

CURRICULUM VITAE

Name: **RANDALL L. EUBANK**
 Address: School of Mathematics and Statistics
 Arizona State University
 Tempe, AZ 85287-1804
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DATE AND PLACE OF BIRTH: January 17, 1952 Dallas, Texas

EDUCATION:

1979 Ph.D. Statistics, Texas A&M University, College Station, Texas. Advisor: Emanuel Parzen.
 1976 M.S. Statistics, Texas A&M University, College Station, Texas. Advisor: A. M. Kshirsagar.
 1976 M.S. Agricultural Economics, New Mexico State University, Las Cruces, New Mexico. Advisor: Garrey Carruthers.
 1974 B.S. Agriculture, New Mexico State University, Las Cruces, New Mexico. Major: Agricultural Economics.

EMPLOYMENT:

2005– Professor, Department of Mathematics and Statistics, Arizona State University.
 1988–2005 Professor, Department of Statistics, Texas A&M University.
 1985–1988 Associate Professor, Department of Statistics, Southern Methodist University.
 1980–1985 Assistant Professor, Department of Statistics, Southern Methodist University.
 1979–1980 Assistant Professor, Department of Mathematics, Arizona State University.

OFFICES AND AWARDS:

2004–2006 Coordinating Editor for the *Journal of Statistical Planning and Inference*
 2003–2004 Associate Editor for the *Journal of the American Statistical Association*
 2002 Elected Member of ISI
 2000 ASA Fellow
 1998–2008 Associate Editor for *Computational Statistics*
 1990 IMS Fellow
 1988–1996 Associate Editor for the *Journal of the American Statistical Association*
 1987–1993 Associate Editor for *American Statistician*

GRANT SUPPORT:

ONR Research Contract N00014-85-K-0340, “Sample Reuse in Statistical Modeling”, June 1, 1985–June 1, 1988. Co-Principal Investigator with W. R. Schucany. Budget: \$195,684.
 NSF Research Contract DMS-8801543, “Testing Hypotheses Using Components of Pearson’s Phi-Squared Distance Measure,” June 15, 1988–November 30, 1989. (Principal Investigator with V. N. LaRiccia.) Budget: \$3,904.
 NSF Research Contract DMS-8902576, “Some Problems in Nonparametric Regression,” June 1, 1989–May 31, 1991. Budget: \$42,350.

NSF Research Contract DMS-9024879, “Some Problems in Nonparametric Function Estimation,” June 1, 1991–May 31, 1993. Budget: \$60,700.

NSF Research Contract DMS-9300918, “Inference for Nonparametric Function Estimators,” July 1, 1993–June 30, 1995. Budget: \$60,000.

NSF Research Contract DMS-9625496, “Inference for Nonparametric Regression,” July 1, 1996–June 30, 1999. Budget: \$60,000.

NSF Research Contract DMS-9970902, “Some Problems in Nonparametric Regression,” July 1, 1999–June 30, 2002. Budget: \$60,000.

NSF Research Contract DMS-0203243, “Spline Smoothing and Nonparametric Regression,” July 1, 2002–June 30, 2005. Budget: \$194,889.

NSF Research Contract DMS-0505670/DMS-0624239 “Dimension Reduction for Stochastic Processes” June 1, 2005–May 31, 2008. Budget: \$197,000. Co-PI with Tailen Hsing.

NSF Research Contract DMS-0723301 “An Interdepartmental Computing Environment for Statistical Research” September 1, 2007–August 31, 2008. Budget: \$50,000. Co-PI with Roger Berger, Sharon Lohr, Renate Mittleman (PI), Douglas Montgomery.

NSF Research Contract DMS-0652883 “NSF Focused Research Group: Integrated Mathematical Methods in Medical Imaging” August 15, 2007–July 31, 2010. Budget: \$828,000. Co-PI with Douglas Cochran, Anne Gelb (PI) and Svetlana Roudenko.

PUBLICATIONS:

Books:

- 1988 *Spline Smoothing and Nonparametric Regression*. New York: Marcel–Dekker.
- 1999 *Nonparametric Regression and Spline Smoothing, Second Edition*. New York: Marcel–Dekker.
- 2005 *A Kalman Filter Primer*. New York: Taylor and Francis.
- 2011 *Statistical Computing in C++ and R*. Boca Raton, Florida: CRC Press. With A. Kupresanin.

