Robert Lund

Curriculum Vitae

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Contact Information

Professor and Chair
Department of Statistics
The University of California, Santa Cruz
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Hobbies

Mountain and Ice Climbing, Heavy Metal Drumming, Golf, Skiing, and Rock and Fossil Hunting.

Research Interests

Correlated Data, Data Science, Statistical Climatology, Stochastic Processes.

Major Honors and Awards

6. Summer 2018 Klein Bottle of Appreciation, Division of Mathematical Sciences, National Science Foundation.

5. Board Member, Companion Animal Parasite Council, 2013-2019.

4. 2013 Mathematical Sciences Department Award for Research Excellence.

3. 2008 Mathematical Sciences Department Teacher of the Year.

2. Clemson University 2008 Award for Faculty Excellence.

1. Fellow, American Statistical Association, 2007.

Education

3. Ph.D., Statistics, 5/1993, The University of North Carolina, Chapel Hill, NC.

2. M.S., Probability and Statistics, 6/1988, Auburn University, Auburn, AL.

1. B.S., Applied Mathematics, 12/1986, Auburn University, Auburn, AL.

Primary Academic Employment

6. 1/2020 — Present, Professor and Chair, Department of Statistics, The University of California, Santa Cruz, Santa Cruz, CA.

5. 10/2016 — 9/2018, Program Manager, National Science Foundation, Division of Mathematical Sciences - Statistics, Alexandria, VA.

4. 8/2004 — 12/2019, Professor, Department of Mathematical Sciences, Clemson University, Clemson, SC.

3. 9/2002 — 8/2004, Associate Professor and Associate Head, Department of Statistics, The University of Georgia, Athens, GA.

2. 9/1998 — 9/2002, Associate Professor, Department of Statistics, The University of Georgia, Athens, GA.

1. 9/1993 — 9/1998, Assistant Professor, Department of Statistics, The University of Georgia, Athens, GA.

Major Grants

6. Lund, R.B. (2021). *General Correlated Count Statistical Structures*, National Science Foundation Grant DMS 2113592, $220,000.

5. Lund, R.B. (2013). *On a General Class of Count Time Series Models*, National Science Foundation Grant DMS 1407480, $150,000, July 2014-May 2018.

4. Lund, R.B. (2008). *Periodic Stochastic Processes*, National Science Foundation Grant DMS 0905570, $100,000, July 2009-May 2012.

3. Lund, R.B. (2003). *Regression with Periodic Series*, National Science Foundation Grant DMS 0304407, $184,208, July 2003-June 2007.

2. Lund, R.B. (2000). *Periodic ARMA Modeling*, National Science Foundation Grant DMS 0071383, $76,542, July 2000-July 2004.

1. Lund, R.B. (1997). *Analysis of Periodic Time Series*, National Science Foundation Grant DMS 9703838, $75,149, July 1997-June 2000.

Other Grants

9. Lund, R.B., S. Holan, T. McElroy and V. Pipiras (2018). Banff International Research Station Workshop Grant. *Statistical Modeling for Large Complex Time Dependent Systems* (Cancelled due to Covid-19).

8. Lund, R.B. and C. McMahan (2016). Companion Animal Parasite Council Forecasting, $70,300.

7. McMahan, C., R.B. Lund and B. Bridges (2015). *Indonesian Rice Yield Optimization*, Biorealm Inc., $21,494.

6. Lund, R.B. and C. McMahan (2015). Companion Animal Parasite Council Forecasting, $65,000.

5. Lund, R.B. (2014). Companion Animal Parasite Council Forecasting, $63,000.

4. Lund, R.B. (2013). Companion Animal Parasite Council Forecasting, $32,000.

3. Senter, H. and R.B. Lund (2005). *Summer 2005 Southern Regional Council on Statistics Conference*, National Science Foundation, $10,000, May 2005-June 2006.

2. Lund, R.B. (2004). *Summer 2004 Southern Regional Council on Statistics Conference*, National Science Foundation, $10,000, May 2004-June 2005.

1. Lund, R.B. (1994). *Trend Analysis of Periodic Time Series*, University of Georgia Faculty Research Grants Program, $4500.

Secondary Academic Employment

5. 2/2015 — 6/2015, Visiting Sabbatical Scholar, Department of Mathematical Sciences, University of Calgary, Calgary, Alberta, Canada.

4. Spring Semester 2001, Visiting Associate Professor, Department of Statistics, Purdue University, West Lafayette, IN.

3. Fall Semester 2000, Visiting Associate Professor, Department of Statistics, The University of South Carolina, Columbia, SC.

2. Summers of 1997, 1998, and 2001, Visiting Scientist, National Center for Atmospheric Research, Boulder, CO.

1. 8/1995 — 8/1996, Visiting Assistant Professor, Department of Statistics, Colorado State University, Fort Collins, CO.

Patents

1. Wagner, J., Lund, R.B. and H. Bassily (2013). System and Method to Assess Signal Similarity with Applications to Diagnostics and Prognostics, United States Patent 8378816.

Publishing

Submitted Journal Articles

110. Chan, J., Kiessler, P.C. and R.B. Lund (2023+). Convergence Rates for Shadowing Markov Chains, Submitted to, *Journal of Applied Probability*.

109. Duker, M., R.B. Lund and V. Pipiras (2023+). High-dimensional Count Time Series Modeling, Submitted to, *Electronic Journal of Statistics*.

108. Grant, J., J. Kong, X. Liu, R.B. Lund and J. Woody (2023+). Statistical Inference for Lindley Processes with Correlated Changes, Submitted to, *Journal of Statistical Computing and Simulation*.

107. Woody, J., Z. Zhao, R.B. Lund and T.L. Wu (2023+). Forensic Statistical Methods for Fraud Detection in the Food Stamp Program, In revision for, *Annals of Applied Statistics*.

106. Lund, R.B., C. Beaulieu, R. Killick, Q.Q. Lu and X. Shi (2023+). Best Practices and Pitfalls of Climate Time Series Changepoints: A Review, Revision in review, *Journal of Climate*.

Published Refereed Journal Articles

105. Jia, Y., R.B. Lund, J. Kong, J. Dyer, J. Woody, and J.S. Marron (2023). Trends in Northern Hemispheric Snow Cover, *Journal of Hydrometeorology*, **24**, 1137-1154.

104. Jia, Y., S. Kechagias, J. Livsey, R.B. Lund and V. Pipiras (2023). Latent Gaussian Count Time Series Models, In press, *Journal of the American Statistical Association*.

103. R.B. Lund and X. Shi (2023). Changepoint Methods in Climatology, *Chance*, **36**, 4-8.

102. Shi, X., C. Beaulieu, R. Killick and R.B. Lund (2022). Changepoint Techniques: An Analysis of the Central England Temperature Series, *Journal of Climate*, **35**, 2729-2742.

101. Gallagher, C.M., R. Killick, R.B. Lund and X. Shi (2022). Estimating Autocovariances in the Presence of Changepoints, *Journal of the Korean Statistical Society*, **51**, 1021-1040.

100. Kong, J. and R.B. Lund (2022). Seasonal Count Time Series Modeling, *Journal of Time Series Analysis*, **43**, doi.org/10.1111/jtsa.12651.

99. Shi, X., C.M. Gallagher, R.B. Lund and R. Killick (2022). A Comparison of Changepoint Techniques for Time Series Data, *Computational Statistics and Data Analysis*, **170**, doi.org/10.1016/j.csda.2022.107433.

98. Davis, R.A., K. Fokianos, S. Holan, H. Joe, J. Livsey, R.B. Lund, V. Pipiras and N. Ravishanker (2021). Count Time Series: A Methodological Review, *Journal of the American Statistical Association*, **116**, 1533-1547.

97. Woody, J., Y. Xu, J. Dyer, R.B. Lund and H. Priyadarshani (2021). A Statistical Analysis of Daily Snow Depth Trends in North America, *Atmosphere*, **12**, doi.org/10.3390/atmos12070820.

96. Nicholson, J., P. Kokoszka, R.B. Lund, P. Kiessler and J. Sharp (2021). Renewal Models for Anamolous Traffic in Internet2 Links, *Statistical Modelling*, **22**, 430-456.

95. Jia, Y., R.B. Lund and J. Livsey (2021). Superpositioned Stationary Count Time Series, *Probability in the Engineering and Informational Sciences*, **35**, 538-556.

94. Lee, J., R.B. Lund, J. Woody and Y. Xu (2020). Trend Assessment of Daily Snow Depths with Changepoint Considerations, *Environmetrics*, **31**, doi.org/10.1002/env.2580.

93. Watson, S.C., Y. Liu, S.K. Nordone, M.J. Yabsey, H.S. Walden, R.B. Lund, D.D. Bowman, C.C. Carpenter, C.S. McMahan, and J.R. Gettings, (2019). Canine v Borne Disease: Mapping and the Accuracy of Forecasting using Big Data from the Veterinary Community, *Animal Health Research Reviews*, 1-14, doi.org/10.1017/S1466252319000045.

