

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME Stephen D. Simon, Ph.D.	POSITION TITLE Research Biostatistician		
eRA COMMONS USER NAME ssimon			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Iowa	B.A.	1977	Mathematics
University of Iowa	M.S.	1978	Statistics
University of Iowa	Ph.D.	1982	Statistics

A. Personal Statement

I am a professional statistician with over thirty years of experience in consulting. I have a Ph.D. from the University of Iowa, and was the student leader of the Statistical Consulting Center during my graduate training. As a faculty member, I assisted with the Consulting Center while also teaching applied statistics at Bowling Green State University. At the National Institute for Occupational Safety and Health, I co-authored several award winning papers and also supervised other professional statisticians. At Children's Mercy Hospital, I co-authored another award winning paper and developed a widely-recognized site on statistics, research ethics, and evidence based medicine: www.childrensmc.org/stats. As an independent consultant and a part-time employee of the University of Missouri-Kansas City, I continue to offer statistical guidance to researchers across a broad spectrum of health care research. I continue to offer web-based resources for Statistics at www.pmean.com, and also publish an email newsletter, The Monthly Mean, that has over 200 subscribers. I have a broad background in statistics and have recently co-authored two peer-reviewed publications about Bayesian statistics. I have taken continuing education courses in data mining, microarray data analysis, mixed regression models, model-based clustering, regression splines, survival analysis, and wavelets. In summary, I have a wealth of background and experience with statistical design and data analysis, and can provide outstanding support to this research project.

B. Positions and Honors

Positions

1. June 1979 - August 1981: Research Assistant, Statistical Consulting Center, University of Iowa
2. June - August 1981: Adjunct Instructor, Department of Statistics, University of Iowa
3. September 1981 - May 1987: Assistant Professor, Department of Applied Statistics and Operations Research, Bowling Green State University
4. July 1987 - November 1987: Research Statistician, Division of Biomedical and Behavioral Science, National Institute for Occupational Safety and Health
5. December 1987 - May 1996: Chief, Statistics Activity, Division of Biomedical and Behavioral Science, National Institute for Occupational Safety and Health
6. April 1996 - October 2008: Research Biostatistician, Office of Medical Research, Children's Mercy Hospital, Kansas City, Missouri
7. June 2008 - present: Independent statistical consultant, P.Mean Consulting, Leawood, Kansas
8. February 2009 - present: Part-time Research Faculty, University of Missouri-Kansas City, Kansas City, MO.

Honors

1. Co-inventor on U.S. Patent, A System and Method for Monitoring and Analyzing Data Trends of Interest Within an Organization, under review by the U.S. Patent Office.
2. Co-author of the following award winning research papers:
 - a. Miller et al Am J Audiology 2003;24(1);16-18, Editor's Award 2003.
 - b. Moorman et al Reproductive Toxicology 1998;12(3):333-46, Alice Hamilton Award 1999 (Biological Sciences Category).
 - c. Schrader et al Journal of Andrology 1990;11(1):32-39, Alice Hamilton Award 1991.
 - d. Schrader et al Reproductive Toxicology 1988;2:183-190, Alice Hamilton Award 1990.
3. My presentation "Medical Statistics Case Studies on the Web" was voted as the best presentation in the area of Teaching Statistics in the Health Sciences at the Joint Statistical Meetings in Anaheim CA, August 1997.
4. Received Public Health Service Commendation Medal in July 1994 and Public Health Service Achievement Medal in April 1990 for efforts to modernize the computing environment.

C. Selected Peer-Reviewed Publications

1. Horii, K. A., Simon, S.D., Liu, D. Y., Sharma, V. Atopic dermatitis in children in the United States, 1997-2004: visit trends, patient and provider characteristics, and prescribing patterns. Pediatrics 2007: 120(3): e527-34.
2. Gaedigk, A., Simon, S.D., Pearce, R. E., Bradford, L. D., Kennedy, M. J., Leeder, J. S. The CYP2D6 activity score: translating genotype information into a qualitative measure of phenotype. Clin Pharmacol Ther 2008: 83(2): 234-42.
3. Adjei, A. A., Gaedigk, A., Simon, S. D., Weinshilboum, R. M., Leeder, J. S. Interindividual variability in acetaminophen sulfation by human fetal liver: implications for pharmacogenetic investigations of drug-induced birth defects. Birth Defects Res A Clin Mol Teratol 2008: 82(3): 155-65.
4. Sati, L., Ovari, L., Bennett, D., Simon, S. D., Demir, R., Huszar, G. Double probing of human spermatozoa for persistent histones, surplus cytoplasm, apoptosis and DNA fragmentation. Reprod Biomed Online 2008: 16(4): 570-9.
5. Gajewski, B. J., Simon, S.D., Carlson, S.E. Predicting accrual in clinical trials with Bayesian posterior predictive distributions. Stat Med 2008: 27(13): 2328-40.
6. Gajewski, B. J., Simon, S.D. A One-Hour Introduction to Bayesian Data Analysis for Non-Statisticians. The American Statistician 2008: 62(3): 190-194.
7. Jones BL, Abdel-Rahman SM, Simon SD, Kearns GL, Neville KA. Assessment of Histamine Pharmacodynamics by Microvasculature Response of Histamine Using Histamine Iontophoresis Laser Doppler Flowimetry. J Clin Pharmacol. 2009;49(5):600-605. [Medline]
8. Midyett LK, Grunt J, Simon SD. Noninvasive radial artery tonometry augmentation index and urinary albumin/creatinine levels in early adolescents with type 1 diabetes mellitus. J. Pediatr. Endocrinol. Metab. 2009;22(6):531-537. [Medline]
9. Melissa K Miller, M Denise Dowd, Matthew C Gratton, Jinwen Cai, Stephen D Simon. Pediatric out-of-hospital emergency medical services utilization in Kansas City, Missouri. Acad Emerg Med. 2009;16(6):526-531. [Medline]
10. Mercer AM, Teasley SL, Hopkinson J, McPherson DM, Simon SD, Hall RT. Evaluation of a breastfeeding assessment score in a diverse population. J Hum Lact. 2010;26(1):42-48.

[71 additional publications between the years of 1985 and 2007 are not listed.]

Principal Investigator/Program Director (Last, First, Middle):

D. Research Support

ACTIVE

NDNQI Services Agreement Work Order No. 3 (Dunton) 02/01/2008 – 12/31/2010

American Nurses Association-Kansas University Medical Center Research Institute

The major goals of this project are to develop a method for unit-based acuity adjustment and to develop a method to calculate hospital level indicators.