

CURRICULUM VITAE

James E. Mays

**Associate Professor (Statistics),
Department of Statistical Sciences and Operations Research
Virginia Commonwealth University**

Work Address:

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Education:

Ph. D.	Statistics	September 1995 Virginia Polytechnic Institute and State University Dissertation: <i>Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods</i> (Advisor: Dr. Jeffrey B. Birch)
M. S.	Statistics	December 1991 Virginia Polytechnic Institute and State University
B. S.	Mathematics	May 1990 (<i>summa cum laude</i>) Virginia Polytechnic Institute and State University

Major Fields of Interest:

Regression Analysis (Nonparametric, Semiparametric), Exploratory Data Analysis, Design of Experiments, Linear Models, Statistical Applications in Environmental Studies/Forestry, Bioassay.

Academic Appointments / Experience:

Associate Professor (in Statistics), Virginia Commonwealth University	August 2002-present
Assistant Professor (in Statistics), Virginia Commonwealth University	August 1996-August 2002
Visiting Assistant Professor in Statistics, Virginia Tech	August 1995-August 1996
Graduate Teaching Assistant (Instructor), Virginia Tech	August 1991-December 1994
Consultant, Statistical Consulting Center, Virginia Tech	August 1991-May 1996
Graduate Research Assistant, Virginia Tech	January-June 1992

TEACHING

Courses Taught (at VCU):

<u>Course</u>	<u>Title</u>	<u>Number of sections</u>
STAT 208	<i>Statistical Thinking</i>	
	Large lecture	22
	Lab	49
	Summer lecture & lab	6
	Summer lecture	1
	Summer lab	1
	Distance education	1
STAT 210	<i>Basic Practice of Statistics</i>	
	Summer lab	7
STAT 213	<i>Introduction to Statistics</i>	2
STAT 214	<i>Applications of Statistics</i>	1
MATH 309	<i>Introduction to Probability Theory</i>	3
STAT 404	<i>Introduction to Statistical Inference</i>	3
ENVS 603	<i>Environmental Research Methods</i>	8
STAT 644/628	<i>Advanced Regression</i>	8
STAT 697	<i>Directed Research</i>	
	<i>Time Series and Spectral Analysis</i>	1
	<i>Repeated Measures/Mixed Models</i>	1
STAT 698	<i>Thesis</i>	8
MATH 001	<i>Elementary Algebra (Math Lab)</i>	1
MATH 100	<i>Unitized Math (Math Lab)</i>	7
MATH 141	<i>Algebra w/ Applications (Math Lab)</i>	3

Course Development:

Attended Student Engagement Workshop, presented by Dr. Bob Smallwood (Associate Provost for Undergraduate Education and Assessment, University of North Florida), March 16, 2006 (3 hours).

Developed electronic materials that form a portion of the Instructor's Manual for *Excursions in Modern Mathematics*, by Tannenbaum and Arnold, published by Prentice Hall (includes materials and instructions for numerous classroom activities for statistical topics) (2000-2001).

STAT 208 Coordinator (for development of introductory statistics general education course) (1998-present).

- coordinator for all sections of this course (approximately 16-20 sections per semester); involves maintaining course Website, creating all assignments and all answer keys, conducting weekly meeting of all lecturers and lab instructors, and maintaining course grade file for assigning and posting grades.
- developed materials and online format of course to be used as a Distance Education course.
- developed and published: Mays, J. E., Street IV, W. S., and Johnson, R. E., "A Guide to Statistical Thinking." Three editions. W. H. Freeman and Company: New York, NY (2003, 2004, 2005).
- developed and published: Mays, J. E. and Johnson, R. E., "A Supplement to STAT 208: Statistical Thinking." Six editions. Cincinnati, OH: Thompson Learning Custom Publishing (1997-2001).
- produced *VCEPT Course Product for STAT208 (Statistical Thinking) Course*, as part of a grant from the Virginia Collaborative for Excellence in the Preparation of Teachers (VCEPT). (Packet with course materials and descriptions for the development of the STAT 208 course, 73 pages).

- material developed for the STAT 208 course is being used by the Air Force Academy for their introductory statistics course.

Joint development of ENVS 603: Environmental Research Methods with Dr. Shelley Harris from the Center for Environmental Studies. Formerly a team-taught course (pre-2006), now have complete responsibility for the course (2006-present).

- developed ENVS 603 Handout Packet (class notes and examples) (248 pages).

Member of Statistics Course Development Team at meeting for the Virginia Collaborative for Excellence in the Preparation of Teachers (VCEPT), 1998, 1999.

- published: Johnson, R. E. and Mays, J. E., "Statistics Course Development Team" report. In *VCEPT Voice Newsletter*, Fall 1998.
- author of "VCEPT Course Quality Assurance Self-Assessment" for STAT 208, Fall 1999.
- host for NSF external review of STAT 208 as part of the NSF and National Visiting Committee external review of the NSF-supported VCEPT project, Fall 1999.