92. Li, Y., R.B. Lund and H. Priyadarshani (2019). Multiple Changepoint Detection with Partial Information on Changepoint Times, *Electronic Journal of Statistics*, **13**, 2462-2520.

91. Washington, B., L. Seymour, R.B. Lund and K. Willett (2019). Simulation of Temperature Series and Networks from Data, *International Journal of Climatology*, **39**, doi.org/10.1002/joc.6129.

90. Liu, Y., S.K. Nordone, M.J. Yabsley, S.R. Meshnick, R.B. Lund, C.M. McMahan and J.R. Gettings (2019). Quantifying the Relationship between Human Lyme Disease and *Borrelia Burgdorferi* Exposure in Domestic Dogs, *Geospatial Health*, **14**, 111-119.

89. Zhu, L., S. Liu and R.B. Lund (2019). A Likelihood for Correlated Extreme Series, *Environmetrics*, **30**, doi.org/10.1002/env.2546.

88. Watson, S.C., C.M. McMahan, A. Brown, R.B. Lund, J. Gettings and M.J. Yabsley (2018). A Large Scale Spatio-temporal Binomial Regression Modeling for Estimating Seroprevalence Trends, *Environmetrics*, **29**, doi:10.1002/env.2538.

87. Livsey, J., R.B. Lund, S. Kechagias and V. Pipiras (2018). Multivariate Poisson Count Time Series Models with Flexible Autocovariances and their Application to Major Hurricane Counts, *Annals of Applied Statistics*, **12**, 408-431.

86. McMahan, C.M., J. Baurley, W. Bridges, C. Joyner, F. Kacamarga, R.B. Lund, C. Pardamean and B. Pardamean (2017). A Bayesian Hierarchical Mixed Model for Identifying Significant Polygenic Effects while Controlling for Confounding and Repeated Measures, *Statistical Applications in Genetics and Molecular Biology*, **16**, doi.org/10.1515/sagmb-2017-0044.

85. Watson, S.C, Y. Liu, R.B. Lund, J.R. Gettings, S.K. Nordone, C.M. Mcmahan, and M.J. Yabsley (2017). A Bayesian Spatio-temporal Model for Forecasting *Anaplasma* Species Seroprevalence in Domestic Dogs within the Contiguous United States, *PLOS One*, **12**, doi.org/10.1371/journal.pone.0182028.

84. Liu, Y., S.C. Watson, J.R. Gettings, R.B. Lund, S.K. Nordone, M.J. Yabsley, and C.M. McMahan (2017). A Bayesian Spatio-temporal Model for Forecasting the Prevalence of Antibodies to *Borrelia Burgdorferi*, Causative Agent of Lyme Disease, In Domestic Dogs within the Contiguous United States, *PLOS One*, **12**, doi.org/10.1371/journal.pone.0174428.

83. Liu, Y., R.B. Lund, S.K. Nordone, M. Yabsley and C.M. McMahan (2016). A Bayesian Spatio-temporal Model for Forecasting the Prevalence of Ehrlichiosis in Domestic Dogs within the Contiguous United States, *Parasites & Vectors*, **10**, doi.org/10.1186/s13071-017-2068-x.

82. Priyadarshani, H., Y. Li, R.B. Lund and J. Rennie (2016). Homogenization of Daily Temperature Data, *Journal of Climate*, **30**, 985-999.

81. Bowman, D.D., C.M. McMahan, Y. Liu and R.B. Lund (2016). Forecasting United States Canine Heartworm, *Parasites & Vectors*, **9**, doi.org/10:11861s13071-016-1804-y.

80. Robbins, M.W., C.M. Gallagher and R.B. Lund (2016). A General Regression Changepoint Test for Time Series Data, *Journal of the American Statistical Association*, **111**, 670-683.

79. Liu, G., Q. Shao, R.B. Lund and J. Woody (2016). Testing for a Seasonal Mean in Time Series Data, *Environmetrics*, **27**, 198-211.

78. R.B. Lund, G. Liu and Q. Shao (2016). A New Approach to ANOVA Methods with Correlated Data, *The American Statistician*, **70**, 55-62.

77. McMahan, C.M., D. Wang, M.J. Beall, D.D. Bowman, S.E. Little, P.O. Pithua, J.L. Sharp, R.W. Stich, M.J. Yabsley and R.B. Lund (2016). Factors Associated with Anaplasma spp. Seroprevalence among Dogs in the United States, *Parasites & Vectors*, **9**, 169-178.

76. Li, Y. and R.B. Lund (2015). Multiple Changepoint Detection using Metadata, *Journal of Climate*, **28**, 4199-4216.

75. Gallagher, C.M., T. Wickramarachchi and R.B. Lund (2015). Asymptotics for Arc Length in Multivariate Time Series, *Applied Stochastic Models in Business and Industry*, **31**, 264-281.

74. Stich, R.W., Blagburn, B.L., Bowman, D.D., Carpenter, C., Cortinas, M.R., Ewing, S.A., Foley, D., Foley J.E., Gaff, H., Hickling, G.J., Lash, R.R., Little, S.E., Lund, C., Lund, R.B., Mather, T.N., Needham, G.R., Nicholson, W.L., Sharp, J., Varela-Stokes, A., and D. Wang (2014), Quantitative Factors Proposed to Influence the Prevalence of Canine Tick-borne Agents in the United States, *Parasites & Vectors*, **7**, 417-424.

73. Woody, J. and R.B. Lund (2014). A Linear Regression Model with Persistent Level Shifts: An Alternative to Infill Asymptotics, *Statistics and Probability Letters*, **95**, 118-124.

72. Willett, K., C. Williams, I.T. Jolliffe, R.B. Lund, L. Alexander, S. Bronniman, L.A. Vincent, S. Easterbrook, V. Venema, D. Berry, R.E. Warren, G. Lopardo, R. Auchmann, E. Aguilar, M.J. Menne, C. Gallagher, Z. Hausfather, T. Thorarinsdottir, and P.W. Thorne (2014). A Framework for Benchmarking of Homogenisation Algorithm Performance on the Global Scale, *Geoscientific Instrumentation, Methods and Data Systems*, **3**, 187-200.

71. Wang, D., D.D. Bowman, H. Brown, L.C. Harrington, P.E. Kaufman, T. McKay, C.T. Nelson, J. Sharp and R.B. Lund (2014). Factors Influencing U.S. Canine Heartworm (*Dirofilaria immitis*) Prevalence, *Parasites & Vectors*, **7**, 264-282.

70. Craigmile, P.F., P. Guttorp, R.B. Lund, R.L. Smith, P. Thorne and D. Arndt (2014). Warm Temperature Streaks in the US Temperature Record: What Are the Chances?, *Journal of Geophysical Research, Atmospheres*, **119**, 5757-5766.

69. Schkoda, R., R.B. Lund and J. Wagner (2014). Clustering of Cyclostationary Signals with Applications to Climate Station Location, Elimination, and Merges, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **7**, 1754-1762.

68. Woody, J., R.B. Lund and M. Gebremichael (2014). Tuning Extreme NEXRAD and CMORPH Precipitation Measurements, *Journal of Hydrometeorology*, **15**, 1070-1077.

67. Lee, J., S. Li and R.B. Lund (2014). Trends in Extreme United States Temperatures, *Journal of Climate*, **27**, 4209-4225.

66. Schkoda, R., R.B. Lund, N. Su and J.R. Wagner (2013). A Comparison of Multivariate Signal Discrimination Techniques, *Journal of Statistical Computing and Simulation*, **85**, 494-506.

65. Gallagher, C., R.B. Lund and M. Robbins (2013). Changepoint Detection in Climate Series with Long-term Trends, *Journal of Climate*, **26**, 4994-5006.

64. Brown, H., L.C. Harrington, P.C. Kauffman, T. McKay, D.D. Bowman, C.T. Nelson, D. Wang and R.B. Lund (2012). Key Factors Influencing CanineHeartworm, Dirofilaria Immitis, in the United States, *Parasites & Vectors*, **5**, 245-254.

63. Tunno, F., C. Gallagher and R.B. Lund (2012). Arc Length Tests for Equivalent Autocovariances, *Journal of Statistical Computing and Simulation*, **82**, 1799-1812.

62. Gallagher, C., R.B. Lund and M. Robbins (2012). Changepoint Detection in Daily Precipitation Series, *Environmetrics*, **23**, 407-419.

61. Steuber, T., P. Kiessler and R.B. Lund (2012). Testing for Reversibility in Markov Chain Data, *Probability in the Engineering and Informational Sciences*, **26**, 593-611.

60. Lee, J. and R.B. Lund (2012). A Refined Efficiency Rate for OLS and GLS Estimators for a Linear Trend with Autoregressive Errors, *Journal of Time Series Analysis*, **33**, 312-324.

59. Li, S. and R.B. Lund (2012). Multiple Changepoint Detection via Genetic Algorithms, *Journal of Climate*, **25**, 674-686.

