

Nancy L. Glenn Griesinger, Ph. D.  
tenured Associate Professor  
nglenn@alumni.rice.edu

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## EDUCATION:

- Rice University** • Houston, Texas May 2002  
Doctor of Philosophy in Statistics, Department of Statistics,  
College of Engineering  
Dissertation: “Robust Empirical Likelihood”  
Advisor: Professor David W. Scott  
**Honors:** Graduated at top of class (#1)  
Awarded full academic fellowship:  
Alliance for Graduate Education and the Professoriate
- University of South Carolina** • Columbia, S. C. 1994 – 1995  
Bachelor of Science in Statistics, Department of Statistics.  
**Honors:** Inducted into Mu Sigma Rho National Statistics Honor Society
- University of South Carolina** • Columbia, S. C. 1983 – 1987  
Bachelor of Science in Mathematics, Department of Mathematics.  
**Honors:** Awarded full academic scholarships:  
James F. Byrnes Scholar, Air Force ROTC Scholar  
Inducted into Pi Mu Epsilon National Mathematics Honor Society

## POSTDOCTORAL POSITION:

- Rice University** • Houston, Texas May 2002 – August 2002  
Post Doctoral position funded by the National Security Agency; worked with Professor Dennis Cox of  
the Department of Statistics, Rice University.

## INTERNSHIP:

- NASA Johnson Space Center** • Houston, Texas June 2013 – August 2013  
Faculty Research Fellow, Biomedical Research & Environmental Sciences Division

## RESEARCH PAPERS:

- “A New Measure of Educational Disparity: The Dispersion Statistic” • N. Glenn Griesinger,  
Andrea J. Shelton, Emiel W. Owens, (2017)  
American Review of Mathematics and Statistics, in press.
- “The design of Resilient and Adaptive Communication Networks with Intrusion Detection, using Statistics”  
• Demetrios Kazakos and N. Glenn Griesinger (2017), Chapter in Published Refereed Proceedings  
of INASE Conference
- “A Comparison of Statistical Analysis Methodologies for Longitudinal Data Affected by Non-Normal W”  
• N. Glenn Griesinger, Demetrios Kazakos (2017), WSEAS Transactions on Advances in Engineering  
Education
- “A Statistical Measure of Education Disparities Due to Zero Tolerance Policies” • N. Glenn Griesinger,  
Andrea J. Shelton, Emiel W. Owens, Demetrios Kazakos (2016), WSEAS Transactions on Advances in  
Engineering Education, **13**:64–68.
- “A Statistical Measure of Educational Disparities Due to Zero Tolerance Policies” • N. Glenn  
Griesinger, Andrea J. Shelton, Emiel W. Owens, Demetrios Kazakos (2016) 15<sup>th</sup> International  
Conference on Telecommunications and Informatics, Proceedings, Ischia, Italy.
- “Kolmogorov–Smirnov Goodness-of-Fit Test for Spatial Data” • N. Glenn Griesinger and Jose

Guardiola (2014)

*JSM Proceedings*, Statistical Computing Section, Alexandria, VA: American Statistical Association, 1121 – 1131.

**“Modeling Longitudinal Data Containing Non–Normal Within Subject Errors” • Nancy L. Glenn and Al Feiveson (2013)** NASA Johnson Space Center white paper

**“Nonparametric spirometry reference values for Hispanic Americans” • Nancy L. Glenn and Vanessa M. Brown (2011),** *Journal of Immigrant and Minority Health* **13(1)**:69–73.

**“Weighted empirical likelihood estimates and their robustness properties” • Nancy L. Glenn and Yichuan Zhao (2007)** *Computational Statistics and Data Analysis* **51**:5130–5141.

**“Empirical likelihood estimation from incomplete data” • Nancy Glenn(2006)** *Journal of Probability and Statistical Science* **4**:1–8.

**“Contrasting patterns of transcript abundance in tumor tissue and cancer cell lines” • Austin Hughes and Nancy Glenn(2006)** *Applied Bioinformatics* **5(4)**:201–210.

