

John H. Walker, Ph.D.

EDUCATION

Cornell University, Ithaca, NY

Department of Economic and Social Statistics

Ph.D. 1995; M.S. 1993

Concentration: Statistics; Minor: Computer Science

Dissertation Advisor: Paul F. Velleman

University of Chicago, Chicago, IL

S.B. 1988 with Honors

Major: Applied Mathematics; Minor: Statistics

EMPLOYMENT

Associate Professor of Statistics

September 2005 – present

Assistant Professor of Statistics

September 2001 – September 2005

Statistics Department, California Polytechnic State University, San Luis Obispo, CA

Statistical Consultant

September 2001 – present

Data Description, Inc., Ithaca, NY

Consultant on various projects related to the development of *Data Desk* statistical software including a National Cancer Institute grant to develop microarray data analysis software and the development of *Data Desk* Version 7.

Senior Statistician

January 2000 – September 2001

Data Description, Inc., Ithaca, NY

Main designer and developer of *Health Data Desk*, a vertical market application to analyze health insurance claims data for patterns of fraud and abuse. Member of Data Description's consulting service. Contributor to *ActivStats* multimedia statistics education software.

Assistant Professor of Managerial Statistics

August 1995 – August 2001

Department of Info. and Decision Sciences, School of Mgmt., Syracuse U., Syracuse, NY

Courses taught: Two-semester undergraduate Managerial Statistics sequence, graduate and undergraduate Linear Regression courses. On leave at Data Description, Inc., from January 2000 – August 2001.

Graduate Assistant

August 1990 – August 1995

Cornell University, Ithaca, NY

Taught course sections in the Department of Economic and Social Statistics. Worked on a National Science Foundation grant entitled "Technology-Based Learning: Exploring Statistical Concepts and Methods." Principal investigators were Dr. Paul Velleman at Cornell University and Drs. William I. Notz, Dennis K. Pearl, and Elizabeth A. Stasny at Ohio State University. Principal work was the development of the *Data and Story Library (DASL)*, an online database of data sets analyzed to provide specific examples to aid in classroom instruction.

Statistical Consultant

Odesta Corporation, Northbrook, IL (full-time)

June 1988 – July 1990

Data Description, Inc., Ithaca, NY (part-time)

August 1990 – August 1995

Support and development of *Data Desk* statistics software.

TEACHING ACTIVITIES

COURSES TAUGHT

Course	Title	Qtrs	Last Taught
STAT 217	Statistical Methods	3	Summer 2007
STAT 221	Introduction to Probability and Statistics	3	Spring 2004
STAT 251	Statistical Inference for Management I	8	Fall 2008
STAT 252	Statistical Inference for Management II	7	Winter 2006
STAT 313/513	Applied Experimental Design and Regression Models	2	Fall 2008
STAT 323/523	Design and Analysis of Experiments I	2	Winter 2007
STAT 324	Applied Regression Analysis	3	Fall 2005
STAT 465	Statistical Communication and Consulting	5	Spring 2008

CURRICULUM DEVELOPMENT

STAT 465, Statistical Communication and Consulting (with Heather Smith)

Prof. Heather Smith and I designed and team-taught the first section of this course in Spring 2004. For more information about this course see the Teaching Philosophy and Profession Plan sections.

COURSE COORDINATION

STAT 251-252, Statistical Inference for Management (with Karen McGaughey)

STAT 302, Statistics II (with Andrew Schaffner)

STAT 324, Applied Regression Analysis

STAT 465, Statistical Communication and Consulting (with Heather Smith)