Papers published or accepted in refereed journals:

- 1979 A goodness of fit test for a proposed null function. *J. Indian Statist. Assoc.* 17, 109–123. With A. M. Kshisagar.
- 1981 A density–quantile function approach to optimal spacing selection. *Ann. Statist.* 9, 494–500.
- 1981 Estimation of the parameters and quantiles of the logistic distribution by linear functions of sample quantiles. *Scandinavian Actuarial J.*, 229–236.
- 1981 Uniqueness and eventual uniqueness of optimal designs in some time series models. *Ann. Statist.* 9, 486–493. With P. L. and P. W. Smith.
- 1982 A note on optimal and asymptotically optimal designs for certain time series models. *Ann. Statist.* 10, 1295–1301. With P. L. and P. W. Smith.
- 1982 On the computation of optimal designs for certain time series models with applications to optimal quantile selection for location and scale parameter estimation., *SIAM J. Sci. Statist. Comput.* 3., 238–249. With P. L. and P. W. Smith.
- 1982 Location and Scale parameter estimation from randomly censored data. *Commun. Statist. A11*, 2869–2888. With V. N. LaRiccia.

- 1982 A quantile domain perspective on the relationships between optimal grouping, spacing and stratification problems. *Statist. and Prob. Letters* 1, 69–73.
- 1983 A note on optimal and robust spacing selection. *Commun. Statist.* A12, 2483–2492.
- 1984 The hat matrix for smoothing splines. *Stat. and Prob. Letters* 2, 9–14.
- 1984 On the relationship between functions with the same knots in spline and piecewise polynomial approximation. *J. Approx. Theory* 40, 327–332.
- 1984 Approximate regression models and splines. *Commun. Statist.* A13, 433–484.
- 1984 Weighted L^2 quantile distance estimators for randomly censored data. *J. Multivariate Anal.* 14, 348–359. With V. N. LaRiccia.
- 1984 A family of minimum quantile distance estimators for the three-parameter Weibull distribution. *Statistische Hefte* 25, 69–82. With T. J. Carmody and V. N. LaRiccia.
- 1985 The singular-value decomposition as a tool for solving estimability problems. *Amer. Statist.* 39, 64–66. With J. T. Webster.
- 1985 Diagnostics for smoothing splines. *J. Roy. Statist. Soc. B* 47, 332–341.
- 1986 A note on smoothness priors and nonlinear regression. *J. Amer. Statist. Assoc.* 81, 514–517.
- 1986 Regression type tests for parametric hypotheses based on sums of squared L -statistics. *J. Statist. Planning and Infer.* 14, 401–407. With V. N. LaRiccia.
- 1986 Diagnostics for penalized least-squares estimators. *Statist. and Prob. Letters* 4, 265–272. With R. F. Gunst.
- 1987 Some new and classical tests derived as components of Pearson's phi-squared distance measure. *J. Amer. Statist. Assoc.* 82, 816–825. With V. N. LaRiccia and R. B. Rosenstein.
- 1988 Optimal grouping, spacing, stratification and piecewise constant approximation, *SIAM Review* 30, 404–420.
- 1988 Regression type tests for parametric hypotheses based on optimally selected subsets of the order statistics. *Annals of the Institute of Statistical Mathematics* 40, 603–613. With V. N. LaRiccia.
- 1989 Convergence rates for estimation in certain partially linear models. *J. Statist. Planning and Infer.* 23, 33–43. With P. Whitney.
- 1989 Trigonometric series regression estimators with an application to partially linear models. *J. Mult. Anal.* 32, 70–83. With J. Hart and P. Speckman.
- 1989 Curve fitting by polynomial-trigonometric regression. *Biometrika* 77, 1–9. With P. Speckman.
- 1990 Components of Pearson's phi-squared distance measure for the k -sample problem. *J. Amer. Statist. Assoc.* 85, 441–445. With V. N. LaRiccia.
- 1990 Testing the goodness-of-fit of a linear model via nonparametric regression techniques. *J. Amer. Statist. Assoc.* 85, 387–392. With C. H. Spiegelman.
- 1991 M -type smoothing splines with auxiliary scale estimation. *Comp. Statist. and Data Anal.* 11, 43–51. With J. K. Cunningham and T. Hsing.
- 1991 Convergence rates for trigonometric and polynomial-trigonometric regression estimators. *Statist. and Prob. Letters.* 11, 119–124. With P. Speckman.

