

Richard L. Einsporn, Ph.D.

Vita

Associate Professor
Department of Statistics
The University of Akron
Akron, Ohio 44325-1913

Phone: (330) 972-8007
E-mail: reinsporn@uakron.edu
Web: <http://gozips.uakron.edu/~rle>

Education

Ph.D. Statistics (1987)	Virginia Polytechnic Inst. and State Univ., Blacksburg, VA
M.A. Statistics (1979)	The Pennsylvania State University, University Park, PA
M.A. Mathematics (1979)	The Pennsylvania State University, University Park, PA
B.S. Mathematics (1975)	Indiana University of Pennsylvania, Indiana, PA

Professional Experience

Full-time faculty member, Department of Statistics (formerly part of the Dept. of Mathematical Sciences)
The University of Akron, Akron, Ohio. (1979-1982, 1987-present)

Teaching

Graduate & Mixed Level courses (sections taught): Experimental Design (22), Regression (9), Response Surface Methodology* (17), Probability and Statistics (2), Advanced Mathematical Statistics (2), Statistics for the Health Sciences / Life Sciences / Nursing (18), Advanced Behavioral Statistics I & II (1 each), Applied Statistics (16), Statistical Consulting (6), Applied Regression and ANOVA (5), Probability (9), Theoretical Statistics I & II (3,2), Statistical Methods (3), Biostatistics (2) (team-taught for the MPH program). * developed course

Undergraduate courses (sections taught): Basic Statistics (46), Introductory Statistics I (12), Intro. Statistics II (8), Intro. Statistics I for medical students (4), Intro. Statistics II for medical students (10), Statistics for Everyday Life (3), Calculus I (8), Calculus II (5), CPre-calculus (3). Undergraduate lab coordinator: 6 years.

Consulting (Center for Statistical Consulting)

Hundreds of clients assisted, dozens each year, including graduate and undergraduate students, faculty, and off-campus clients. Subject areas: nursing, medicine, biomedical engineering, chemical engineering, mathematics, psychology, law, education, biology, communications, business, polymer science, statistics, polymer engineering, civil engineering, modern languages.

Graduate Assistant, Statistics Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (1982-1987).

Teaching: Introductory Statistics I (2 sections), Intro. Statistics II (10 sections).

Statistical Consulting: Assisted graduate students and faculty from agronomy, biology, horticulture, veterinary science, geography, food science, physical education, architecture, industrial engineering, and worked as a consultant for one year in the Office of Institutional Research.

Dissertation

"HATLINK: A Link Between Least Squares Regression and Nonparametric Curve Estimation." (Provides a bridge between the model-based and model-free approaches to regression.) Advisor: Jeffrey B. Birch.

Articles

"Results of a Summer Developmental Program on Minority Students with Low Academic Skills," Resources in Education, November, 1985.

"A Comparison of Non-Parametric Tests for Shift in Scale," with G. Ulrich, Proceedings of the Statistical Computing Section of the American Statistical Association, Vol. 12, 1986.

"HATLINK: A General Approach to Regression When the True Model is Unknown," with Jeffrey B. Birch, Proceedings of the Statistical Computing Section of the American Statistical Association, Vol. 13, 1987.

"A Model-Robust Approach to Variance Estimation in Regression," Proceedings of the Statistical Computing Section of the American Statistical Association, Vol. 14, 1988.

"Discussion -- Regression: Influence Measures, Collinearity, and Non-Full Rank Models," Proceedings of the Statistical Computing Section of the American Statistical Association, Vol. 14, 1988.

"Breast Volume Measurement of 598 Women Using Biostereometric Analysis," with C. W. Loughry, et al, Annals of Plastic Surgery, Vol. 22 (5), 350-385, 1989.

"Use of Biostereometric Analysis as a Screen for Breast Cancer," with C. W. Loughry, et al, Investigative Radiology, Vol. 26 (6), 528-533, 1991.

"Level of Cancer Pain Knowledge Among Baccalaureate Student Nurses," with D. Sheehan, et al, Journal of Pain and Symptom Management, Vol. 7 (8), 478-484, 1992.

"Social Support: Gender Differences in Multiple Sclerosis Spousal Caregivers," with D. Good and D. Bower, Journal of Neuroscience Nursing, Vol. 27 (5), 305-311, 1995.

"Group Therapy for Survivors of Childhood Sexual Abuse Who Are Severely and Persistently Mentally Ill," with M. C. Kreidler, et al, Journal of the American Psychiatric Nurses Association, Vol. 5 (3), 73-79, 1999.

"An Overview of Model-Robust Regression," with J. E. Mays and J. B. Birch, Journal of Statistical Computation and Simulation, Vol. 66, 79-100, 2000.

"A Study of the Effect of PP-g-NA and SEBS-g-NA on the Mechanical and Morphological Properties of Polypropylene/Nylon 6 Blends, with D. E. Tucker and S. Lee, Polymer Engineering and Science, Vol. 40 (12), 2577-2589, 2000.

"Using Graphing Calculators to Enhance Students' Understanding of the Formal Definition of Limits," with A. Quesada and M. Wiggins, Proceedings of the 17th Annual International Conference on Technology in College Mathematics. October, 2004.

Quesada, A, Einsporn, R, Wiggins, M. "A report on how to enhance students' understanding of the formal definition of limits via a graphical approach," Proc. of the Third International Conference on the Teaching of Mathematics (ICTM-3), pp 193-198, Istanbul, Turkey, 2006.

