Curriculum Vitae
Don Edwards
Nov 12, 2014

EDUCATION / CERTIFICATION

ASA Accredited Professional Statistician (PStat$^®$), 2011-2016
Ph.D. Statistics, Ohio State University 1981
M.S. Statistics, Ohio State University 1979
B.S. Mathematics, Ohio State University 1977

RESEARCH INTERESTS

Statistical methods for auditing; interrater agreement; response surface methodology; simultaneous inference

EXPERIENCE: in Program/Dept. of Statistics, University of South Carolina, except as noted.

2002-05, 2013:- Grad Director for Distance Education
2012: Visiting Professor, Dept. of Epidemiology and Biostatistics, UC-San Francisco
2000-: Consultant for Palmetto GBA, Inc. (CMS contractor)
2005-12: Department Chair
2003-09: Consultant for TriCenturion, Inc. (Medicare benefit integrity investigations)
2004-07: *JABES* Management Board
2005-06: Associate Editor, *Journal of the American Statistical Association*
1996-02: Director of Graduate Studies
1996: Software Designer for the *multicomp()* suite in *Splus®*, MathSoft, Inc.
1989: Visiting Scientist, Operations Research and Industrial Engineering, Cornell University
1983-87: Director, Statistical Consulting Laboratory
1981-95: Assistant Professor to Professor

HONORS

2014 Breakthrough Leadership in Research Award, University of South Carolina
1997 Fellow of the American Statistical Association
1990 Outstanding Member of the South Carolina Chapter of the American Statistical
   Association for 1985-1989

FUNDED RESEARCH ACTIVITY (SELECTED)

2014-17: NCI, $1,141,325 R01 CA172463-01A1, "Modeling Agreement in Cancer Diagnostic Tests" (co-I; Kerrie Nelson, P.I.)

2012-13: NSF, $10,000. DMS-1157813, "Summer Research Conference in Statistics" (P.I.)

2007: NSF, $13,000. DMS-0726219, "Current and Future Trends in Nonparametrics" (co-P.I.; P.I. Edsel Peña).

2006-08: NCI, $290,000. R03 CA114783-01A. "Modeling inter-rater agreement through the use of generalized linear mixed models" (co-I.; Kerrie Nelson, P.I.)

1992-94 NSF, $94,980, "Elementary Statistics Laboratory Course Development," co-P.I. (J.D. Spurrier, P.I.).

1986-87 NIH R01, $30,531, "Sharp multiple comparisons for multivariate analysis" (P.I.)

1985-86 NIH R01, $15,709, "Exact simulation-based multiple comparisons" (P.I.)

BOOKS

Petkewich, Maureen and Edwards, Don (2013). *Statistics: Play-by-Play*. Dubuque, IA: Kendall-Hunt.

Spurrier, John D., Don Edwards, and Lori A, Thombs (1999). *Statistics: Learning by Doing*. Long Beach, NY: Whittier.

Spurrier, John D., Don Edwards, and Lori A.Thombs (1995). *Elementary Statistics Laboratory Manual.* (separate versions for MS-DOS and Macintosh; also, Instructor's Manual). Belmont, CA: Duxbury Press.

PEER-REVIEWED JOURNAL ARTICLES (SELECTED FROM 73)

Nelson, Kerrie and Edwards, Don. "Models and Measures of Agreement for Ordinal Classifications in Population-Based Studies". Submitted.

Gao, Jie, Don Edwards, Andrew T.A. Wood, and Jayaram Sethuraman. "Pearsonian estimation and inference for a model-based measure of agreement". Submitted.

Edwards, Don, Dennis Gilliland, Gail Ward-Besser, and Jennifer Lasecki. "Conservative Pennysampling". Submitted.

Ignatova, Iliana; Deutsch, Roland; and Edwards, Don (2012). "Closed sequential and multistage inference on binary responses with or without replacement". *The American Statistician* **66**: 163-172.

Gilliland, Dennis and Edwards, Don. (2011) "Using Randomized Confidence Limits to Balance Risk- an Application to Medicare Investigations". *The American Statistician* **65**, 149-153.

