

Roger W. Hoerl

Union College
807 Union Street
Schenectady, NY 12308
hoerlr@union.edu

Education

Ph.D. in Statistics, University of Delaware – 1983. Dissertation topic – A Simulation Study of Biased Estimation and Subset Selection Regression Techniques, J.H. Schuenemeyer, Chair of Dissertation Committee. Published in Technometrics.
M.S. in Statistics, University of Delaware - 1981
B.S. in Mathematics, Elizabethtown College - 1979

Major Professional Honors

Harry L. Roberts Statistical Advocate of the Year Award, Chicago Section of the American Statistical Association (ASA) 2013
Elizabethtown College Educate for Service Award, 2011
Deming Lectureship Award, ASA, 2011
Shewhart Medalist, American Society for Quality (ASQ), 2009
Coolidge Fellowship Recipient* (GE Global Research), 2006
Founders Award (ASA) Recipient 2004
Brumbaugh Award (ASQ) Recipient 2002
Hunter Award (ASQ) Recipient 1999
Fellow of American Statistical Association (ASA)
Fellow of American Society for Quality (ASQ)
Elected to (Fellow of) International Statistical Institute (ISI)
Elected as Academician in (Fellow of) the International Academy for Quality (IAQ)

*Highest technical award at GE Global Research. One Fellowship is granted per year for career technical achievement from among the four GE Global Research locations. Includes paid six month sabbatical.

Publications

See attached publication list. Highlights include six books, two book chapters, and sixty publications, over fifty-five of which have been in refereed journals.

Highlights of Professional Service

Executive Committee, National Institute of Statistical Sciences (NISS) (Current) – Vice Chair in 2013/2014
Chair, Membership Committee of International Statistical Institute (ISI) (Current)
Council Member, International Society for Business and Industrial Statistics (ISBIS) (Current)
Member, ASA Committee on Undergraduate Education (Current)
Member, ASA Committee on Masters Programs in Statistics (2011-2012)
Chair, Management Committee, Technometrics Journal (2006 – 2008)
Associate Editor, Technometrics (1986 – 2003)
Chair, Quality and Productivity Section, ASA (1996)
Chair, Gordon Research Conference on Statistics in Chemistry and Chemical Engineering (1993)
Chair, Statistics Division, ASQ (1991)
Chair, Delaware Section, ASQ (1985)

Community Service

Member, Advisory Board, E4p Incorporated. E4p (www.e4poverty.org) is a registered not-for-profit organization combating poverty through four major focus areas, energy, environment, economics, and education, both locally and globally. Major project partners include the City Mission of Schenectady and New Song of Grace, Paicho, Uganda. My personal focus has been to organize a sponsorship program for the Bophelong Children's Home (AIDS orphanage) in Mamelodi, South Africa.

Partnered with student teams from Union College and also the University of West Virginia to travel to South Africa to study the potential impact of the business community on the AIDS pandemic and global poverty.

Elder (member of spiritual oversight), Calvary Tabernacle Church, Schenectady. Lead overseas missions activities, including orphan care, AIDS relief, and poverty alleviation in Malawi, Uganda, South Africa, Haiti, Mexico, Bulgaria, Bangladesh, and India. My personal focus has been leading our collaboration with partners in Bulgaria, primarily focused on orphan care and rehabilitation.

Spent 2007 Coolidge Fellowship sabbatical studying the global HIV/AIDS pandemic, ultimately resulting in publication of *Use What You Have: Resolving the HIV/AIDS Pandemic* with coauthor Presha Neidermeyer.

Highlights of Conference Presentations

Keynote speaker for at least seven national or international statistical conferences, including European Network of Business and Industrial Statistics (ENBIS), Royal

Statistical Society, the Joint Statistical Meetings, the Statistics Society of Canada, the Fall Technical Conference, Making Statistics More Effective in Schools of Business, and Beyond the Formula.