**“The future of data analysis in evolutionary genomics” • Austin Hughes, Robert Freidman and Nancy Glenn(2006)** *Current Genomics* **7**:227–234.

**“Role of microRNAs in regulation of lentiviral latency and persistence” • Omar Bagasra, Lucia Pirisi–Creek, Kim E. Creek, Alexander U. Bagasra, Nancy Glenn and Jeremy S. Lee (2006)** *Applied Immunohistochemistry & Molecular Morphology* **14(3)**:276–90.

**“Recruitment to adult habitats following marine planktonic development in the fiddler crab” • Renae Brodie, Matthew Behum, Emily Monroe, Nancy Glenn and Joseph Staton (2005)** *Marine Biology* **147**:105–111.

## RESEARCH GRANTS AWARDED:

- TSU Office of Research • \$4,000** Nancy L. Glenn, PI  
“Some Algorithmic Aspects of Linear Quantile Mixed Models and Other Longitudinal Data Analysis Methods” November 2013.
- NASA • \$5,000,000** Dr. Olufisayo Jejelowo (PI), Nancy L. Glenn (co-PI), et al.,  
“Center for Bionanotechnology and Environmental Research” 2008–2013.
- National Science Foundation • \$1,500** Nancy L. Glenn, PI  
“Effects of Spatial Correlation on Empirical Likelihood” June 2011.
- College of Science and Technology Faculty Development Fund • \$300** Nancy L. Glenn, PI  
“Statistical Physics Super Computer Conference” December 2010.
- Texas Southern University Faculty Development Fund • \$2,000** Nancy L. Glenn, PI  
“Effects of Spatial Correlation on Empirical Likelihood” June 2010.
- Texas Southern University Research Enhancement Program • \$15,000** Nancy L. Glenn, PI  
“Classification and Regression Trees: Future Use in Microarray and Serial Analysis of Gene Expression Data” 2007 – 2008.
- Graduate Research Assistantship Grant • \$12,000** Nancy L. Glenn, PI  
USC Graduate School 2004 – 2005.
- South Carolina EPSCoR • \$9964** Austin Hughes and Nancy L. Glenn, co-PI  
“Interdisciplinary Team for Study of Evolution of Flight in Birds” March 2005 – December 2005.

## INTERNATIONAL RESEARCH PRESENTATIONS:

**INASE Conference • Crete, Greece** July 2017

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“A Comparison of Statistical Analysis Methodologies for Longitudinal Data Affected by Non-Normal Within Subject Errors”

**INASE Conference** • Crete, Greece July 2017

“The design of Resilient and Adaptive Communication Networks with Intrusion Detection, using Statistical and Artificial Intelligence Methods”

**WSEAS Conference** • Ischia, Italy June 2016

“A Statistical Measure of Educational Disparities Due to Zero Tolerance Policies”

**Joint Statistical Meetings** • Vancouver, BC August 2010

“Effects of Spatial Dependence on Empirical Likelihood”

### **DOMESTIC RESEARCH PRESENTATIONS:**

**Texas Southern University Research Week** • Houston, TX April 2016

“A New Measure of Educational Disparity: The Disproportion Statistic”.

**NASA Johnson Space Center** • Houston, TX August 2013

“Modeling Longitudinal Data Containing Non-Normal Within Subject Errors”.

**Texas Southern University** • Houston, TX May 2013

“Kolmogorov–Smirnov Test for Spatial Data”

**Texas Southern University Research Week** • Houston, TX April 2011

“A Nonparametric Statistical Methodology for Establishing Normal Pulmonary Ranges for Americans of Mexican Descent”

**World Statistics Day** • Rice University October 2010

“Spatial Correlation and Empirical Likelihood”

**Texas Southern University Research Week** • Houston, Texas April 2009

“The Nonparametric Expectation–Maximization Algorithm for Insufficient Information”.