Development of a module on nonparametric regression for the course STAT 628: Advanced Regression, when taught by Dr. D'Arcy Mays in Spring 1998. (Provided descriptions/summaries of nonparametric techniques, and developed graphical aides for class presentation).

Development of course handout packets for the courses STAT 644: Advanced Regression (220 pages), MATH 309: Introduction to Probability Theory (28 pages), and STAT 404: Introduction to Statistical Inference (59 pages).

Advising / Research Committees / Lectures:

- Advisor for 25 Mathematical Sciences undergraduate majors (1996-2001).
- Graduate thesis advisor for Donna Kroos (Statistics). Completed November 30, 2006.
- Graduate thesis advisor for Brian Shaffer (Statistics). Completed December 3, 2003.
- Graduate thesis advisor for Pat Lewis (Statistics). Completed July 2, 2003.
- Graduate thesis advisor for Shawn Burton (Statistics). Completed April 25, 2002.
- Research seminar advisor for Pat Lewis, "Predicting Success in College with Standard Objective of Learning Test Scores in the Presence of SAT's and High School GPA's," April 3, 2003.
- Research seminar advisor for Brian Shaffer, "Discussion on Semiparametric Regression Techniques with an Introduction to Nonparametric Regression," November 13, 2001.
- Research seminar advisor for Shawn Burton, "A Comparison of Parametric and Nonparametric Regression," May 3, 2001.
- Research seminar advisor for Qing Wan, "Smoothing Techniques in Nonparametric Regression," April 28, 1998.
- Committee member: Ph.D. Dissertation of Jean Nelson, Integrated Life Sciences, topic on fluorescence detection and characterization of uranyl contamination (a radiological target) in the open environment, ongoing.
- Committee member: Ph.D. Dissertation of Heather Hoffman, Biostatistics, "Maximum Likelihood Estimation of Multivariate Normal Parameters in the Presence of Left-Censored and Missing Values," completed November 11, 2005.
- Committee member: Ph.D. Dissertation of Gymama Slaughter, School of Engineering, "Artificial Neural Network for Temporal Impedance Recognition of Neurotoxins," completed March 30, 2005.
- Committee member: Master's thesis of Stephen Asante-Ansong, Center for Environmental Studies, "An Evaluation of Molds in Public Schools in the City of Richmond, Virginia," completed April 30, 2007.
- Committee member: Master's thesis of Jason Young, Center for Environmental Studies, "Determination of Size Fractions and Concentrations of Airborne Particulate Matter Generated from Construction and Demolition Waste Processing Facilities," completed March 21, 2007.
- Committee member: Master's thesis of Matt Fisher, Biology, "Temporal and Spatial Patterns of Anadromous Fish Passage at Boshers Dam Vertical Slot Fish Fishway on the James River, Richmond, Virginia," completed February 16, 2007.
- Committee member: Master's applied project of Marissa Eagle, Statistical Sciences and Operations Research, "Using Multiple Linear Regression to Evaluate the Use of a Classroom Performance System in an Introductory Statistics Course," completed April 27, 2006.
- Committee member: Master's thesis of Kevin Fields (WAY Engineer, Infinion), School of Engineering, "Neural Network Approach to Semiconductor Die Level Classification Using Compressed Chip Fail Data," completed July 27, 2004.
- Committee member: Master's thesis of Kelly Durst, Center for Environmental Studies, "Long Term Changes in Surface Water Quality and Land Use in a Small Suburban Watershed," completed October 21, 2003.
- Committee member: Master's thesis of Greg Edmonds, Center for Environmental Studies, "Temporal and Spatial Patterns of Occurrence for Two Nonindigenous Ictalurid Predators in Virginia's Coastal Plain Rivers," completed April 25, 2003.
- Committee member: Master's thesis of Karen Doran, Center for Environmental Studies, "Protection of the Karst Sensitive Environment: An Analysis of the Effectiveness of County Comprehensive Plans in Protecting the Karst Region of Virginia," completed April 16, 2003.
- Committee member: Master's thesis of Jean Dennis, Center for Environmental Studies, "Spectrofluorometric Filter Chamber Assay to Identify and Quantify *E. coli*," completed November 2001.
- Committee member: Master's thesis of Clint Smith, Center for Environmental Studies, "Detection of Microorganisms Using Total Luminescence Spectroscopy," completed April 2001.
- Committee member: Master's thesis of Robert Hare, Center for Environmental Studies, "The Town of Monterey, Virginia Wastewater Treatment Facility Efficiency and Evaluation Study," completed November 2000.
- Committee member: Master's thesis of Colleen Carpenter, Center for Environmental Studies, "A Study to Examine the Utility of the Asian Clam, *Corbicula fluminea*, as a Biomonitor for Pathogenic Amoebae," completed Spring 2000.

