

Allan J. Rossman

(Brief) Curriculum Vitae March 2018

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EDUCATION

- Ph.D., Statistics, Carnegie Mellon University, 1989
- M.S., Statistics, Carnegie Mellon University, 1986
- B.A., Geneva College, summa cum laude, 1984 (Majors: Mathematics, English)

POSITIONS HELD

- Professor of Statistics, California Polytechnic State University – San Luis Obispo, 2006 –
 - Chair, Department of Statistics, 2013 –
- Associate Professor of Statistics, Cal Poly – San Luis Obispo, 2001-2006
- Associate Professor of Statistics and Mathematics, Dickinson College, 1996-2001
 - Chair, Department of Mathematics and Computer Science, 1996-1999
- Assistant Professor of Mathematics, Dickinson College, 1989-1996

COURSES TAUGHT

- **Cal Poly**
 - STAT 130: Introduction to Statistical Reasoning
 - STAT 150: Introduction to Statistical Investigations
 - STAT 217: Introduction to Statistical Concepts and Methods
 - STAT 218: Applied Statistics for the Life Sciences
 - STAT 221: Introduction to Probability and Statistics
 - STAT 251: Statistical Inference for Management I
 - STAT 252: Statistical Inference for Management II
 - STAT 301: Statistics I
 - STAT 305: Introduction to Probability and Simulation
 - STAT 312: Statistical Methods for Engineers
 - STAT X320: Statistical Concepts and Methods for Mathematics and Statistics
 - STAT 321: Probability and Statistics for Engineers and Scientists
 - STAT 322: Statistical Analysis for Engineers and Scientists
 - STAT 325: Introduction to Probability Models
 - STAT 350: Probability and Random Process for Engineers
 - STAT 415: Bayesian Reasoning and Methods
 - STAT 425: Probability Theory
 - STAT 426: Estimation and Sampling Theory
 - STAT 427: Mathematical Statistics
 - STAT 461, 462: Senior Project Supervision
 - STAT 512: Statistical Methods

HONORS AND DISTINCTIONS

- Chief Reader, Advanced Placement Statistics, 2009 – 2014
 - Responsible for developing scoring rubrics, organizing and supervising grading of over 170,000 AP Statistics exams per year
- Program Chair, U.S. Conference on Teaching Statistics, May 2013, May 2015, May 2017
 - Chaired program committee for conferences with more than 400 participants
- Waller Distinguished Teaching Career Award, American Statistical Association, 2016
- Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics, Mathematical Association of America, 2010
 - Distinguished College or University Teaching of Mathematics, Northern California, Nevada, and Hawaii Section of MAA, 2009
- President, International Association for Statistical Education, 2007-09
 - President-Elect, 2005-2007
- Program Chair, Joint Statistical Meetings, Salt Lake City, August 2007
 - Chaired program committee for conference with more than 2500 presentations, more than 5000 participants
- Ron Wasserstein Best Contributed Paper Award, ASA Section on Statistical Education, 2013.
- MERLOT (Multimedia Educational Resources for Learning and Online Teaching) Award for Exemplary Online Materials (with Beth Chance), 2011
 - CAUSEweb Resource of the Year Award (with B. Chance), 2009
- Dex Whittinghill Best Contributed Paper Award, SIGMAA on Statistics Education, 2006
- Co-editor (with B. Chance), *Stats: The Magazine for Students of Statistics*, American Statistical Association, 2002-2004.
- Chair, ASA Section on Statistical Education, 2001
- Elected Fellow of the American Statistical Association, 2001
- Elected member of International Statistical Institute, 2010
- Chair, ASA/MAA Joint Committee on Undergraduate Statistics, 1999-2000

GRANTS AWARDED

- Co-Principal Investigator for “Developing an Innovative Randomization-Based Introductory Statistics Curriculum” (with N. Tintle, B. Chance, S. Roy, T. Swanson), NSF/DUE/CCLI Program, Award #1140629, 2012-2013, \$181,478.
- Principal Investigator for “Collaborative Research: The CATALST Project: Change Agents for Teaching And Learning STatistics” (with B. Chance), NSF/DUE/CCLI Program, Award #0816319, 2008-2011, \$181,686.
- Principal Investigator for “Concepts of Statistical Inference: A Randomization-Based Curriculum,” (with B. Chance), NSF/DUE/CCLI Program, Award #0633349, 2007-2008, \$149,842.
- Principal Investigator for “A Data-Oriented, Active Learning, Post-Calculus Introduction to Statistical Concepts, Methods and Theory,” (with B. Chance), NSF/DUE/CCLI Program, Award #9950476, #0321973, 1999-2004, \$252,828.
- Principal Investigator for “STATS: Statistical Thinking with Active Teaching Strategies,” (with T. Short), NSF/DUE/UF E Program, Award #9554621, 1996-1999, \$202,843.

- Co-Principal Investigator for “Workshop Precalculus: Developing Pedagogically Powerful Instructional Materials for an Integrated Course in Functions, Data Analysis, and Modeling,” (with N. Baxter Hastings, K. Callahan, P. Laws, D. Hastings), NSF/DUE/CCLI Program, Award #9952483, 2000-2003, \$496,445.
- Co-Principal Investigator for “Disseminating the Workshop Mathematics Program,” (with N. Baxter), FIPSE Program, U.S. Dept. of Education, 1995-1998, \$233,955.
- Co-Principal Investigator for “Workshop Mathematics: Using New Pedagogy and Computers in Introductory Mathematics and Statistics Courses,” (with N. Baxter, P. Laws), FIPSE Program, U.S. Dept. of Education, 1991-1994, \$283,000
- Co-Principal Investigator for “Microcomputer-Equipped Workshops for the Introductory Mathematics Program,” (with N. Baxter, J. Stodghill), NSF/DUE/ILI Program, Award #9152325, 1991-1994, \$92,000.