**Texas Academy of Sciences Conference** • Junction, Texas March 2009

“Empirical Likelihood Spirometry Reference Values”.

**Joint Statistical Meetings** • Minneapolis, Minnesota August 2005

“Weighted Empirical Likelihood Estimates and Their Robustness Properties”.

**Texas A&M University** • Nonparametric Statistics Conference January 2005

“Empirical Likelihood Estimates and Their Robustness Properties”.

**Rice University** • Lehmann Symposium May 2004

“Weighted Bayesian Empirical Likelihood”.

### **INVITED RESEARCH PRESENTATIONS:**

**StatFest** • Rice University October 2013

“Quantile Regression Analysis of Biomedical Response to Human Spaceflight”

**Joint Statistical Meetings** • Denver, Colorado August 2008

“Empirical Likelihood Method for Determining Spirometry Reference Values for Hispanic Americans”

**Bioinformatics Research Symposium** • Clemson University January 2007

“GEM for Linear Models with Missing Data”

**Institute for Mathematics and its Applications** • Minneapolis, MN October 2006

“EL Algorithm for Linear Models with Missing Data”

**American Institute of Mathematics** • Palo Alto, CA August 2005

“A New Nonparametric Approach to Testing Internal Branches in Phylogenetic Trees”

**International Chinese Statistical Association** • Washington, DC June 2005

“Nonparametric Analysis of Phylogenetic Tree Data”

**North Carolina State University** • Department of Statistics April 23, 2004

“Weighted Empirical Likelihood”

**Georgia State University** • Department of Mathematics & Statistics April 2, 2004

“Weighted Bayesian Empirical Likelihood Point Estimation”

**South Carolina Bioinformatics Symposium** • Isle of Palms, SC March 2004

“Empirical Likelihood Theory and Phylogenetic Trees”	
<b>University of South Carolina</b> • Department of Biostatistics	February 2004
“Weighted Bayesian Empirical Likelihood”	
<b>University of South Carolina</b> • Department of Statistics	November 2003
“Robust Bayesian Empirical Likelihood”	
<b>USC Bioinformatics Symposium</b> • Columbia, SC	November 2003
“Empirical Likelihood and Phylogenetics”	
<b>Richard Tapia Computing Conference</b> • Atlanta, Georgia	October 2003
“A Statistical Application of Karush–Kuhn–Tucker: Robust Bayesian Empirical Likelihood”	
<b>Spelman College</b> • Mathematics Department	October 2003
“Using Karush–Kuhn–Tucker to Maximize Empirical Likelihood”	
<b>University of Alabama, Birmingham</b> • Biostatistics Department	July 2003
“Empirical Likelihood of Phylogenetic Trees”	
<b>Conf. African–American Researchers Mathematical Sciences</b> • Purdue University	June 2003
“A Statistical Application of the Karush–Kuhn–Tucker Theorem”	
<b>University of South Carolina</b> • Department of Computer Science and Engineering	April 2003
“Statistical Learning Techniques for Intelligent Memory Management”	
<b>University of Georgia</b> • Athens, Georgia	March 2003
“Robust Empirical Likelihood”	
<b>Joint Mathematics Meetings</b> • Baltimore, Maryland	January 2003
“Robust Empirical Likelihood”	
<b>Conf. of Texas Statisticians</b> • Houston, Texas	April 2002
“Robust Empirical Likelihood”	
<b>SIAM 2001 Annual Meeting</b> • San Diego, California	July 2001
“Robust Empirical Likelihood”	
<b>Conf. African–American Researcher Mathematical Sciences 7</b> • Duke University	June 2001
“Robust Empirical Likelihood”	
<b>National Science Foundation</b> • Washington, D.C.	December 1995
“Probability Concepts In Secondary School”	

