#### January 2019

# JOHN M. GREGO

**830 Old Woodlands Road**

**Columbia, SC 29209**

**(803) 331-3366**

**Department of Statistics**

**University of South Carolina**

**Columbia, South Carolina 29208**

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**Education**

Ph.D. 1989 Statistics, Pennsylvania State University (Co-Advisors Dr. Clifford C. Clogg and Dr. Bruce G. Lindsay)

M.A. 1985 Statistics, Pennsylvania State University (Advisor James D. Lynch)

B.A. 1982 Mathematics, College of Charleston

**Professional Employment**

University of South Carolina

Department Chair, July 2012 to June 2019

Full Professor, January 2012 to present

Associate Professor, August 1995 to January 2012

Assistant Professor, August 1989 to August 1995

Minitab Inc.

Consultant for Software Development, August 1985 to August 1989

Pennsylvania State University

Graduate Assistant, August 1982 to August 1989

**Publications**

**Papers**

1. Lu, J. Carbone, G.J., and Grego, J.M. (2019). “Uncertainty and hotspots in 21st century projections of agricultural drought from CMIP5 models”, *Scientific Reports* 9, Article number: 4922.
2. Androulakis, X.M., Sen, S., Kodumuri, N., Zhang, T., Grego, J., Rosamond, W., Gottesman, R.F., Shahar, E., and Peterlin, B.L. (2019). “Migraine age of onset and association with ischemic stroke in late life: 20 years follow-upon ARIC”, *Headache: The Journal of Head and Face Pain*, 59(4): 556-566.
3. Barnes, G. V., DeFreitas, A., & Grego, J. (2016). "Parental Involvement and Home Environment in Music: Current and Former Students in Selected Community Program in Brazil and United States", *International Journal of Music Education*, 34(2), pp 208-218.
4. Grego, J.M., Yates, P.A. & Mai, K. "Standard error estimation for mixed flood distributions with historic maxima", *Environmetrics*, 26(3), 229-242.
5. Grego, J. & Hitchcock, D. (2014) "Limited-Information Modeling of Loggerhead Turtle Population Size", *Journal of Agricultural, Behavioral and Environmental Statistics*. 19(1), 18-38.
6. Grego, J., Li, S., Lynch, J., & Sethuraman, J. (2014) "Partition Based Priors and Multiple Event Censoring: An Analysis of Rosen's Fibrous Composite Experiment", *Technometrics*.
7. Loudermilk, E.L., O'Brien, J.J., Mitchell, R.J., Cropper, W.P. Jr., Hiers, K.J., Grunwald, S., Grego, J., & Fernandez-Diaz, J.C. (2012) "Linking complex forest fuel structure and fire behavior at fine-scales", International Journal of Wildland Fire 21(7) 882-893.
8. J. Grego (2012). Generalized additive models in *Encyclopedia of Environmetrics Second Edition*, A.-H. El-Shaarawi and W. Piegorsch (eds).  John Wiley & Sons Ltd, Chichester, UK, pp.1128-1130.
9. Valerio, W. H., Reynolds, A. M., Grego, J., Yap, C. C., & McNair, A. (2011). Parents’ documentation of their children’s music-related behaviors. In S. Burton & C. Taggart, (Eds.), Learning from Young Children: Research in Early Childhood Music. Lanham, MD: Rowman & Littlefield.
10. J.M. Grego, P.A. Yates (2010), “Point and standard error estimation for quantiles of mixed flood distributions,” *Journal of Hydrology*, 391, 289-301.
11. Roland C. Deutsch, John M. Grego, Brian Habing and Walter W. Piegorsch (2010). “Maximum Likelihood Esitmation with Binary-data Regression Models: Small-sample and Large-sample Features,” *Advances and Applications in Statistics*, 14(2), 101-116.
12. Hiers, J.K., O’Brien, J.J., Mitchell, R.J., Grego, J.M., Loudermilk, E.L. (2009), “The wildland fuel cell concept: an approach to characterize fine-scale variation in fuels and fire in frequently burned longleaf pine forests,” *International Journal of Wildland Fire,* 18, 315-325.
13. West, T. N., Brown, W. H., Grego, J. M., & Johnson, R. (2008). Practitioners’ judgments of peer interaction interventions: A survey of DEC members. *Journal of Early Intervention*, 30(1), 36-54.
14. John Grego and James Lynch (2006), “Some Applications of Mixed Gamma Representations,” *Journal of Applied Probability & Statistics*, 1, 31-37.
15. E. Ezra, Z. Gregor, et al (2004), “Surgery for Idiopathic Full-Thickness Macular Holes: 2-Year Results of a Prospective Randomised Clinical Trial Comparing Natural History, Vitrectomy and Vitrectomy Plus Autologous Serum: Moorfields Macular Hole Study Group Report No. 1*,” Archives of Ophthalmology*, 122, 224-236.
16. J.M. Grego (2001), “Generalized Additive Models,” Encyclopedia of Environmental Statistics, John Wiley & Sons, 2, 851-853.
17. K.L. Clark, J.H. Oliver, Jr., J.M. Grego, A.M. James, L.A. Durden, and C.W. Banks (2001), “Host Associations of Ticks Parasitizing Rodents at Borrelia burgdorferi-enzootic Sites in South Carolina,” J. Parasitol. 87(6), 1379-1386.
18. Marcel J.M. Reichert, John M. Dean, Robert J. Feller, John M. Grego (2001), “Somatic Growth and Otolith Growth in Juveniles of a Small Subtropical Flatfish, the Fringed Flounder (Etropus crossotus),” J. Exp. Mar. Biol. Ecol., 254(2), 169-188.
19. John M. Grego, Trevor Craney and James F. Lewis (2000), “Quantile Plots for Mean Effects in the Presence of Variance Effects for Fractional Factorial Designs,” Comm. Stat.—Simulation and Computation, 29:4, 1109-1133.
20. W.B. Driggers, III, J.M. Grego, and J.M. Dean (1998), “Age and Growth of Yellowfin Tuna, Thunnus albacares, in the Western North Atlantic Ocean,” Int. Comm. Conserv. Atl. Tunas SCRS/98/123, 10p.
21. E. Ezra, J.A. Wells, R.H. Gray, F.M.P. Kinsella, G.O. Orr, J.M. Grego, G.B. Arden and Z.J. Gregor (1997), “Incidence of Idiopathic Full Thickness Macular Holes in Fellow Eyes: A Five-Year Prospective Natural History Study,” Ophthalmology, 102, 353-359.
22. T. Hwang, T.P. Close, J.M. Grego, W.L. Brannon, F. Gonzales (1996), “Predilection of Brain Metastasis in Gray and White Matter Junction and Vascular Border Zones,” Cancer, 77, 1551-1555.
23. John M. Grego (1995), “PRASCH: A Fortran Program for Latent Class Polytomous Response Rasch Models,” Applied Psychological Measurement, 17, 238.
24. John M. Grego (1993), “Generalized Linear Models and Process Variation,” Journal of Quality Technology, 25, pp. 288-295.
25. Bruce G. Lindsay, Clifford C. Clogg and John M. Grego (1991), “Semi-Parametric Estimation in the Rasch Model and Related Exponential Response Models, Including a Simple Latent Class Model for Item Analysis,” JASA, 86-86-97.
26. Clifford C. Clogg, Scott P. Elison and John M. Grego, “Models for the Analysis of Change in Discrete Variables,” in New Statistical Models for the Analysis of Longitudinal Data, A. von Eye, ed., New York: Academic Press, 1989.
27. John M. Grego, Hsiu-Li Hsi and James P. Lynch (1990), “A Strategy for Analyzing Mixed and Pooled Exponentials,” Applied Stochastic Models and Data Analysis, 6, 59-70.