58. Fralix, B., J. Livsey and R.B. Lund (2012). Renewal Sequences with Periodic Dynamics, *Probability in the Engineering and Informational Sciences*, **26**, 1-15.

57. Su, N. and R.B. Lund (2012). Multivariate Versions of Bartlett's Formula, *Journal of Multivariate Analysis*, **105**, 18-31.

56. Robbins, M., C. Gallagher, R.B. Lund and A. Aue (2011). Mean Shift Testing in Correlated Data, *Journal of Time Series Analysis*, **32**, 498-511.

55. Gong, Z., Kiessler, P. and R.B. Lund (2011). A Prediction Residual Approach to Extremes of Periodic Time Series, *Journal of Time Series Analysis*, **32**, 407-419.

54. Robbins, M., R.B. Lund, C. Gallagher and Q. Lu (2011). Changepoints in the North Atlantic Tropical Cyclone Record, *Journal of the American Statistical Association*, **106**, 89-99.

53. Holan, S., R.B. Lund and G. Davis (2010). The ARMA Alphabet Soup: A Tour of ARMA Model Variants, *Statistics Surveys*, **4**, 232-274.

52. Cui, Y. and R.B. Lund (2010). Inference for Binomial AR(1) Models, *Statistics and Probability Letters*, **80**, 1985-1990.

51. Annis, D., P. Kiessler, R.B. Lund and T. Steuber (2010). Estimation for Reversible Markov Chains, *The American Statistician*, **64**, 116-120.

50. Mahmood, R., R.B. Lund, *et al.* (2010). Impacts of Land Use Land Cover Change on Climate and Future Research Priorities, *Bulletin of the American Meteorological Society*, **91**, 37-46.

49. Lu, Q., R.B. Lund and T.C.M. Lee (2010). An MDL Approach to the Climate Segmentation Problem, *Annals of Applied Statistics*, **4**, 299-319.

48. Cui, Y. and R.B. Lund (2009). A New Look at Time Series of Counts, *Biometrika*, **96**, 781-792.

47. Woody, J., R.B. Lund, A.J. Grundstein, and T.L. Mote (2009). A Storage Model Approach to the Assessment of Snow Depth Trends, *Water Resources Research*, **45**, W10426, 11 pp.

46. Karvetski, C., R.B. Lund and F. Parisi (2009). A Statistical Study of Nor'easters, *Involve*, **2**, 341-350.

45. Kiessler, P. and R.B. Lund (2009). Traffic Intensity Estimation, *Naval Research Logistics*, **56**, 385-387.

44. Lund, R.B., H. Bassily and B. Vidakovic (2009). Testing Equality of Autocovariance Functions, *Journal of Time Series Analysis*, **30**, 332-348.

43. Lund, R.B. and B. Li (2009). Revisiting Climate Region Definitions via Clustering, *Journal of Climate*, **22**, 1787-1800.

42. Bassily, H., R.B. Lund and J. Wagner (2009). Fault Detection in Multivariate Signals with Applications to Gas Turbines, *IEEE Transactions on Signal Processing*, **57**, 835-842.

41. Ko, K., J. Lee and R.B. Lund (2008). Confidence Intervals for Long Memory Regressions, *Statistics and Probability Letters*, **78**, 1894-1902.

40. Lee, J. and R.B. Lund (2008). Equivalent Sample Sizes in Time Series Regressions, *Journal of Statistical Computing and Simulation*, **78**, 285-297.

39. Parisi, F. and R.B. Lund (2008). Return Periods of Continental U.S. Hurricanes, *Journal of Climate*, **21**, 403-410.

38. Lund, R.B., X.L. Wang, J. Reeves, Q. Lu, C. Gallagher and Y. Feng (2007). Changepoint Detection in Periodic and Autocorrelated Time Series, *Journal of Climate*, **20**, 5178-5190.

37. Lu, Q. and R.B. Lund (2007). Simple Linear Regression with Multiple Level Shifts, *Canadian Journal of Statistics*, **37**, 447-458.

36. Lund, R.B. (2007). Revenge of the White Swan, *The American Statistician*, **61**, 189-192.

35. Reeves, J., J. Chen, X.L. Wang, R.B. Lund and Q. Lu (2007). A Review and Comparison of Changepoint Detection Techniques for Climate Data, *Journal of Applied Meteorology and Climatology*, **46**, 900-915.

34. Lund, R.B., Y. Zhao and P.C. Kiessler (2006). Shapes of Stationary Autocovariances, *Journal of Applied Probability*, **43**, 1186-1193.

33. Grundstein, A., Q. Lu and R.B. Lund (2006). Return Levels of Northern Great-Plains Snow Water Equivalents, *Journal of Applied Meteorology and Climatology*, **45**, 995-1002.

32. Lund, R.B., Y. Zhao and P.C. Kiessler (2006). A Monotonicity in Reversible Markov Chains, *Journal of Applied Probability*, **43**, 486-499.

31. Xiao, Y. and R.B. Lund (2006). Inference for Shot Noise, *Statistical Inference for Stochastic Processes*, **9**, 77-96.

30. Lund, R.B., Q. Shao and I.V. Basawa (2005). Parsimonious Periodic Time Series Modeling, *Australian & New Zealand Journal of Statistics*, **48**, 33-47.

29. Lund, R.B. (2005). A Seasonal Analysis of Riverflow Trends, *Journal of Statistical Computation and Simulation*, **76**, 397-405.

28. Lu, Q., R.B. Lund and P.L. Seymour (2005). An Update of United States Temperature Trends, *Journal of Climate*, **18**, 4906-4914.

27. Lund, R.B., W.P. McCormick and Y. Xiao (2004). Limiting Properties of Shot Noise Processes, *Journal of Applied Probability*, **41**, 911-918.

26. Shao, Q. and R.B. Lund (2004). Computation and Characterization of Autocorrelations and Partial Autocorrelations in Periodic ARMA Models, *Journal of Time Series Analysis*, **25**, 359-372.

25. Basawa, I.V., R.B. Lund and Q. Shao (2004). First-Order Autoregressions with Periodic Autocorrelations, *Statistics and Probability Letters*, **67**, 299-306.

24. Lee, J. and R.B. Lund (2004). Revisiting Simple Linear Regression with Autocorrelated Errors, *Biometrika*, **91**, 240-245.

23. Berenhaut, K.B. and R.B. Lund (2003). Bounds for Linear Recurrences with Restricted Coefficients, *Journal of Inequalities in Pure and Applied Mathematics*, **4**, 1-15.

22. Lund, R.B. and J. Reeves (2002). Detection of Undocumented Changepoints — A Revision of the Two-Phase Regression Model, *Journal of Climate*, **17**, 2547–2554.

21. Berenhaut, K. and R.B. Lund (2002). Renewal Convergence Rates for DHR and NWU Lifetimes, *Probability in the Engineering and Informational Sciences*, **16**, 67-84.

20. Lund, R.B., P.L. Seymour and K. Kafadar (2001). Temperature Trends in the United States, *Environmetrics*, **12**, 673-690.

19. Berenhaut, K. and R.B. Lund (2001). Geometric Renewal Convergence Rates from Hazard Rates, *Journal of Applied Probability*, **38**, 180-194.

18. Basawa, I.V. and R.B. Lund (2001). Large Sample Properties of Parameter Estimates from Periodic ARMA Models, *Journal of Time Series Analysis*, **22**, 651-663.

17. Parisi, F. and R.B. Lund (2000). Seasonality and Return Periods of Landfalling Atlantic Basin Hurricanes, *Australian & New Zealand Journal of Statistics*, **42**, 271-282.

16. Lund, R.B. and I.V. Basawa (2000). Recursive Prediction and Likelihood Evaluation for Periodic ARMA Models, *Journal of Time Series Analysis*, **21**, 75-93.

15. Lund, R.B., R.W. Butler and R.L. Paige (1999). Prediction of Shot Noise, *Journal of Applied Probability*, **36**, 374-388.

14. Lund, R.B. and P.L. Seymour (1999). Assessing Temperature Anomalies for a Geographical Region: A Control Chart Approach, *Environmetrics*, **10**, 163-177.

13. Lund, R.B. W.J. Padgett and P.L. Seymour (1998). A Control Chart for a General Gaussian Process, *Journal of Statistical Planning and Inference*, **70**, 19-34.

12. Kisaalita, W.S., R.B. Lund and M.D. Evans (1997). Cell-Size Changes in Low Serum-induced Differentiating Neuroblastoma Cells, *In Vitro*, **33**, 734-737.

11. Lund, R.B. (1997). The Geometric Convergence Rate of a Lindley Random Walk, *Journal of Applied Probability*, **34**, 806-811.

10. Lund, R.B. and W.L. Smith (1997). A Comparison of Convergence Rates for Three Models in the Theory of Dams, *Journal of Applied Probability*, **34**, 74-83.

9. Basawa, I.V., U.N. Bhat and R.B. Lund (1996). Maximum Likelihood Estimation for Single Server Queues from Waiting Time Data, *Queueing Systems and their Applications*, **24**, 155-168.