PROFESSIONAL DEVELOPMENT ACTIVITIES

JOURNAL ARTICLES

- Jessica L. Yee, John Walker, Hany Khalil, and Rafael Jiménez-Flores (2008), “Effect of Variety and Maturation of Cheese on Supercritical Fluid Extraction Efficiency,” *Journal of Agricultural and Food Chemistry*, 56 (13), 5153–5157.
- Vandna Sikand, Phillip S. Tong and John Walker (2008), “Impact of protein standardization of milk powder with lactose or permeate on whey protein nitrogen index and heat classification,” *Dairy Science and Technology*, 88 (1) 105-120.
- T. L. Cody, A. Olabi, A. G Pettingell, P. S. Tong, and J. H. Walker (2007), “Evaluation of Rice Flour for Use in Vanilla Ice Cream,” *Journal of Dairy Science*, 90: 4575-4585.
- S. Jinjarak, A. Olabi, R. Jiménez-Flores, and J.H. Walker (2006), “Sensory, Functional and Analytical Comparisons of Whey Butter to Other Butters,” *The Journal of Dairy Science*, 89: 2428-2440.
- S. Jinjarak, A. Olabi, R. Jiménez-Flores, I. Soldini, and J.H. Walker (2006), “Sensory Evaluation of Whey and Sweet Cream Buttermilk,” *Journal of Dairy Science*, 89: 2441-2450.
- Jensen, J.R., Walker, J.H., Milki, A.A., Westphal, L., and Behr, B. (2004) “The Effect of a Two-Hour, Room Temperature Incubation of Human Spermatozoa in TEST-Yolk Buffer on the Rate of Fertilization *In Vitro*,” *Journal of Assisted Reproduction and Genetics*, 21 (5) May 2004: 169-173.
- F. Anderson Rowe M.D., John H. Walker Ph.D., Loren C. Karp M.A., Eric A. Vasiliauskas M.D., Scott E. Plevy M.D., Stephan R. Targan M.D. (2000) “Factors predictive of response to cyclosporin treatment for severe, steroid-resistant ulcerative colitis” *American Journal of Gastroenterology*, 95:8, 2000-2008

In Preparation:

- “Effect of Protein Standardization on Heat Stability of Reconstituted Skimmed Milk Powder” (with V. Sikand and P.S. Tong)
- “Sensory Evaluation of Super Critical Fluid Extraction in Novel Buttermilk Products” (with S. Jinjarak, A. Olabi, and R. Jiménez-Flores)

EDUCATIONAL MATERIALS

Bock, David E. and Walker, John H. (2008) *Printed Test Bank and Resource Guide for Stats: Data and Models, 2/E*, Addison-Wesley.

Walker, John H. and Beemer, Beverly (2004) *Instructor's Testing Manual to accompany Stats: Data and Models*, Addison-Wesley.

In Preparation:

Stats II (Working Title for Intermediate Statistics Text with Paul Velleman and Richard De Veaux), Addison-Wesley.

PROJECT AND TECHNICAL REPORTS

"Comparison of the Efficacy of the Activpad to the Tectrol System for Maintaining Strawberry Quality" (with J. Wyatt Brown). Report to CO₂ Technologies West, Santa Maria, CA, 2007.

"Evaluation of 'Yosemite Fresh' Watermelons" (with J. Wyatt Brown and James Green). Report to Van Groningen and Sons, Manteca, CA, 2007.

"Assessing High Academic Performance Among Cal Poly First Year Students" (with David Conn, Patricia Ponce, and Ulric Lund). Report to the Consortium for High Academic Performance (CHAP), Grant #49071-800011, 2004.

"The Cal Poly Partner's Program: Factors Relating to Academic Performance" (with David Conn, Patricia Ponce, and Ulric Lund). Report to the Fund for the Improvement of Postsecondary Education (FIPSE), Grant P116B010559, 2005.

CONFERENCE PROCEEDINGS

Walker, John H., (2004) "Teaching Regression with Simulation," *Proceedings of the 2004 Winter Simulation Conference*, R.G. Ingalls, M.D. Rossetti, J.S. Smith, and B.A. Peters eds.

Walker, John H., (1997) "A Case-Deletion Influence Measure for Structural Equations Models without Latent Variables," *Proceedings of the Statistical Computing Section of the American Statistical Association*.

Velleman, P.F., Hutcheson, M.C., Meyer, M.M, and Walker, J.H. (1996) "DASL, The Data and Story Library: An Online Resource for Teaching Statistics," *Proceedings of the Statistics Education Section of the American Statistical Association*.

