Curriculum Vitae

Calvin L. Williams, Ph.D.

Business Address: Center of Excellence in Mathematics and Science Education College of Engineering and Sciences 0-323 Martin Hall Clemson University Clemson, SC 29634-0975 (864) 656-5241 Home Address: 215 Brooks Street Clemson, SC 29631 (864) 654-7187

Objectives

- To leverage my experiences as an educator, researcher, administrator and leader in education policy and academic administration to promote access to excellence in higher education for all students.
- To strengthen the educational pathways from K-12 to graduate school, as well as the academic and administrative capacities of the institution.
- To increase academic offerings and research opportunities in Education, Technology, Engineering and the Mathematical, Physical and Health Sciences for students of diverse backgrounds, skills, and training.

Summary

- Biostatistical Intern, Upjohn Pharmaceutical Company (1982-1986); Assistant Professor of Mathematical Sciences, Clemson University (1987-1993); Visiting Research Scholar, Stanford University (1993; 4 Months); Visiting Associate Professor and Postdoctoral Scholar, Carnegie Mellon and University of Pittsburgh (1993-1995); Associate Professor of Mathematical Sciences, Clemson University (1993-present); Program Director Division of Undergraduate Education, Directorate for Education and Human Development, The National Science Foundation (2002-2004); Director, Center of Excellence in Mathematics and Science Education(2004-present); Coordinator of Instruction, Department of Mathematical Sciences(2012-present).
- Innovative educator and research scientist, strong oral and written skills, with a strong and sincere commitment to excellence in education, research and curricula development.

Education:

College of Charleston, Department of Mathematics: Bachelors of Science, Mathematics (1981)

Honors:

Pi Mu Epsilon Honorary Mathematics Fraternity

Recipient of College of Charleston Alumni Award for Outstanding Achievement

Medical University of South Carolina, Department of Biometry:Doctor of Philosophy, Biometry (1987) **Honors:**

Upjohn Pharmaceutical Company-Biometry Career Development Award Mu Sigma Rho National Statistical Honor Fraternity

Professional Experience:

8/04 - present Coordinator of Instruction, Department of Mathematical Sciences Clemson University

As the Coordinator of Instruction, effectively plans course scheduling, assigning course instructors, including graduate student assignments. Additional duties include addressing any and all issues concerning course instruction, student grading concerns and parental meetings. Preparation of semester ending and year ending reports. Also as the coordinator of instruction, handled budgets with detailed understanding of revenue and expenditures. Addressed the hiring of temporary faculty and personnel matters.

8/04 - present Director, Center of Excellence in Mathematics and Science Education(CEMSE) Clemson University

• As the Director of the Center of Excellence in Mathematics and Science Education, our goals are to develop programs for Pre K-16 teachers as well as to develop programs for Pre K-12 students. These goals include the research and study of policy issues that affect Pre K-16 teachers as well as their students. Currently there are five mathematics education projects being coordinated by the Center under the supervision of the Director. Also as the Director handled budgets withe detailed understanding of revenue and expenditures.

8/93 - Present Associate Professor (tenured), Department of Mathematical Sciences Clemson University

- Effectively taught courses in introductory, intermediate, graduate level Statistics, and introductory Calculus.
- Successfully conducted a scientific research program.
- Served on several Departmental and University committees, chairman searches, curricula and policy issues committees.
- Effectively advised undergraduate students in course selection and development issues.
- Served as a Committee member on Masters and Doctoral Committees both in Mathematical Sciences and disciplines external to Mathematical Sciences.
- Achieved recognition of research and outreach endeavors through procurement of external grants and fellowships.