8. Ligon, J., B. Thyer and R.B. Lund (1996). Drinking, Eating, and Driving: Evaluating the Effects of Partially Removing a Sunday Liquor Sales Ban, *Journal of Drug and Alcohol Education*, **42**, 15-24.

7. Lund, R.B. (1996). The Stability of Storage Models with Shot Noise Input, *Journal of Applied Probability*, **33**, 830-839.

6. Lund, R.B., S.P. Meyn and R.L. Tweedie (1996). Computable Exponential Convergence Rates for Stochastically Ordered Markov Processes, *Annals of Applied Probability*, **6**, 218-237.

5. Lund, R.B. and R.L. Tweedie (1996). Geometric Convergence Rates of Stochastically Ordered Markov Chains, *Mathematics of Operations Research*, **21**, 182-194.

4. Lund, R.B., H. Hurd, P. Bloomfield and R.L. Smith (1995). Climatological Time Series with Periodic Correlation, *Journal of Climate*, **11**, 2787-2809.

3. Bloomfield, P., H. Hurd and R.B. Lund (1994). Periodic Correlation in Stratospheric Ozone Data, *Journal of Time Series Analysis*, **15**, 127-150.

2. Lund, R.B. (1994). A Dam with Seasonal Input, *Journal of Applied Probability*, **31**, 526-541.

1. Lund, R.B. (1994). The Annual Arrival Cycle of Atlantic Tropical Cyclones, *Journal of Applied Statistics*, **21**, 195-204.

Contributions to Books (All Refereed)

6. Fisher, T., R.B. Lund and M.R. Robbins (2021). A Statistical Analysis of North Atlantic Tropical Cyclone Changes, In: *Evaluating Climate Change Impacts*, edited by V. Lyubchich, Yulia R. Gel, K. Kilbourne, T.J. Miller, N.K. Newlands and A.B. Smith, CRC Press, 25-41.

5. Lund, R.B., S. Holan, and J. Livsey (2015). Long Memory Discrete-valued Time Series, In: *Handbook on Discrete-valued Time Series*, edited by R.A. Davis, S. Holan, R.B. Lund and N. Ravishanker, CRC Press, 446-456.

4. Lund, R.B., and J. Livsey (2015). Renewal Based Count Time Series, In: *Handbook on Discrete-valued Time Series*, edited by R.A. Davis, S. Holan, R.B. Lund and N. Ravishanker, CRC Press, 101-120.

3. Lund, R.B. (2011). Choosing Seasonal Autocovariance Structures: PARMA or SARMA?, In: *Economic Time Series: Modelling and Seasonality*, edited by W.R. Bell, S.H. Holan and T.S. McElroy, CRC Press, 63-80.

2. Lund, R.B. and I.V. Basawa (1999). Modeling and Inference for Periodically Correlated Time Series, In: *Asymptotics, Nonparametrics, and Time Series*, edited by S. Ghosh, CRC Press, 37-62.

1. Basawa, I.V., R.B. Lund and U.N. Bhat (1997). Estimating Function Methods of Inference for Queueing Parameters, In: *Selected Proceedings on the Symposium on Estimating Functions*, Institute of Mathematical Statistics Lecture Note Series, Volume 32, 269-284.

Discussion Papers

1. Lund, R.B. and X. Shi (2020). Invited Commentary on "Detecting Possibly Frequent Changepoints: Wild Binary Segmentation 2 and Steepest-drop Model Selection", by Piotr Fryzlewicz, *Journal of the Korean Statistical Society*, **49**, 1090-1095.

Journal Articles in Preparation

8. Gallagher, C.M., R. Killick, R.B. Lund and X. Shi (2023+). A Computationally Rapid Automated Penalized Likelihood Multiple Changepoint Procedure for Complex Model Structures, for *Journal of the American Statistical Association*.

7. S. Kechagias, J. Kong, J. Livsey, R.B. Lund and V. Pipiras (2023+). Copcount: An R Package for Count Time Series with Specified Marginal Distributions, for *Journal of Statistical Software*.

6. Kong, J. and R.B. Lund (2023+). Poisson Count Time Series, for *Journal of Time Series Analysis*.

5. Kong, J., R.B. Lund (2023+) and J. Woody. Particle Filtering Inference for General Censored Time Series, for *Journal of the American Statistical Association*.

4. Draper, D.D., E. Gao, R.B. Lund and J. Woody (2023+). A Simple Necessary Condition For Independence of Real-Valued Random Variables, for *The American Statistician*.

3. Fernando, D., M. Alqawba, R.B. Lund, and N. Diawara (2023+). Copula Autoregressive Models for Count Time Series, for *Journal of Time Series Analysis*.

2. Bandhodypay, S., Hammerling, D., B. Li, R.B. Lund and D. Nychka (2023+). Testing Equality of Random Fields, for *Journal of the American Statistical Association*.

1. Kiessler, P.C., R.B. Lund and Z. Gong (2023+). Extremes for Regenerative Processes, for *Annals of Applied Probability*.

Books

1. Davis, R., S. Holan, R.B. Lund and N. Ravishanker (2015), Editors, *Handbook on Discrete Valued Count Series*, CRC Press.

Nonrefereed Contributions

4. Lund, R.B. (2017). Periodic Time Series, In: Wiley StatsRef: Statistics Online Reference, 1-10, doi.org/10.1002/9781118445112.stat07786.pub2

3. Lund, R.B. (2012). Periodic Time Series, In: *Encyclopedia of Environmetrics*, Second Edition, Edited by A.H. El-Shaarawi and W.W. Piegorsch, 2204-2210.

2. Lund, R.B. and R.L. Tweedie (1994). Exact Rates of Convergence of Stochastically Ordered Markov Chains, In: *Proceedings on the 14th IMACS World Congress on Computational and Applied Mathematics, Volume I*, 320-324.

1. Lund, R.B., H.L. Hurd and P. Bloomfield (1992). Periodic Correlation in Meteorological Time Series, In: *Proceedings of the Fifth International Meeting on Statistical Climatology*, 1-6.

Book Reviews

14. Lund, R.B. (2020). Review of *Time Series. A Data Analysis Approach using R*, by R.H. Shumway and D.S. Stoffer, *The American Statistician*, **74**, 312-312, doi.org/10.1080/00031305.2020.1790221.

13. Lund, R.B. (2009). Review of *Introduction to Time Series Analysis and Forecasting*, by D.C. Montgomery, C.L. Jennings, and M. Kulachi, *The American Statistician*, **63**, 194-195.

12. Lund, R.B. (2007). Review of *Time Series Analysis and Its Applications*, Second Edition, by R.H. Shumway and D.L. Stoffer, *Journal of the American Statistical Association*, **102**, 1079-1079.

11. Lund, R.B. (2007). Review of *Statistical Analysis of Stochastic Processes in Time*, by J.K. Lindsey, *Journal of the American Statistical Association*, **102**, 382-382.

10. Lund, R.B. (2005). Review of *Periodic Time Series*, by P.H. Frances and R. Papp, *Journal of the American Statistical Association*, **100**, 1458-1459.

9. Lund, R.B. (2004). Review of *Stochastic Processes and their Applications*, by F.E. Beichelt and L.P. Fatti, *The American Statistician*, **58**, 261-261.

8. Lund, R.B. (2004). Review of *Elementary Probability Theory with Stochastic Processes and an Introduction to Mathematical Finance*, Fourth Edition, by K.L. Chung and F. Aitsahila, *The American Statistician*, **58**, 173-174.

7. Lund, R.B. (2003). Review of *Stochastic Processes An Introduction*, by P.W. Jones and P. Smith, *The American Statistician*, **56**, 332-333.

6. Lund, R.B. (2003). Review of *Elements of Applied Stochastic Processes*, Third Edition, by U.N. Bhat and G. Miller, *Journal of the American Statistical Association*, **98**, 1085-1086.

5. Lund, R.B. (2000). Review of *Statistical Analysis in Climate Research*, by H. von Storch and F. Zwiers, *Journal of the American Statistical Association*, **95**, 1375-1376.

4. Lund, R.B. (2000). Review of *Basic Stochastic Processes*, by Z. Brzezniak and T. Zastawniak, *Journal of the American Statistical Association*, **95**, 1019-1019.

3. Lund, R.B. (1999). Review of *Markov Chains*, by J.R. Norris, *Journal of the American Statistical Association*, **94**, 654-655.

2. Lund, R.B. (1998). Review of *Markov Processes for Stochastic Modeling*, by M. Kijima, *Journal of the American Statistical Association*, **93**, 842-842.

1. Lund, R.B. (1997). Review of *An Intermediate Course in Probability Theory*, by A. Gut, *Journal of the American Statistical Association*, **92**, 1125-1125.

Edited Monographs

2. Lund, R.B., K.B. Kulasekera and R.L. Taylor (2006). Editors, Special Edition on the 2004 Southern Regional Conference on Statistics, *Journal of Statistical Computation and Simulation*, **76**, Volume 5.

1. Vidakovic, B. and R.B. Lund (2003). Editors, Special Edition on Wavelets, *Applied Stochastic Models in Business and Industry*, **19**, Volume 3.