Walker, John H., (1996) "Influence Measures for Hierarchical Linear Models," *Proceedings of the Statistical Computing Section of the American Statistical Association*.

Walker, John H., (1994) "Partially-Ordered Linear Models," *1994 Proceedings of the Statistical Computing Section of the American Statistical Association*.

Walker, John H., (1993) "Adapting Ordinary Regression Influence Measures for Use with the GMANOVA Model," *Proceedings of the Statistical Computing Section of the American Statistical Association*.

PRESENTATIONS

"Teaching Ethics in Statistics Class," Discussant, Joint Statistical Meetings, 2008.

"Statistical Consulting at Cal Poly," Mellon Workshop on Statistical Consulting, 2007.

"Integrating Statistical Knowledge Through an Undergraduate Capstone Course," Contributed Paper, Joint Statistical Meetings, 2006 (with Heather Smith).

"Teaching an Undergraduate Capstone Course in Statistical Consulting," Contributed Paper, Joint Statistical Meetings, 2006 (presented by Heather Smith).

"Teaching Regression with Simulation," Invited Paper, Winter Simulation Conference, 2004.

- “Getting Down to Business: Engaging Business Majors in Statistics Classes,” Invited Paper, CORS/INFORMS Conference, 2004 (with Heather Smith).
- “Making Statistics More Effective in Schools and Business: Involving Statistics Students in Activities,” Invited Paper, MSMESB Special Session, Joint Statistical Meetings, 2003 (with Heather Smith).
- “Clustering Using the BACON Algorithm: An Alternative to K-Means,” Contributed Paper, Joint Statistical Meetings, 2001.
- “Influence Measures for Reduced-Rank Regression Models,” Contributed Paper, Joint Statistical Meetings, 2000.
- “Teaching Collinearity by Computer Simulation,” Making Statistics More Effective in Schools of Business Conference, Syracuse, NY, 2000.
- “Influence Diagnostics for Three-Stage Least Squares Estimation,” Contributed Paper, Joint Statistical Meetings, 1999.
- “Influence Diagnostics for Two-Stage Least Squares Estimation,” Cornell Statistics Seminar, November 1998, Ithaca NY and Brethen Institute Colloquium Series, April 1999, Syracuse NY.
- “*ActivStats*: A Multimedia Tool for Statistics Teaching,” Invited Paper, Conference on Technology in Statistics Education, Babson College, Wellesley, MA, March 1998.
- “A Case-Deletion Influence Measure for Structural Equations Models without Latent Variables,” Contributed Paper, Joint Statistical Meetings, 1997.
- “Influence Measures for Hierarchical Linear Models,” Contributed Paper, Joint Statistical Meetings, 1996.
- “DASL, The Data and Story Library: An Online Resource for Teaching Statistics,” Invited Paper, Joint Statistical Meetings, 1996.
- “Using Sequential and Partial Sums-of-Squares Together to Order the Entry of Variables into Linear Models,” Contributed Paper, Joint Statistical Meetings, 1994.
- “Diagnostics for the GMANOVA Model,” Contributed Paper, Joint Statistical Meetings, 1993.

MAJOR CONSULTING PROJECTS

- “Comparison of the Efficacy of the Activpad to the Tectrol System for Maintaining Strawberry Quality” (with J. Wyatt Brown). Client: CO₂ Technologies West, Santa Maria, CA, 2007.
- “Evaluation of ‘Yosemite Fresh’ Watermelons” (with J. Wyatt Brown and James Green). Client: Van Groningen and Sons, Manteca, CA, 2007.
- Analysis of the LibQual+ Survey. Client: The Cal Poly Library, 2005 (with Heather Smith).
- “Recruiting and Retaining Underrepresented Students for Polytechnic Programs in the Post-Affirmative Action Era,” Grant P116B010559, Fund for the Improvement of Postsecondary Education (FIPSE). Clients: David Conn and Patricia Ponce, Summer 2005 (with Ulric Lund).
- Cal Poly Student Registration Survey. Clients: ITS, Student Success Council, and the Provost’s Office, Spring 2005 (with Heather Smith).
- “Assessing High Academic Performance at Cal Poly,” Grant P116B010559, Consortium for Higher Academic Performance (CHAP). Clients: David Conn and Patricia Ponce, Spring-Fall 2004 (with Ulric Lund).
- “An Integrated Interactive Graphics Environment for Data Visualization and Exploration of Microarray Data,” SBIR Phase II Grant, National Cancer Institute. Client: Data Description, Inc., 2002-2004.