SELECTED PUBLICATIONS

Books

- Tintle, N., Chance, B., Cobb, G., Rossman, A., Roy, S., Swanson, T., and VanderStoep, J. (2016), *Introduction to Statistical Investigations*, John Wiley and Sons.
- Cannon, A., Cobb, G., Hartlaub, B., Legler, J., Lock, R., Moore, T., Rossman, A., and Witmer, J. (2014), *STAT2: Building Models for a World of Data*, W.H. Freeman.
- Rossman, A. and Chance, B. (2012), *Workshop Statistics: Discovery with Data* (4th ed.), John Wiley & Sons.
- Chance, B. and Rossman, A. (2006), *Investigating Statistical Concepts, Applications, and Methods*, Duxbury Press.

Articles (in Peer-Reviewed Journals)

- Rossman, A., St. Laurent, R., and Tabor, J. (2015), “Advanced Placement Statistics: Expanding the Scope of Statistics Education,” *The American Statistician*, 69(2), 121-126.
- Rossman, A. and Chance, B. (2014), “Using Simulation-Based Inference for Learning Introductory Statistics,” *WIREs Computational Statistics*, DOI: 10.1002/wics.1302.
- Rossman, A. and Chance, B. (2013), “The Future of Textbooks: Focusing on the Advancement of Learning,” *Technology Innovations in Statistics Education*, 7(3), <http://escholarship.org/uc/item/2m4222dt>.
- Rossman, A. (2008), “Reasoning About Informal Statistical Inference: One Statistician’s View,” *Statistics Education Research Journal*, 7(2), 5-19.
- Rossman, A. and Tesman, B. (2002), “Do You Want to Deal?” *Pi Mu Epsilon Journal*, 11, 319-326.
- Chance, B. and Rossman, A. (2001), “Sequencing Topics in Introductory Statistics: A Debate on What to Teach When,” *The American Statistician*, 55, 140-144.
- Rossman, A. and Chance, B. (1999), “Teaching the Reasoning of Statistical Inference: A ‘Top Ten’ List,” *College Mathematics Journal*, 30, 297-305.
- Rossman, A., Short, T., and Parks, M. (1998), “Bayes Estimators for the Continuous Uniform Distribution,” *Journal of Statistics Education*, 6(3).

- Rossman, A. (1997), “Quantitative Reasoning: Argument with Data,” *College Teaching*, 45, 52-54.
- Rossman, A. and Short, T. (1995), “Conditional Probability and Education Reform: Are They Compatible?,” *Journal of Statistics Education*, 3(2).
- Henry, J., Rossman, A., and Snyder, J. (1995), “Quantitative Evaluation of Software Process Improvement,” *The Journal of Systems and Software*, 28, 169-177.
- Rossman, A. (1994), “Televisions, Physicians, and Life Expectancy,” *Journal of Statistics Education*, 2(2).

Articles (Book Chapters)

- Harradine, A., Batanero, C., and Rossman, A. (2011), “Students’ and Teachers’ Knowledge of Sampling and Inference,” in *Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education*, ed. C. Batanero, G. Burrill, C. Reading, International Commission for Mathematics Instruction.
- Rossman, A., Chance, B., and Medina, E. (2006), “Some Important Comparisons Between Statistics and Mathematics, and Why Teachers Should Care,” in *Thinking and Reasoning with Data and Chance*, National Council of Teachers of Mathematics.
- Rossman, A. (2006), “Integrating Data Analysis into Precalculus Courses,” in *A Fresh Start for Collegiate Mathematics: Rethinking the Courses Below Calculus*, ed. Nancy Baxter Hastings, Mathematical Association of America.
- Rossman, A. (2006), “Workshop Precalculus: Functions, Data, Models,” in *A Fresh Start for Collegiate Mathematics: Rethinking the Courses Below Calculus*, ed. Nancy Baxter Hastings, Mathematical Association of America.
- Rossman, A. (2005), “Teaching a Data-Oriented, Activity-Based Course,” in *Innovations in Teaching Statistics*, ed. Joan Garfield, Math Assoc of America.
- Moore, T., Peck, R., and Rossman, A. (2004), “Statistics: CRAFTY Curriculum Foundations Project,” in *The Curriculum Foundations Project: Voices of the Partner Disciplines*, ed. Ganter and Barker, Mathematical Assoc of America, pp. 125-144.

Articles (*Journal of Statistics Education* Interview Series)

- Interviews with D. Kaplan, D. Pearl (2017), R. De Veaux, S. Roy, R. Hayden (2016), D. Nolan, A. Watkins, G. Cobb (2015), J. Tabor, J. Utts, R. Wasserstein (2014), C. Franklin, D. Moore, M. Shaughnessy (2013), M. Everson, R. Peck, R. Scheaffer (2012), J. Garfield, J. Dietz (2011)

PRESENTATIONS

- *Professional conferences*: More than 100 presentations at regional, national, and international professional conferences
 - Most on statistics education, in a total of 38 states and 11 countries
- *Workshops*: More than 100 professional development workshops conducted for college faculty and high school teachers
- *Colloquia*: More than 60 presentations for local groups of college or high school students