Editorial Positions

8. Associate Editor, *Journal of Time Series Analysis*, June 2023-Present.

7. Associate Editor, *Advances in Statistical Climatology, Meteorology and Oceanography*, October 2022-Present.

6. Associate Editor, *International Statistical Review*, July 2022-Present.

5. Editor in Chief, *Journal of the American Statistical Association*, Reviews Section, Term: Jan 2005 - Dec 2007.

4. Associate Editor, *Journal of the American Statistical Association*, 1996-2004.

3. Associate Editor, *Applied Stochastic Models in Business and Industry*, 1999-2020.

2. Associate Editor, *Involve*, 2006 - Present.

1. Associate Editor, *Environmetrics*, 2008 - Present.

Student Supervision

40. Jiajie Kong, Ph.D., University of California, Santa Cruz, In progress.

39. John Grant, Ph.D., Clemson University, November 2022, (Joint with Sophie Liu of Mathematical Sciences).

38. John Chan, Ph.D., Clemson University, April 2022, (Joint with Peter Kiessler of Mathematical Sciences).

37. Xueheng Shi, Post-doc, The University of California, Santa Cruz, October 2021.

36. Meltem Ozcan Masters, University of California, Santa Cruz, June 2021.

35. Sampson Mao, Masters, University of California, Santa Cruz, June 2021, (Joint with Herbie Lee of Statistics).

34. Xueheng Shi, Ph.D., Clemson University, July 2020, (Joint with Colin Gallagher of Mathematical Sciences).

33. Liu Zhu, Ph.D., Clemson University, September 2018, (Joint with Sophie Liu of Mathematical Sciences).

32. Yisu Jia, Ph.D., Clemson University, July 2018.

31. John Grant, Masters, Clemson University, July 2018.

30. Yanbo Xia, Ph.D., Clemson University, July 2017.

29. Hewa Priyadarshani, Ph.D., Clemson University, November 2015, (Joint with Yingbo Li of Mathematical Sciences).

28. Dongmei Wang, Ph.D., Clemson University, June 2014, (Joint with Julia Sharp of Mathematical Sciences).

27. Shanghong Li, Ph.D., Clemson University, October 2013.

26. Zhiyun Gong, Ph.D., Clemson University, August 2013, (Joint with Peter Kiessler of Mathematical Sciences).

25. Jim Livsey, Ph.D., Clemson University, July 2013, (Joint with Brian Fralix of Mathematical Sciences).

24. Mike Finney, Masters, Clemson University, April 2012, (Joint with K.B. Kulasekera of Mathematical Sciences).

23. Nan Su, Ph.D., Clemson University, April 2012.

22. Ryan Schkoda, Ph.D., Clemson University, April 2012, (Joint with John Wagner of Mechanical Engineering).

21. Tara Steuber, Ph.D., Clemson University, June 2011. (Joint with Peter Kiessler of Mathematical Sciences).

20. Jim Livsey, Masters, Clemson University, April 2010.

19. Jonathan Woody, Ph.D., Clemson University, November 2009.

18. Yunwei Cui, Ph.D., Clemson University, July 2009.

17. Michael Robbins, Ph.D., Clemson University, May 2009, (Joint with Colin Gallagher of Mathematical Sciences).

16. Tara Steuber, Masters, Clemson University, April 2008.

15. Chris Karvetski, Masters, Clemson University, April 2008.

14. Hany Bassily, Ph.D., Clemson University, October 2007, (Joint with John Wagner of Mechanical Engineering).

13. Hugh Clifton, Honors Undergraduate Project, Clemson University, Summer 2007.

12. Nana Dua-Kyei, Masters, Clemson University, Fall 2006.

11. Ying Zhao, Ph.D., The University of Georgia, Summer 2005.

10. QiQi Lu, Ph.D., The University of Georgia, Summer 2004.

9. Jaechoul Lee, Ph.D., The University of Georgia, Summer 2003.

8. Yuanhui Xiao, Ph.D., The University of Georgia, Summer 2003.

7. Qin Shao, Ph.D., The University of Georgia, Summer 2002.

6. Ken Berenhaut, Ph.D., The University of Georgia, Summer 2000.

5. Jin-Hong Park, Masters, The University of Georgia, Spring 2000.

4. Peter Davis, Masters, The University of Georgia, Winter 1998.

3. Frank Parisi, Masters, Colorado State University, Spring 1998.

2. Karin Chu, Masters, Colorado State University, Summer 1996.

1. Atsushi Hirano, Masters, The University of Georgia, Fall 1995.

Current Student Supervisory Committee Memberships

1. Peter Trubey, Ph.D., Statistics, The University of California, Santa Cruz.

Talks and Lectures

Subject: Periodic Time Series

30. Invited Speaker, Florida State University Graduate Student Seminar, April 2018.

29. Invited Speaker, United States Census Bureau, Washington, DC, March 2014.

28. Invited Speaker, Memorandum of Understanding Celebration with the Environmental Protection Agency, Clemson University, Clemson, SC, March 2014.

27. Invited Speaker, Department of Mathematics and Statistics, University of Toledo, Toledo, OH, February 2013.

26. Invited Speaker, Joint Statistical Meetings, San Diego, CA, August 2012.

25. Invited Speaker, 8th International Purdue Symposium on Statistics, Purdue University, West Lafayette, IN, June 2012.

24. Invited Speaker, Department of Civil and Environmental Engineering, Tufts University, Boston, MA, February 2012.

23. Invited Speaker, Department of Management Science, University of Miami, Coral Gables, FL, January 2008.

22. Invited Speaker, Department of Statistics and Probability, Michigan State University, East Lansing, MI, October 2007.

21. Invited Speaker, Department of Mathematical Sciences, Clemson University, Clemson SC, March 2007.

20. Invited Speaker, Department of Statistics, Rice University, Houston, TX, October 2002.

19. Invited Speaker, International Nonparametrics Conference, Crete, Greece, July 2002.

18. Invited Speaker, National Center for Atmospheric Research, Boulder, CO, May 2001.

17. Invited Speaker, Department of Statistics, Purdue University, West Lafayette, IN, December 2000

16. Invited Speaker, Department of Statistics, The University of South Carolina, Columbia, SC, September 20

15. Invited Speaker, Symposium on Inference for Stochastic Processes, The University of Georgia, Athens, GA, May 2000.

14. Invited Speaker, AT&T Bell Labs, Murray Hill, NJ, March 1997.

13. Invited Speaker, Department of Mathematics, The University of Colorado – Denver, Denver, CO, November 1995.

12. Invited Speaker, Department of Statistics, The University of Wyoming, Laramie, WY, October 1995.

11. Invited Speaker, National Center for Atmospheric Research, Boulder, CO, September 1995.

10. Invited Speaker, Southern Research Conference on Statistics, Williamsburg, VA, June 1995.

9. Invited Speaker, Department of Discrete and Statistical Sciences, Auburn University, Auburn, AL, August 1994.

8. Invited Speaker, Department of Statistics, Colorado State University, Fort Collins, CO, April 1994.

7. Invited Speaker, Program in Statistics, Washington State University, Pullman, WA, February 1994.

6. Invited Speaker, Department of Mathematical Sciences, The University of Montana, Missoula, MT, February 1994.

5. Invited Speaker, Department of Statistics and Actuarial Science, The University of Iowa, Iowa City, IA, November 1993.

4. Invited Speaker, Department of Statistics, The University of Georgia, Athens, GA, October 1993.

3. Contributed Talk, IMS Meeting, Laramie, WY, June 1993.

2. Invited Speaker, Department of Statistics, The University of North Carolina, Chapel Hill, NC, May 1993.

1. Invited Speaker, Fifth International Meeting on Statistical Climatology, Toronto, Canada, June 1992.

Subject: Markov Chains

18. Invited Speaker, STODAD Seminar, Online, Campinas, Brazil, July 2021.

17. Invited Speaker, Department of Statistics and Probability, Michigan State University, East Lansing, MI, February 2008.