8/02 - 08/04 Program Director, Division of Undergraduate Education (DUE) National Science Foundation (on detail from Clemson University)

- One of three Program Officers in Mathematical Sciences on all Division Mathematics related projects; established and fostered national meetings for principal investigators and Faculty with significant preservice STEM educators; co-managed a \$3 million dollar budget.
- Co-Lead in the Computer Science, Engineering, and Mathematics Scholarship program(CSEMS, now SSTEM); co-managed a \$25 million dollar budget.
- Established and fostered national meetings for principal investigators with scholarship programs.
- Lead Program Officer in the Course Curriculum and Laboratory Improvement-Assessment of Student Achievement Program (CCLI-ASA); managed a \$3 million dollar budget.
- Co-Lead in Interdisciplinary Training in Undergraduate Biology and Mathematics (UBM); co-managed a \$3.2 million dollar budget.
- Site Visit Team member for National Science Foundation support of the Mathematics Science Partnerships. Offering support as a content specialist on site visits. Honored with the Director's Award for Collaborative Integration.

In all of the preceding programs,

- Advised on policy issues, implementation of proposal review and evaluation of programs.
- Conducted scientific and technical analyses of proposals received in the programs.
- Conducted programmatic review, determined budgets and funds availability.
- Conducted final reviews of proposals and evaluations and makes recommendations for awards and declinations.
- Evaluated projects and activities that are proposed or funded by conducting site visits and reviewing interim and final reports.
- Negotiated interagency agreements with other federal agencies for transfer of funds to assist in the support of research and education.
- 6/94 5/95 Visiting Associate Professor, Department of Statistics Carnegie Mellon University
- 8/93 5/94 Postdoctoral Research Professor, Department of Statistics Psychiatric Statistics Training Program Carnegie Mellon University
 - Conducted research and statistical analyses on psychological and physical effects of depression.
 - Contributed to the knowledge base of current treatment regimes.
- 6/93 8/93 Visiting Associate Research Scholar, Department of Statistics Stanford University
 - Conducted research and statistical analyses within an on-going research program.
- 7/87 8/93 Assistant Professor, Department of Mathematical Sciences Clemson University
 - Effectively taught courses in introductory, intermediate, graduate level Statistics, and introductory Calculus.
 - Successfully conducted a scientific research program.
 - Served on several Departmental and University committees, chairman searches, curricula and policy issues committees.
 - Effectively advised undergraduate students in course selection and development issues.
 - Served as a Committee member on Masters and Doctoral Committees both in Mathematical Sciences and disciplines external to Mathematical Sciences.
 - Achieved recognition of research and outreach endeavors through procurement of external grants and fellowships.
- 9/82 9/85 Biostatistics Intern, Biostatistics Unit 7293 Upjohn Pharmaceutical Company
 - Developed protocols and conducted statistical analyses for drug protocols.
 - Created reports and analyses used for the FDA-related drug approval pipeline.

Dissertation

• "An Expert System for the Conceptualization of Experimental Designs" Doctoral dissertation, Medical University of South Carolina, 1987.

Honors and Special Invitations

Institutes of Higher Learning

- Postdoctoral Research Fellowship, Department of Statistics, 8/93-5/94
- Psychiatric Statistics Training Program, Carnegie Mellon University
- Visiting Associate Research Scholar, Department of Statistics, Stanford University, 6/93-8/93

Awards

- Director's Award for Collaborative Integration: Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences, National Sciences Foundation, July 20, 2004.
- Carnegie Mellon University, Dept. of Statistics Postdoctoral Fellowship, 1993-1994.
- Upjohn Biometry Career Development Award Upjohn Pharmaceutical Company, 1981-87.
- Alumni Award, Mu Sigma Rho, 1986.
- University Alumni Award, College of Charleston, 1981.

