CURRICULUM VITA

February 2018

George Roy Terrell

BIRTH DATE AND PLACE: March 18, 1948, Las Cruces, New Mexico

EDUCATION:

B.A. Mathematics, Rice University, 1970

M.A. Mathematics, Rice University, 1974

Ph.D. Mathematics, Rice University, 1978

Dissertation Title: Nonsplitting of H-Space Sequences (1977)

Adviser: Morton L. Curtis

PROFESSIONAL EMPLOYMENT:

1974 – 1977 Scientific Programmer, Institute of Computer Science, Baylor College of Medicine, Houston, Texas.

1977 – 1979 Instructor of Experimental Medicine, Design and Anlaysis Unit, Baylor College of Medicine, Houston, Texas.

1978 – 1980 Lecturer, Department of Industrial Engineering, University of Houston, Houston, Texas.

1979 – 1980 Senior Scientist, Lockheed Engineering and Management Services Company, Houston, Texas.

1981 – 1983 Principal Scientist, Lockheed Engineering and Management Services Company, Houston, Texas (part-time).

1980 – 1986 Lecturer of Mathematical Sciences, Rice University, Houston, Texas.

1986 – 1992 Assistant Professor of Statistics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

1992 – Present Associate Professor of Statistics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

1994—1995 Visiting Associate Professor of Statistics, Rice University, Houston, Texas

2005-2006 Visiting Associate Professor of Statistics, Rice University, Houston, Texas

PROFESSIONAL ACTIVITIES:

Member of the American Statistical Association

Associate Editor for Mathematics of the ***Texas Journal of Science***, 1983 - 1987

Fellow of Scientia, 1983 - 1987

Faculty Associate of Baker College, 1984 - 1986

Associate Editor of ***Computational Statistics***, 1992 - 2001

Associate Editor of ***Journal of Computational and Graphical Statistics*****,** 1999-2010

Member of the College of Science Curriculum Committee, VPI&SU, 2003-2005.

Member of the College of Science 5-year Dean Review Committee

PUBLICATIONS:

a) Books

Terrell, George R. (1999). ***Mathematical Statistics: A Unified Introduction***. Springer-Verlag: New York, 453 pages.

b) Refereed Statistical Journals

Terrell, George R. and Scott, David W. (1980). On improving convergence rates for nonnegative kernel density estimates. ***Annals of Statistics***, 8, pp. 1160 - 1163.

Terrell, George R. (1983). A characterization of rectangular distributions. ***Annals of Probability***, 11, pp. 823 - 826.

Terrell, George R. and Scott, David W. (1985). Oversmoothed nonparametric density estimates. ***Journal of the American Statistical Association***, 80, pp. 209 - 214.

Terrell, George R. (1987). Chi-squared left-tail probabilities, ***Journal of Statistical Computation and Simulation***, 28, C290, pp. 264 - 266.

Scott, David W. and Terrell, George R. (1987). Biased and unbiased cross-validation in density estimation. ***Journal of the American Statistical Association***, 82, pp. 1131 - 1146.

Terrell, George R. (1990). The half-space problem. ***Journal of Statistical Computation and Simulation***, 36, pp. 50-35.

Terrell, George R. (1990). The maximal smoothing principle in density estimation. ***Journal of the American Statistical Association***, 85, pp. 470 - 477.

Hüsemann, Joyce A. and Terrell, George R. (1991). Optimal parameter choice for error minimization for bivariate histograms. ***Journal of Multivariate Analysis***, 37, pp. 85 - 103.

Terrell, George R. and Scott, David W. (1992). Variable kernel density estimation. ***Annals of Statistics***, 20, 3, pp. 1236 - 1265.

Terrell, George R. (1992). Review of ***Influence Diagrams, Belief Nets, and Decision Analysis***, R. Oliver and J. Smith (editors). ***Technometrics***, 3, 4, pp. 114 - 115.

Terrell, George R. (1992). Discussion of Sheather and Park and Turlach. ***Computational Statistics***, 7, 3, pp. 275 - 277.