16. Invited Speaker, Department of Mathematics and Statistics, Auburn University, Auburn, AL, February 2006.

15. Invited Speaker, Department of Mathematics, Mississippi State University, Starkville, MS, November 2004.

14. Invited Speaker, Department of Mathematics, Boise State University, Boise, ID, March 2004.

13. Invited Speaker, Department of Mathematical Sciences, Clemson University, Clemson, SC, April 2003.

12. Invited Speaker, IMS Nonparametrics Meeting, Florida State University, Tallahassee, FL, January 2003.

11. Invited Speaker, Department of Statistics, Purdue University, West Lafayette, IN, March 2001.

10. Invited Speaker, Department of Applied Mathematics, The University of Colorado, Boulder, CO, December 2000.

9. Contributed Talk, IMS New Researchers Meeting, Laramie, WY, July 1997.

8. Invited Speaker, Department of Statistics, The University of North Carolina, Chapel Hill, NC, February 1997.

7. Invited Speaker, Department of Statistics, The University of Georgia, Athens, GA, January 1997.

6. Invited Speaker, Department of Statistics, The University of South Carolina, Columbia, SC, March 1996

5. Invited Speaker, Department of Statistics, Colorado State University, Fort Collins, CO, September 1995.

4. Invited Speaker, Department of Mathematics, Georgia Institute of Technology, Atlanta, GA, March 1995.

3. Invited Speaker, Department of Discrete and Statistical Sciences, Auburn University, Auburn, AL, August 1994.

2. Invited Speaker, 14th IMACS World Meeting, Atlanta, GA, July 1994.

1. Contributed Talk, IMS Meeting, Chapel Hill, NC, June 1994.

Subject: Control Charts

2. Invited Speaker, Southern Research Conference on Statistics, Navarre Beach, FL, June 1998.

1. Invited Speaker, National Center for Atmospheric Research, Boulder, CO, July 1997.

Subject: Global Warming and Climate Change

20. Invited Panelist, Tata Cancer Meeting, Varansi, India, February 2023.

19. Invited Panelist, Inagural IDEAS ASA presentation, November 2022.

18. Invited Keynote Speaker, Clemson University Calculus Challenge, Clemson, SC, April 2019.

17. Invited Speaker, University of Toledo, Toledo, OH, October 2006.

16. Invited Speaker, Georgia Southern University, Statesboro, GA, March 2006.

15. Invited Speaker, NASA, Langley Air Force Base, Hampton, VA, February 2006.

14. Invited Speaker, Department of Biostatistics, Emory University, Atlanta, GA, November 2005.

13. Invited Speaker, Department of Systems Engineering, University of Virginia, Charlottesville, VA, October 2005.

12. Invited Speaker, Department of Mathematics and Operations Research, Naval Postgraduate School, Monterey, CA, March 2005.

11. Invited Speaker, Department of Statistical Sciences, Cornell University, Ithaca, NY, November 2004.

10. Invited Speaker, SRCOS Annual Meeting, Blacksburg, VA, June 2004.

9. Invited Speaker, Ninth International Meeting on Statistical Climatology, Capetown, South Africa, May 2004.

8. Invited Speaker, Department of Applied Mathematics, The University of Colorado, Boulder, CO, October 2003.

7. Invited Speaker, Joint Statistical Meetings, San Francisco, CA, August 2003.

6. Invited Keynote Speaker, South Carolina ASA Chapter Meeting, Columbia, SC, April 2003.

5. Invited Speaker, Department of Statistics, The University of Georgia, Athens, GA, January 2002.

4. Invited Speaker, Department of Mathematics, Wake Forest University, Winston-Salem, NC, October 2001.

3. Invited Speaker, Atmospheric Sciences Seminar, The University of Georgia, Athens, GA, March 2000.

2. Invited Speaker, Mathematics Club, The University of Georgia, Athens, GA, November 1999.

1. Invited Speaker, National Center for Atmospheric Research, Boulder, CO, March 1998.

Subject: Atlantic Hurricanes

13. Invited Speaker, Interdisciplinary Workshop on Climate and Weather Extremes, Clemson University, Clemson, SC, May 2023.

12. Invited Speaker, Joint Statistical Meetings, Washington, DC, August 2022.

11. Invited Speaker, AISC Meeting, Greensboro, NC, October 2012.

10. Invited Speaker, The International Environmetrics Society Annual Meeting, Hyderabad, India, January 2012.

9. Invited Speaker, Joint Statistical Meetings, Miami, FL, August 2011.

8. Invited Speaker, Department of Statistics, University of Florida, Gainesville, FL, April 2010.

7. Invited Speaker, Weather Channel Seminar, September 2009.

6. Invited Speaker, Department of Systems Engineering, University of Virginia, Charlottesville, VA, October 2005.

5. Invited Discussant, Applied Statistics Class, Department of Statistical Sciences, Cornell University, Ithaca, NY, November 2004.

4. Invited, Television Interview, Channel 32, North Georgia Television, September 2004.

3. Invited, National Public Radio Interview, September 2004.

2. Invited Speaker, Graduate Student Seminar, The University of Georgia, Athens, GA, February 2002.

1. Invited Speaker, Statistics Club, Purdue University, West Lafayette, IN, April 2001.

Subject: Changepoints

81. Invited Speaker, WNAR Meeting, Anchorage, AK, June 2023.

80. Invited Speaker, Georgetown University, Department of Biostatistics, Bioinformatics & Biomathematics, Online, November 2022.

79. Invited Speaker, University of California, Santa Cruz, Department of Environmental Studies, November 2022.

78. Invited Speaker, Department of Statistics, University of Nebraska, Online, October 2022.

77. Invited Speaker, EAC-ISBA Meeting, Dali, China, Online, November 2021.

76. Invited Speaker, Math Club, Clemson University, School of Mathematical Sciences, Online, October 2021.

75. Invited Speaker, ICSA Conference, China, Online, September 2021.

74. Invited Speaker, Kraw Lecture Series, The University of California, Santa Cruz, Online, June 2021.

73. Invited Speaker, IMSI Workshop, Champaign-Urbana, Illinois, Online, March 2021.

72. Invited Speaker, Department of Mathematics and Statistics, San Jose State University, San Jose, CA, Online, October 2020.

71. Invited Speaker, Department of Mathematics and Statistics, The University of North Carolina - Greensboro, Greensboro, NC, January 2020.

70. Invited Keynote Speaker, 18th Conference on Time Series and Econometrics, Gramado, Brazil, September 2019.

69. Invited Speaker, Time Series Workshop, University of Campinas, Campinas, Brazil, August 2019.

68. Invited Speaker, Joint Statistical Meetings, Denver, CO, August 2019.

67. Invited Speaker, Changepoint Workshop, Griefswald, Germany, July 2019.

66. Invited Speaker, ICSA Meeting, Tianjin, China, July 2019.

65. Invited Speaker, Department of Statistics, George Mason University, Fairfax, VA, February 2019.

64. Invited Speaker, Department of Statistics, University of California, Santa Cruz, Santa Cruz, CA, January 2019.

63. Invited Speaker, Department of Statistics, Florida State University, Tallahassee, FL, November 2018.

62. Invited Speaker, Department of Statistics and Operations Research, University of North Carolina, Chapel Hill, NC, October 2018.

61. Invited Speaker, TIES Annual Meeting, Guanajutro, Mexico, July 2018.

60. Invited Speaker, DSSV Conference, Vienna, Austria, July 2018.

59. Invited Speaker, IISA Conference, University of Florida, Gainesville, FL, May 2018.

58. Invited Speaker, IRSA Conference, University of Minnesota, Minneapolis, MN, May 2018.

57. Invited Speaker, Department of Statistics, Colorado State University, Fort Collins, CO, March 2018.

56. Invited Speaker, Department of Statistics, University of Illinois, Urbana-Champaign, IL, February 2018.

55. Invited Speaker, Department of Mathematics and Statistics, University of Maryland – Baltimore County, Baltimore, MD, December 2017.

54. Invited Speaker, Department of Mathematics and Statistics, Georgia State University, Atlanta, GA, November 2017.

53. Invited Speaker, Data Mining and Environmental Statistics Conference, Oaxaca, Mexico, October 2017.

52. Invited Speaker, Department of Industrial Systems and Engineering, Georgia Institute of Technology, Atlanta, GA, October 2017

51. Invited Speaker, Department of Statistics, for ASA Days, University of Kentucky, Lexington, KY, October 2017.

50. Invited Speaker, Department of Statistics, Baylor University, Waco, TX, September 2017.

49. Invited Speaker, Climate Informatics Conference, National Center for Atmospheric Research, Boulder, CO, September 2017.

48. Invited Speaker, Department of Mathematics and Statistics, Boise State University, Boise, ID, September 2017.

47. Invited Speaker, Bayesian Conference, Michigan Tech University, Houghton, MI, July 2017.

46. Invited Speaker, QPRC Conference, University of Connecticut, Storrs, CT, June 2017.

45. Invited Speaker, Department of Mathematics and Statistics, American University, Washington, District of Columbia, March 2017.

44. Invited Speaker, Department of Mathematics, University of Maryland, College Park, Maryland, February 2017.

43. Invited Speaker, CFM Meeting, Seville, Spain, December 2016.

42. Invited Speaker, Big Data Tsunami Meeting, Banff International Research Institute, Banff, Alberta, March 2016

41. Invited Speaker, Department of Statistics, University of Illinois, Urbana-Champaign, IL, September 2015.

40. Invited Speaker, PIMS Conference, Vancouver, British Columbia, May 2015.

39. Invited Speaker, Department of Mathematics and Statistics, University of Sherbrooke, Sherbrooke, Quebec, May 2015.

38. Invited Speaker, IASSL Conference, Colombo, Sri Lanka, December 2014.

37. Invited Speaker, Department of Earth Engineering and Environmental Sciences, Clemson University, Clemson, SC, November 2014.