SENIOR PROJECTS SUPERVISED

Hongyan Wang, "Robustness to Non-Normality of the Regression T-Test," 2008 (expected).

Hagen von Massenbach, "Investigation into the Robustness of Regression to Non-Normal Errors," 2007 (with Jimmy Doi).

Anna Welden, "Reflections on an Internship in Statistical Consulting," 2007.

Kristin Sharp, "Consulting in Statistics: Reflections of a Student," 2006 (with Heather Smith).

Jacqueline Conway, "Analysis of the *Breathing Room* Data on Teen Smoking Cessation," 2005.

Ryan Kimes, "Starting Algorithms for Blocked Adaptive Clustering," 2004.

Marie Westcoat, "Clustering Analysis: Comparing the BACON Algorithm to K-Means Algorithm," 2003.

WORK WITH GRADUATE STUDENTS

Jessica Yee, Dairy Science, M.S. 2007. Topic: Effect of Variety and Maturation of Cheese on Supercritical Fluid Extraction Efficiency. Advisor: Dr. Rafael Jimenez-Flores.

Eleanore Brophy, Dairy Science, M.S. 2006. Topic: The Rheology of Crème Fraîche. Advisor: Dr. Phillip Tong.

Jane Donaldson, Biology, M.S. completion date unknown. Topic: The Effects of Fire on the Presence and Diversity of Bird Species. Advisor: Dr. Michael Hanson.

Supanika Jinjarak, Dairy Science, M.S. 2005. Topic: Sensory Evaluation of Whey Cream Products: A comparison between types of butter, buttermilk and novel ingredient powders. Advisor: Dr. Ammar Olabi.

Michael Walgren, Biology, M.S. 2003. Topic: Distribution and Morphology of the Morro Shoulderband Snail (*Helminthoglypta walkeriana*). Advisor: Dr. Roger Gambs.

ACADEMIC SERVICE

WASC Learn-by-Doing Working Group, Cal Poly, 2008-present.

Member, COSAM Curriculum Committee, Cal Poly, 2008-present.

Faculty Advisor, Western Intellectual Traditions (WIT) Minor, Cal Poly, 2007-present.

Group Facilitator, PREFACE Reading Program, 2005, 2006, 2007, 2008.

Associate Editor, *The American Statistician*, 2003-present.

Departmental Advisor, Statistics Department, Cal Poly, 2003-present.

Member, Departmental Technology Committee, Statistics Department, Cal Poly, 2001-present.

Departmental Statistical Consultant, Statistics Department, Cal Poly, Ongoing (Last Service: Spring 2008).

Attendee, Colloquia Series on Derek Bok's *Our Underachieving Colleges*, Cal Poly, Summer 2007.

Member, Fairness Board, Cal Poly, 2006-2007.

Member, Academic Senate Committee on Budget and Long Range Planning, Cal Poly, 2002-2006.

Member, Executive Committee, Statistics Education Section of the American Statistical Association, 2003-2005.

Organizer, "Teaching Data Mining," Topic Contributed Panel, Joint Statistical Meetings, August 2001.

Planning Committee, Making Statistics More Effective in Schools of Business Conference, 1999-2000.

School of Management Undergraduate Curriculum Committee, Syracuse U., 1997-9.

Managerial Statistics Curriculum Redesign Committee, Syracuse University, 1998-9.

School of Management Task Force on Instructional Resources and Responsibilities, Syracuse U., 1997-9.

Syracuse Chapter of the American Statistical Association: President, 1997-8; Executive Committee, 1998-9; Program Chair, 1996-7.