Edwards, Don (2011) "On Stratified Sampling and Ratio Estimation in Medicare Benefit Integrity Investigations" *Health Serv Outcomes Res Method*, **11**: 79-94. DOI 10.1007/s10742-011-0073-7

Nelson, Kerrie and Edwards, Don (2010). "Improving the reliablity of diagnostic tests in population-based agreement studies. *Statistics in Medicine*. 29(6), 617-626

Ignatova, Iliana and Edwards, Don (2008). "Probe Samples and the Minimum Sum Method for Medicare Fraud Investigations". *Health Services and Outcomes Research Methodology* **8**: 209-221.

Nelson, Kerrie, and Edwards, Don (2008). "On population-based measures of agreement". *The Canadian Journal of Statistics*, **36:** 411–426.

Parody, Robert and Edwards, Don (2007) "Confident Exploratory Visualization Techniques for Improvement in High Dimensional Response Surfaces". *International Journal of Statistics and Management Systems,* **1**:112-129.

Parody, Robert and Edwards, Don (2007). "Simulation-Based Inference on the Improvement in a Rotatable Response Surface". *QTQM*, **4**: 489-499.

Edwards, Don, G.Ward-Besser, J.Lasecki, B.Parker, K.Wieduwilt, F.Wu, and P.Moorhead (2005). "The Minimum Sum Method: a Distribution-Free Sampling Procedure for Medicare Fraud Investigations". *Health Services and Outcomes Research Methodology* **4:** 241-263.

Edwards, Don (2005). "On 'False Discovery Rate-Adjusted Multiple Confidence Intervals for Selected Parameters' ". Invited comment, *Journal of the American Statistical Association* **100**, 81.

Merchant, Aparna, M.McCann and D. Edwards (1998). "Improved multiple comparisons with a control in response surface analysis". *Technometrics* **40**, 297-303.

McCann, Melinda and Edwards, Don (1996), "A path-length inequality for the multivariate-t distribution, with applications to multiple comparisons". *Journal of the American Statistical Association* **91**, 211-216.

Scholz, Paul M., D.Edwards, R.C.Palm, Jr. and J.M. Dean (1994), "Use of a quadratic response model to estimate optimum combinations of nutritional variables." *Transactions of the American Fisheries Society* **123**, 266-272.

Sa, Ping and Edwards, Don (1993), "Multiple comparisons with a control in response surface methodology." *Technometrics* **35**, 436-445.

Gardner, L.R., L.Thombs, D.Edwards, and D.Nelson (1989), "Time series analyses of suspended sediment concentrations at North Inlet, SC". *Estuaries* **12**, 211-221.

Edwards, Don (1987), "Extended-Paulson sequential selection". *Annals of Statistics* **15**, 449-455.

Edwards, Don and Berry, Jack J. (1987), "The efficiency of simulation-based multiple comparisons". *Biometrics* **43**, 913-928.

Edwards, Don and Coull, B.C. (1987). "Autoregressive trend analysis: an example using long-term ecological data". *Oikos* **50**, 95-102.

Sugimoto, Tai and Edwards, Don (1987). "Incidence and costs of incidental appendectomy as a preventive measure". *American Journal of Public Health* **77**, 471-475.

Spurrier, John D. and Edwards, Don (1986), "An asymptotically optimal subclass of the balanced treatment incomplete block designs for comparisons with a control." *Biometrika* **73**, 191-199.

Edwards, Donald G. and Hsu, J.C. (1983), "Multiple comparisons with the best treatment*." Journal of the American Statistical Association* **78**, 965-971.

Hsu, J.C. and Edwards, Donald G. (1983), "Sequential multiple comparisons with the best*." Journal of the American Statistical Association* **78**, 958-964.

INVITED PRESENTATIONS (SELECTED FROM 22)

Joint Statistical Meetings, Boston MA August 2014. "Distance Education: Strategies that Work".

2nd Workshop on Biostatistics and Bioinformatics, Atlanta GA May 2013. "Exact Analysis of closed sequential experiments with binary response".

Fifteenth Annual Medicare / Medicaid Statistics and Data Analysis Conference, Baltimore, MD August 2011. "Conservative Pennysampling".