- Committee member: Master's thesis of Nita Lavin, department of Criminal Justice, "Juvenile Delinquency and Divorce: Determining If There is a Correlation," completed April 1999.
- Committee member: Master's thesis of Amy Anstey, department of Biology, "Effects of Flooding and Salinity on the Growth and Distribution of *Clethra alnifolia*," completed April 1999.
- Committee member: Master's thesis of Heath Graves, department of Criminal Justice, "Partner Violence in the Air Force: Evaluating Reporting Behaviors and Recidivism," completed October 1997.
- Committee member: Oral comprehensive exam of Preston Allen, Center for Environmental Studies, May 2004.
- Committee member: Oral comprehensive exam of Allyson Reid-Campbell, Center for Environmental Studies, May 2004.
- Committee member: Oral comprehensive exam of Tamara Pirkle, Center for Environmental Studies, May 2004.
- Committee member: Oral comprehensive exam of Heather Hoffman, Biostatistics, August 2004.
- Guest lecturer for Research Methods in Public Administration (PAD 624), March 18, 1998. Lecture on Hypothesis Testing. (For Dr. Janet Hutchinson, V.C.U.).

Reviewer for publishers:

Reviewer for *Duxbury (Thomson Brooks/Cole) Publishers*. Textbook: Mathematical Statistics with Applications, Sixth edition, by Wackerly, Mendenhall, and Scheaffer, April 2005. (Review for development of Seventh edition).

Reviewer for *McGraw-Hill Publishers*. Textbook: Elementary Statistics: A Brief Version, by Allan Bluman, October 1999.

Teaching Related Publications:

* Hutchinson, J. R., J. E. Mays, and L. J. Moriarty, "Technological Aids for Teaching Statistics in the 21st Century," chapter in Criminal Justice Technology in the 21st Century, Second edition (2005): 42-54, Eds. L. J. Moriarty and D. L. Carter, Springfield, IL: Charles C. Thomas Publishing, 2005. (*peer reviewed)

* Hutchinson, J. R., J. E. Mays, and L. J. Moriarty, "Teaching Statistics in the 21st Century: Technology in the Classroom," chapter in Criminal Justice Technology in the 21st Century (1998): 35-46, Eds. L. J. Moriarty and D. L. Carter, Springfield, IL: Charles C. Thomas Publishing, 1998. (*peer reviewed)

Mays, J. E., W. S. Street IV, and R. E. Johnson, "A Guide to Statistical Thinking." Four editions. W. H. Freeman and Company: New York, NY (2003, 2004, 2005, 2007).

Mays, J. E. and R. E. Johnson, "A Supplement to STAT 208: Statistical Thinking." Six editions. Thompson Learning Custom Publishing, Cincinnati, OH (1997-2001).

Johnson, R. E. and J. E. Mays, "Statistics Course Development Team" report. In *VCEPT Voice Newsletter*, Fall 1998.

Teaching Related Grants (see section on Grant Proposals / Awards below for details):

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany "Statistics Concepts and Controversies," Sixth edition, by Moore and Notz.

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany "Statistics Concepts and Controversies," Fifth edition, by David S. Moore (jointly with Dr. W. Scott Street, IV).

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany "The Basic Practice of Statistics," Third edition, by David S. Moore (jointly with Dr. W. Scott Street, IV).

Two Small Teaching Grants through the VCU Center for Teaching Excellence.

VCEPT Grant for producing a VCEPT Course Product for STAT208 (Statistical Thinking) course.

Faculty Mentoring Program, through the Instructional Development Center, Office for Information Technology, Virginia Commonwealth University.

RESEARCH / SCHOLARLY ACTIVITY

BIBLIOGRAPHY:

Papers Appearing in Refereed Publications:

Hutchinson, J. R., J. E. Mays, and L. J. Moriarty, "Technological Aids for Teaching Statistics in the 21st Century," chapter in Criminal Justice Technology in the 21st Century, Second edition (2005): 42-54, Eds. L. J. Moriarty and D. L. Carter, Springfield, IL: Charles C. Thomas Publishing, 2005.

Walker, E. L., D. L. Green, B. A. Starnes, J. B. Birch, and J. E. Mays (2004), "Model Robust Regression for Instrument Calibration," extended abstract from 24th AIAA Aerodynamic Measurement Technology and Ground Testing Conference paper, published by the American Institute of Aeronautics and Astronautics, Inc., 10 pages.

Mays, J. E. and J. B. Birch (2002), "Smoothing for Small Samples with Model Misspecification: Nonparametric and Semiparametric Concerns," *Journal of Applied Statistics*, **29**, 1023-1045.

Mays, J. E. (2001), "Capturing Nonconformity Points in Regression," *InterStat*, published online at <http://interstat.stat.vt.edu/interstat/ARTICLES/2001/abstracts/G01003.html-ssi>, August 2001 #3, 1-25.

