual meeting of the Statistical Society of Canada**, Regina, Canada, June 6-9.
- 1998** A comparison of Block Bootstrap Methods for dependent data. At the **NSF Bootstrap Conference**, Rutgers, NJ. May 14-16.
- 1998** Inference for continuous parameter spatial processes under mixed and pure increasing domain asymptotics. At the **1998 Workshop on Inference for spatial data, Center for Research in Mathematics**, Montreal, Canada, April 6-9.
- 1997-8** Prediction of Spatial Cumulative Distribution Functions With an Application to Forest Health Monitoring Data. At the **ISI-Bernoulli Society International Conference on Recent Advances in Statistics and Probability**. Calcutta, India, Dec. 29, 1997- Jan. 1, 1998.

- 1997** Prediction bands for Spatial Cumulative Distribution Functions based on a subsampling method. At the **1997 Workshop on Resampling methods, Center for Research in Mathematics**, Montreal, Canada, Sept. 14-20.
- 1997** On empirical choice of the optimal block size for block bootstrap methods. At the **1997 International Symposium on Contemporary Multivariate Analysis**, Hong Kong, May 19-22.
- 1996** Prediction of spatial cumulative distribution functions and prediction bands based on a subsampling method. At the **Environmental Statistics and Earth Sciences Conference**, Brno, Czech Republic, Aug. 20- 24.
- 1996** On Jackknife-After-Bootstrap method for dependent data and its asymptotic properties. At the **Joint Meetings of IMS, ASA, WNAR, & ENAR**, Chicago, IL, Aug 4-8.
- 1996** On the moving block bootstrap and subsampling methods for long range dependent data. At the **NSF Symposium on the Bootstrap and Econometrics**, Berkeley, CA, July 30 - Aug. 6.
- 1995** On inconsistency of estimators based on spatial data under infill asymptotics. At the **Second International Triennial Calcutta Symposium on Probability and Statistics**. Calcutta, India, Dec. 30, 1994-Jan. 2, 1995.
- 1994** On inconsistency of estimators under infill asymptotics for spatial data. At the **1994 North American Regional Science meeting**. Niagara Falls, Canada, November 17-20.
- 1993** On asymptotic expansion under dependence. At the **Second International IMS Symposium on Probability and its Applications**. Bloomington, Indiana, March 18-21.
- 1992** On the second order properties of the moving block bootstrap for studentized M-estimators in multiple linear regression models. At the **Fourth International Meeting of Statistics at Basque Country**. San Sebastian, Spain, August 3-8.
- 1992** On the asymptotic normality of REML estimators with applications to spatial regression. At the **222nd IMS Meeting**. Cincinnati, OH, March 22-25.
- 1991** Edgeworth expansion for sums of weakly dependent random vectors. At the **NSF-CBMS Conference on "Higher order asymptotics with applications to statistical inference."** University of North Carolina, Chapel Hill, NC, Aug. 6-10.
- 1990** Second order optimality of stationary bootstrap. At the **214th IMS Meeting**. E. Lansing, MI, May 15-19.

(C) Contributed Papers:

- 2004** Block Bootstrap for periodic time series. At the **Joint Statistical meetings of the ASA, ENAR/WNAR, IMS, SSC**, Toronto, Canada, Aug. 8-12.
- 2000** A necessary and sufficient condition for asymptotic independence of discrete Fourier transforms. At the **2000 Joint Statistical meetings of the ASA,IMS,SSC, WNAR/ENAR**, Indianapolis, Aug. 13-17.

- 1995** On the optimal choice of block-size for the moving block bootstrap method. At the **58th IMS Annual Meeting with Statistical Society of Canada**, Monteval, Canada, July 9-13.
- 1994** On Edgeworth expansion and moving block bootstrap for studentized M-estimators in multiple linear regression models. At the **57th IMS/3rd Bernoulli Society Annual Meeting**. Chapel Hill, NJ, June 20-25.
- 1992** On bootstrapping M-estimators in multiple linear regression models. In a **Special Topic Session on Bootstrap, 52nd Annual Meeting of the IMS**. Boston, MA, Aug. 9-13.
- 1991** Rates of bootstrap approximation for the normalized mean of lattice variables. At the **51st Annual Meeting of the IMS**. Atlanta, GA, August 17-21.