Thirteenth Annual Medicare / Medicaid Statistics and Data Analysis Conference, Omaha, NE October 2009. Invited panelist on testifying in Medicare ALJ hearings

National Advocacy Center (US DoJ), Columbia SC, January 2009: "The Evolution of Statistical Sampling for Medicare Benefit Integrity Investigations"

Ninth Annual Medicare Statistics and Data Analysis Conference, Indianapolis, IN, November 2005: "The Minimum Sum Method for Audited Payment Populations". Keynote address.

Joint Statistical Meetings, August 2000. Invited Discussant for Session on Distance Education.

CONTRIBUTED PAPERS AND SEMINARS (SELECTED FROM 92)

International Biometric Society, Florence IT. "Pearsonian Estimation and Inference for a Model-based Measure of Agreement" (July 2014)

Medical University of South Carolina Department of Biostaistics. "Exact Analysis for Certain Closed Sequential Experiments with Binary Responses (November 2013)

Neyman Lecture, Dept. of Statistics, UC - Berkeley "Statistics and Healthcare Fraud" (Oct 2012). Also presented at Oklahoma State University Department of Statistics (March 2013), UC-Davis Dept. of Statistics (Oct 2012), University of North Florida, Dept. of Mathematics and Statistics (March 2012), Cleveland State University, Department of Mathematics and Statistics (October 2011).

UC-San Francisco Division of Biostatistics, September 2012: "Closed sequential and multistage inference with binary response". Also presented at Michigan State University Department of Statistics and Probability, November 2010.

Western Kentucky University Department of Mathematics and Statistics, Feburary 2011. "Exact Sequential Acceptance Sampling for Attributes". Also presented at the University of North Florida, Dept. of Mathematics and Statistics (March 2012); Austin Peay State University, Department of Mathematics (February 2011) Clemson University Dept. of Mathematical Sciences (March 2009). UNC Greensboro (Oct. 2008) and UNC Wilmington (Nov. 2008).

13th Annual Medicare / Medicaid Statistics and Data Analysis Conference, Omaha, NE October 2009. "On Stratification in Medicare Investigations"

Ohio State University Statistics Department Silver Anniversary conference, October 1999. "Multiple Comparisons with the Best in Response Surface Methodology".

University of Florida, Department of Statistics, April 1996. "Moldy soccer balls, circus balloon animals, and multiple comparisons".

SELECTED PROFESSIONAL SERVICE

Southern Regional Council on Statistics (SRCoS): President-Elect 2009-11;
  President 2012-13; Past-President 2014-.
International Biometric Society (ENAR) 2008-.
American Statistical Association 1979-;
  ASA Caucus of Institutional Representatives: Treasurer, 2008-12
  Member, ASA delegation to China, December 2010
SC Chapter of the American Statistical Association
  Sec.-Treas., 1983; V.P., 1983-84; Pres.-Elect, 1984-85; Council Rep., 1984-86; President,
  1985-86. SC Region II Science Fair Judge and/or Presenter (yearly) 1985-.
Mu Sigma Rho (national honorary society for Statistics)
  National Vice-President 1991-94; President 1994-97; co-organizer College Bowl 1996-
  97, Stat Bowl 2003; Council Rep 2000-2010.

SELECTED USC COMMITTEE SERVICE

USC Statistics Program/Department
  Director for Distance Education Graduate programs 2002-05, 2013-;
  Department Chair, 2005-12
  Graduate Director 1996-2002
  Undergraduate Director 1995-96
  Director, Statistical Consulting Laboratory, 1983-87
University Committee on Distance Education 2010-12
Search Committee, University VP for Human Resources, 2010
Provost's Committee on NRC PhD program rankings, 2010
University Committee on Tenure and Promotion, 2003-05
University Graduate Council 1997-2000
University Committee on Curriculum and Courses, 1997-2000

REVIEWER FOR (SELECTED):

Journal of Agricultural, Biological, and Ecological Statistics; Journal of the American
  Statistical Association; Journal of the Royal Statistical Society, Series B; Journal of
  Statistics Education; Journal of Statistical Planning and Inference; Statistical Science;
  Technometrics; The American Statistician; The Annals of Statistics.

CONTACT INFORMATION

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