Einsporn, R. , Quesada, A., Pachnowski, L. and Saliga, L., "Conducting an Online Inquiry-Based Mathematics Workshop: A First Experience," Ohio Journal of School Mathematics, Spring, 2007, No. 55, pp. 12-19.

Quesada, A., Einsporn, R., and Wiggins, M., "The Impact of the Graphical Approach on AStudents' Understanding of the Formal Definition of Limit," The International Journal for Technology in Mathematics Education, Vol. 15, No. 3, 2008.

Technical Reports

"Model-Robust Regression: Using Nonparametric Regression to Improve Parametric Regression Analyses," with J. Birch, Technical Report No. 93-5, Virginia Polytechnic Institute and State University, May, 1993.

"Improving Predictions by Combining Least Squares and Kernel Regression Prediction Weights," with J. Birch, Technical Report No. 93-11, Virginia Polytechnic Institute and State University, June, 1993.

Presentations

"A Link Between Least Squares and Nonparametric Regression," 1987 Winter Conference of the American Statistical Association, January 8, 1987.

"A Model-Robust Approach to Variance Estimation in Regression," 1988 Joint Statistical Meetings, August 23, 1988.

Invited Discussant, session on "Influence Measures, Collinearity, and Non-Full Rank Models", 1988 Joint Statistical Meetings, August 25, 1988.

"How to Operate in Statistics Class," Ohio MAA / Statistics meeting, Youngstown State University, Spring, 1997.

"Activities in Stats Class," Teaching Excellence Grant Spotlight Conference, The University of Akron, April 21, 1999.

Invited Discussant, "Assessment and Evaluation of Student Performance in Statistics," Midwest Conference on Teaching Statistics, University of Wisconsin Oshkosh, June 26, 1999.

"Classroom Activities that Integrate Several Topics," Midwest Conference on Teaching Statistics, University of Wisconsin Oshkosh, June 27, 1999.

"Inquiry Statistics," Northeast Ohio Title II Teacher Quality Enhancement Regional Conference, April 27, 2002.

"Ohio's Inquiry-Based Mathematics," with L. Pachnowski, L. Saliga, A. Quesada, and E. Wheland, OCTM conference, Cleveland, October, 2, 2003.

Funded Grants

"Parental Psychosocial Responses to Perinatal Loss," with K. Reed, Principal Investigator. Funded by the National Institutes of Health for 1994-1996.

"Comparison of the Impact of Adult Survivors of Childhood Sexual Abuse Therapy Groups on Female Survivors who do and do not have a Severely Mentally Disabled Diagnosis," with M. Kreidler, Principal Investigator. Funded by the Ohio Department of Mental Health for 1995-1997.

"Revision and Enhancement of Basic Statistics," Teaching Excellence Grant, The University of Akron, Summer, 1998. (\$5,500)

"Inquiry Statistics," with Lynne Pachnowski. Title II Initiative for Enhancing Teacher Quality. Funded by the Ohio Board of Regents for 2000-2001. (\$9,000)

"Inquiry Statistics on the Web," with Lynne Pachnowski. Title II Initiative for Enhancing Teacher Quality. Funded by the Ohio Board of Regents for 2001-2002. (\$9,000)

"Ohio's Online Inquiry-Based Math," with L. Saliga, L. Pachnowski, and A. Quesada. Ohio Board of Regents Technology Initiatives grant. Funded for 2002-2003. (\$215,000)

Professional Activities

Session Chairman, 1988 Joint Statistical Meetings session on the "Use of the Computer in Consulting and Teaching Statistics," August 24, 1988.

Reviewer for:

Biometrics (1991, 1993), The American Statistician (1992), Journal of Statistical Education (2008, 2010)

Master's Thesis Advisor

Sue Crane, (1994)

Master's Paper Advisor

Dawn Hardin (1989)
John Patterson (1990)
David Lawrence (1992)
Min Li (1992)
Cindi Goodlet (1993)
Christopher Moore (1993)
Ruba Sen (1994)
John Gabrosek (1995)
Cathy Darulla (1995)
Guofen Yan (1995)
Ramona McNeal (1996)
Ron Scott (1998)
Douglas Ruvolo (1998)
Ziad Traish (1999)
Umran Avcilar (2000)
Pei-whe Hsu (2000)
Josh Kuzak (2001)
Matt Robinson (2001)
Eric Winters (2002)
Muhammed Asif Shahulhameed (2002)
Aanchal Kochar (2003)
Andrew Stephens (2004)
Nathan Morris (2004)
David Hulse (2005)
Anthony Sgambellone (2005)
Jason Lehmilller (2005)
Linsey Hollingshead (2005)
Michael Stansky (2006)
Kajal Nayyar (2006)
Mike Hewit (2006)
Yinmei Huang (2006)
Martin Woyczynski (2007)
Andrew Rugaiganisa (2007)
Chutima Kanchanaolarnsire (2007)
Kathlene Garland (2008)
Rochak Vig (2008)
Varun Midha (2008)
Tasha Preissler (2009)
Gurpreet Kohli (2009)
Fangyuan Zuo (2009)

Awards

Buchtel College of Arts and Sciences Chairs' Award for Outstanding Achievement in Teaching (2004)