- 1992 A bias reduction theorem with applications in nonparametric regression. *Scand. J. Statist.* 18, 211–222. With P. Speckman.
- 1992 Testing symmetry about an unknown median via linear rank procedures. *J. Nonparametric Statist.* 1, 301–311. With R. B. Rosenstein and V. N. LaRiccia.
- 1992 Testing goodness-of-fit in regression via order selection techniques. *Ann. Statist.* 20, 1412–1425. With J. Hart.
- 1993 Asymptotic comparison of Cramér–von Mises and nonparametric function estimation techniques for testing goodness-of-fit. *Ann. Statist.* 20, 2071–2086. With V. N. LaRiccia.
- 1993 Testing for no effect in nonparametric regression. *J. Statist. Planning and Infer.* 36, 1–14. With V. N. LaRiccia.
- 1993 Commonality of cusum, von Neumann and smoothing-based goodness-of-fit tests. *Biometrika* 80, 89–98. With J. Hart.
- 1993 A test for second order stochastic dominance. *Commun. Statist.–Theor. Meth.* 22, 1893–1905. With E. Schechtman and S. Yitzhaki.
- 1993 Detecting heteroscedasticity in nonparametric regression. *J. Roy. Statist. Soc. B* 55, 145–155. With W. Thomas.
- 1993 The asymptotic average squared error for polynomial regression. *Statistics* 24, 311–319. With B. Jayasuriya.
- 1993 Testing goodness of fit using nonparametric function estimation techniques. *Commun. Statist.–Theor. Meth.* 22, 3327–3354. With J. Hart and V. N. LaRiccia.
- 1993 Confidence bands in nonparametric regression. *J. Amer. Statist. Assoc.* 88, 1287–1301. With P. Speckman.
- 1994 Confidence regions in nonparametric regression. *Scand. J. Statist.* 21, 147–158. With S. Wang.
- 1994 A simple smoothing spline. *The American Statistician* 48, 103–106.
- 1994 Component type tests for ordered categorical data. *Parisankhyan Samikkha* 1, 51–60. With V. N. LaRiccia.
- 1995 Component type tests with estimated parameters. *Probability and Mathematical Statistics* 15, 275–289. With V. N. LaRiccia and J. H. Schuenemeyer.
- 1995 Nonparametric estimation of regression curves with discontinuous derivatives. *Journal of Statistical Research* 29, 17–30. With D. B. H. Cline and P. Speckman.
- 1995 Testing for additivity in nonparametric regression. *Ann. Statist.* 23, 1896–1920. With J. D. Hart, D. G. Simpson and L. A. Stefanski.
- 1997 Testing goodness-of-fit with multinomial data. *J. Amer. Statist. Assoc.* 92, 1084–1093.
- 1998 Estimation in partially linear models. *Comp. Statist. and Data Anal.* 29, 27–34. With E. L. Kambour, J. T. Kim, K. Klipple, C. S. Reese and M. Schimek.
- 1998 A simple second order smoother. *J. Statist. Comput. Simul.* 61, 271–285. With J. T. Kim.
- 1999 A simple smoothing spline, II. *J. Statist. Planning and Infer.* 81, 229–235.
- 1999 A central limit theorem for the sum of generalized linear and quadratic forms. *Statistics* 33, 85–91. With S. Wang.

- 2000 Testing for no effect by cosine series methods. *Scand. J. Statist.* 27, 747–763.
- 2002 The Cholesky decomposition for state space models. *Journal of Statistical Studies: Special Volume in Honour of Professor Mir Masoom Ali's 65th Birthday*, 51–61.
- 2002 The equivalence between the Cholesky decomposition and the Kalman filter. *Amer. Statist.* 56, 39–43. With S. Wang.
- 2003 Adaptive order selection for spline smoothing. *J. Comp. Graph. Statist.* 12, 382–397. With C. F. Huang and S. Wang.
- 2004 A simple smoothing spline, III. *Comp. Statist.* 19, 227–241.
- 2004 Regularization parameter selection and inference for statistical inverse problems. *Pakistan J. Statist.—Special Volume in Honor of Mir Masoom Ali*, 20, 49–72.
- 2004 Smoothing spline estimation in varying coefficient models. *J. Roy. Statist. Soc. B* 66, 653–667. With C. Huang, Y. Munoz, N. Wang, S. Wang and B. Buchanan.
- 2005 Testing lack-of-fit of parametric regression models using nonparametric regression techniques. *Statist. Sinica*, 15, 135–152. With C. S. Li and S. Wang.
- 2006 Monotone smoothing with application to dose-response curves. *Commun. Statist. Simul. Comput.* 35, 991–1004. With M. Kong.
- 2007 Some properties of canonical correlations and variates in infinite dimensions. *J. Multivar. Anal.* 99, 1083–1104. With J. Cupidon, D. Gilliam and F. Ruymgaart.
- 2007 The delta-method for analytic functions of random operators with application to functional data. *Bernoulli* 13, 1179–1194. With J. Cupidon, D. Gilliam and F. Ruymgaart.
- 2008 A diagnostic test for parallelism. *Int. J. Statist. Sci.* 7, 13–29. With C.-S. Li.
- 2008 Canonical correlation for stochastic processes. *Stochastic Process. Appl.* 118, 1634–1661. With T. Hsing.
- 2009 Bayesian semiparametric sales projections for the Texas lottery. *J. Data Sci.* 7, 73–87. With A. Majumdar.
- 2009 Convergence rates for smoothing spline estimation in varying coefficient models. *J. Statist. Planning and Infer.* 140, 369–381. With P. Eggermont and V. LaRiccia.
- 2010 An RKHS framework for functional data analysis. *J. Statist. Planning and Infer.* 140, 3627–3637. With A. Kupresanin, H. Shin and D. King.
- 2011 Unit canonical correlations and high-dimensional discriminant analysis. *J. Statist. Comput. Simul.* 81, 167–178. With H. Shin.
- 2012 Knot selection for least squares and penalized splines. *J. Statist. Comput. Simul.*, to appear. With S. Spiriti, D. Young and P. W. Smith.
- 2012 Moderate deviations and intermediate efficiency for lack-of-fit tests. *Statistics and Risk Modeling*, to appear. With D. Mason.