36. Invited Speaker, South Carolina Statistics Consortium, Clemson, SC, November 2014.

35. Invited Speaker, CMG++ Meeting, Boise, ID, September 2014.

34. Invited Speaker, Joint Statistical Meetings Roundtable Session, Boston, MA, August 2014.

33. Invited Speaker, International Surface Temperature Initiative Meeting, National Center for Atmospheric Research, Boulder, CO, July 2014.

32. Invited Speaker, Southeast Agricultural Days, Clemson University, Clemson, SC, May 2014.

31. Invited Speaker, Department of Physics, Clemson University, Clemson, SC, March 2014.

30. Invited Speaker, Department of Statistics and Operations Research, Virginia Commonwealth University, Richmond, VA, November 2013.

29. Invited Speaker, Sequential Analysis Workshop, The University of Georgia, Athens, GA, July 2013.

28. Invited Speaker, The International Environmetrics Society Annual Meeting, Anchorage, AK, June 2013.

27. Invited Speaker, Department of Mathematics and Statistics, University of Toledo, Toledo, OH, February 2013.

26. Invited Speaker, Department of Statistics, North Carolina State University, Raleigh, NC, October 2012.

25. Invited Speaker, 8th International Purdue Symposium on Statistics, Purdue University, West Lafayette, IN, June 2012.

24. Invited Speaker, National Climatic Data Center, Asheville, NC, May 2012.

23. Invited Speaker, Department of Mathematics, Washington State University, Pullman, WA, March 2012.

22. Invited Speaker, Department of Mathematics, University of Toledo, Toledo, OH, January 2012.

21. Invited Speaker, Department of Statistics, University of Connecticut, Storrs, CT, November 2011.

20. Invited Speaker, Department of Mathematics and Statistics, Mississippi State University, Starkville, MS, October 2011.

19. Invited Speaker, Department of Statistics, University of South Carolina, Columbia, SC, September 2011.

18. Invited Speaker, Department of Mathematics and Statistics, Georgia State University, Atlanta, GA, April 2011.

17. Invited Speaker, Department of Statistics, Montana State University, Bozeman, MT, March 2011.

16. Invited Speaker, Department of Statistics, Purdue University, West Lafayette, IN, February 2011.

15. Invited Speaker, Department of Biostatistics, University of Arizona, Tucson, AZ, November 2010.

14. Invited Speaker, Water 2010 Meeting, Quebec City, Canada, July 2010.

13. Invited Keynote Speaker, Snake River ASA Chapter Annual Meeting, Boise, ID, June 2010.

12. Invited Speaker, Department of Statistics, University of Florida, Gainesville, FL, April 2010.

11. Invited Speaker, Department of Statistics, The University of Missouri, Columbia, MO, January 2010.

10. Invited Speaker, Regional Meeting of the American Mathematical Society, Boca Raton, FL, October 2009.

9. Invited Speaker, Department of Mathematical Sciences, Clemson University, Clemson, SC, October 2009.

8. Invited Speaker, Department of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA, September 2009.

7. Invited Speaker, Symposium for Asymptotics Methods in Statistics, The University of Georgia, Athens, GA, May 2009.

6. Invited Speaker, Department of Statistics, The University of Georgia, Athens, GA, February 2008.

5. Invited Speaker, 2007 Workshop on Land-use Land-cover Changes and their Influences on Temperature Changes, National Center for Atmospheric Research, Boulder, CO, August 2007.

4. Invited Senior Speaker, 2007 Junior Faculty Forum, National Center for Atmospheric Research, Boulder, CO, July 2007.

3. Invited Speaker, 2nd Workshop on Climate Homogeneity Methods, National Climatic Data Center, Asheville, NC, March 2006.

2. Invited Speaker, Joint Statistical Meetings, Minneapolis, MN, August 2005.

1. Invited Speaker, SRCOS Annual Meeting, Clemson, SC, June 2005.

Subject: Count Time Series

20. Invited Speaker, BIRS Neuroscience Meeting, Oaxaca, Mexico, May 2023.

19. Invited Speaker, CM Statistics Meeting, London, UK, December 2022.

18. Invited Speaker, The University of California, Santa Cruz, Santa Cruz, CA, October 2020.

17. Invited Speaker, Department of Mathematics and Statistics, University of Maryland — Baltimore County, October 2019.

16. Invited Plenary Speaker, 18th Conference on Time Series and Econometrics, Gramado, Brazil, September 2019.

15. Invited Speaker, United States Census Bureau, Washington, DC, June 2019.

14. Invited Speaker, Department of Statistics, Colorado State University, Fort Collins, CO, March 2019.

13. Invited Speaker, Department of Applied Mathematics, The University of Colorado Mines, Golden, CO, March 2019.

12. Invited Speaker, ISBIS Meeting, Athens, Greece, July 2018.

11. Invited Speaker, Joint Statistical Meetings, Chicago, IL, August 2016.

10. Invited Speaker, Department of Mathematical Sciences, Clemson University, Clemson, SC, November 2015.

9. Invited Speaker, Department of Mathematics and Statistics, Mississippi State University, Starkville, MS, October 2015.

8. Invited Speaker, Department of Mathematical Science, The University of Calgary, Calgary, Alberta, April 2015.

7. Invited Speaker, Department of Statistics and Probability, Michigan State University, East Lansing, MI, February 2015.

6. Invited Speaker, Department of Statistics, Missouri University, Columbia, MO, February 2015.

5. Invited Speaker, IASSL Conference, Colombo, Sri Lanka, December 2014.

4. Invited Speaker, Bob Taylor Retirement Conference, Clemson University, Clemson, SC, November 2013.

3. Invited Speaker, Department of Mathematics and Statistics, University of Windsor, Windsor, Ontario, October 2013.

2. Invited Speaker, Department of Mathematics and Statistics, University of Toledo, Toledo, OH, February 2013.

1. Invited Speaker, SRCOS Annual Meeting, Hickory Knob State Park, SC, June 2012.

Subject: Disease Mapping

15. CAPC Board Meeting, Las Vegas, NV, March 2018.

14. Invited Speaker, Joint Statistical Meetings, Baltimore, MD, July 2017.

13. Invited Speaker, Department of Biostatistics, Emory University, Atlanta, GA, September 2016.

12. Invited Speaker, Center for Disease Control Webinar, September 2016.

11. Invited Speaker, Life Sciences Colloquium, Clemson University, Clemson, SC, April 2016.

10. Invited Speaker, AVMA Conference, Boston, MA, July 2015.

9. Invited Speaker, The University of Calgary, Calgary, Canada, May 2015.

8. CAPC Board Meeting, Palm Springs, CA, November 2014.

7. Invited Speaker, American Association of Veterinary Parasitology Meeting, Denver, CO, July 2014.

6. Invited Speaker, Big Data in Education Meeting, George Mason University, Fairfax, VA, March 2014.

5. CAPC Board Meeting, Atlanta, GA, March 2014.

4. Invited Speaker, Western Veterinary Conference, Las Vegas, NV, February 2014.

3. Invited Speaker, North American Veterinary Conference, Orlando, FL, January 2014.

2. CAPC Board Meeting, Portland, OR, October 2013.

1. CAPC Board Meeting, Atlanta, GA, March 2012.

Subject: Temperature Network Simulation

1. Invited Speaker, National Climatic Data Center, Asheville, NC, May 2012.

Journal Refereeing

Advances in Applied Probability
The American Statistician
Annals of Applied Probability
Annals of Applied Statistics
Annals of Probability
Annals of Statistics
Annals of the Institute of Mathematical Statistics
Applied Stochastic Models in Business and Industry
Atmospheric Chemistry and Physics Discussions
Australian & New Zealand Journal of Statistics
Bernoulli
Biometrics
Biometrika
Climate of the Past
Climatic Change
Canadian Journal of Statistics
Communications in Statistics
Environmetrics
Environmental Software
Frontiers of Public Health
Geospatial Health
International Journal of Climatology
International Journal of Forecasting
International Statistical Review
Involve
Journal of Agricultural, Biological, and Environmental Statistics
Journal of the American Statistical Association
Journal of Applied Probability
Journal of Climate
Journal of Applied Meteorology and Climatology

Journal of Agricultural, Biological, and Environmental Statistics
Journal of the Royal Statistical Society
Journal of Statistical Planning and Inference
Journal of Statistical Computation and Simulation
Journal of Multivariate Analysis
Journal of Time Series Analysis
Mathematics of Operations Research
Mathematical and Computer Modeling
Numerical Methods
Numerical Algorithms
National Security Agency Grants
NSF Grants
NSERC Grants
Open Geosciences
Operations Research Letters
Queueing Systems and their Applications
Statistica Sinica
Statistics and Probability Letters
Statistics in Medicine
Statistical Inference for Stochastic Processes
Statistical Science
Stochastic Processes and their Applications
Technometrics
Water Resources Research
WIREs Computational Statistics

Session Chair/Organizer

9. Coorganizer, IMSI Fall Program "Confronting Global Climate Change", Fall 2022.

8. Temperature Trends Session, ISI Meeting, Durban, South Africa, August 2009.

7. Statistical Climatology Session, IMS/ASA Joint Meeting, Atlanta, GA, August 2001.

6. IMS Contributed Talks Chair, IMS/ASA Joint Meeting, Atlanta, GA, August 2001.

5. Time Series Session, IMS/ENAR Meeting, Atlanta, GA, March 1999.

4. IMS New Researchers Meeting, Laramie, WY, July 1997.

3. IMS Regional Meeting, Chapel Hill, NC, October 1996.

2. 14th IMACS World Congress, Atlanta, GA, July 1994.