Terrell, George R. (1997). Review of ***Statistical Theory and Computational Aspects of Smoothing***. Härdle and Schimek, eds., ***Journal of Statistical Planning and Inference***, 64, pp. 167 - 169.

Eno, Daniel R. and Terrell, George R. (1999). "Scatterplots" for logistic regression with discussion and our rejoinder. ***Journal of Computational and Graphical Statistics***. 38 pages, pp. 413 - 425 and 438 - 430.

Kathman, Steven J. and Terrell, George R. (2002). Improving Poisson approximation through tilting and expansion. ***Journal of Statistical Planning and Inference***. Vol. 104, no. 2.

Kathman, Steven J. and Terrell, G. R. (2003). Poisson approximation by constrained exponential tilting. *Statistics and Probability Letters* 61 pp. 83-89.

Terrell, G. R. (2003) Review of Thomas Garrity, **All the Mathematics You Missed (but Need to Know for Graduate School.)** *The American Statistician*, Vol 57 #1 pp. 69-70.

Terrell, G. R. (2003) The Wilson-Hilferty transform is locally saddlepoint. *Biometrika* 90 2 pp. 445-453.

Terrell, G. R. (2004) Review of Kenneth Lange, **Applied Probability.** *Journal of the American Statistical Association* Vol. 99 466 p. 562.

Chen, J., Kim, I., Terrell, G., and Liu, L., (2014), Generalized partial linear single-index mixed models for repeated measures data. *Journal of Nonparametric Statistics*. 26 pp. 291-303.

Chen, J., Terrell, G., Kim, I., and Daviglus, M**.** (2018) Proportional Odds Model with Log-concave Density Estimation. *Statistica Sinica*. 34 pages. Accepted subject to revision.

d) Book Chapters

Monahan, John J., Harris, Stephen E. and O'Malley, Bert W. (1977). Analysis of cellular messenger RNA using complementary DNA probes. (Appendix written by George R. Terrell) In ***Receptors and Hormone Action***, Bert W. O'Malley and Lutz Birnbaumer, eds., Academic Press, pp. 297 - 329.

Curtis, Morton L. and Terrell, George R. (1978). Infinite dimensional quaternionic projective spaces genuine and fakes. In ***Conference on Algebraic and Geometric Topology***. Springer-Verlag Notes, **#664**, pp. 76 - 82.

Terrell, George R. (1985). Biology and the behavioral sciences: a modern paradigm conflict. In ***Mapping the Cosmos***, R. O. Wells and J. Chance, eds., Rice University Press, pp. 118 - 128, 166 – 167.

f) Non-refereed Proceedings

Terrell, George R. (1989). Parseval quadrature for computing multinormal probabilities. ***Proceedings of the Symposium on the Interface: Computing Science and Statistics***, pp. 586Û,2590.

Terrell, George R. (1989). Kernel linear regression. *Proceedings of the Statistical Graphics Section, Joint Statistical Meetings*, pp. 40 - 44.

Terrell, George R. (1990). Linear density estimates. ***Proceedings of the Statistical Computing Section, Joint Statistical Meetings***, pp. 297 - 302.

Terrell, George R. (1991). Computing multivariate L^1 regression estimates. ***Proceedings of the Symposium on the Interface: Computing Science and Statistics***, 4 pages.

Terrell, George R. (1992). Impact Quantiles. Proceedings of the Business and Economic Statistics Section, Joint Statistical Meetings, Boston, Massachusetts, pp. 366 - 368.

Terrell, George R. (1993). Spline Density Estimates. Proceedings of the Statistical Computation Section, Joint Statistical Meetings, San Francisco, 6 pages.

Terrell, George R. (1994). Computing multivariate normal tail probabilities by Parseval quadrature. Proceedings of the Symposium on the Interface, Computing Science and Statistics, Research Triangle Park, North Carolina, pp. 228 - 230.

Terrell, George R. (1995). A Fisher information test for Pearson family membership. Proceedings of the Statistical Computing Section, Joint Statistical Meetings, Orlando, Florida, 5 pages.