Other publications:

- 1985 Optimal Spacing Problems. In *The Encyclopedia of Statistical Sciences* (N. Johnson, S. Kotz and C. Read, eds.) 6, 452–458.
- 1986 Quantiles. In *The Encyclopedia of Statistical Sciences* (N. Johnson, S. Kotz and C. Read, eds.) 7, 424–432.
- 1995 In Nonparametric estimation of functions with jump discontinuities. In *Change Point Problems*, IMS Lecture Notes–Monograph Series, Vol. 23. With P. Speckman.
- 2000 Spline Regression. In *Smoothing and Regression: Approaches, Computation and Application* (M. G. Schimek, ed.), 1–18.

- 2007 Difference based variance estimators for partially linear models. In *Festschrift in Honor of Mir Masoom Ali*, 313–323. With K. Klipple.
- 2009 Bayesian curve registration of functional data. In *Indian Statistical Institute Platinum Jubilee Volume*. With Z. Zhong and A. Majumdar.

Invited discussions and book reviews:

- 1985 Comment on “Some aspects of the spline smoothing approach to non-parametric regression curve fitting” by B. W. Silverman. *J. Roy. Statist. Soc. B.* 47, 35–36.
- 1986 Review of *Quantile Processes with Statistical Applications* by M. Csörgő. *J. Amer. Statist. Assoc.* 81, 858.
- 1988 Comment on “Monotone Regression Splines in Action” by J. O. Ramsay. *Statist. Science* 3, 425–461.
- 1989 Comment on “Linear Smoothers and Additive Models” by A. Buja, T. Hastie and R. Tibshirani. *Ann. Statist.*, 17, 453–555. With P. Speckman.
- 1990 Review of *Nonparametric Regression Analysis of Longitudinal Data* by H. G. Müller. *Technometrics* 32, 290.
- 1991 Comment on “Some Tools for Functional Data Analysis” by J. Ramsay and C. Dalzell. *J. Roy. Statist. Soc. B* 53, 565.
- 1993 Review of *Applied Nonparametric Regression* by W. Härdle. *Technometrics* 35, 225.
- 1993 Review of *Nonparametric Function Estimation, Modeling and Simulation* by James R. Thompson and Richard A. Tapia. *J. Amer. Statist. Assoc.* 88, 697.
- 2009 Comment on “Parametrics versus Nonparametrics: Two Alternative Methodologies.” by E. Lehmann. *J. Nonpar. Statist.* 21, 407–410.

INVITED ADDRESSES:

- 1980 Some useful inefficient statistics. 50 minute talk. Department of Mathematical Sciences Statistics Colloquium, Old Dominion University, Norfolk, Virginia. March.
- 1980 Adaptive data summary construction. 50 minute talk. Guest speaker at the meeting for the North Texas Section of the American Statistical Association, Dallas, Texas. November.
- 1981 Variable knot and smoothing spline problems in statistics. Two 50 minute talks. Department of Mathematics. Visiting Speaker Program, University of Nebraska–Lincoln. May
- 1981 Regression designs for the quantile process. NSF Regional Conference on Quantile Processes. Texas A&M University, July.
- 1982 Regression design for time series and quantile selection. 35 minute talk. Central regional meeting of IMS, San Antonio, Texas. March.
- 1982 Piecewise constant approximation in statistics. 50 minute talk. Department of Mathematical Sciences Statistics Colloquium, Old Dominion University, Norfolk, Virginia. June.
- 1982 Some piecewise constant approximation problems in statistics. 50 minute talk. Department of Mathematical Sciences Colloquium, Rice University, Houston, Texas. October.
- 1983 The relationship between certain optimal grouping, spacing and stratification problems. 30 minute talk. 1983 Conference for Texas Statisticians, Waco, Texas. April.
- 1983 Splines in regression. 90 minute talk. 1983 SREB Summer Research Conference, Gatlinburg, Tennessee. June.