National Science Foundation Review Panels

- EHR-ESIE MSP Critical Site Reviewer
- EHR-ESIE Teacher Enhancement Panels
- EHR-ESIE Centers for Learning and Teaching Education Program Panel
- EHR-ESIE Presidential Awards for Excellence in Science and Mathematics National Selection Committee
- EHR-DGE Graduate Teaching Fellows in K-12 Education Program Panels
- EHR-DGE Committee of Visitors GK-12
- EHR-REC Research On Learning And Education (ROLE) Program Panels
- EHR-DRL DRK-12 Program Panels
- EHR-DRL Fostering Interdisciplinary Research on Education (FIRE) Program Panels
- EHR-DRL Promoting Research and Innovation in Methodologies for Evaluation (PRIME) Program Panels
- EHR-DRL Research and Evaluation on Education in Science and Engineering (REESE) Program Panels
- EHR-DUE CCLI (Type I-III) Program Panels
- EHR-DUE TUESTYC Mentorship Project
- EHR-DUE STEP Program Panels
- EHR CAREER Proposal Reviewer
- EHR EPSCor Program Panels

Selected Consulting Affiliations:

College Board

College Board-Educational Testing Service

• Advanced Placement Question Leader/Table Leader/Reader- Statistics 1997-

College Board-Educational Testing Service

• Siemens Science, Technology, Engineering and Mathematics Competition-Mathematics (Technical Judge 2004-2008, Lead Judge 2009-)

Institutes of Higher Learning

- Medical University of South Carolina Department of Biometry
- Greenville Hospital System Department of Medical Education
- Upjohn Pharmaceutical Company, Biostatistics Unit 7293
- Clemson University Counseling Center
- Clemson University College of Education, Special Projects
- Clemson University Department of Sociology
- Clemson University Department of Nursing

Professional Memberships and Activities

- American Statistical Association, ASA (1984-2006)
- Institute of Mathematical Statistics, IMS (1987-)
- Eastern North American Region of the International Biometric Society, ENAR (1987-)
- International Biometrics Society, IBS (1987-)
- National Council of Teachers of Mathematics, NCTM (1990-)
- Advanced Placement Statistics Development Committee (2003-)
- Eastern North American Region of the International Biometric Society Regional Advisory Board (1998-2000)
 - Representative to the Joint Statistical Meetings 2003
- ASA-NCTM Quantitative Literacy Team Statistician (1993-1995)
- American Statistical Association
 - Committee on Minorities In Statistics (1991-1993)
 - Committee on Membership (1995-1997, 1998-2001)
- American Statistical Association South Carolina Chapter

President (1993-1994)

Vice President (1992-1993)

Secretary-Treasurer (1991-1992)

Refereed publications

- [1] Williams, Calvin L. (1991). "A Clinical Application of Expert System Methodology." *Journal of Applied Statistics* **18**, 185-201.
- [2] Williams, Calvin L. (1991). "Design Expert: An Expert System Application to Clinical Investigations." Expert Systems with Applications 2, 361-371.
- [3] Williams, Calvin L. (1993). "Relative Difference in Diversity Between Populations." Annals of The Institute of Statistical Mathematics 45, 2, 383-399 (with K. Alam).
- [4] Williams, Calvin L. (1993). "Success in Baccalaureate Nursing Programs: A Matter of Accommodation?", Journal of Nursing Education 32, 64-70 (with R. B. Hughes, J. Haislett and G. Brown)
- [5] Williams, Calvin L. (1993). "Multivariate Goodness-of-Fit Tests Based on Statistically Equivalent Blocks." Communications in Statistics-Theory and Methods 22, 6, 1515-1533 (with K. Alam and R. Abernathy).
- [6] Williams, Calvin L. (1995). "A Multivariate Goodness-of-Fit Test For Stochastically Ordered Distributions." Biometrical Journal 37, 8, 945-956, (with K. Alam).
- [7] Williams, Calvin L.(2001). "An Adaptive Procedure for Goodness of fit based on Sample Spacings.", Communications in Statistics Computation and Simulation 30, 2, 229-246, (with K. Alam).
- [8] Williams, Calvin L.(2001). "Smooth Estimation of the Reliability Function.", *Lifetime Data Analysis*, 7, 413-33, (with K. B. Kulasekera, M. Coffin and A. Manatunga).
- [9] Williams, Calvin L.(2003). "Hyperprior Imprecision in Hierarchical Bayesian Modeling of Clustered Bernoulli Observations.", *InterStat*(with Ann-Janette Locke).
- [10] Williams, Calvin L.(2003). "Hybrid Methods for Analysis of Dose-Response Data.", Proceeding of the Joint Statistical Meetings-Biopharmaceutical Section.
- [11] Williams, Calvin L.(2007). "OrganicPad: A Tablet PC Based Interactivity Tool for Organic Chemistry" Proceeding of PLT 2007 1st International Workshop on Pen-based Learning Technologies: "Enabling advanced graphical, multimodal, and mobile learning interactions" 24-25 May 2007 Catania, Italy(with Roy Pargas and Melanie Cooper)
- [12] Williams, Calvin L.(2009). "Application of classical versus bayesian statistical control charts to on-line radiological monitoring." Journal of Radioanalytical and Nuclear Chemistry (2009) DOI 10.1007/s10967-009-0255-8. (with DeVol, Timothy A., and, Gohres, Amy A.)

