
• WILLIAM J. PADGETT

Department of Statistics
University of South Carolina
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EDUCATION:

Ph.D. (Statistics, 1971) Virginia Polytechnic Institute and State University, Blacksburg, VA
M. S. (Mathematics, 1968) Clemson University, Clemson, SC
B. S. (Mathematics, 1966) Clemson University, Clemson, SC

PROFESSIONAL EMPLOYMENT:

University of South Carolina, Department of Statistics, Columbia, SC

- **Distinguished Professor Emeritus: August, 2003 to present**
- **Carolina Distinguished Professor of Statistics: July, 1985 to August, 2003**
- **Department Chairman: July 1, 1985 to June 30, 1993, and July 1, 1996 to June 30, 2001**

University of South Carolina, Dept. of Mathematics & Statistics, Columbia, SC

- **Carolina Professor of Mathematics and Statistics: May, 1981-June, 1985**
- **Professor: September 1977, to June 30, 1985**
- **Associate Professor: September 1973, to August 1977**
- **Assistant Professor: February 1, 1971, to August 1973**

University of South Carolina, Department of Epidemiology and Biostatistics

- **Adjunct Professor: November, 1990, to present**

Clemson University, Department of Mathematical Sciences

- **Part-Time Visiting Professor: August 2003 - May 2009**

Virginia Tech, Department of Statistics

- Visiting Professor: September 1994

University of Georgia, Department of Statistics

- Visiting Professor: November 1994

University of South Florida, Department of Mathematics

- Visiting Professor: June 1976, and March-May 1978

SOCIETY MEMBERSHIPS:

**American Statistical Association
Institute of Mathematical Statistics
International Statistical Institute
American Society for Quality**

PROFESSIONAL HONORS:

**Donald S. Russell Award for Creative Research in Science and Engineering,
May 1975, University of South Carolina.**

Elected Fellow of the American Statistical Association, August 1983.

Elected Fellow of the Institute of Mathematical Statistics, August 1989.

1990 Governor's Award for Excellence in Science in South Carolina.

Elected Member of the International Statistical Institute, December 1995.

University of South Carolina Trustees Professorship Award, May 1999.

**Russell Research Award in Science, Mathematics and Engineering, May 2001,
University of South Carolina.**

**Michael J. Mungo Graduate Teaching Award, May 2002, University of
South Carolina.**

Paul Minton Service Award, June 2003, Southern Regional Council on Statistics

RESEARCH INTERESTS:

**Reliability models and inference; censored/incomplete data problems;
statistical quality control; nonparametric function estimation from incomplete data;
engineering/industrial statistics.**

EDITORIAL APPOINTMENTS:

Associate Editor of *Journal of Statistical Computation and Simulation*,
1980-1986. Editorial Advisory Board, 1986-present.
International Editorial Board of *Communications in Statistics*, 1984-1987.
Associate Editor of *Naval Research Logistics*, 1986-1989.
Associate Editor of *Technometrics*, 1987-1992.
Coordinating Editor of *Journal of Statistical Planning and Inference*, 1995-1997.
Associate Editor of *Journal of Applied Statistical Science*, 1992-2001.
Associate Editor of *Journal of Nonparametric Statistics*, 1989-2004.
Associate Editor of *Lifetime Data Analysis*, 1994-2003.
Associate Editor of *Journal of Statistical Theory and Applications*, 2001-2007.

RESEARCH GRANTS:

June 1978 - November 1979: NSF (PI)
June 1979 - May 1981: US AFOSR (with Co-PIs R.L. Taylor and L.J. Wei)
June 1981 - May 1982: US AFOSR (with Co-PI R.L. Taylor)
June 1984 - May 1987: US AFOSR and US ARO (PI)
July 1987 - November 1990: US ARO (with Co-PIs S. Durham and J.D. Lynch)
March 1992 - August 1995: NSF/EPSCoR Subcontract with Clemson University, Chemical
Engineering, Dan Edie, PI (with Co-PIs J. D. Lynch and S. Durham)
July 1995 - December 1998: NSF (PI, with Co-PIs J. Lynch and S. Durham)
August 1999 - July 2003: NSF (PI, with Co-PI J. Lynch)
April 2000 - March 2001: NSF (PI, for SRCOS/ASA Summer Research Conference)
July 2002 - July 2003: NSF (Co-PI with PI E. Pena, for ICRSA 2003 support)
September 2002 - August 2003: US ARO (PI, with Co-PI E. Pena, for ICRSA 2003
support)
May 2003 - April 2004 : NIH/NCI (Co-PI with PI E. Pena, for ICRSA 2003
support)
August 2003 - July 2006: NSF (PI, with Co-PI J. Lynch)

PRESENTATIONS AT PROFESSIONAL MEETINGS:

34 invited; 39 contributed

PUBLICATIONS:

TOTAL NUMBER OF REFEREED PUBLICATIONS: 165

BOOKS: 4 Research Monographs

BOOK CHAPTERS: 7

SOME REPRESENTATIVE PUBLICATIONS:

"Bayes Bandwidth Selection in Kernel Density Estimation with Censored Data,"

Journal of Nonparametric Statistics, to appear, with K.B. Kulasekera.

"Accelerated Degradation Models for Failure Based on Geometric Brownian Motion and Gamma Processes,"

Lifetime Data Analysis 11(2005), 511-527, with Chanseok Park.

"New Cumulative Damage Models for Failure Using Stochastic Processes as Initial Damage,"

IEEE Transactions on Reliability 54(2005), 530-540, with Chanseok Park.

"Some Properties of a Scaled Burr Type X Distribution,"

Journal of Statistical Planning and Inference 128(2005), 271-280, with J. G. Surles.