Terrell, George R. (1996). Why are math stat courses often bad math and bad stat? Proceedings of the Statistical Education Section, Joint Statistical Meetings, Chicago, Illinois, pp. 156 - 160.

Terrell, George R. (1998). Gibbs Sampling for Estimation of Linear Models for Ranks. Proceedings of the Symposium on the Interface, Computing Science and Statistics 1997, Houston, Texas, pp. 267 - 270.

Terrell, George R. (1999). Flexible smoothing of density estimates. Proceedings of the Statistical Computing Section, Joint Statistical Meetings, Dallas, Texas, pp. 42 - 47.

Terrell, George R. (2000). Discretization methods for density estimation. Proceedings of the Statistical Computing Section, Joint Statistical Meetings, Baltimore, Maryland. 6 pages.

Terrell, George R. (2001). The Wilson-Hilferty transform is locally saddlepoint. Proceeding on the Interface: Computing Science and Statistics 2000. 10 pages.

Terrell, George R. (2002). The gradient statistic. Proceedings on the Interface: Computing Science and Statistics 2002. 20 pages.

Terrell, George R. (2003). A stabilized Lugannani-Rice formula. Proceedings on the Interface: Computing Science and Statistics 2003. 13 pages.

Terrell, George R., and Kathman, Steven J. (2004). Finite Population Probability Generating Functions. Proceedings of the Statistical Education Section, Joint Statistical Meetings, Toronto. 4 pages.

Terrell, G. R. (2007) Finite element methods for density estimation. *Proceedings of the Statistical Computing Section*, Joint Statistical Meetings, Seattle, Washington. 8 pages.

Terrell, George R. (2009) Co-Residual Analysis of Linear Models. Proceedings of the Section on Physical and Engineering Sciences, Joint Statistical Meetings, Denver, Colorado pp. 2401-8.

Terrell G. R. (2012) Geometry of Generalized Linear Models. Proceedings of the Section on Statistical Computation, Joint Statistical Meetings 2011, Miami Beach, Florida. 6 pages.

Terrell, G. R. (2013). Generalized least angle regression. **Proceedings of the Statistical Computation Section, American Statistical Association**. Joint Statistical Meetings, Montreal, Quebec, Canada. 7 pages.

g) Technical Memoranda

Terrell, George R. (1980). A note on the generation of Poisson-distributed random variables with large mean. Lockheed/emsco.

Terrell, George R. (1980). A bound for the smoothing parameter in certain well-known nonparametric density estimators. Lockheed/emsco.

Terrell, George R. (1980). Sampling of Rectangular Distributions. Lockheed/emsco.

Terrell, George R. (1981). An algorithm for the rapid location of an extremum subject only to geometrical restrictions. Lockheed/emsco.

Terrell, George R. (1985). Projection pursuit via multivariate histograms. Technical Report #85-7, Mathematical Sciences Department, Rice University.

Terrell, George R. (1986). Pearson's rule for sample medians. Technical Report #86-3, Mathematical Sciences Department, Rice University.

Terrell, George R. (1988). Roughness-penalized Hellinger distance methods in density estimation. Technical Report #88-6, VPI & SU.

Terrell, George R. (1988). The maximal smoothing principle in density estimation. Technical Report #88-8, VPI & SU.

Terrell, George R. (1988). Roughness-penalized hellinger distance methods II: asymptotic theory. Technical Report #88-19, VPI & SU.

Terrell, George R. (1988). Computing probabilities in the student's-t distribution. Technical Report #88-28, VPI & SU.

Terrell, George R. (1989). Parseval quadrature for computing multinormal probabilities. Technical Report #89-2, VPI & SU.

Terrell, George R. (1989). Kernel linear regression, Technical Report #89-14, VPI & SU.

Terrell, George R. (1989). Linearized maximum likelihood in regression, Technical Report #89-15, VPI & SU.

Terrell, George R. (1990). Linear density estimates, Technical Report #90-8, VPI & SU.