1. IMS Annual Meeting, Chapel Hill, NC, June 1994.

Major Service

9. External Reviewer, Data Science Degree Program, Department of Mathematics and Statistics, The University of Calgary, December 2022.

8. External Reviewer, Graduate Program, Department of Statistics, The University of California, Davis, December 2020.

7. Chairman, Data Science Degree Emphasis Committee, University of California, Santa Cruz, August 2020 - present.

6. Department Head, University of California, Santa Cruz, Department of Statistics, January 2020 - Current.

5. National Science Foundation Program Manager, Division of Mathematical Sciences, October 2016 - September 2018.

4. Tenure, Promotions, and Review Committee Chair, Department of Mathematical Sciences, Clemson University, 2009-2010 academic year.

3. *Journal of the American Statistical Association* Reviews Editor, January 2005 — December 2007.

2. Associate Head, Department of Statistics, The University of Georgia, August 2002 — August 2004.

1. Faculty Senator, Department of Statistics, The University of Georgia, August 1999 — August 2002.

Minor Service (Current Only)

2. American Statistical Association, Funded Research Committee, January 2020 — Current.

1. DCAP Committee, Baskin College of Engineering, University of California, Santa Cruz, Academic Year 2020-2021.

Teaching

Course Instruction at Clemson University, Fall 2004 — Fall 2019 (as Professor)

MthSci 302	Engineering Statistics	Fall 2004	28 Students	4.65
MthSci 803	Stochastic Processes	Spring 2005	17 Students	4.77
MthSci 803	Stochastic Processes	Fall 2005	5 Students	4.75
MthSci 809	Time Series Analysis	Spring 2006	10 Students	5.00
MthSci 803	Stochastic Processes	Fall 2006	12 Students	4.65
MthSci 809	Time Series Analysis	Spring 2007	16 Students	4.71
MthSci 803	Stochastic Processes	Summer 2007	15 Students	4.85
MthSci 208H	Diff Equations (Honors)	Fall 2007	15 Students	4.58
MthSci 208	Diff Equations	Fall 2007	35 Students	4.04
MthSci 803	Stochastic Processes	Spring 2008	14 Students	4.80
MthSci 818	Extreme Value Theory	Spring 2008	9 Students	5.00
MthSci 817	Stochastic Processes II	Fall 2008	16 Students	4.94
MthSci 809	Time Series Analysis	Spring 2009	18 Students	4.90
MthSci 800	Probability	Summer 2009	12 Students	4.82
MthSci 302	Engineering Statistics	Fall 2009	35 Students	4.70
MthSci 901	Measure Theory	Fall 2009	15 Students	5.00
MthSci 403	Statistics I	Spring 2010	15 Students	4.46
MthSci 818	Extreme Value Theory	Spring 2010	8 Students	4.50
MthSci 800	Probability	Fall 2010	25 Students	4.74
MthSci 400	Intro Probability	Spring 2011	29 Students	4.88
MthSci 809	Time Series	Spring 2011	12 Students	5.00
MthSci 901	Measure Theory	Fall 2011	10 Students	5.00
MthSci 403	Statistics I	Spring 2012	18 Students	4.60
MthSci 803	Stochastic Processes	Spring 2012	27 Students	4.82
MthSci 981	Time Series II	Fall 2012	13 Students	5.00
MthSci 809	Time Series	Spring 2013	28 Students	4.81
MthSci 403	Statistics I	Spring 2013	23 Students	5.00
MthSci 809	Time Series	Fall 2013	19 Students	4.92
MthSci 901	Measure Theory	Fall 2013	10 Students	5.00
MthSci 809	Time Series	Spring 2014	12 Students	4.50
MthSci 800	Probability	Fall 2015	23 Students	5.00
MthSci 901	Measure Theory	Fall 2015	9 Students	4.67
MthSci 803	Stochastic Processes	Spring 2016	29 Students	4.64
MthSci 809	Time Series	Fall 2018	6 Students	4.80
MthSci 800	Probability	Fall 2018	17 Students	4.62
MthSci 407	Regression	Spring 2019	14 Students	4.58
MthSci 809	Time Series	Fall 2019	12 Students	5.00
MthSci 407	Regression	Fall 2019	9 Students	4.50

The numerical scores in the right-most column summarize responses to Question # 10 on course evaluations. The question asks the student for an overall teaching evaluation on a five point scale, with 5 being the best and zero the worst. The scores are averages over all responding students.

Course Instruction at The University of Georgia, Fall 1993 — Spring 2004

Fall	1993	STA 4/628	Time Series	11 Students	3.80
Winter	1994	STA 927	Consulting	5 Students	3.25
Spring	1994	STA 4/621	Stat. Methods I	42 Students	3.34
Spring	1994	STA 4/621	Stat. Methods I	45 Students	3.49
Fall	1994	STA 4/628	Time Series	15 Students	3.86
Fall	1994	STA 621	Stat. Methods I	39 Students	3.37
Winter	1995	STA 870	Stochastic Pro.	9 Students	3.88
Winter	1995	STA 927	Consulting	6 Students	4.00
Fall	1996	STA 817	Prob. Thy. I	6 Students	3.67
Winter	1997	STA 818	Prob. Thy. II	6 Students	3.83
Spring	1997	STA 622	Stat. Methods I	27 Students	3.17
Spring	1997	STA 622	Stat. Methods I	13 Students	3.36
Fall	1997	STA 4/6280	Time Series	6 Students	3.73
Fall	1997	STA 817	Prob. Thy. I	5 Students	3.83
Winter	1998	STA 4/672	Intro. Prob. II	8 Students	3.57
Spring	1998	STA 818	Prob. Thy. II	5 Students	4.00
Fall	1998	STA 4/6280	Time Series	6 Students	4.00
Fall	1998	STA 4/671	Intro. Prob. I	9 Students	4.00
Spring	1999	STA 4/672	Intro. Prob. II	9 Students	4.00
Fall	1999	STA 4/6280	Time Series	19 Students	3.77
Spring	2000	STA 4210	Stat. Methods I	17 Students	3.67
Fall	2001	STA 8280	Adv. Time Series	12 Students	4.00
Fall	2001	STA 8700	Stochastic Pro.	7 Students	4.00
Spring	2002	STA 4/6510	Math Stat. I	22 Students	3.88
Spring	2003	STA 8700	Stochastic Pro.	10 Students	3.71
Spring	2004	STA 8280	Adv. Time Series	18 Students	3.83
Spring	2004	STA 8700	Stochastic Pro.	4 Students	4.00
Spring	2004	Fresh. Sem.	How to Gamble	20 Students	No eval.

The numerical scores in the right-most column show responses to Question # 5 on course evaluations. The question asks the student whether he/she thinks that the instructor is an excellent teacher on a four-point scale, with four being the best and one the worst. Reported are the number of responses and the average response.

Course Instruction at the University of California, Santa Cruz, Winter 2020 — Current (as Professor)

Stat 208	Linear Models	Spring 2020	21 Students	4.75
Stat 5	Elementary Statistics	Fall 2020	227 Students	4.00
Stat 243	Measure Theory	Fall 2020	12 Students	4.36
Stat 203	Probability	Fall 2021	10 Students	4.90
Stat 243	Measure Theory	Fall 2022	3 Students	5.00
Stat 246	Stochastic Processes	Spring 2023	7 Students	4.83

The numerical scores in the right-most column show responses to the overall teaching effectiveness on the evaluation. The question uses a five-point scale with five being the best and one the worst. Reported is the average response.

Other Course Instruction

Auburn University, 1987 — 1988 (as Graduate Teaching Assistant)

Math 140	College Algebra	Two Times
Math 160	Precalculus	One Time
Math 161	Calculus I	One Time
Math 162	Calculus II	One Time
Math 169	Business Calculus	One Time

The University of North Carolina, 1990 — 1993 (as Graduate Teaching Assistant)

Statistics 23	Introductory Statistics	Three Times

Colorado State University, 1995 — 1996 (as Visiting Assistant Professor)

Stat 309	Engineering Statistics	One Time
Stat 525	Time Series Analysis I	One Time
Stat 526	Time Series Analysis II	One Time
Stat 742	Stationary Processes	One Time

The University of South Carolina, Fall 2000 (as Visiting Associate Professor)

Stat 110	Engineering Statistics	One Time
Stat 509	Engineering Statistics	One Time

Purdue University, Spring 2001 (as Visiting Associate Professor)

Stat 520	Time Series Analysis	One Time
Stat 532	Stochastic Processes	One Time