- 1983 Diagnostics and inference for smoothing splines. 50 minute talk. University of Texas at Dallas Mathematical Sciences Department Distinguished Lecture Series. October.
- 1984 Diagnostics and inference for smoothing splines. 50 minute talk. Department of Statistics, Texas A&M University. October.
- 1985 Parameter estimation from randomly censored data. 35 minute talk. IMS regional meeting, Austin, Texas. March.
- 1986 Components of ϕ -squared. 50 minute talk. Department of Statistics, Texas A&M University. October. University of Texas at Dallas, Mathematical Sciences Department Colloquium. April, 1986.
- 1986 What is a good estimator? 50 minute talk. Department of Statistics, Texas A&M University. February.
- 1986 Diagnostics for penalized least squares estimators. 50 minute talk. NSF regional conference on spline and partial spline models in statistics, Columbus, Ohio. March.
- 1987 Testing hypotheses with components of ϕ -squared. 30 minute talk. Joint Statistical Meetings, San Francisco. August.
- 1987 Hypothesis testing using components of ϕ -squared. 50 minute talk. Statistical Colloquium, University of Missouri–Columbia, October and University of Delaware, Dept. of Math. Sciences, October.
- 1988 Polynomial–Trigonometric regression. 50 minute talk. North Texas Chapter of the American Statistical Association. February.
- 1988 A bias reduction theorem with applications to nonparametric regression. 50 minute talk. Department of Statistics, Southern Methodist University, Dallas, Texas. November.
- 1988 Spline smoothing and nonparametric regression. 3 hour tutorial. Forty–fourth Conference on Applied Statistics. Atlantic City, New Jersey. December.
- 1989 Testing the goodness–of–fit of a linear model via nonparametric regression techniques. 30 minute talk. AMS Special Session on Statistics and Probability, Ball State University, Muncie, Indiana. October.
- 1990 Testing goodness–of–fit using nonparametric function estimation techniques. 50 minute talk. Workshop on nonparametric function estimation. Cornell University, Ithaca, New York (June). Also given at U.C. Davis (September), University of Missouri, Columbia (October), Arizona State University (November).
- 1991 Confidence regions in nonparametric regression. 50 minute talk. Department of Mathematical Sciences, University of Texas, El Paso (January).
- 1991 Testing goodness–of–fit for parametric models using nonparametric function estimation techniques. 30 minute talk. International symposium on “Trends in the Analysis of Curve Data,” March 18–21, Heidelberg, Germany.
- 1991 A bias reduction theorem with applications in nonparametric regression. 40 minute talk. Invited session on “Nonparametric Function Estimation” at IMS regional meeting in Houston, Texas (March 25–27).
- 1991 Confidence bands in nonparametric regression. 50 minute talk. Department of Business Administration, University of Texas, Austin (October) and Department of Mathematical Sciences, University of Texas at El Paso (December).
- 1992 Confidence bands in nonparametric regression. 50 minute talk. Department of Mathematical Sciences, University of Delaware (February). Also given at i) 2nd Annual Statistics Day, Arizona State University (March), ii) Department of Mathematical Sciences, Uni-