Mays, J. E., J. B. Birch, and B. A. Starnes (2001), "Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods," *Journal of Nonparametric Statistics*, **13**, 245-277.

Mays, J. E., J. B. Birch, and R. L. Einsporn (2000), "An Overview of Model-Robust Regression," *Journal of Statistical Computation and Simulation*, **66**, 79-100.

Doruska, P. F. and J. E. Mays (1998), "Crown Profile Modeling of Loblolly Pine by Nonparametric Regression Analysis," *Forest Science*, **44**, 445-453.

Hutchinson, J. R., J. E. Mays, and L. J. Moriarty, "Teaching Statistics in the 21st Century: Technology in the Classroom," chapter in Criminal Justice Technology in the 21st Century (1998): 35-46, Eds. L. J. Moriarty and D. L. Carter, Springfield, IL: Charles C. Thomas Publishing, 1998.

Papers Submitted to Refereed Publications:

Walker, E. L., D. L. Green, B. A. Starnes, J. B. Birch, and J. E. Mays, "Model Robust Calibration: Method and Application to Electronically-Scanned Pressure Transducers," submitted to the *National Aeronautics and Space Administration as a Technical Publication* (NASA/TP-2006-XXXXXX), 1/01/06.

Papers/Manuscripts Appearing in Non-Refereed Publications:

Mays, J. E. and J. B. Birch (2001), "Small-Sample Model-Robust Confidence Intervals in Regression," *Proceedings of the Annual Meeting of the American Statistical Association*, August 5-9, 2001.

Mays, J. E. and J. B. Birch (2000), "Smoothing for Small Samples with Model Misspecification: Nonparametric and Semiparametric Concerns," *1999 Proceedings of the Section on Physical and Engineering Sciences*, published by the American Statistical Association, 91-96.

Johnson, R. E. and J. E. Mays, "Statistics Course Development Team" report, in *VCEPT Voice Newsletter*, Fall 1998.

Mays, J. E. and J. B. Birch (1995), "Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods," *ASA Proceedings of the Section on Physical and Engineering Sciences*, published by the American Statistical Association, 61-66.

Technical Reports:

Mays, J. E. (2001), "Model-Robust Confidence Intervals and Capturing Nonconformity Points," *Technical Report Number 01-1*, Dept. of Mathematical Sciences, Virginia Commonwealth Univ.

Mays, J. E., J. B. Birch, and B. A. Starnes, "Mixing Procedures and Asymptotically Optimal Estimates for Model-Robust Regression," Virginia Tech, Department of Statistics, *Technical Report*, #00-1 (2000), 31 pages.

Mays, J. E. and J. B. Birch, "Smoothing Considerations in Nonparametric and Semiparametric Regression" Virginia Tech, Department of Statistics, *Technical Report*, #98-2 (1998), 24 pages.

Mays, J. E. and J. B. Birch, "Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods," Virginia Tech, Department of Statistics, *Technical Report*, #96-11 (1996), 33 pages.

Papers in Progress:

"Small-Sample Model-Robust Confidence Intervals in Regression," to be submitted to *Communications in Statistics*.

"Choosing Bandwidth and Mixing Parameter Simultaneously in Semiparametric Regression," to be submitted to *Interstat*, or the *Journal of Statistical Computation and Simulation*.

"Mixing Parameter Selection in Semiparametric Regression -- An Improved Asymptotically Optimal Estimator."

"A Model to Predict 24-hour Urinary Creatinine Level Using Repeated Measurements in an Occupational Cohort Study."

Published Abstracts of Presentations and Papers:

Mays, J. E., "Small-Sample Model-Robust Confidence Intervals in Regression" (Abstract), *2001 Abstracts, Joint Statistical Meetings, Atlanta, Georgia*, (2001).

Mays, J. E., "Capturing Nonconformity Points in Regression" (Abstract), *Virginia Journal of Science*, **52** (2001), 131.

Mays, J. E. and J. B. Birch, "Smoothing for Small Samples with Model Misspecification: Nonparametric and Semiparametric Concerns" (Abstract), *1999 Abstracts, Joint Statistical Meetings, Baltimore, Maryland*, (1999).

Mays, J. E. and J. B. Birch, "An Overview of Model-Robust Regression" (Abstract), *Program and Abstracts of the Virginia Tech Conference: "Statistics: Modeling of Processes in Science and Industry"*, (August, 1999).

Mays, J. E. and P. F. Doruska, "Crown Profile Modeling of Loblolly Pine by Nonparametric Regression Analysis" (Abstract), *Virginia Journal of Science*, **49** (1998), 121.

Mays, J. E. and J. B. Birch, "Mixing Procedures for Obtaining a Model-Robust Fit" (Abstract), *Institute of Mathematical Statistics Bulletin*, **26** (1997), 468.