"Inference from Accelerated Degradation and Failure Data Based on Gaussian Process Models,"

Lifetime Data Analysis 10(2004), 191-206, with Meredith A. Tomlinson.

"A Penalized Local D-Optimality Approach to Design for Accelerated Test Models,"

Journal of Statistical Planning and Inference 119(2004), 411-420, with Arzu Onar.

"Lower Confidence Bounds for Percentiles of Weibull and Birnbaum-Saunders Distributions,"

Journal of Statistical Computation and Simulation 73(2003), 429-443, with Meredith A. Tomlinson.

"A Cumulative Damage Model for Strength of Materials When Initial Damage Is a Gamma Process,"

Journal of Statistical Theory and Applications 1(2002), 1-14, with Meredith A. Tomlinson.

"Absolute Error Criteria for Bandwidth Selection in Density Estimation from Censored Data,"

Journal of Statistical Computation and Simulation 70(2001), 215-230, with J. W. Kuhn and J. G. Surles.

"Inference for Reliability and Stress-Strength for a Scaled Burr Type X Distribution,"

Lifetime Data Analysis 7(2001), 187-200, with J. G. Surles.

"Accelerated Test Models with the Inverse Gaussian Distribution,"

Journal of Statistical Planning and Inference 89(2000), 119-133, with Arzu Onar.

"Inverse Gaussian Accelerated Test Models Based on Cumulative Damage,"

Journal of Statistical Computation and Simulation 64(2000), 233-247, with Arzu Onar.

"Power-Law Accelerated Birnbaum-Saunders Life Models,"

International Journal of Reliability, Quality and Safety Engineering 7(2000), 1-15, with W. J. Owen.

"Acceleration Models for System Strength Based on Birnbaum-Saunders Distributions,"

Lifetime Data Analysis 5(1999), 133-147, with W. J. Owen.

"A Control Chart for General Gaussian Processes,"

Journal of Statistical Planning and Inference 70(1998), 19-34, with R. Lund and L. Seymour.

"Birnbaum-Saunders-Type Models for System Strength Assuming Multiplicative Damage,"

in *FRONTIERS IN RELIABILITY*, A.P. Basu, et al, Eds., World Scientific Publishing Co., pp.283-294, 1998, with W. J. Owen.

"A Multiplicative Damage Model for Strength of Fibrous Composite Materials,"

IEEE Transactions on Reliability R-47(1998), 46-52.

"A Cumulative Damage Model for System Failure with Application to Carbon Fibers and Composites,"

Technometrics 39(1997), 34-44, with S. D. Durham.

"Families of Smooth Confidence Bands for the Survival Function under General Random Censorship," *Lifetime Data Analysis* 2(1996), 349-362, with S. Gulati.

"Smooth Nonparametric Function Estimation from Inversely Sampled Record-Breaking Data," *Canadian Journal of Statistics* 23(1995), 359-368, with S. Gulati.

"Weibull Analysis of the Strength of Carbon Fibers Using Linear and Power Law Models for the Length Effect," *Journal of Composite Materials* 29(1995), 1873-1884, with S. Durham and A. Mason.

"Nonparametric Quantile Estimation from Record-Breaking Data," *Australian Journal of Statistics* 36(1994), 211-223, with S. Gulati.

"Smooth Nonparametric Estimation of the Distribution and Density Functions from Record-Breaking Data," *Communications in Statistics, Theory and Methods* 23(1994), 1259-1274, with S. Gulati.

"Smooth Nonparametric Estimation of the Hazard and Hazard Rate Functions from Record-Breaking Data," *Journal of Statistical Planning and Inference* (1994), with S. Gulati.

"A Smooth Nonparametric Quantile Estimator for IFR Distributions," *Journal of Nonparametric Statistics* 2(1993), 195-202, with Y.L. Lio.

"Asymptotically Optimal Bandwidth for a Smooth Nonparametric Quantile Estimator under Censoring," *Journal of Nonparametric Statistics* 1(1992), 219-229, with Y.L. Lio.

"On the Asymptotically Optimal Bandwidth for Nadaraya's Quantile Estimator," *Statistics and Probability Letters* 11(1991), 243-249, with Y. L. Lio.

"A Probabilistic Stress-Strength Model and Its Application to Fatigue Failure in Gun Barrels," *Journal of Statistical Planning and Inference* 29(1991), 67-74 with S. D. Durham.

"Asymptotically Optimal Bandwidth Selection for Kernel Density Estimators from Randomly Right-Censored Samples," *Annals of Statistics* 15(1987), 1520-1535, with J. S. Marron.

"A Kernel Type Estimator of a Quantile Function from Right-Censored Data," *Journal of the American Statistical Association* 81(1986), 215-222.

PH.D. STUDENTS DIRECTED:

Arthur C.H. Lee (1977), Consultant, Los Angeles, CA.

Diane T. McNichols (1982), currently Professor of Mathematics, Shippensburg University, Shippensburg, PA.

Andre P. Lubecke (1985), currently Professor and Chair of Mathematics, Lander University, Greenwood, SC.

Y.L. Lio (1987), currently Professor of Mathematics, University of South Dakota, Vermillion.

Sneh Gulati (1991), currently Professor and Chair of Statistics, Florida International University, Miami.

Jonathan W. Kuhn (1995), currently Research Faculty, VIPBG, Medical College of Virginia, Richmond.

W. Jason Owen (1997), currently Associate Professor of Mathematics, University of Richmond, Richmond, Virginia.

Arzu Onar (1998), currently Research Faculty, St.Judes Childrens Research

Hospital, Memphis, TN.

James G. Surlis (1999), currently Associate Professor of Mathematics and Statistics, Texas Tech University, Lubbock.

Meredith A. Tomlinson (2003), currently Assistant Professor and Chair of Mathematics and Computer Science, Campbell University, Buies Creek, NC.