Book reviews

- [1] Everitt, Brian S. and Graham Dunn(2001). "Applied Multivariate Data Analysis", *The American Statistician*, **56**, No. 3.
- [2] Spector, Phil (1994). "An Introduction to S and S-Plus", Journal of Quality Technology, 26, No. 4, pp. 322-324.
- [3] Everitt, Brian S. (1994). "A Handbook of Statistical Analyses using S-Plus", *Journal of Quality Technology*, **27**, No. 1, pp. 89-90.
- [4] Venables, W.H and B. D. Ripley (1994). "Modern Applied Statistics with S-Plus", *Journal of Quality Technology*, **29**,No. 1, pp. 116.
- [5] Gibbons, J. D and S. Chakraborti (1992). "Nonparametric Statistical Inference", *Journal Applied Statistics*, **22**, No. 1, pp. 193-194.

In Manuscript

- [1] Williams, Calvin L. "Selection of Most (Least) Diverse Multinomial Population", (with K. Alam) in manuscript.
- [2] Williams, Calvin L. "Relation Between Levels of Radiation and Frequencies of Cytogenetic Aberrations", (with K. Alam), in manuscript
- [3] Williams, Calvin L. "Mixed, Censored and trucated Distributions and their convolutions", in manuscript.

Journal Referee

- Journal of Quality Technology
- Journal Applied Statistics

Papers Presented:

Invited Presentations:

- "Enhancements to the Modeling of Longitudinal Data with missing or Incomplete information"
- "Comparison of Two Hazard Functions: Crossing Point Estimation", Department of Statistics, Stanford University, July 28, 1993.
- "Multivariate Goodness-of Fit Tests based on Statistically Equivalent Blocks", Department of Statistics, Carnegie Mellon University, October 28, 1992.
- "An Expert System for the Design of Experiments." American Statistical Association, Winter Conference 1987.
- "An Overview of Artificial Intelligence In Biomedical Sciences." *Department of Biometry*, Medical University of South Carolina, March 1985.
- "An Expert System for the Design of Experiments" *Department of Biometry*, Medical University of South Carolina, February 1986.

Contributed Presentations:

- "Hybrid Methods for Analysis of Dose-Response Data." Joint Meetings of the American Statistical Association, IMS, Biometric Society(ENAR), August 3-7, 2003.
- "NSF/DUE Funding Opportunities in the Directorate for Education and Human Resources", Joint Mathematics Meeting, Baltimore Maryland, January 18, 2003
- "Emerging Areas in Biostatistics, Biomathematics, and Bioinformatics: Bridging Biology, Mathematics, and Statistics", Joint Mathematics Meeting, Baltimore Maryland, January 18, 2003
- "Analysis of IVF Data Using Imprecise Prior Probabilities", The Biometric Society Joint Spring Meetings with IMS and ASA March 29-April 1, 1998.
- "Random Effects Analysis of A Cases Control Study of Children Exposed to Cocaine in Utero", The Biometric Society Joint Spring Meetings with IMS and ASA March 29-April 1, 1998.
- "Relation Between Levels of Radiation and Frequencies of Cytogenetic Aberrations", The Biometric Society Joint Spring Meetings with IMS and ASA March 29-April 1, 1997.
- Spatial and Temporal Aspects of Biomass Variability in Water Chemistry on the Oropouche Bank, Trinidad", *The XVIIIth International Biometric Conference*, July 1-5, 1996. Amsterdam, The Netherlands.