- versity of California – San Diego (April), iii) Department of Mathematics, University of California – Los Angeles (April), iv) Department of Statistics, Rice University (April) and v) Department of Statistical Science, Southern Methodist University (May).
- 1992 Testing goodness-of-fit of parametric models using nonparametric function estimators. 50 minute talk. Department of Biomathematics, M. D. Anderson Cancer Research Center, Houston, Texas (April).
- 1992 Nonparametric estimation of functions with jump discontinuities. 50 minute joint presentation with P. Speckman. AMS conference on Change Point Problems, Mount Holyoke College, Holyoke, Massachusetts. July 11–17, 1992.
- 1992 Nonparametric regression: an overview. 50 minute talk. Department of Mathematics, Arizona State University. November.
- 1993 Nonparametric estimation of regression curves with discontinuous derivatives. 45 minute talk. International Meeting on Statistical Function Estimation and Smoothing Techniques, Academia Sinica, Taipei, Taiwan. March 22–24, 1993.
- 1993 Testing for additivity in nonparametric regression. 20 minute talk. 25th Symposium on the Interface, San Diego. April 14–17.
- 1994 Confidence bands in nonparametric regression. 25 minute talk. ASA invited session on “Fitting Curves to Data: How to Do It” at the 1994 Joint Statistical Meetings in Toronto, Canada. August 13–18.
- 1994 Testing goodness-of-fit using order selection techniques. 45 minute talk. Invited session on “Statistical Inference” at the COMPSTAT’94 meeting in Vienna, Austria. August 22–26. Travel funds were provided.
- 1994 Univariate smoothing spline regression and diagnostics. 40 minute talk. Invited talk at the COMPSTAT’94 Satellite Meeting on Smoothing: Statistical Theory and Computational Aspects in Semmering, Austria. August 27–28. Travel funds were provided.
- 1994 Testing for additivity in nonparametric regression. 50 minute talk. Distinguished Lecturers Series, Department of Mathematics, Arizona State University. October 25.
- 1995 Testing for no effect in regression. 50 minute talk. Department of Statistics, University of California–Davis. August 4.
- 1995 Testing for goodness-of-fit with multinomial data. 50 minute talk. Department of Mathematics, Arizona State University. November 14.
- 1996 Inference in nonparametric regression. 50 minute talk. Program on Spline Functions and Theory of Wavelets at the University of Montreal. April 3–5. Partial travel funds were provided.
- 1996 Testing goodness-of-fit of parametric regression models using nonparametric regression smoothers. 50 minute talk. Pusan National University, October 4; 90 minute talk. Taegu University, October 6; 50 minute talk. Seoul National University, October 9. Travel funds were provided.
- 1996 An introduction to nonparametric regression. 50 minute talk. Cheju University, October 7.
- 1996 An overview of nonparametric regression. 90 minute talk. Taegu University, October 5. Travel funds were provided.
- 1996 Testing goodness-of-fit of parametric regression models using nonparametric regression smoothers. 50 minute talk. Department of Statistics, University of North Carolina, November 15 ; Department of Statistics, Florida State University, November 21 ; Department of Mathematics, Arizona State University, December 13.

- 1997 Assessing lack-of-fit for parametric regression via nonparametric regression techniques. 45 minute talk. Symposium on Recent Developments in Smoothing Methods, New York University, May 30.
- 1997 Testing lack-of-fit for nonlinear regression models. 40 minute talk. Symposium on Nonparametric Functional Estimation, University of Montréal, October 16. Travel funds were provided.
- 1998 A simple smoothing spline. 60 minute talk. University of Puerto Rico–Mayaguez, November 12. Travel funds were provided.
- 1999 Nonparametric regression and spline smoothing. 3 hour tutorial. 52nd Annual Deming Conference on Applied Statistics, Atlantic City NJ, December 8. Travel funds were provided.
- 2001 Adaptive selection of the regularization parameter for nonparametric estimation in inverse problems. 40 minute talk. Inverse Problems in Engineering Symposium, Texas A&M University, June 14.
- 2002 Time Varying Coefficient Models for Longitudinal Data. 20 minute talk. Nonparametric Statistics Conference, Crete, July 15. Partial travel support was provided.
- 2003 Inference for Functional Regression Models. 40 minute talk. 2003 IMS Winter Workshop on Functional Data Analysis, University of Florida, Gainesville. Travel funds were provided.
- 2003 Prediction using functional regression analysis. 50 minute talk. Department of Mathematics and Statistics, University of Canterbury, New Zealand, February 11. Travel funds were provided.
- 2003 Adaptive order selection for spline smoothing. 40 minute talk. Best of the *Journal of Computational and Graphical Statistics* at the 35th Symposium on the Interface: Computing Science and Statistics, Salt Lake City, March 14.
- 2003 Data analysis using spline smoothing methods. 35 minute talk. August JSM in San Francisco.
- 2004 Prediction using functional regression analysis. 50 minute talk. Department of Food and Resource Economics, University of Delaware, April 21; Department of Statistics, University of British Columbia, December 13.
- 2004 Reproducing kernel Hilbert spaces and functional data analysis. 30 minute talk. Sixth ICSA International Conference, Singapore, July 24.
- 2005 Reproducing kernel Hilbert spaces and functional data analysis. 50 minute talk. Department of Statistics, University of Florida, January 13; Department of Mathematics and Statistics, Texas Tech University, February 9; Department of Mathematics and Statistics, Arizona State University, February 16.
- 2005 An RKHS framework for analysis of variance and discrimination. 35 minute talk. 55th Session of the International Statistical Institute, Sydney, April 9.
- 2005 Applications of reproducing kernel Hilbert spaces in Statistics. 25 minute talk. 2005 Joint Statistical Meetings, Minneapolis, August 10.
- 2005 Discriminant analysis and analysis of variance for stochastic processes. 35 minute talk. NSF Focused Research Group Conference on Non-parametric Models for Complex Biological Data, UC Davis, August 17.
- 2007 Canonical correlation for stochastic processes. 50 minute talk. Department of Statistics, Florida State University, Tallahassee Florida, March 23.