Mays, J. E. and J. B. Birch, "Smoothing Considerations in Nonparametric and Semiparametric Regression" (Abstract), *Virginia Journal of Science*, **48** (1997), 162.

Other Publications:

Mays, J. E., W. S. Street IV, and R. E. Johnson, "A Guide to Statistical Thinking." Four editions. W. H. Freeman and Company: New York, NY (2003, 2004, 2005, 2007).

Mays, J. E. and R. E. Johnson, "A Supplement to STAT 208: Statistical Thinking." Six editions. Thompson Learning Custom Publishing, Cincinnati, OH (1997-2001).

OTHER SIGNIFICANT SCHOLARLY AND PROFESSIONAL ACTIVITY:

Presentations at Professional Meetings (* indicates talk given by other than James Mays):

* “A Model to Predict 24-hour Urinary Creatinine Level Using Repeated Measurements in an Occupational Cohort Study,” by Kroos, D., Mays, J. E., and Harris, S. A., invited poster presentation at the *17th Annual Conference of the International Society of Exposure Analysis*, October 14-18, 2007 (upcoming). (* presentation to be given by D. Kroos).

* “Model Robust Regression for Instrument Calibration,” by Walker, E. L. and Green, D. L., Starnes, B. A., Birch, J. B., and Mays, J. E., *24th AIAA Aerodynamic Measurement Technology and Ground Testing Conference*, Portland, OR, June 28-July 1, 2004. (* presentation given by E. L. Walker and D. L. Green).

“Small-Sample Model-Robust Confidence Intervals in Regression,” August 2001 Joint Statistical Meetings, Atlanta, Georgia (contributed paper).

- runner-up for the **ASA Section on Physical and Engineering Sciences’ (SPES) Outstanding Presentation Award** for this talk. Talk judged by peers to be the best of forty talks given in SPES-sponsored contributed paper sessions at the 2001 Joint Statistical Meetings.

“Capturing Nonconformity Points in Regression,” Virginia Academy of Science, James Madison University, Harrisonburg, VA, May 2001 (contributed paper).

“An Overview of Model Robust Regression,” Statistics: Modeling of Processes in Science and Industry, a Conference Celebrating the 50th Anniversary of the Department of Statistics at Virginia Tech, Blacksburg, VA, August 1999 (contributed poster).

“Smoothing for Small Samples with Model Misspecification: Nonparametric and Semiparametric Concerns,” August 1999 Joint Statistical Meetings, Baltimore, Maryland (contributed paper).

- received the **ASA Section on Physical and Engineering Sciences’ (SPES) Outstanding Presentation Award** for this talk. Talk judged by peers to be the best of sixty-two talks given in SPES-sponsored contributed paper sessions at the 1999 Joint Statistical Meetings.

“Crown Profile Modeling of Loblolly Pine by Nonparametric Regression Analysis,” Virginia Academy of Science, George Mason University, Fairfax, VA, May 1998 (contributed paper).

* “Model Robust Regression: Motivation, Results, and Applications,” by Jeffrey B. Birch and James E. Mays, U.S. Army Conference on Applied Statistics, George Mason University, Fairfax, VA, October 1997 (*invited paper*).

“Mixing Procedures for Obtaining a Model-Robust Fit,” New Researchers Conference, University of Wyoming, Laramie, July 1997 (contributed paper).

“Smoothing Considerations in Nonparametric and Semiparametric Regression,” Virginia Academy of Science, Virginia Tech, Blacksburg, VA, May 1997 (contributed paper).

“Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods,” August 1995 Joint Statistical Meetings, Orlando, Florida (contributed paper).

“Some Developments in Model Robust Regression,” Virginia Academy of Science, Virginia Military Institute, Lexington, VA, May 1995 (contributed paper).

Seminars, Colloquia, Lectures, and Other Talks (* indicates talk given by other than James Mays):

* “The Ups and Downs of the Flat Tacks” a Statistical Hands-On Workshop, organized jointly with Bob Johnson, Department of Mathematical Sciences at VCU. Presented at the VCEPT 1998 Mathematics & Science Colloquium session on Leadership Roles for Teachers in Education Reform, Norfolk State University, June 24-26, 1998.

* “An Introduction to Nonparametric Regression with Application to Crown Profile Modeling in Loblolly Pine,” by Paul F. Doruska and James E. Mays, School of Forest Resources, University of Arkansas at Monticello, February 1998 (colloquium).

“Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods,” given March 26, 1996 at Montclair State University, and April 18, 1996 at Virginia Commonwealth University (seminar).

“Model Robust Regression--Combining Parametric, Nonparametric, and Semiparametric Methods,” Department of Statistics, Virginia Tech, Blacksburg, VA, September 1995 (colloquium).

Grant Proposals / Awards:

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany “Statistics Concepts and Controversies,” Sixth edition, by Moore and Notz. April 2006-May 2006. **Award:** \$1,600.