**Papers Presented at Professional Meetings, Conferences, etc.**

**Invited**

1. “River Gage Estimation”, SC-FLOODS Conference, Columbia SC November 2016
2. “Limited Information Modeling of Loggerhead Turtle Population Size”, ENAR Spring Meeting (JABES Highlight Session), Miami, FL, March 2014.
3. “Congaree River Hydrology and Hydraulics”, Southeast Friends of the Pleistocene, Columbia, SC, October 2008.
4. “Hurricane Hugo influence on the Old-growth floodplain forest, plant, and animal communities at Four Holes Swamp, SC” 26th Annual International Wetlands Meeting, Charleston, SC, June 2005.
5. “The Art and Science of Floodplain Mapping,” Congaree Swamp Science Symposium I, January 2002.
6. “Congaree River Hydrology,” SC ASA Annual Meeting, Columbia, SC, April 2000.
7. Improvements in the Quality of Consulting in a Statistical Laboratory,” SC Statewide Quality Conference, Myrtle Beach, SC, October 1997.
8. “Quantile Plots for Mean Effects in the Presence of Variance Effects,” Colorado School of Mines, Golden, CO, April 1996.
9. “Quantile Plots for Mean Effects in the Presence of Variance Effects,” Clifford C. Clogg Memorial Conference, State College, PA, October 1996.
10. “Beyond Retention: The Use of Enrollment Data to Identify Critical Needs in the Alliance Institution,” Formative Evaluation Session, AMP Project Director’s Meeting, Washington, DC, September 1995.
11. “Quantile Plots for Mean Effects in the Presence of Variance Effects,” ASQC Fall Technical Conference, St. Louis, MO, October 1995.
12. “Random Effects Polytomous Response Rasch Models,” SRCOS Conference, Galveston, Texas, June 1993.
13. Generalized Linear Models in Designed Experiments,” American Society for Quality Control, Columbia, SC, April 1991.

**Contributed or Otherwise**

1. “Pooled mixture models in flood frequency estimation” (Phil Yates, presenter), JSM, Vancouver BC, July-August 2018.
2. “A modified mixture model approach to the large scale multiple testing problem”, JSM, Baltimore MD, July-August 2017.
3. “Standard error estimation for mixed flood distributions with historic maxima”, JSM, Boston, MA, August 2014.
4. "Partition Based Priors and Multiple Event Censoring: An Analysis of Rosen's Fibrous Composite Experiment", JSM, San Diego, CA, July 2012.
5. “Mixture Models for Flood Frequency Distributions”, ASA/IMS Joint Statistical Meetings, Washington, DC, August 2009.
6. “Mixture Methods for the Analysis of Flood Frequency Distributions”, ASA/IMS Joint Statistical Meetings, Denver, CO, August 2008.
7. “Calibration Model for Floodplain Modelling,” JSM, Annual Meeting, Minneapolis, MN, August 2005.
8. "An Inventory Control Model", IMS/SPES Spring Research Conference, Dayton, OH, June 2003.
9. “Calibration of a Flood Hydraulics Model,” JSM, Annual Meeting, New York City, NY, August 2002.
10. “Analysis of Error Estimation in Flood Flows,” ENAR Spring Regional Meeting, Charlotte, NC, March 2001.
11. “Empirical Bayes Estimation in an Unreplicated Factorial Experiment,” Joint Statistical Meetings, Baltimore, MD, August 1999.
12. “Modeling Host Association for Correlated Data,” ENAR Spring Meeting, Atlanta, GA, March 1999.
13. “Modeling Variation,” Spring Technical Conference (IMS/SPES), Santa Fe, NM, 6/5/98.
14. “Quantile Plots for Variance Effects,” Joint Statistical Meetings, Anaheim, CA, August 1997.
15. “Robust Parameter Design and Semiparametric Inference,” Joint Statistical Meetings, Chicago, IL, August 1996.
16. “Testing Equivalence of Longitudinal Data in a Clinical Trial,” ENAR Conference, Birmingham, AL, March 1995.
17. “Quantile Plots for Means in the Presence of Variance Effects,” Joint Statistical Meetings, Toronto, ON, Canada, August 1994.
18. “Generalized Linear Models and Process Variation,” Joint Statistical Meetings, Boston, MA, August 1992.
19. “A Random Effects Model for Polytomous Response Data,” Joint Statistical Meetings, Anaheim, CA, August 1990.
20. “A Simple Latent Class Model for Item Analysis,” Joint Statistical Meetings, Washington, DC, August 1989.