- "An Adaptive Procedure for Goodness of fit based on Sample Spacings." Joint Meetings of the American Statistical Association, IMS, Biometric Society(ENAR), August 8-12, 1993.
- "Statistical Applications in Biomedicine." Mu Alpha Theta ($MA\Theta$), College of Charleston, February 26, 1993.
- "Dissimilarity in Diversity Between Populations." The Biometric Society Joint Spring Meetings with IMS and ASA March 22-25, 1992.
- "Selection of Most(Least) Diverse Population." Joint Meetings of American Statistical Association, IMS, Biometric Society (ENAR), August 8-12, 1992.
- "Analysis of Dissimilarity in Diversity." *The XVIth International Biometric Conference* Hamilton, New Zealand, December 7-11, 1992.

Sponsored Research:

Research:

- SC Commission on Higher Education: "ITQ: Meeting the Need for Highly Qualified Mathematics Teachers: Integrated Mathematics and Sciences Technology Institute", **Principal Investigator: Calvin L. Williams, Ph.D.**; **Amount funded:** \$103,000.00 : **Role:** Co-Investigator Nicole Bannister-Sinwell; Responsible for 25% of funded research. (Project year: 2014-2014)
- SC Commission on Higher Education: "ITQ: Improving Middle Grades Teacher Quality through the Clemson Mathematics Institute and Video Club", **Principal Investigator: Calvin L. Williams**, **Ph.D.**; **Amount funded:** \$214,000.00 : **Role:** Co-InvestigatorNicole Bannister-Sinwell; Responsible for 50% of funded research.(Project year: 7/1/2012-6/30/2014)
- SC Commission on Higher Education: "iPad Technology in Middle Grades Mathematics" Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$63,412.48: Role: Co-Investigator Megan Che, Ph.D.; Responsible for 100% of funded research. (Project year: 2012-2013)
- SC Commission on Higher Education: "iPad Technology in Middle Grades Mathematics" Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$63,412.48: Role: Co-Investigator Megan Che, Ph.D.; Responsible for 100% of funded research. (Project year: 2012-2013)
- SC Commission on Higher Education: "ITQ: Meeting the Need for Highly Qualified Mathematics Teachers,", co-PI \$60,000.00 (\$12,000) (Project year: 2012-2013).
- SC Commission on Higher Education: "ITQ: Meeting the Need for Highly Qualified Mathematics Teachers,", co-PI \$95,449.00 (\$12,000) (Project year: 2010-2012).
- <u>Hewlett-Packard:</u> "Transitioning through Technology: Using Digital Learning Environments in Calculus as a Collaborative Model to Advance STEM Students through Four-year Institutions", Co-PI \$280,000 in technology (May, 2009)
- National Science Foundation: "Mathematics Partnering with Computer Science to Improve Calculus Instruction and Learning" **Principal Investigator: Calvin L. Williams, Ph.D.**; **Amount funded:** \$400,000.00 over a 3-year Period: (08/01/2008-07/31/2011); **Role:**Investigator responsible for 33% of funded research(with Roy Pargas and Marilyn Reba).
- National Science Foundation: "OrganicPad: A Tablet PC-Based Interactivity Tool for Organic Chemistry" Principal Investigator: Melanie Cooper, Ph.D.; Amount funded: \$311,740.00 over a 3-year Period:(01/01/2008-12/31/2011); Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for 33% of funded research.(with Roy Pargas)
- National Science Foundation: "CU-STEP: Enhancing the Undergraduate Experience through Research and Curriculum Development"; Principal Investigator: Barbara Speziale, Ph.D.; Amount funded: \$1,138,830.00 over a 4-year Period: (09/01/2006-12/31/2009); Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for 18% of funded research.
- SC Commission on Higher Education: "South Carolina Professional Organization for Middle Level Educators Presentation" Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$614.00: Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for 100% of funded research.
- SC Commission on Higher Education: "Building a Mathematical Learning Community" Principal Investigator: Donna Diaz, Ph.D.; Amount funded: \$125,000.00 over a 4-year Period: (01/01/2005-12/08/2009); Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for 10% of funded research. (with Bill Moss)