Small Teaching Grant through the VCU Center for Teaching Excellence, “Enriching Summer Statistics Classes Through the Use of CPS” (jointly with Dr. W. Scott Street, IV). January-December 2005. **Award:** \$3,500.

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany “Statistics Concepts and Controversies,” Fifth edition, by David S. Moore (jointly with Dr. W. Scott Street, IV). December 2004-January 2005. **Award:** \$3,200.

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany “The Basic Practice of Statistics,” Third edition, by David S. Moore (jointly with Dr. W. Scott Street, IV). August-December 2003. **Award:** \$3,200.

PA-99-143: Occupational Safety and Health Research, NIOSH/NIH, “Pesticide Dose Monitoring in Turf Applicators,” (jointly with S. A. Harris, J. C. Fox, C. Crawley, and R. A. Yeary). July 2002-June 2005, extended through 2006. **Award:** \$604,310.

Small Teaching Grant through the VCU Center for Teaching Excellence, “Incorporating Computer-Based Learning into a General Education Statistics Course (STAT 208).” March-July 2001. **Award:** \$3,500.

VCEPT Grant for producing a VCEPT Course Product for STAT208 (Statistical Thinking) course. Created packet containing course materials and descriptions for the development of the STAT 208 course (73 pgs). January, 2001. **Award:** \$500.

National Science Foundation (NSF) Travel Grant to attend Statistics: Modeling of Processes in Science and Industry, a Conference Celebrating the 50th Anniversary of the Department of Statistics at Virginia Tech, Blacksburg, VA, August 1999. **Award:** \$850.

National Science Foundation (NSF): Course, Curriculum, and Laboratory Improvement (CCLI) program, “Common Core Statistics CD-ROM,” (jointly with Dr. Janet Hutchinson, department of Political Science and Public Administration, Dr. Laura Moriarty, department of Criminal Justice, and Dr. Lorraine Parker, department of Mathematical Sciences). Submitted June 7, 1999 to request funding of \$487,913. Was not funded. We will continue to pursue funding with NSF and/or FIPSE (below).

The Fund for the Improvement of Postsecondary Education (FIPSE), “Intro Statistics Tutorial Modules on CD-ROM,” (jointly with Dr. Janet Hutchinson, department of Political Science and Public Administration, Dr. Laura Moriarty, department of Criminal Justice, and Dr. Lorraine Parker, department of Mathematical Sciences). Revised and resubmitted in October 1997 to request funding of \$202,991; one of 280 out of 1648 preliminary proposals selected for final proposal submission in January 1998; final proposal submitted in March 1998; one of final 90 proposals, but was not funded.

Faculty Mentoring Program, through the Instructional Development Center, Office for Information Technology, Virginia Commonwealth University, “Web-based Demonstrations and Experiments to Enhance the Understanding of Statistical Concepts,” (jointly with Dr. Steven Rein, department of Mathematical Sciences), May, 1997. **Award:** laptop computer, accessories, and software.

* The *Mathematics Teacher* (November 1999) (published by the National Council of Teachers of Mathematics) printed the article “Using Simulation on the Internet to Teach Statistics” by V. M. Ng and K. Y. Wong in which **the result of this grant was listed among the five favorite Internet sites for usefulness for teaching as well as student projects.**

Journal Reviews: (see Service to Professional Organizations below for details)

Consulting:

Consulting with Michele Monti (and colleagues) (Virginia Department of Health, Office of Epidemiology) to develop proposal for grant from U.S. Environmental Protection Agency on the “Development of Environmental Health Outcome Indicators.” 9/27/06 (1½ hours).

Consulting with Jennifer Ciminelli (VCLNA GIS Planner, VA DCR Division of National Heritage, VCU Center for Environmental Studies) on regression modeling for prediction of lot size based on road density. 4/14/06 (1 hour + 1 hour research).

Consulting with DonJanell Thomas (Research Assistant, Corporate and Foundation Relations, University Advancement, VCU) on probability calculation. 2/15/06 (30 minutes via email).

Consulting with Dr. David Primeaux (School of Engineering—Computer Science, VCU) on probability question. 9/21/05-9/22/05 (1½ hour phone conversation + 1 hour research).

Consulting with Shawn Burton (Statistical Sciences and Operations Research, VCU) on nonlinear bioassay project from Health Canada, 6/10/04 (1½ hours).

Consulting with Anora Thomas and Kerry O’Connor (Scenczar Corporation) on confidential bio-suit project for the military, 11/25/03 (1½ hours); possible future involvement with project would involve paid consulting.

Consulting project with James River Association to develop a pamphlet summarizing water quality on the James River from 1976-2000. Work completed in summer 2001 jointly with Aaron Vaughan (Center for Environmental Studies) and Dr. Scott Street (Department of Mathematical Sciences).

52¼ combined hours of consulting with graduate students in Biology, Engineering, Environmental Sciences, Public Policy and Administration, and Criminal Justice to aid in the statistical analysis for their dissertation or thesis projects (August 1996-present).