Keynote speaker for at least eight national or international non-statistical conferences, including the International Conference on Lean Six Sigma, the Lean and Six Sigma Conference, World Quality Day Finland, Lean Six Sigma Summit West, Institute for Continuous Quality Improvement, and the Global ISO Conference.

Approximately fifty-seven invited presentations at national (~46) or international (~11) conferences, such as the Swiss Statistical Society Meetings, ENBIS (Poland, Greece), ISBIS (Czech Republic, Peru, Hong Kong, Thailand), Royal Statistical Society (England), International Conference on Six Sigma (Scotland), Statistics Society of Canada, Joint Statistical Meetings, and Fall Technical Conference

Approximately twelve invited presentations in academia, including Rochester Institute of Technology, University of Tennessee, Central Michigan University, University of Arizona, Penn State University, Temple University, University of Denver, Drexel University, Union College, Elizabethtown College, Universidad Nacional Mayor de San Marcos (Lima, Peru), University of Windsor (Windsor, Canada), and University of Plovdiv (Bulgaria)

Approximately ten invited presentations to statistics groups in the private sector, including Intel, AIG, Amgen, 3M, GlaxoSmithKline, DuPont, John Deere, Nestle (Switzerland), Hewlett Packard (Poland), and Gore Associates

Academic Teaching Experience

Union College

Brate-Peschel Assistant Professor of Statistics, 2012 - present

Teach introductory statistics, engineering statistics, design of experiments, and regression analysis

Drexel University

Instructor, 1988 – 1992 (approximate dates)

Taught introductory statistics, statistics for MBA students, and modern methods for quality management

University of Delaware

Instructor, 1980 – 1987 (approximate dates)

Taught introductory statistics, business statistics, multivariate statistics, and statistics for MBA students

Experience in Business and Industry

General Electric Company

Manager, Applied Statistics Laboratory 3/2001 – 6/2012

Leader of 16-person group specializing in development and application of advanced statistical methods to research and development. Key methodologies include reliability estimation and improvement, quantitative finance, biostatistics, strategies of experimentation, and Bayesian methods.

Business Systems Project Leader 4/2000 – 3/2001

Project leader at Global Research for key business improvement projects, including web-enablement of finance and other business functions, and developing an integrated approach to managing long term service agreements (LTSA's) and other contracted services.

Quality Leader - CAS 11/98 – 4/2000

Quality Leader for Corporate Audit Staff (CAS), a leadership development program within Corporate Finance. Responsible for fully implementing Six Sigma within CAS on a worldwide basis, including introduction of a Black Belt program.

Quality Program Manager - 1/1/97 - 11/98

Member of Six Sigma Quality Organization at Corporate Research and Development Center. Certified as a Six Sigma Master Black Belt. Responsible for development and implementation of a Six Sigma approach for design of new non-manufacturing processes.

Statistician - 9/95 - 1/97

Member of Applied Statistics Group, working on key technical problems within a variety of GE businesses. Received CRD Whitney Awards for contributions to GE90 Fan Blade (GE Aircraft Engines) and Ceramic Metal Halide Lamp (GE Lighting).

Scott Paper Company

Manager of Quality Methods and Information 2/92 - 9/95

Leader of Quality Methods and Information Group. Responsible for developing systems to grow organizational capability in quality methods, such as Quality Function Deployment, experimental design, and Statistical Process Control, and also common information systems depicting the state of competitive and Scott product quality.

Statistical Quality Control Manager 2/87 - 2/92

Responsible for design, development, and execution of a strategy to develop Continuous Improvement concepts and SPC skills for all levels in the organization, including hourly workers.

Hercules Incorporated

Research Statistician 6/83 - 2/87

Statistician responsible for statistical support of scientists at the Research Center, as well as production sites; development of Corporate Quality Assurance Group; and Principle Investigator.

DuPont Company

Statistical Intern 6/81 - 9/82 (Summers)

Responsible for assisting DuPont statisticians in consulting with clients, designing experiments, analyzing data, preparing reports, and making presentations.