(D) Colloquium Talks:

- 2006** Resampling based empirical prediction: An application to small area estimation-II. **National Center for Health Statistics**, Hyattsville, MD, June 6.
- 2006** Asymptotic expansions for sums of block variables, with applications. **Department of Mathematics, University of Southern California**, Los Angeles, Feb. 12.
- 2006** Block Bootstrap for spatial regression models based on irregularly spaced spatial data. **Department of Statistics, Texas A & M University**, College Station, TX, Feb. 23.
- 2005** Edgeworth Expansions for Studentized statistics under dependence. **Statistics and Mathematics Unit, Indian Statistical Institute**, Kolkata, India, Dec. 29.
- 2005** Block Bootstrap for spatial regression models based on irregularly spaced spatial data. **Department of Statistics, University of Auckland**, Auckland, New Zealand, June 2.
- 2005** Block Bootstrap for spatial regression models based on irregularly spaced spatial data. **School of Mathematics and Statistics, University of Sydney**, Sydney, Australia, May 29.
- 2005** Block Bootstrap for irregularly spaced spatial data. **Centre for Mathematics and its Applications, Australian National University**, Canberra, Australia, April 28.
- 2005** Resampling based empirical prediction: An application to small area estimation -I. **National Center for Health Statistics**, Hyattsville, MD, March 8.
- 2004** Bootstrap methods for irregularly spaced spatial data. **Department of Statistics, University of Minnesota**, Minneapolis, MN, Feb 24.
- 2004** Bootstrap methods for irregularly spaced spatial data. **Department of Statistics, Cornell University**, Ithaca, NY, Feb 13.
- 2003** Lattice point counts and its connections to optimal block lengths for spatial resampling methods. **Department of Statistics, Rutgers University**, New Brunswick, NJ, Oct. 15.
- 2003** On the choice of the optimal block size for variance estimation using a spatial subsampling method. **Department of Probability and Statistics, Michigan State University**, East Lansing, MI, March 25.

- 2003** On the choice of the optimal block size for variance estimation using a spatial subsampling method. **Department of Statistics, University of Michigan**, Ann Arbor, MI, March 24.
- 2003** Wavelets. VIGRE seminar on ‘Theoretical Statistics’. **Department of Statistics, Iowa State University**. Jan. 29.
- 2002** Optimal block sizes for a spatial subsampling method. **Division of Theoretical Statistics, Indian Statistical Institute**, Calcutta, India, Aug. 11.
- 2002** On the choice of the optimal block size for variance estimation using a spatial subsampling method. **Department of Statistics, University of Wisconsin**, Madison, WI, April 15.
- 2002** Resampling methods for spatial data. **Department of Statistics, Iowa State University**. Feb. 11.
- 2001** The Bootstrap and Other resampling methods. VIGRE seminar on ‘Theoretical Statistics’. **Department of Statistics, Iowa State University**. Sept. 20.
- 1998** On empirical choice of the optimal block length for block bootstrap methods. **Division of Theoretical Statistics, Indian Statistical Institute**, Calcutta, India, Nov. 21.
- 1997** Prediction of spatial cumulative distribution functions and prediction bands based on a subsampling method. **Dep. of Statistics, University of Iowa**, Iowa City, IA, Oct. 9.
- 1997** On empirical choice of the optimal block size for block bootstrap methods. **Department of Statistics, McMaster University**, Hamilton, Canada, September 23.
- 1997** On empirical choice of the optimal block size for block bootstrap methods. **Department of Statistics, Northern Illinois University**, De Kalb, IL, April 25.
- 1997** Prediction of spatial cumulative distribution functions and prediction bands based on a subsampling method. **Dept of Statistics, Iowa State University**, Ames, IA, Jan. 27.
- 1996** Prediction of spatial CDFs and prediction bands based on a subsampling method. **Department of Statistics, Pennsylvania State University**, University Park, PA, April 19.
- 1994** On the moving block bootstrap under short- and long-range dependence. **Department of Statistics, Stanford University**, Stanford, CA, Nov. 29.
- 1994** On the moving block bootstrap for studentized statistics in multiple linear regression models. **Center for Mathematics and Information**, Amsterdam, NL, July 20.
- 1994** On asymptotic properties of the block bootstrap under weak and strong dependence. **Department of Mathematics, Queensland University of Technology**, Brisbane, Australia, May 10.
- 1994** Asymptotic expansions for normalized sums of weakly dependent random vectors. **Centre for Mathematics and its Applications, Australian National University**, Canberra, Australia, January 27.
- 1993** On second order correctness of Efron’s bootstrap without Cramer-type conditions in regression models. **Stat-Math Division, Indian Statistical Institute**, Calcutta, India, Jan. 5.