Consultant, Statistical Consulting Center, Virginia Tech, August 1991-May 1996 (200+ hours);

SERVICE

Service to Professional Organizations:

- Reviewer for *Computational Statistics and Data Analysis*. Article: “A Study of Partial F Tests for Multiple Linear Regression Models,” by Wei Liu and Mortaza Jamshidian. (completed August 2005, & review for resubmission).
- Reviewer for *Duxbury (Thomson Brooks/Cole) Publishers*. Textbook: Mathematical Statistics with Applications, Sixth edition, by Wackerly, Mendenhall, and Scheaffer, April 2005.
- Reviewer for the journal *Nonlinear Analysis*. Reviewed “An Alternate Model for Experimental Cylindrical Data,” submitted by Anderson-Cook and Noble, June 2000.
- Reviewer for *McGraw-Hill Publishers*. Reviewed textbook Elementary Statistics: A Brief Version, by Allan Bluman, October 1999.
- Reviewer for the *Journal of Statistical Computation and Simulation*. Reviewed “Model Misspecification in Parametric Dual Modeling,” submitted by Robinson and Birch, October 1999.
- Reviewer for *Canadian Journal of Forest Research*. Reviewed “Radial tree-growth modeling with fuzzy regression,” submitted by Boreux, Gadbin-Henry, Guiot, and Tessier. February 1998.
- Organized a session on Semiparametric Regression for the Southern Regional Council on Statistics (SRCOS) conference held at Virginia Commonwealth University on June 4-6, 2007.
- Virginia Academy of Science:
 - President of Statistics section, 2001-02
 - Vice President of Statistics section, 2000-01
 - VAS Councilor for Statistics section, 2003-2004.
 - ASA chapter representative of Statistics section, 2002-03
 - Attended and organized invited speaker presentations for Statistics section meeting at VAS meetings, Hampton University, Hampton, VA, May 2002.
 - Presided over Statistics section at VAS meetings, Radford University, Radford, VA, May 2000.
- Editor for Statistics section of the *Virginia Journal of Science* (1998-2000).
- Member of American Statistical Association.
- Member of Nonparametric Statistics section of the American Statistical Association
- Member of Mu Sigma Rho (National Statistical Honor Society), 1991-present

University Service:

- Core Competency Assessment team—oral communication assessment; evaluation of oral presentations of 17 students in various courses. Spring 2006.
- Center for Teaching Excellence Junior Faculty Mentor. Met monthly to mentor two Instructors in Statistical Sciences and Operations Research (Fall 2005-Spring 2006, and Fall 2006-Spring 2007).
- Faculty Senate (Humanities and Sciences senator) (2002-2005).
 - Faculty Senate subcommittee for Student Affairs (2002-2005), co-chair in 2004-2005.
- Academic Campus Recreational Sports Advisory Committee (1997-2004); Faculty Senate representative.
 - Administrative Appeal Sub-committee of the Recreational Sports Advisory Committee (Summer 2002).
 - Academic Campus Recreational Sports Advisory Committee Appeal Board (Spring 2001).
- Student-Athlete Advisor Search Committee (Spring 2004).
- Steering committee for the creation of a Phi Beta Kappa chapter at VCU (2005-present).
- University Faculty Mentor (1999-present); use of instructional technology in the classroom and other computing concerns.
- University Task Force on Long-Range Planning Process for Public Service and Outreach (1998-99).
- University Faculty Marshal at 2003, 2004, 2005, 2006 VCU Commencement.
- Faculty Advisor for Underwater Hockey Club (VCU Sports Club) (2004-05).

College Service:

- College of Humanities and Sciences Undergraduate Academic Committee (UAC) (2000-2007).
 - Chair for 2004-2007.
- Co-chair, College of Humanities and Sciences General Education Steering Committee (2006-2007).

- College of Humanities and Sciences General Education Subcommittee – Science and Technology.
- College of Humanities and Sciences General Education Subcommittee – Foreign Language.
- College of Humanities and Sciences Faculty Council (UAC representative) (2004-2007).
- College of Humanities and Sciences Grade Appeal Committee, Chair (Spring 2003).
- College of Humanities and Sciences Phi Kappa Phi Scholarship Selection Committee (2001-2007); applications reviewed: 12, 26, 26, 6, 25, 18, 19.
- Humanities and Sciences College Awards Committee (1999-2000, 2001-02); nominations reviewed: 32, 42.
- Guest speaker at Faculty Mentoring Luncheon on College and University Service (March 24, 2005).