Terrell, George R. and Scott, David W. (1990). Variable kernel density estimation. Technical Report #90-7, Statistics Department, Rice University.

Terrell, George R. (1993). Spline density estimators. Technical Report 93-9, Department of Statistics, VPI & SU. 26 pages.

Terrell, George R. (1993). Variable-smoothing density estimates. VPI & SU technical report (January 1994). 22 pages.

Terrell, George R. (1994). Introductory Lectures on Stochastic Processes. Technical Report, Department of Statistics, VPI&SU, July 28, 1994.

Terrell, George R. (1998). Linear Methods in Density Estimation. Preface and Chapter 1: Directional Data. Technical Report, Department of Statistics, VPI&SU. 21 pages.

Terrell, George R. (1998). Linear Methods in Density Estimation. Chapter 2: Spline. Technical Report, Department of Statistics, VPI&SU. 18 pages.

Terrell, George R. (1998). Linear Methods in Density Estimation. Chapter 3: Roughness Penalties and Chapter 4: Regular Kernels. Technical Report, Department of Statistics, VPI&SU. 32 pages.

Terrell, George R. (1999). Linear Methods in Density Estimation. Chapter 5: Restricted Support. Technical Report, Department of Statistics, VPI&SU. 21 pages.

Terrell, George R. (1999). Linear Methods in Density Estimation. Chapter 6: Variable Smoothing. Technical Report, Department of Statistics, VPI&SU. 25 pages.

Terrell, George R. (1999). Linear Methods in Density Estimation. Chapter 7: Discrete Methods and Chapter 8: Advanced Discrete Methods. Technical Report, Department of Statistics, VPI&SU. 36 pages.

RECENT PRESENTATIONS:

Co-residual Analysis of Linear Models. Contributed Lecture, Joint Statistical Meetings, Denver, Colorado. August 6, 2008.

Scan Statistics for Bio-warfare Monitoring. Contributed Lecture, Army Conference on Applied Statistics, Lexington, Virginia. October 23, 2008.

Generalized F-Statistics. Contributed Lecture, Joint Statistical Meetings, Washington, D.C., August 3, 2009.

Geometry of Generalized Linear Models, August 3, 2011. Joint Statistical Meetings, Miami Beach.

Geometry of Linear Models, October 6, 2011,Virginia Polytechnic Institute and State University Statistics Colloquium

Generalized Least Angle Regression. Contributed presentation, Joint Statistical Meetings, Montreal, Quebec, Canada. August 4, 2013

Generalized Least Angle Regression, Virginia Polytechnic Institute and State University Statistics Colloquium, September 4, 2014

A GLARE Algorithm for Choosing Gaussian Graphical Models . Contributed presentation, Joint Statistical Meetings, Seattle, Washington, August 13. 2015.

Ph.D. Dissertations Directed:

Hüsemann, Joyce A. (1985). Variable Bin Bivariate Histograms. Rice University.

Jee, Rodney (1985) (co-directed with David Scott). A Study of Projection Pursuit Methods. Rice University.

Reeve, Russell (1989). Estimated Hausdorff Dimension. Virginia Polytechnic Institute and State University.

Kim, Donggeon (1995). Least Squares Mixture Decomposition Estimation. Virginia Polytechnic Institute and State University.

Kim, Jinhyo (1997) (co-directed with Richard Krutchkoff). Iterated Grid Search Methods. Virginia Polytechnic Institute and State University.

Lee, Yew-Haur (1998). A Fisher Information Test of Normality. Virginia Polytechnic Institute and State University.

Kathman, Steven (1999). Discrete Small-Sample Asymptotics. Virginia Polytechnic Institute and State University.

Wilcock, Samuel (2001). A Less-Restrictive Procedure for the k-Sample Problem. Virginia Polytechnic Institute and State University.

Chen, Jinsong (2010). GLIM models with Concave Errors. Virginia Polytechnic Institute and State University.

Ammerman, Peter (2013) Stochastic GARCH Models and Multifractal Volatility. Virginia Polytechnic Institute and State University. (in progress)