**Meetings attended without presenting a paper**

1. SRCOS Meeting, Montgomery Bell State Park, TN, June 2013
2. Congaree Swamp Science Symposium, Columbia, SC Feburary 2008
3. Current and Future Trends in Nonparametrics, Columbia SC, October 2007
4. XXIII International Biometric Conference (IBC2006), Montreal, Quebec, Canada, June 2006
5. ICRSA Meeting, Columbia, SC, June 2003 (Field trip leader, Runner)
6. SRCOS Meeting, Williamsburg, VA, June 2000 (Discussant)
7. SRCOS Meeting, Gatlinburg, TN, June 1997
8. Symposium on Estimating Equations, Athens, GA, March 1996.
9. ASA Winter Meetings, Atlanta, Ga, January 1994

**Reviews and Refereeing**

**Papers Refereed**

*American* Statistician (1)

*Annals of Statistics* (2)

*Applied Stochastic Models in Business and Industry* (1)

*Canadian Journal of Fisheries and Aquatic Science* (1)

*Comm Stat-Simulation and Computation* (2)

*Comm Stat-Theory and Methods*  (2)

*CSDA* (1)

*DOD Polygraph Institute* (2)

*Environmetrics* (1)

*Eos* (3)

*Fisth Otolith Research and Application* (1)

*International Journal of Economic Sciences and Applied Research* (1)

*JASA* (6)

*JAPS* (12)

*Journal of Educational Statistics* (1)

*Journal of Hydrology* (3)

*Journal of Hydrometerology*  (2)

*Journal of Modern Applied Statistical Methods*  (1)

*JQT* (4)

*JSCS* (163)

*Journal of Systems Science and Systems Engineering* (1)

*Multivariate Behavioral Research* (1)

*North American Journal of Fisheries Management* (1)

*Psychometrika* (1)

*Sociological Methods and Research* (1)

*Sociological Methodology* (4)

*SCDNR Technical Report* (1)

*Statistical Methodology* (1)

*Stochastic Envionrmental Research and Risk Assessment* (1)

*Technometrics* (4)

*Water* (3)

*Watersheds and Water Resources* (1)

**Papers or Books Reviewed**

* + - 1. G. Celli, “Experimental Design with Applications in Management, Engineering, and the Sciences”, prospectus, MIT Press, 2017.
      2. S.T. Bate and R.A. Clark, “The Design and Analysis of Animal Experiments”, Quarterly Review of Biology, 2015.
      3. Alan Agresti, “Foundations of Linear and Generalized Linear Models,” prospectus, John Wiley & Sons, 2013.
      4. Chris Bilder and Thomas Loughin, “The Analysis of Categorical Data with R”, CRC Press, 2010.
      5. Sheldon Ross, “Simulation”, Elsevier Press, 2011.
      6. Chris Bilder and Thomas Loughin, “The Analysis of Categorical Data with R”, prospectus, CRC Press, 2010.
      7. Daniel Powers and Yu Xie, “Statistical Methods for Categorical Data Analysis, 2nd Edition”, prospectus, Academic Press, 2004
      8. Andrew Gelman, John Carlin, Hal Stern, Donald Rubin, “Bayesian Data Analysis, 2nd Edition,” for *Techometrics*, 2004
      9. “Experimental Design in the Real World,” Addison-Wesley, 1999
      10. Brian Yandell, “Practical Data Analysis for Designed Experiments,” for *Technometrics*, 1997
      11. D. Levine, P. Ramsey and B. Schmidt, “Applied Statistics for Engineers and Scientists,” Prentice Hall, 1997
      12. “Analysis of Categorical Variables in Developmental Research,” prospectus, Academic Press, 1993-1994

**Proposals Refereed or Reviewed**

1. NSF, 2015
2. “Nonparametric Mixture Models,” NSF, 2005.
3. “Nonparametric Inference in Mixture Models,” NSF, 2001.
4. “Analyzing Developmental Trajectories with Mixture Models: A Second Generation of Models and Software,” NSF, 1999-2000.
5. “Modeling Repeated Categorical Responses,” NSF, 1997.
6. “Nonparametric Mixture (Latent Class) Analysis,” NSF, 1996.
7. “Collaborative Research on Semiparametric Mixed Poisson Regression Models,” NSF, 1995.

**d. Editorial Activities**

* + - 1. Associate Editor of Journal of Applied Probability and Statistics, 2006-
      2. Associate Editor of Journal of Statistical Computation and Simulation, 1995-2007.