Michelin North America, Inc: "Partial Least Squares and Advanced Statistical Software Applications Using SAS AF/Frame Technology" Principal Investigator: Calvin L. Williams, Ph.D.; Amount Funded: \$ 25,000.00:

<u>National Science Foundation:</u> "Numerical Assessments of Goodness-of-Fit Tests Based on Statistically Equivalent Blocks"; **Principal Investigator:** Calvin L. Williams, Ph.D.; Amount funded: \$119,231.58 over a 3-year Period;

Office of Naval Research:: "Affordability Modeling and Decision Analysis: Principal Investigator: James A Reneke, Ph.D.; Amount Funded: \$ 750,000.00.; Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for one-tenth of funded research. Only for one year.

National Science Foundation:: "Mathematical Sciences: Scientific Computing Research Environment: Principal Investigator: Peter Kiessler, Ph.D.; Amount Funded: \$ 68,698.00: Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible for one-fifth of funded research.

Greenville Hospital/Clemson University Cooperative Alliance Research Grant: "Greenville Healthy Children Study: Growth and Development" Principal Investigator: Martin Crane, Ph.D.,; Amount Funded: \$5,000: Role: Co-Investigator Calvin L. Williams, Ph.D.; Co-Investigator responsible for pro bono statistical research support.

Clemson University Research Grant: "Representing Characteristics of Experimental Designs via Stereotypical Frames for Expert System Development" Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$1,800.00.

Consulting Grants:

National Science Foundation: "Implementing the STANDARDS Using Calculators and Computers; in the College Preparatory Sequence" Principal Investigator: John Luedeman,; Center of Excellence in Mathematics and Science Education; Amount funded: \$150,000.00; Role: Co-Investigator Calvin L. Williams, Ph.D.; Responsible statistical support for calculator-based standards.

National Science Foundation: "Statistics Leaders in the Palmetto State: Principal Investigator: John Luedeman,; Center of Excellence in Mathematics and Science Education; Amount funded: \$605,000.00; Role: Co-Investigator Calvin L. Williams, Ph.D.; Co-Investigator responsible statistical support.

Clemson University Defense Logistic Application; Clemson Apparel Research: Principal Investigator: Calvin L. Williams, Ph.D.;

Service:

The College Board: "Advanced Placement Statistics Institute" Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$18,000.00.

<u>Texas Instruments:</u> "Teachers Teaching with Technology Mini-Grant:AdvSTAT" Summer 1997 Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$4,000.00.

<u>Texas Instruments:</u> "Teachers Teaching with Technology Mini-Grant:STATS" Summer 1998 Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$4,000.00.

<u>Texas Instruments:</u> "Teachers Teaching with Technology Mini-Grant: AdvSTAT" Summer 1999: Principal Investigator: Calvin L. Williams, Ph.D.; Amount funded: \$5,000.00.

<u>Texas Instruments:</u> "Teachers Teaching with Technology Mini-Grant:MODEL" Summer 1999: **Principal Investigator:** Calvin L. Williams, Ph.D.; **Amount funded:** \$5,000.00.

Other:

<u>National Science Foundation:</u> Intergovernmental Personnel Act Assignment; **Principal Investigator:** Calvin L. Williams, Ph.D.; **Amount funded:** \$130,000.00:

<u>National Science Foundation:</u> Travel Grant to International Biometrics Conference, Hamilton, New Zealand,; Principal Investigator: Calvin L. Williams, Ph.D.,; Amount funded: \$1,500.00.