- 2007 Functional Data Analysis. Summer Institute, Department of Statistics, Brigham Young University. Ten one hour lectures. With T. Hsing.
- 2007 Canonical correlation and prediction for stochastic processes. 50 minute talk. Department of Statistics, UC Davis. With A. Kupresanin and T. Hsing. October 9.
- 2009 An RKHS framework for functional data analysis. 25 minute talk. 2009 Joint Statistical Meetings, Washington D.C. With A. Kupresanin, H. Shin and D. King. August 3.
- 2010 Random number generation: a lecture in honor of Professor Dennis Young. 50 minute talk. Meeting of the Arizona Chapter of ASA. April 21.

OTHER PROFESSIONAL ACTIVITIES:

Refereed papers for *Advances in Decision Sciences*, *American Mathematical Monthly*, *American Statistician*, *Annals of Statistics*, *Annals of the Institute of Statistical Mathematics*, *The Auk*, *Biometrika*, *Canadian Journal of Statistics*, *Communications in Statistics*, *Computational Statistics*, *Computational Statistics and Data Analysis*, *Concurrency and Computation: Practice and Experience*, *Econometric Theory*, *Empirical Economics*, *Indian Journal of Pure & Applied Mathematics*, *IEEE Signal Processing Letters*, *IEEE Transactions on Information Theory*, *International Journal of Applied Mathematics and Statistics*, *Inverse Problems in Engineering*, *Journal of the American Statistical Association*, *Journal of Approximation Theory*, *Journal of Business and Economic Statistics*, *Journal of Climate*, *Journal of Computer Science and Technology*, *Journal of Econometrics*, *Journal of Nonparametric Statistics*, *Journal of the Royal Statistical Society Series B*, *Journal of Scientific Research*, *Journal of Statistical Computation and Simulation*, *Journal of Statistical Planning and Inference*, *Journal of Statistical Theory and Applications*, *Journal of Zoology*, *Jurimetrics*, *Mathematical Methods in Statistics*, *Pakistan Journal of Statistics*, *Psychological Methods*, *Psychometrika*, *Probability Theory and Related Fields*, *Sankhy A*, *Scandinavian Journal of Statistics*, *Statistica Sinica*, *Statistics and Decisions*, *Statistics & Probability Letters*, *Technometrics* and *Water Resources Research*.

Reviewed proposals for Austrian Science Fund, NSF, ARO, AFOSR, NSA, NSERC and Swiss National Science Foundation. Served on NSF Probability and Statistics Review Panels 1999, 2000, 2002, 2003 and 2010.

TEACHING EXPERIENCE AND ACTIVITIES:

a) Courses taught:

Name	Text Author(s)	Description
Advanced Statistical Inference (SMU)	Lehmann	Advanced graduate level theory
Applied Multivariate Analysis (SMU)	Johnson & Wichern	Graduate multivariate methods
Computational Statistics (A&M, ASU)	Eubank & Kupresanin	Object oriented programming in statistics
Elements of Statistics (ASU)	Johnson	Undergraduate methods for social sciences
Introductory Applied Statistics (ASU)	Ott	Graduate methods for non-majors
Introduction to Probability (ASU)	Ross	Graduate level introduction to the theory of probability
Introduction to Statistics (SMU)	Freedman, Pisani & Purves	Freshman level "statistics appreciation" course

Introduction to Statistical Inference (SMU)	Koopmans	Undergraduate methods course for psychologists
Large Sample Theory (SMU, A&M)	Serfling	Graduate study of large sample theory in statistics
Mathematical Statistics (ASU)	Bain & Engelhardt/ Casella & Berger	Graduate level introduction to the theory of statistics
Mathematical Theory of Sampling (SMU)	Cochran	Graduate theory of sampling
Nonparametric Statistics (ASU)	Hollander & Wolfe	Graduate nonparametric methods
Statistics for Modern Business Decisions (SMU)	Daniel	Undergraduate methods for business majors
Statistics for Social Science (SMU)	Ott, Mendenhall & Larsen	Undergraduate methods course for Social Sciences
Statistics for Engineers and Computer Scientists (A&M)	Devroye	Undergraduate probability and statistics for science majors.
Spline Approximation in Statistics (SMU)	—	Study of spline and least-squares approximation oriented toward Statistics
Stochastic Processes (SMU)	Parzen	Graduate level introduction to stochastic processes and time series
Survey of Nonparametric Statistics (SMU)	Randles & Wolfe	Graduate nonparametric theory
Nonparametric Regression (A&M)	Eubank	Graduate level introduction to theory and practice of nonparametric regression
Advanced Theory of Statistics (A&M)	Durrett	Probability Theory

b) MS and Ph. D. Students:

Ashley Brown, Dan Glab, Stephani Hall, Vince LeMoine, Michele Olds: MS in 2005 [A&M]

Hailong Cui: MS in 2010 [ASU]

T. J. Carmody (Graduated December 1985). Dissertation Title: Diagnostics for Multivariate Smoothing Splines. [SMU]

R. B. Rosenstein (Graduated August 1986). Dissertation Title: Components of Phi-Squared and Tests of Symmetry. [SMU]

K. Cunningham (Graduated August 1987). Dissertation Title: Robust Penalized Regression. [SMU]

B. Jayasuriya (Graduated December 1990). Dissertation Title: Testing for Polynomial Regression Using Nonparametric Regression Techniques. [A&M]

Juei-Chao Chen (Graduated August 1992). Dissertation Title: Testing Goodness-of-Fit of Polynomial Models Via Spline Smoothing Techniques. [A&M]

JongTae Kim (Graduated December 1992). Dissertation Title: Testing Goodness-of-Fit Via Order Selection Criteria. [A&M]

Chin-Shang Li (Graduated August 1997). Dissertation Title: Testing Lack-of-Fit of Heteroscedastic Regression Models. (Co-directed with S. Wang) [A&M]

Karon Klipple (Graduated August 2000). Dissertation Title: Error Variance Estimation and Testing for Homoscedasticity in Partially Linear Models. [A&M]

Chungfeng Huang (Graduated December 2001). Dissertation Title: Topics in Spline Smoothing. [A&M]

Jason Clark (Graduated December 2001). Dissertation Title: Linearly Constrained Local Polynomial Regression. [A&M]

Sang-Joon Lee (Graduated May 2004). Dissertation Title: Approximation of Method of Regularization Estimators. [A&M]

Yolanda Munoz (Graduated May 2005). Dissertation Title: Mixed Models, Posterior Means and Penalized Least-Squares. [A&M]

Keith Schumann (Graduated August 2005). Dissertation Title: Resampling Confidence Regions and Test Procedures for Second Degree Stochastic Efficiency with Respect to a Function. [A&M]

Hyejin Shin (Graduated May 2006). Dissertation Title: Infinite Dimensional Discrimination and Classification. (Co-directed with E. Parzen) [A&M]

Napatkamon Ayutyanont (Graduated December 2007). Dissertation Title: Statistical Characteristics and Models of Cyber Attack and Norm Data for Cyber Attack Detection. (Co-directed with N. Ye) [ASU]

Zimin Zhong (Graduated May 2008). Dissertation Title: Curve Registration in Functional Data Analysis. (Co-directed with A. Majumdar) [ASU]

Guoyi Zhang (Graduated August 2008). Dissertation Title: Smoothing Splines Using Compactly Supported, Positive Definite, Radial Basis Functions. [ASU]

Hongling Yang (Graduated August 2008). Dissertation Title: A Study of Additive Coefficient Models. [ASU]

Ana Kupresanin (Graduated August 2008). Dissertation Title: Topics in Functional Canonical Correlation and Regression. [ASU]

Steven Spiriti (Graduated December 2008). Dissertation Title: Random Search Optimization for Free Knot Spline and P-Spline. (Co-Directed with D. Young) [ASU]

David King (Graduated December 2009). Dissertation Title: Canonical Correlation of Functional Data. [ASU]

Jenifer Boshes (Graduated December 2009). Dissertation Title: Change Point Detection in Cyber-Attack Data. (Co-Directed with N. Ye) [ASU]

Tsui-Ling Chen (Graduated May 2010). Dissertation Title: Some Topics in Spectral Density Estimation. [ASU]

c) Other Activities:

Director of Undergraduate Studies, SMU, (1980–1985)

Member of Curriculum Committee, SMU, (1985–1988)

Member of Faculty Search Committee, SMU, (1987)

Member of Departmental Graduate Committee, A&M, (1988–90)

Chairman of Promotion and Tenure Committee, A&M, (1989)

Member of Faculty Recruiting Committee, A&M (1989–90)

Chairman of Head Search Committee, A&M (1990)

Member of Faculty Recruiting Committee, A&M (1992–1993)

Chairman of Promotion and Tenure Committee, A&M (1993–1994)

Member of Promotion and Tenure Committee, A&M (1994–2001)

Chairman of Promotion and Tenure Committee, A&M (2001–2002, 2003–2004)

Member of College of Science Promotion and Tenure Committee, A&M (2001–2004)

Chair of Faculty Recruiting Committee for Statistics, ASU (2005–2006)

Member of Personnel and Budget Committee, ASU (2006–2007)

Member of Graduate Committee, ASU (2010–2011)