**Direction of Theses and Dissertations**

1. Stephanie Jones, M.S.,”The South Carolina Safety Belt Study: Large-scale Location Sampling”, May 2018
2. Kirsten Edwards, B.S. Honors, “The Importance of Planning: Science Education from Many Points of View”, December 2017
3. Pooja Malhotra, B.S. Honors, “Congaree National Park: A Natural and Cultural Guide for the Boardwalk Loop Trail”, May 2017
4. Drew Dixon, B.S. Honors, “Congaree National Park: Preparing a Trail Guide and Recommendations to Raise Awareness”, May 2016
5. Taylor Karlin, B.S. Honors, “Deeply Rooted: The Story of the Congaree National Park”, May 2016
6. Nathan Spagnola, M.S.,"The Complete Plus-Minus: A Case Study of the Columbus Blue Jackets", May 2013
7. Hongtao Zhang, M.S., “Bayesian Hierarchical Model for Spatiotemporal Data of Fire Behavior” August 2009.
8. Sam Szelepka, M.S., “Modelling Loggerhead Turtle (*Caretta caretta*) Nesting Data”, May 2009.
9. Jocelyn Ross, M.I.S. “The Impact of Dual Enrollment in South Carolina’s Technical College System”, May 2008.
10. Bin Lin, M.I.S. “Piezoelectric Wafer Active Sensor Installation Evaluation Using Statistical Design of Experiments”, May 2008.
11. Deepa Wani, M.S. “Statistical Models for Spatiothermal Data Collected at Jones Ecological Research Center”, May 2008.
12. Justin Lewis, M.S. “Calibration Methods for Multinomial Response: Predicting Age Classes for Striped Bass”, May 2008.
13. Brett Ermer, M.S. “Applying Poset Linear Extensions to Generalizing Conjoint Analysis” (with Joshua Cooper), May 2008.
14. Jun Ni, Ph.D. “Extensions to Hierarchical Bayesian Shrinkage Estimation with Applications to a Marketing Science Problem”, August 2007
15. Roland Deutsch, Ph.D. “Benchmark Analysis for Two Predictor Variables”, August 2007.
16. Cassondra Bigini, M.S. “Statistical Models in Analyzing Mixing Characteristics of the Congaree River for the Saluda Hydroelectric Project”, May 2007.
17. Philip Yates, Ph.D. “Methods for the Analysis of Flood Frequency Distributions”, December 2006.
18. Bingyu Zhu, M.S. “Using Multiple Imputation to Analyze Transfer Function Models”, August 2006.
19. Cameron Broderick, M.I.S. “Measurement System Variation of a High Volume Injector Test Line”, May 2006.
20. Samuel Croker, M.S. “Multiple Input Transfer Function Modelling for Streamflow Data”, May 2006.
21. Tsungirirai Hungwe, M.S. “An Autologistic Model for Predicting Hog Disturbance in Congaree National Park”, May 2006.
22. James Spurgeon, M.I.S. “Y5V MLCC Capacitor Optimization: Process and Design Optimization through the use of Designed Experiments and Statistical Analysis”, May 2005.
23. Zongshou Cai, M.S. “Multiple Input Transfer Function Model with Missing Data”, May 2005.
24. Amanda Ballou, M.S. “Spatial and Temporal Models for Continuous and Binary Groundwater Data”, May 2005.
25. Emmy McKinney, M.S. “Multivariate Methods for Contamination Identification”, May 2005.
26. Dong Hai, M.S. “A Multinomial Mixture Model for Codon Usage Data”, August 2004.
27. Deiana Stankova-Kozareva, M.S. “Transfer Function Models”, August 2004.
28. Cerissa Newdigate, M.S. “Multistage Stratified Sampling with Ratio Estimators and Unequal Probabilities”, May 2003.
29. Carl Miller, Ph.D., “Varying Coefficient Models for Periodic Water Quality Data”, August 2002.
30. Petko Kostadinov, M.S., “Inventory Control Model”, May 2002.
31. Caroline Hoffman, Honors thesis, “The Prevalence of Overweight and Obese High School Students in South Carolina,” May 2001.
32. Megan Meece, M.S., “Using the Bootstrap to Estimate the Standard Error of One Hundred-Year Flood Levels When Flood Flows have been Adjusted for a change in the Watershed,” May 2001.
33. Wilma Sims, M.S., “Bayesian Models for Process Mean and Variance,” May 2000.
34. Denice Osborne, M.I.S., “Analysis of a Nested Design of Experiments with Controlled and Non-Controlled Variables for an Applied Industrial Study on Core Straightness,” May 2000.
35. Megan Meece, Honors Thesis, “Why Students Stay: A Study of the Effectiveness of the SCAMP Program at Retaining and Encouraging Graduate Study in Science, Mathematics, and Engineering Students,” May 1999.
36. Craig Wheatley, M.S., “Repeated Measurement Extensions of the Rasch Model,” May 1999.
37. Carrold T. Shropshire, M.I.S., “Investigation into Bubble Generation in Blood Collection Tubes,” December 1997.
38. Wenkai Hu, M.S., “Simultaneous Random Effects Models for Progress Mean and Variance,” December 1997.
39. Trevor Craney, M.S., “Simultaneous Modeling of Mean and Variance Effects in Industrial Experimentation,” December 1997.
40. Scott Sheridan, Honors Thesis, “Comparisons of Nonparametric and Normal Theory Censored Data Procedures to Normal Theory Procedures Using Simulated Environmental Data,” May 1995.
41. James F. Lewis, M.S., “Probability Plots and Robust Parameter Design,” May 1994.
42. Dean Johnson, M.S., “Small Sample Confidence Intervals for a Multiparameter Problem: Estimating the Geographic Center of South Carolina,” August 1993.
43. Karin Thomas, M.S., “Estimation of the Polytomous Response Rasch Model,” August 1991.
44. Tony Onwuegbuzie, M.S., “The Education Improvement Act – A Statistical Overview,” May 1991.

**Grants**

177 grants and contracts totaling $3.5M, including $1.8M from federal agencies, $1.4M from state agencies, $180K from private/nonprofit sources, and $112K from USC.

Selected grants:

* + - 1. SC DPS/NHTSA/DOT, "Buckle Up South Carolina Observational Survey and Attitudinal Survey 2018” (PI: Wilma Sims),4/23/18-7/09/18, $45,502
      2. SC DPS/NHTSA/DOT, "Buckle Up South Carolina Observational Survey and Attitudinal Survey" (PI: Wilma Sims),4/24/17-7/10/17, $34,000
      3. NSF/DMS, "2016 Latent Variables Conference", 6/15/16-5/31/17, $10,000
      4. USC Vice President for Research (SC-FLOODS), River Gage Estimation, 10/23/15-3/15/16, $9954
      5. SC DNR, "Statistical Support for SC DNR Freshwater Fisheries", 7/1/14-6/30/15, $6650.
      6. Jones Ecological Research Center, "Mixed effects modeling for ANPP data", 1/1/14-12/31/14, $2000.
      7. USC Office of the Provost, "Palmetto Lecturer 2015", 3/2/15-3/6/15, $2012
      8. USC Office of the Provost, "Palmetto Lecturer 2014", 3/23/14-3/29/14, $1952
      9. USC Office of the Provost, "Faculty Climate Survey Graduate Student Support", 6/16/2013-8/15/2013, $3000.
      10. SC Department of Education, "SC DOE Special Education Parent Survey Analysis", 11/1/13-2/15/14, $5625.
      11. SC Department of Education, "SC DOE Special Education Parent Survey Analysis", 11/1/12-2/1/13, $5626.
      12. NPS, "Assess the Distribution and Status of Champion Trees at Congaree National park, CESU" (PI: John Kupfer), 8/23/12-5/31/14, $23,500
      13. NIH (Edsel Pena, PI), “Biometry Core Facility, Center for Colon Cancer Research (CCCR)”, 10/1/07-9/30/12, $4169 in 2011.
      14. SC DSS, "Sampling Plans for SNAP and Child Welfare Cases", 4/1/11-12/31/11, $1410
      15. National District Attorneys Association (6/15/10-12/30/10), “Evaluation of NDAA Short Courses”, $6978.
      16. SC Department of Education/USDE (10/1/09-9/30/10), "TRIAAD-Item Analysis", $7750.
      17. SC DMH (3/1/09-9/30/09), “Statistical Analysis for South Carolina Department of Mental Health—Education, Training and Research”, $13000.
      18. USC Department of Speech and Communication Disorders (1/1/08-12/31/08), “Statistical Support”, $6000.
      19. SC Bar Association (8/1/08-12/31/08) “Analysis of 2008 Judicial Evaluation Survey”, $6000.
      20. USC Research Foundation-R&PS Grant (4/1/06-6/30/07), “Forest Regeneration Patterns Following Logging of Bottomland Hardwood Forests in Congaree National Park”, $18,000, John Kupfer—PI.
      21. SC DOR (9/22/06-12/31/06), “Statistical Support for SCBOS (South Carolina Business One-Stop)” $13,000.
      22. NSF/EHR (1/1/06-12/31/06), “SCAMP Evaluator”, $11,000.
      23. Clemson University/USGS (3/04-2/05), “Modeling the Impact of Reservoir Management on Important Ecosystem in the Santee River Basin,” $30,000.
      24. US Army Center One (1/1/03-5/15/03), “Graduate Assistant”, $6000.
      25. SC ARNG (2/1/99-1/31/01), “Cost Effectiveness Analysis of AH64/UH-60,” $43,738.
      26. NPS (co-PI with Bobbi Simpson and Rebecca Sharitz) (10/1/01-9/30/06), “Center for Old Growth Bottomland Forest Research and Education,” $1,125,000
      27. NERR (PI-Fred Holland) (10/1/99-9/30/00), “A Synthesis of Water Quality Data from the NERR’s System Wide Monitoring Program,” $28,000.
      28. SC Department of Natural Resources (10/1/99-6/30/01), “Analysis of Trends in Historical River Flow Data,” 9,058.
      29. USGS/BRD (co-PI). “Monitoring analytes at Congaree Swamp National Monument”, 5/1/99- , $24,000.
      30. Hall Institute (10/15/96-5/30/98), “Analysis of Teen Risk Behaviors,” $4,500.
      31. NSF (1/1/97-12/31/98), “EPSCoR Evaluator,” $16,000.
      32. College of Library and Information Science (7/1/96-12/31/96), “Statistical Lab Research Services,” $6,600.
      33. Sonoco Products Co. (8/5/96-10/30/96), “Statistical Lab Research Services,” $4,600.
      34. Westinghouse (4/22/96-7/22/96), “Review of Statistical Modules,” $14,672.
      35. SCUREF (8/15/94-9/30/95), “SCUREF Site Data Base Support Task-Task 1A.2 QC/CQ Verification,” (PI Bill Pirkle), $13,000.
      36. SC Department of Education (2/22/94-3/31/95), “Study of Performance of Lubricants Used in School Bus Engines,” $13,655.
      37. SC Department of Transportation (10/15/94-7/31/95), “Monitoring of SC DOT Validation Study,” $5,478.
      38. Midlands Technical College (11/3/94-11/10/95), “Community Perception Telephone Survey,” $6,900.
      39. NSF-CBMS Regional Conference (3/93-8/94), “Semiparametric Mixture Models: Theory and Methods with Applications in Empirical Bayes, Measurement Error and Random Effects Models – May 1994. $23,906.
      40. NSF Research Grant (8/91-1/94), “Random Effects Rasch Models,” funded for $27,427.

**Activities in Professional Organizations**

**Offices/Professional Recognition**

1. President, SC Chapter of ASA, 1994-1995.
2. Vice President, SC Chapter of ASA, 1993-1994.
3. Secretary/Treasurer, SC Chapter of ASA, 1992-1993.

**Professional Accreditation**

PStat (ASA Accredited Professional Statistician) 2010 to present. One of first 50 accredited.

**Sessions Organized or Chaired at Meetings**

1. Session Chair, “Recent Advances in Non- and Semi-parametrics”, Current and Future Trends in Nonparametrics Conference, Columbia, SC October 2007.
2. Session Chair, "Multivariate SPC", IMS/SPES Spring Research Conference, Dayton, OH, June 2003.
3. Session Chair, USC Statistics Department 15th Anniversary Alumni Conference, March 2001
4. Session Chair, ENAR Spring Meeting, Atlanta, March 1999.
5. Session Chair, “Inference for Categorical and Binary Models,” Joint Statistical Meetings, Toronto, ON, Canada, August 1994.

**Conferences, Seminars and Workshops organized, attended or presented**

1. Attended ASA Caucus of Academic Representatives Chairs’ Retreat, Alexandria, VA, June 2019
2. Organizer of Don Edwards Retirement Colloquium, April 2017
3. Co-organizer of USC Symposium on Research Cyberinfrastructure, April 2017
4. Lead Organizer of Latent Variables 2016 Conference, October 2016
5. Co-organizer of USC Symposium on Research Cyberinfrastructure, April 2016
6. Clemson University Department of Environmental Engineering and Earth Science, “Flood frequency estimation and floodplain policy”, February 2016
7. USC Statistics Department Research Seminar, “"Caucus of Academic Representatives session on Future Directions in Graduate Education", September 2014.
8. USC Statistics Department Research Seminar, "The Mathematical Sciences in 2025", October 2013.
9. USC Statistics Department Research Seminar, "Updating a Dirichlet Process", January 2013.
10. SC-SUG, "Developing and teaching an advanced SAS course: STAT 541", SC-SUG, Columbia, SC October 2012.
11. USC Statistics Department Research Seminar Speaker, “Multiple Input Stochastic Transfer Function Models,” October 2011 (2 lectures).
12. USC Statistics Department Research Seminar Speaker, “Mixture Models in Flood Frequency Distribution,” April 2010.
13. USC Statistics Department Research Seminar Speaker, October 2009.
14. USC Statistics Department Research Seminar Speaker, April 2009.
15. Attended Stochastic Monte Carlo Seminar, Columbia, SC, Summer 2008.
16. Attended Multiple Testing Seminar, Columbia, SC, Summer 2008.
17. Attended GIS short courses, Columbia, SC, May-June 2008.
18. Attended Learning Outcomes Seminar by Loren Anderson, Columbia SC, August 2008.
19. Attended STAT 718, Jayaram Sethuraman lecturer, Spring 2008.
20. Duke University Forestry Traveling Seminar speaker, November 2007.
21. Attended COBRE Faculty Retreat, Columbia, SC, January 2007.
22. Attended COBRE Faculty Retreat, Columbia, SC, January 2006.
23. “Modelling for Codon Usage Data,” University of South Carolina, SCINBRE Meeting, August 2006.
24. Attended Distance Learning Seminar, April 2005.
25. Attended School of Environment Continuing Education Seminar, March 2005.
26. “Afternoons with Wilma: A Calibration Story,” University of South Carolina, Department of Statistics, August 2004.
27. Microarray Analysis Seminar, Statistics Department, Fall 2003.
28. Consulting Seminar with Professor Ray Torres and Karyn Novakowski (Geology), “Random River Basin Networks”, Fall 2002.
29. “Congaree River Hydrology and Hydraulics,” University of South Carolina, Department of Statistics, November 2001.
30. “Congaree River Hydrology,” Columbia College, March 2001.
31. Attended Functional Data Analysis seminar and lectured twice, Fall 1999.
32. “Simultaneous Random Effects Models for Process Mean and Variance,” University of South Carolina, Department of Statistics, 11/19/98.
33. Attended Automated Process Control Seminar, Spring 1996.
34. Attended Automated Process Control Seminar, Spring 1995.
35. Attended Markov Random Fields and Image Reconstruction Seminar, Spring 1995.
36. Attended NSF Evaluation Workshop in Minneapolis, MN October 94.
37. “Quantile Plots of Means in the Presence of Variance Effects,” Departmental Colloquium, September 94.
38. Attended Automated Process Control Seminars, 3/93-3/94. Lectured twice.
39. Organized and attended NSF/CBMS Regional Conference on Semi-parametric mixture models, May 1993
40. Attended Department DOIT (Quality in Teaching) Seminars, 1992-1993, 1995
41. Attended Automated Process Control Seminars, 9/92-12/92.
42. “Design of Learning Experiences for Industry” 1-day short course taught by Bill Parr, 6/92.
43. “Changing Quality Paradigm” 2-day short course taught by Roger Wiggins, 5/92.
44. “Generalized Linear Models and Process Variation,” USC Departmental Colloquium, March 1992.
45. Attended “Hack and Snack” Seminars, 9/91-4/92. Lectured twice.
46. Co-Presenter of Seminar on the Use of Normal Probability Plots in Quality Control, with Prof. Lynch, 1990.