## RESEARCH CONFERENCE ATTENDANCE:

<b>Rice University</b> • Houston, TX Eubank Conference: Modeling Real World Markets – A Focus on Energy	April 2016
<b>Rice University</b> • Houston, TX Eubank Conference: Modeling Real World Markets – A Focus on Energy	March 2015
<b>Rice University</b> • Houston, TX StatFest	October 2013
<b>Texas Southern University</b> • Houston, TX Statistical Physics SuperComputer Conference II	May 2013
<b>Rice University</b> • Houston, TX Conference of Texas Statisticians	March 2013
<b>Texas Southern University</b> • Houston, TX Statistical Physics Super Computer Conference	December 2010
<b>Rice University</b> • Houston, TX CAARMS15	June 2009
<b>Rice University</b> • Houston, TX Tapia Conference	May 2009
<b>Rice University</b> • Houston, TX Eubank Conference: Modeling Real World Markets	March 2009
<b>Lamar University</b> • Beaumont, TX Probability, Statistics and Related Areas	February 2009

## INVITED RESEARCH WORKSHOP ATTENDANCE:

<b>American Institute of Mathematics</b> • Palo Alto, CA Phylogenetic Tree Analysis Workshop	August 2005
<b>Joint Statistical Meetings</b> • San Francisco, CA Pathways Workshop	August 2003
<b>American Institute of Mathematics</b> • Palo Alto, CA Geometric Models of Biological Phenomena Workshop	May 31, 2003 – June 5, 2003

## RESEARCH WORKSHOP ATTENDANCE:

<b>Promotion and Tenure Workshop</b> • Teaching & Learning Excellence Center TSU	April 2013
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## GRANT WORKSHOP ATTENDANCE:

<b>TSU</b> • Texas Southern University High Performance Computing Workshop	August 2013
<b>TSU Office of Research</b> • Texas Southern University NSF / NIH Grant Proposal Writing Workshop	March 2013
<b>USC Sponsored Research Office</b> • University of South Carolina CAREER Grant Proposal Writing Workshop	April 2007
<b>USC Sponsored Research Office</b> • University of South Carolina NIH Proposal Writing Workshop	April 2007
<b>USC Sponsored Research Office</b> • University of South Carolina NSF Proposal Writing Workshop	March 2007
<b>USC Sponsored Research Office</b> • University of South Carolina General Proposal Writing Workshop	September 2006
<b>USC Sponsored Research Office</b> • University of South Carolina Grants.gov Overview	April 2006

## TEACHING WORKSHOP ATTENDANCE:



## TEACHING EXPERIENCE:

<b>Texas Southern University</b> • Houston, Texas Associate Professor - tenured, Department of Mathematics	2007 – present
<b>University of South Carolina</b> • Columbia, S.C. Assistant Professor, Department of Statistics	2002–2007
<b>Rice University</b> • Houston, Texas Lab assistant for introductory statistics course	1996 – 2000
<b>Midlands Technical College</b> • Columbia, S.C. Instructor for College Algebra	Fall 1995
<b>Southwestern College</b> • San Diego, California Instructor for College Algebra	1990–1992

## COURSES TAUGHT AT TSU:

<b>Applied Probability and Stochastic Processes (developed course)</b> •	MATH 499
<b>Probability &amp; Statistics I</b> •	MATH 473
<b>Elementary Statistics</b> •	MATH 231
<b>PreCalculus Mathematics</b> •	MATH 136
<b>Business Calculus</b> •	MATH 135
<b>College Trigonometry</b> •	MATH 134
<b>College Algebra</b> •	MATH 133

## COURSES TAUGHT AT USC:

<b>Theory of Nonparametric Statistics</b> •	STAT 724
<b>Nonparametric Statistics</b> •	STAT 518
<b>Probability and Stochastic Processes</b> •	STAT 510
<b>Statistics for Engineers and Scientists</b> •	STAT 509
<b>Statistical Methods</b> •	STAT 515
<b>Elementary Statistics</b> •	STAT 201
<b>Introduction to Descriptive Statistics</b> •	STAT 110

## EDITORIAL RESPONSIBILITIES:

<b>EPSCoR</b> • research grant reviewer	June 2013
<b>International Journal of Social Science Research</b> • article reviewer	April 2013
<b>Molecular Phylogenetics and Evolution</b> • article reviewer	October 2008