Departmental Service:

- Departmental Undergraduate Curriculum Committee (1998-2007).
- Chair, Search Committee for tenure-track Assistant Professor in statistics (Spring 2006).
- Peer Review Committee for the Promotion and Tenure of Dr. Jill Hardin (Fall 2006).
- Peer Review Committee for the Promotion and Tenure of Dr. Scott Street (Fall 2005).
- Chair, Peer Review Committee for the Promotion of Dr. Anthony Sherman (Fall 2004).
- Peer Review Committee for the Third Year Review of Dr. Scott Street (Spring 2003).
- Peer Review Committee for the Promotion and Tenure of Dr. Jason Merrick (Fall 2002).
- Department Assessment Task Force, Chair (quantitative assessment report for 100 and 200 level mathematical sciences courses; completed July 2001) (2000-01).
- STAT 208 Coordinator (for development of introductory statistics general education course) (1998-present).
- Departmental Undergraduate Credentials Committee, Co-Chair for applications (1997-98)
 - coordinated the review (check and double-check) of 22 Graduation Worksheets, 20 Graduation Applications, and 12 combined Graduation Worksheets/Applications. (Personally reviewed 15 worksheets, 11 applications, and 6 combined worksheets/applications).
- Departmental Testing and Placement Committee (1996-97).

Inter-departmental Service:

- Meeting for “Exchange with Community College Faculty” to discuss equivalence of Math and Science courses that may transfer to VCU. Department representative, 9/23/05.
- Peer Review Committee for the Tenure of Dr. Paul Bukaveckas (Department of Biology), Fall 2004.
- Peer Review Committee for the Promotion and Tenure of Dr. Shelley Harris (jointly in the Center for Environmental Studies and the Department of Preventive Medicine and Community Health) (Fall 2003).

Community Service:

- Head Judge, Senior Group Projects division of the Metro Richmond Science Fair (2007).
- Intel ISEF (International Science and Engineering Fair) Finalist Judge at the Metro Richmond Science Fair (2005).
- Judge, Math/Statistics/Computer Science section of Metro Richmond Science Fair (1997-2002, 2004-2006).
- Reader for Virginia Junior Academy of Science, papers on Mathematics/Statistics (1997-2004).
- Represented Department (statistical demonstration) at the Science Museum of Virginia for National Science and Technology Week (1997-2003).

AWARDS AND HONORS:

Small Teaching Grant through the VCU Center for Teaching Excellence, “Enriching Summer Statistics Classes Through the Use of CPS” (jointly with Dr. W. Scott Street, IV). January-December 2005. Award: \$3,500.

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany “Statistics Concepts and Controversies,” Fifth edition, by David S. Moore (jointly with Dr. W. Scott Street, IV). December 2004-January 2005. Award: \$3,200.

PA-99-143: Occupational Safety and Health Research, NIOSH/NIH, “Pesticide Dose Monitoring in Turf Applicators,” (jointly with S. A. Harris, J. C. Fox, C. Crawley, and R. A. Yeary). July 2002-June 2005. Award: \$604,310.00.

Small grant from *W. H. Freeman and Company* for the development of PowerPoint presentations to accompany “The Basic Practice of Statistics,” Third edition, by David S. Moore (jointly with Dr. W. Scott Street, IV), Summer-Fall 2003. Award: \$3,200.

Small Teaching Grant through the VCU Center for Teaching Excellence, “Incorporating Computer-Based Learning into a General Education Statistics Course (STAT 208),” March-July 2001. Award: \$3500.00.

VCEPT Grant for producing a VCEPT Course Product for STAT208 (Statistical Thinking) course, January 2001. Created packet containing course materials and descriptions for the development of the STAT 208 course (73 pgs). January 2001. Award: \$500.00.

ASA Section on Physical and Engineering Sciences’ (SPES) Outstanding Presentation Award for the talk “Smoothing for Small Samples with Model Misspecification: Nonparametric and Semiparametric Concerns” given at the 1999 Joint Statistical Meetings (talk judged best of sixty-two talks given in SPES-sponsored contributed paper sessions).

Runner-up for the *ASA Section on Physical and Engineering Sciences’ (SPES) Outstanding Presentation Award* for the talk “Small-Sample Model-Robust Confidence Intervals in Regression” given at the 2001 Joint Statistical Meetings (talk judged best of forty talks given in SPES-sponsored contributed paper sessions).

Faculty Author Recognition by College of Humanities and Sciences (2000, 01, 02, 03, 04, 05, Spring 06, Fall 06).

NSF Travel Grant to attend Statistics: Modeling of Processes in Science and Industry, a Conference Celebrating the 50th Anniversary of the Department of Statistics at Virginia Tech, Blacksburg, VA, August 1999. Award: \$850.00.

Faculty Mentoring Grant, through the Instructional Development Center, Office for Information Technology, Virginia Commonwealth University, “Web-based Demonstrations and Experiments to Enhance the Understanding of Statistical Concepts,” (jointly with Dr. Steven Rein, department of Mathematical Sciences), May 1997. (Awarded laptop computer, accessories, and software).

Mu Sigma Rho National Statistical Honor Society, 1991-present