**Statistical Consulting**

**Within the University**

Over 555 faculty, doctoral students, masters students, and staff

**Outside**

Over 325 external clients

**Department Committees and Assignments**

* + - 1. Computer Advisory Committee, 1989-1994
      2. Manager, Remote 43, 1992-1993
      3. Qualifying Exam Committee, 1989, 1991, 1992, 1993 (2), 1994, 1995, 1997 (2), 1998 (2), 1999 (2), 2003, 2004, 2005, 2008, 2009, 2010, 2012, 2015, 2016
      4. Graduate Advisory Committee, 1989-1993
      5. Library Committee, 1990-1993
      6. Comprehensive Exam Committee, 1991, 1995, 1996, 1999
      7. Chair Advisory Committee, 1993-2010
      8. Director, Statistical Laboratory, 1993-2012 (Acting Director, 2012-)
      9. Chair Search Committee, 1996, 2001
      10. Nominations and Awards Committee, 1997-2003, 2012-
      11. Ethics Committee, 1997-2001
      12. Assessment Advisory Committee, 1998
      13. Alumni Conference Committee, 2000-2001
      14. Tenure and Promotion Revision Committee, 2001-2003
      15. Peer Review of Assistant Professors, Chair, 2002-2005, 2007, 2008, 2011, 2012-
      16. Peer Review of Associate Professors, Chair, 2012-
      17. Distributed Learning Committee, 2003-
      18. Faculty Search Committee, 2003-5, 2009-2010, 2012-
      19. Strategic Planning Committee, 2003, 2009.
      20. Stat Lab Advisory Committee, Chair, 1993-
      21. Family Fund Coordinator, 2003-5.
      22. Peer Mentor for Prof. Brian Habing, 1998-2004.
      23. Peer Mentor for Prof. David Hitchcock, 2004-2010.
      24. Peer Mentor for Prof. Ou Zhao, 2012-2014.
      25. Peer Mentor for Prof. Yen-yi Ho, 2018-.
      26. Bioinformatics Search Committee, 2005-2006.
      27. Grievance Committee, 2006-2008, 2011, 2012
      28. RCCF FEI Search Committee, 2006-2007.
      29. Ad Hoc Chair Evaluation Committee Chair, 2006, 2009-2012
      30. Instructor Search Committee, 2009, 2017, 2018
      31. MIS/MAS Exam Committee, 2010, 2011, 2013, 2018 (2)
      32. Review of Teaching Committee, 2012-
      33. Staff Hiring Committee, 2014 (2), 2015, 2016
      34. Acting Graduate Director, Spring 2017, Fall 2018

**College/University-Wide/External Activities**

**Committees**

1. Information Technology Advisory Committee, 2017-2019
2. Faculty Senate Steering Committee, 2016-2017
3. Information Security Advisory Committee, 2016-2018
4. Information Technology Ad Hoc Committee, Chair/Co-Chair, 2014-2016 Chair/Co-Chair 2014-2016)
5. Information Technology Committee, Chair, 2016-2017.
6. Committee on Professional Conduct, Chair, 2014-2016
7. Faculty Welfare Committee, 2012-2014.
8. Faculty Welfare Committee Secretary, 2013-2014.
9. Chair, Graduate Council Science, Math, Engineering, Health Sciences, and Related Professional Programs Curriculum Committee, 2010-2012.
10. Graduate Council, 2009-2012.
11. Faculty Senator, 2005-2008, 2011-2014.
12. College of Arts and Sciences Student Academic Grievance Committee, 2005-2008
13. External Advisory Committee for STEM Connections at Benedict College (NSF HBCU-UP Grant), 2004
14. SCAMP Executive Committee, 1993-2009.
15. College of Science and Mathematics Computer Committee, 1989-1993

**Special Assignments**

1. Provost’s Research Computing Advisory Committee, subcommittee on RCI staffing, 2016.
2. Chief Information Officer Search Committee, Chair, 2016
3. Planning Committee, Retreat for the Undergraduate Major, 2014
4. Information Technology Ad Hoc Committee, 2014-
5. Math/Stat Information Resource Consultant Hiring Committee, 2013
6. GRAD 701 Proposal Review Committee, 2012-2016
7. Chair of Physics/Astronomy Chair Search Committee, 2013
8. Planning Committee and Presenter, Retreat for the Undergraduate Major, 2012-2013
9. Chair of Anthropology Chair Search Committee, 2012
10. Academic Honesty Committee, Ad Hoc, 2011.
11. ERIC Pre-proposal reviewer for COSM, Fall 2004.
12. Center for Health Service and Policy Research Search Committee, 2002-2003.
13. Consultant for Faculty Advisory Committee, 1999-2001.
14. Provost’s Writing Center Advisory Committee, 1995.