Outreach Activities

Teacher Enhancement Workshops

- Quantitative Literacy Workshop, Summer 1992
- Implementing the STANDARDS Using Calculators and Computers in the College Preparatory Sequence, Summer 1994
- Statistics Leaders in The Palmetto State (SLIPS), Summer 1995
- Advanced Placement Statistics Institute, Summer 1996
- Teachers Teaching with Technology: AdvSTAT, Summer 1997
- Advanced Statistics Academy Greenville County Schools, Summer 2001

Graduate Student Advising:

Doctoral Graduates:

• Ann-Janette Dubose Locke, "Prior Imprecision in Bayesian Hierarchical Modeling".(1998)

Masters Graduates:

- Morgan, Dominique (MS) "An Investigation of Record Times and a Surprise Index for Record Values," (2009).
- Watson, Charity (MS) "The Convolution of Mixed Distributions," (2009). item Shailaja Chilappagari, "Recent Advances in Generalized Linear Models: Application of SAS Macro GLIMMIX," (1993).
- Joni L. Carson, "Growth Analysis of Effect of Maternal Cocaine Use on Child Growth," (1996).
- Ann-Janette Dubose Locke, "Predicting the Likelihood of Clinical Pregnancy with In Vitro Fertilization," (1996).
- Deborah S. Snyder, "Modeling Health Maintenance Factors: A study in Breast Cancer Prevention," (1997).
- Marla D. Hutson, "Assessing Child Growth: Nonlinear Modeling Issues," (1997).
- Ramzi AbuJamra, "A Study of Deep-Vein Thrombosis in Trauma Patients and Some of its influences", (1997).
- Abdul-B Shaibu, "Some Applications of the Bootstrap method", (2003).

Courses Taught

Undergraduate Courses:

- MthSc 106 Calculus I
- MthSc 301 Statistical Methods I
- MthSc 302 Statistical Methods in Engineering and Sciences
- MthSc 403 Mathematical Statistics
- MthSc 405 Statistical Methods II
- MthSc 406 Sampling Methods
- Statistics 225 Probability and Statistics I (Carnegie Mellon)
- Statistics 226 Probability and Statistics II (Carnegie Mellon)

Graduate Courses:

- MthSc 761 Probability and Statistics for Teachers
- MthSc 801 Probability
- MthSc 801 Linear Models I
- MthSc 802 Linear Models II
- MthSc 804 Statistical Inference
- MthSc 805 Data Analysis
- MthSc 807 Multivariate Methods
- MthSc 809 Time Series
- MthSc 884 Statistics for Experimenters
- MthSc 885 Advanced Data Analysis
- MthSc 981 Special Topics: Analysis of Longitudinal and Repeated Measures Data
- MthSc 981 Special Topics: Analysis of Categorical Data
- MthSc 981 Special Topics: Bayesian Methods
- MthSc 981 Special Topics: Modern Statistical Computation
- MthSc 983 Special Topics: The Logic of Artificial Intelligence and Expert Databases

Departmental and University Service:

- University: Member, President's Search Committee for the Vice President for Research (2009-2010).
- University: Member, President's Distributed Systems Task Force Committee (2008-2009).
- University: Chair, Faculty Working Committee: President's Commission on the Status of Black Faculty and Staff (1998-1999).
- University: Member, Clemson University Commission on the Status of Black Faculty and Staff (1995-2002).
- University: Member, University Committee on the Needs of the Non-traditional Student (1991-1992)
- **Department:** Chair, Department Head Search (1998).
- Department: Pi Mu Epsilon Honorary Mathematics Fraternity, Advisor (1990-1993)
- University: Kappa Alpha Psi Fraternity Incorporated, Advisor
- University: Clemson Career Workshop, Mathematics Consultant (1988-1992)
- University: ProAct Advisor