**Journal of the American Statistical Association** • article reviewer September 2006

**Journal of Probability and Statistical Science** • article reviewer April 2006

**Biometrical Journal** • article reviewer December 2004

**Journal of Computational and Graphical Statistics** • article reviewer August 2004

**Journal of Computational and Graphical Statistics** • article reviewer November 2003

**Empirical Likelihood** • Art Owen  
Chapman and Hall / CRC Press, 2001

### GRADUATE STUDENTS:

**Ty Moori** • dissertation statistical consultant 2015  
Doctor of Health Administration employed by University of Texas Health Science Center, Houston, Texas.

**Deidre Sharkey** • dissertation committee 2011  
Ed. D. Education. principal of middle school in Houston area.

**Crystal Piper** • dissertation committee 2007  
Ph. D. Public Health.

**Paige W. Lewis** • 2<sup>nd</sup> reader, thesis committee 2006  
M.S. Public Health, employed by Centers for Disease Control and Prevention, Atlanta, Georgia.

**Vanessa M. Brown** • thesis advisor 2005  
M.S. Statistics, employed by SunTrust Bank.

**Amanda Ballou** • thesis committee 2005  
M.S. Statistics, employed by South Carolina Budget and Control Board.

### PROFESSIONAL MEMBERSHIPS:

Houston American Statistical Association (Chapter Representative)  
American Statistical Association (ASA)  
Nonparametric Statistics Section of the American Statistical Association

### PROFESSIONAL AND UNIVERSITY SERVICE:

**College of Science and Technology Research Committee** • Member 2010 – present

**TSU Honors College Committee** • Member 2009 – present

**TSU College of Science and Technology Research Week Committee** • Chair Spring 2009

**Houston American Statistical Assoc.** • Chapter Representative 2008 – present

**TSU College of Science and Technology Research Committee** • Member 2007 – present

**University of South Carolina Life–Long Learning Committee** • Member (Appointed by Provost) 2007

**SC American Statistical Assoc.** • Chapter Representative 2004 – 2007

**Department of Statistics Faculty Awards Committee** • Member 2006 – 2007

Department of Statistics Graduate Advisory Committee • Member 2006 - 2007

Health Sciences Computing Center Planning Committee • Member fall 2004

Department of Statistics Qualifier Exam Committee • Member fall 2004

North Carolina State University • Statfest volunteer November 2003

Department of Statistics Undergraduate Advisory Committee • Member 2002 – 2005

Department of Statistics Awards Committee • Member fall 2003

Department of Statistics Distance Education Committee • Member spring 2003

### INVITED NONRESEARCH PRESENTATIONS:

South Kilbourne Elementary • Columbia, SC February 2007  
 “Do You Want To Be A Statistician”

Lincoln High School Commencement • McClellanville, SC May 2003  
 Keynote Speaker

### RELEVANT COMPUTER SKILLS:

UNIX, Windows, S-plus, SAS, R, C++, MATLAB, X-Maple, SYSTAT, Minitab, HTML, Excel, Powerpoint, L<sup>A</sup>T<sub>E</sub>X

### LANGUAGE SKILLS:

Spanish (advanced level written and spoken)

### COMMUNITY SERVICE:

Meadowfield Elementary Annual Field Day • volunteer May 2004 - May 2006

47<sup>th</sup> Annual USC Central South Carolina Region II Science & Engineering Fair • judge March 2003

### CURRENT MEMBERSHIPS:

Houston Museum of Fine Arts

### AWARDS

COST • Leadership Award 2013  
 Grievance Committee

National Science Foundation • History Maker www.thehistorymakers.org  
 February 2012

Faculty Poster Presentation, 2<sup>nd</sup> Place • TSU Research Week  
 April 2008

Award for Lifelong Commitment to the Pursuit of Scholarship and Excellence • USC  
 April 10, 2003