**Club or Other Organization Sponsorship**

1. Faculty Advisor, Statistics Club, 1992-1995, 1997-2001

**Honors and Awards Received**

* + 1. “Congaree National Park” book dedication (author John Cely)
    2. The Trust for Public Land, recognized for leadership to expand Congaree National Park, 2011
    3. South Carolina Wildlife Federation Land Conservationist Award (Friends of Congaree Swamp), 2009
    4. South Carolina Chapter 25 Year Hall of Fame (1980-2005), Sierra Club, 2005.
    5. The Dr. A. James Hicks Leadership Award, Louis Stokes South Carolina Alliance for Minority Participation Program, 2004
    6. Outstanding Service Award, SCAMP Executive Committee, 2002
    7. Conservationist of the Year, SC Sierra Club, 2001
    8. Water Conservation Award, South Carolina Wildlife Federation, 2001
    9. Community Service Award, Columbia Audubon Society, 2000

**Course Assignments at USC**

**Regular Courses**

SCHC 312 (4)

STAT 506/J506 (10)

STAT 509 (6)

STAT 515 (2)

STAT 516 (1)

STAT 517/540 (6)

STAT 518 (2)

STAT 519 (1)

STAT 541/J541 (4)

STAT 704 (5)

STAT 705 (5)

STAT 706/J706 (15)

STAT 740 (5)

STAT 770 (3)

STAT 790 (24)

STAT 791 (20)

**Other Activities**

**a. Thesis Committee Member**

76 PhD Committees, 55 Masters Comittees

**b. Tenure and Promotion files**

Reviewed T&P file, Biostatstics Department, University of Kentucky, 2012

Reviewed Promotion file (Full Professor), Department of Mathematics and Statistics, University of Vermont, 2012

Reviewed Tenure and Promotion File, Georgia State, 2010

Reviewed T&P file, Dept. of Applied Stat. and OR, Bowling Green State Univ, 2004

Reviewed Tenure File, UC-Denver, 1996

**c. Interviews**

Interview by Clover Robichaud, Mathematics B.S., Columbia College, senior thesis, 2018

Interview by Caroline Smith, Biology B.S., USC, Climate Change course project, 2016

Interview by Brynna Golden, College of Atlantic, Senior Thesis on public lands protection, 2016

Interview by Jeff Stensland, USC Times, July 2013

Interview by Prof. Michele Maher (EDUC) on STEM mentoring, March 2012

Interview by Laura Begg, Broadcast Journalism undergrad on Congaree NP service activity, February 2012

Film and interview by Adele Wilson-Hamaker, The Trust for Public Land, November 2011

Interview by Lauren Hebert, Journalism student at University of South Carolina, April 2011

Interview by Heather Day, Doctoral student at University of Montana-Missoula on Federal/Non-profit partnerships, November 2010

Oral History Interview, by Prof. Jim Williams (Director of Albert Gore Research Center at Middle Tennessee State Univeristy), May 2010

Appeared in Roots in the River, SCETV documentary produced by Betsy Newman, 2009

Interviewed by Laura Stroup, Geography, for dissertation study on Climate Change Effects in Congaree River Basin, March 2006

Appeared on Walter Edgar’s radio show “Walter Edgar’s Journal” to promote Congaree National Park, March 2005

**d. Guest lectures/substitute lectures/university service lectures**

BIOL 599, January 2018

ENVR 501, field trip host, May 2016

ENVR 501, field trip host, May 2015

ENVR 501 field trip host, May 2014

ENVR 501 field trip host, May 2013

STAT 516, guest lecture, March 2014

ENVR 501 field trip host, May 2013

ENVR 501 field trip host, May 2012

GEOL 315 guest lecturer (2), February 2008

HSPM 800 guest lecturer, January 2008

Prof. Robert Best’s Genetic Counseling class, February 2004

Dean Gerard Crawley’s COSM 702 class, January 2004

Benedict College, HBCU-UP Planning Committee, October 2001

Advanced Composition Class, Benedict College, March 2001, November 2001

GEOL 103 class, July 2001

Doug Williams’ Honors Geology Class, October 2000

Speaker at Stat Club, February 2000

Medical School Honors Class, September 2000

Tom Owen’s Honors Geology class, November 1999

Terry Tirrito’s Social Work class, June 1999

School of Medicine Honors Surgery Seminar, October 1998

Terry Tirrito’s Social Work class, June 1998

John Dean’s Marine Science Class (2), 1997

Nancy Thompson’s Research Methodology Class, 1997 (2)

3-day presentation to Benedict College Summer Stat Program, July 1996

Speaker, University Retention Committee, October 1995

Guest Lecturer, Speech Department Grad Course, April 1993

Served as statistical expert at English Department Seminar on ETS student evaluation forms, 1990

**e. Local meetings/seminars**

Annual attendance at SC ASA, frequently student presentation judge

SC ASA Consortium, Clemson SC 2018

SC-SUG, Columbia SC, 2009, 2011 (2), 2012, 2013

Ethics and Employment in Higher Ed Workshop, September 2009

Jim Lynch Final Colloquium coordinator, December 2008

Attended regional safety belt monitoring conference, Atlanta, June 1999

Half-day seminar on managing for different learning styles, USC Counseling Center, May 1998