- 1992** On asymptotic expansions for normalized sums under polynomial mixing rates. **Stat-Math Division, Indian Statistical Institute**, Calcutta, India, December 21 & 23.
- 1992** A second order correct bootstrap procedure for the studentized mean of lattice data. **Department of Statistics, Iowa State University**, Ames, Iowa, September 9.
- 1991** Refinements in the asymptotic expansion for sums of weakly dependent random vectors. **Department of Mathematics, Iowa State University**, Ames, Iowa, October 23.
- 1990** On bootstrapping the studentized sample mean of lattice data. **Department of Statistics, University of Southwestern Louisiana**, Lafayette, Louisiana, November 9.
- 1989** Rate of bootstrap approximation for robust estimators of a simple linear regression parameter. **Department of Statistics, Iowa State University**, Ames, Iowa, February 13.
- 1989** Edgeworth expansion and bootstrap approximation for M-estimators of a linear regression parameter. **Department of Mathematics, Boston University**, Boston, MA, February 9.

COMMITTEES SERVED ON:

- College of Science Committee on Promotion and Tenure, TAMU (2007-2008).
- Graduate Program Committee, Dept. of Statistics, TAMU Dept. of Statistics (2004-2006). (2005-06; chair)
- Committee on Promotion and Tenure, Dept. of Statistics, TAMU 2006-2007.
- Committee on Promotion and Tenure, Dept. of Statistics, ISU (2004-2006). (2005-06; chair)
- Advisory Committee on Long Range Planning (2003-2004)
- Graduate Committee (2003-2004; Chair)
- Graduate Exams Committee (2002-2003; Chair)
- Faculty Development Committee, The college of Liberal Arts and sciences, ISU (1995-1998).
- Committee on Promotion and Tenure, Dept. of Statistics (2000-2001; 2001-2002, Chair).
- Ph.D. Prelim Committee, Dept. of Statistics (2000-2001), (2002-2003; Chair), (2003-2004; Co-Chair).
- Seminar Committee (Co-chair), Dept. of Statistics (1992-93;1993-94; 1999-2000).
- Search committee/senior position, Dept. of Statistics (1998-2001).
- MS Nonthesis Exam Committee, Dept. of Statistics (1989-93, 1995-99). (Chair 1991-92, 1997-99).
- Self Study Committee on Research, Dept. of Statistics, (1997-98).
- Graduate Theory-Courses Review Committee, Dept. of Statistics (1996-97) (Chair).
- Search Committees, Dept. of Statistics (1995-96; 1996-97).

- Co-chair, Program Committee, H.A. David Conference, Dept. of Statistics (1995).
- TA Evaluation Committee, Dept. of Statistics (1994-95).

OTHER PROFESSIONAL ACTIVITIES:

1. Refereeing:

2002-present: On the average, handled about 12 papers/year as an associate editor of 3 journals and refereed 8 papers/year for the journals listed below.

1990-2002: Refereed 148 papers (in 1990-2002) for the following journals:

Number of papers reviewed in 2000: 13.

Number of papers reviewed in 2001: 14.

Number of papers reviewed in 2002: 19

Since 2002, also handled several papers as an Associate Editor:

American Statistician (2); Annals of Probability (2); Annals of Statistics (23); Annals of the Institute of Statistical Mathematics (3); Bernoulli (2); Book Volumes (1); Canadian Journal of Statistics (1); Communications in Statistics (5); Econometric Theory (3); Econometrika (4); Environmetrics (1); Journal of American Statistical Association (14); Journal of Econometrics (1); Journal of Multivariate Analysis (9); Journal of Nonparametric Statistics (1); Journal of Statistical Planning and Inference (24); Journal of Theoretical Probability (1); Mathematical Methods of Statistics (1); Probability Theory and Related Fields (5); Publicationes Mathematicae Debrecen, Hungary (1); Sankhya, Ser. A (13); Scandinavian Journal of Statistics (2); Statistica Neerlandica (1); Statistica Sinica (4); Statistics and Probability Letters (18); Stochastic Processes and its Applications (3); Technometrics (1).