ASA Quantitative Literacy Workshop, Clemson, July 1994

Freshman Year Experience Conference, March 1994

Departmental DOIT (Quality in Teaching) lunches, Spring 1992

**f. Professional development workshops**

CTE Active Shooter Training, July 2018

BEST Institute, Creating Accessible Content, August 2017

CTE Academic Freedom forum, January 2015

BEST Institute,, Blackboard, What’s New, January 2015

USC Connect Workshop, May 2014

CTE Workshop, Engaging Students in Large On-line Classes, February 2014

CTE Workshop, Interactive Strategies with Classroom Technology, April 2013

BEST Institute, Blackboard Mash-ups, August 2012

CTE Workshop, Integrative Learning is Reflection, March 2012

CTE Workshop, Integrative Learning is Service, October 2011

CTE Workshop, Mungo Panel: Engaging Students, September 2011

BEST Institute, Blackboard, Course Merge, August 2010

BEST Institute, Blackboard, Grade Center, August 2009

BEST Institute, Blackboard, Assignment Manager, April 2009

Sheila Tobias workshop on curriculum reform, April 1999

Sheila Tobias workshop on assessment, April 1999

**g. SCAMP**

Attended NSF Education and Human Resources Conference, Wash. DC, March 2004

Attended NSF/LSAMP Project Directors meeting, Wash. DC, March 2002

Sponsored SCAMP Summer Research Scholar Rachael Austin (awarded 2nd place in Poster Division SCAMP Summer Research Fair), July 2001

Attended PER Review for SCAMP, November 1999

Attended SCAMP Annual Retreat, July 1999

Attended site visit for SCAMP, October 1998

Attended AMP Projector Director’s Meeting and AMP Research Conference, Polson, MT July 1998

SCAMP Program Manager interview committee, January 1998

Attended SCAMP Retreat, 1997

Attended AMP Project Directors’ Meeting and AMP Research Conference, Las Cruces, NM, 1997

Attended GPRA for SCAMP, 1997

SCAMP Program Manager Search Committee, 1997

SCAMP Summer Research Fair Judge, 1997

Attended GPRA for SCAMP, Nov 1996

Attended AMP Project Director’s Meeting and AMP Research Conference, Tallahassee, FL, July 1996

Attended Reverse Site Visit for SCAMP, December 1995

Co-mentor (with Don Edwards) of Lametis Johnson through SCAMP, Summer 1992

**h. Community/service talks**

Spoke to Palmetto Garden Club, October 2013

Hike leader for Grace United Methodist Church, May 2010

Congaree National Park presentations, February 2009-February 2013, April 2009, September 2009

WOIC, Conservation Matters radio show, February 2009 (2 appearances)

WOIC, Conservation Matters, December 2008

WOIC, Conservation Matters, October 2008

Eastover Environmental Watch speaker, May 2008

Led Congaree NP tour for University Women’s Club, January 2008, November 2008

Sierra Club (Bachman Chapter) presentation, September 2007

Invited to lead walk for SC Native Plant Society Annual Meeting, April 2005

Led research walk at Congaree National Park’s NatureFest, April 2005

Spoke to Riverland Park Neighborhood Association February 2002, April 2002

Prepared talk for New Light Beulah Baptist Church, September 2001

Spoke to Green Diamond Task Force, June 2001

Spoke to SC DNR Board, March 2001

Spoke to SC Assoc. of Environmental Professionals, July 2001

Spoke to Gills Creek Watershed Association, May 2001

Spoke at FEMA hearings April 2001, July 2001

Spoke to Bluff Road homeowners August 2000, September 2000

Spoke to Sierra Club, April 2000

Spoke at FEMA hearings January 2000, April 2000

Presentation to *The State* newspaper editorial board, October 1999

Presentation at Richland County Council public hearing, November 1999

Presentation to SC DNR Board, November 1999

Presentation at League of Women Voter’s public hearing, October 1999

Presentation to Columbia Audubon Society, October 1999

Presented talk to Statistics Club on “Product Development at Minitab,” 1989

**i. Miscellaneous**

Judge for Junior Science and Humanities Symposium, 2018

Richland County Land Development Code Blue Ribbon Committee, 2018

REI grant for Fork Swamp Trail, 2017

NEEF grant for Title 1 school field trips, 2017-2018

Mark Catesby Tricentennial Planning Committee, 2017-2019

Henry David Thoreau Bicentennial Planning Committee, 2016-2017

LEAD 1 Certification, 2017

Flood Resilience Conference, Columbia SC, June 2016

Visiting Scholar, Hua Zhao, Xiamen University, 2013-2014

Richland County Community Conservation Grant, McCords Ferry Trail, June 2013

Richland County Hospitality Tax Grant, SC Welcome Center displays, June 2013

Attended Faculty Bullying Workshop, February 2013

Graduate Student Day Judge, April 2012

Palmetto Health Grant in Aid Review Committee, 2011-2018

Advisor to Erich Miarka, American Rivers Intern, 2011-2012

Organized focus group on African-Americans and Congaree NP, April 2011

Graduate Student Day Judge, April 2011

Mayoral Sustainability and Environment Transition Committee, 2010

Richland County Conservation Commission, appointed by Councilman Greg Pearce, 2009-2018

Richland County Conservation Committee, Vice Chair for Conservation, 2011-

Richland County Site Planning Roundtable, Phase II, 2009-2012

Shape Richland County Advisory Committee, 2017-2018

Sustainable Midlands Organizing Committee, 2009

Riverkeeper Committee, 2008-2009

Wateree River Blue Trail Guide committee, 2008-2009.

Richland County Conservation Commission Community Conservation Grant, 2007, 2008

Technical reports for ESWM committee and SCE&G consultant on Saluda Dam Relicensing, 2007-2008

Main draft of Congaree River Blue Trail Guide, 2007-2008

R&PS Mentor for David Hitchcock, Roumen Vesselinov, and John Kupfer (Geography), January 2006

AP Practice Exam Runner/Proctor, 2003-2005, 2009

Career Day at Meadowfield Elementary School, 2002, 2003

President, Friends of Congaree Swamp, 2003-2018

Board Member, Friends of Congaree Swamp, 1999-2018

Research Chair, Friends of Congaree Swamp, 1998-2002

Vice President, Friends of Congaree Swamp, 2002-2003

GAANN mentor, Wilma Sims, 2000-2001

Proposal Evaluation Committee, SC DOT, 1995

USC Showcase volunteer, 1992-1993

Experimental Design Short Course Instructor 1991 (4), 1992 (6), 1993 (3), 1994 (3), 1995 (1), 1996 (1), 1997 (1), 1998 (2), 1999 (1), 2000 (1)

Judge at Region II Science Fair 1990, 1992, 1994, 1999, 2000, 2001, 2002, 2008, 2009, 2011, 2012, 2014, 2015, 2016, 2017, 2018

Co-developer of short course in Experimental Design, 1990