2. Review of Proposals:

Reviewed 49 NSF and 2 NSA proposals in 1990-2007.

3. Review of Promotion and Tenure Cases:

Served as an external reviewer for 6 Promotion and Tenure cases.

4. Chairing & Organizing:

- Organized two invited paper sessions at the **Joint Statistical Meetings**, Salt Lake City, UT, July 29-Aug 2, 2007. The session titles are: *"Recent Advances in Nonparametric Methodology"* (sponsored by the **ASA- NPR Section**) and *"Nonlinear and Nonstationary Time Series analysis"* (sponsored by the **IISA**).
- Organizing a **workshop celebrating 65th birthday of Professor Hira Koul**. East Lansing, MI, May 2007.
- Member, Scientific Program Committee, **Sixth biennial conference of the IISA**, Cochin, India, Jan 3-7, 2007.
- Organized two invited paper sessions at the **Joint Statistical Meetings**, Seattle, WA, Aug 6-10, 2006. The session titles are: *"Recent advances in resampling methodology for complex dependent data structures"* (sponsored by the **ASA- NPR Section**) and *"Statistical Methods for environmental applications"* (sponsored by the **IISA**).

- Organized an invited session on “*Computer-intensive statistical methods*” at the **35th Symposium of the Interface**, Salt Lake City, Utah. March 12-15, 2003.
- Organized an invited session on “*Asymptotic expansions and approximations*”, at the **Fourth IISA Biennial International Conference on Statistics, Probability and Related Areas**. Northern Illinois University in DeKalb, IL. June 14-16, 2002.
- Chaired a plenary invited lecture session at the **International Conference on Statistics in the 21st Century**, Orono, Maine, June 29-July 1, 2000.
- Member, Program committee for the **1999 Spring meeting of the Iowa Chapter of the American Statistical Association at the University of Iowa**, Iowa City, IA, April 16 - 17, 1999.
- Organized an invited paper session on “*Resampling methods*” at the **annual meeting of the Statistical Society of Canada**, Regina, Canada, June 6-9, 1999.
- Organized the **1998 Spring meeting of the Iowa Chapter of the American Statistical Association** at the Luther College, Decorah, IA. April 17 - 18, 1998.
- Organized an invited paper session on “*Asymptotics and Inference*” at the **ISI/Bernoulli Society meeting**, Calcutta, India, Dec. 29, 1997 - Jan. 1, 1998.
- Organized an invited paper session on “*Empirical Likelihoods and Resampling Methods*” for the IMS at the **joint IMS/ASA/ENAR/WNAR annual meeting** in Chicago, IL, Aug. 4-8, 1996.
- Chaired a contributed paper session at the **52nd annual meeting of IMS**, Boston, MA, August 9-13, 1992.

5. Workshops attended:

- 2003 Workshop on “*Bioinformatics*”. **Institute of Mathematics and its Applications (IMA)**, Minneapolis, MN., September, 2003.
- 2004 Workshop on “*Machine Learning*”. **Statistical and Applied Mathematical Sciences Institute (SAMSI)**, Research Triangle Park, NC., May, 2004.
- 2005 New Direction Course on “*Quantum Computing*”. **Institute of Mathematics and its Applications (IMA)**, Minneapolis, MN., August, 2005.

6. Mentoring:

- Suhashini Subba Rao, Assistant Professor, Department of Statistics, TAMU, 2006-. (Mentoring program for junior faculty members, TAMU).
- Tzee-Ming Huang, Assistant Professor, Department of Statistics, ISU. 2004-2005. (Mentoring program for junior faculty members, ISU).
- Song Chen, Associate Professor, Department of Statistics, ISU. 2003-2005. (Mentoring program for junior faculty members, ISU).
- Joseph Harriges, Associate Professor, Department of Economics, ISU. 1996-97. (Study in a second discipline program, ISU.)
- Yuhong Yang, Assistant Professor, Department of Statistics, ISU. 1996 - 2001. (Mentoring program for junior faculty members, ISU).