# **Shonda Roelfs Kuiper**

Grinnell College, 2042 Science, Grinnell, IA 50112

#### **EDUCATION**

**Doctor of Philosophy**, Statistics August, 1997

Iowa State University

Master of Science, Statistics December, 1994

Iowa State University

**Bachelor of Arts**, Mathematics August, 1990

Summa cum laude, Wartburg College

## TEACHING EXPERIENCE

Associate Professor Grinnell College, 5/2010 – present

Teaching Introductory Statistics, Statistical Methods, Statistical Modeling, Design of Experiments, and a calculus-based Probability and Statistics sequence.

**Assistant Professor,** Grinnell College, 9/03 – 5/2010

Teaching Introductory Statistics, Statistical Methods, Statistical Modeling, Design of Experiments, and a calculus-based Probability and Statistics sequence.

**Assistant Professor,** Wartburg College, 9/01 – 9/03

Designed and taught Calculus I, Statistical Methods, and a calculus-based statistics course.

**Quality Engineer**, Hallmark Cards, 6/97 – 9/01 (promoted to Senior Engineer in 1998) Provided leadership and overall strategy to ensure all operational divisions consistently deliver cost-effective, high quality products to Hallmark consumers. This includes:

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### GRANTS, PROPOSALS, CONTRACTS AND AWARDS

The 2012 MERLOT Classics Award in Statistics. This award is given once a year for the best peer reviewed online resources designed to enhance teaching and learning.

Kuiper, S. "Playing Games with a Purpose: A New Approach to Teaching and Learning Statistics." NSF TUES DUE #1043814, May 2011-May 2014.

Kuiper, S., "Misconceptions in Medical Research", Committee for Support of Faculty Scholarship (CSFS), 2010-2011.

Kuiper, S. and Sklar., J. *Practicing Statistics: Guided Investigations for a Second Statistics Course.* Pearson Addison-Wesley book contract, 2008-2012.

Best Contributed Paper in Statistics Education Award "Playing Games with a Purpose." American Statistical Association Joint Statistical Meetings, Washington D.C., August 2009.

Kuiper, S.; Moore, T.; and Collins, L. (2005-2008). "Collaborative Research: Integrating Science and Active Learning into Data-Oriented Post-Calculus Probability and Statistics Courses." NSF CCLI DUE # 0510392, recommended for approval, \$144,950.

## **PUBLICATIONS** (\*Undergraduate students)

#### **Textbooks**

Kuiper, S. and Sklar., J. *Practicing Statistics: Guided Investigations for a Second Statistics Course.* Pearson Addison-Wesley, 2012

#### **Refereed Publications**

Albert, J., Carver, R., Erickson, P., Kuiper, S., Lesser, L., Liao, S., Martin, N., Pearl, D., Posner, M., Wall, A., and Weber, J., (2013) "Using Fun in the Statistics Classroom: An Exploratory Study of College Instructors' Hesitations and Motivations", Journal of Statistics Education, Volume 21, Number 1

Cummiskey, K., Kuiper, S., and Sturdivant, R., (2012) "Using classroom data to teach students about data cleaning and testing assumptions", Frontiers in Quantitative Psychology and Measurement, 3:354. doi: 10.3389/fpsyg.2012.00354

Kuiper, S., "Incorporating a research experience into an early undergraduate statistics course." International Conference on Teaching Statistics, Proceedings of the International Conference on Teaching Statistics, http://icots.net/8/cd/pdfs/invited/ICOTS8\_4G1\_KUIPER.pdf, July 2010.

Kuiper, S. and Collins, L. (2009) "Guided Labs That Introduce Statistical Techniques Used in Research From Multiple Disciplines." *The American Statistician*. 63(4):343-347.

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Posner, M., Wall, A., and Weber, J., "Using Fun in the Statistics Classroom: An Exploratory Study of Hesitations and Motivations of USCOTS 2011 Attendees", Reviewed Poster Presentation, May 2013

Kuiper S., "Playing Games with a Purpose: A New Approach to Teaching and Learning Statistics" Topic Contributed Presentations, Joint Statistics Meetings. San Diego California, August 2012

Kuiper S., "2012 MERLOT Classics Award Invited Presentation - Stat2Labs", SLOAN Fifth Annual International Symposium on Emerging Technologies for Online Learning, Las Vegas, Nevada, July 2012 This award is given once a year for the best peer reviewed online resources designed to enhance teaching and learning.

Finzer W., Konold K., and Kuiper S., "Online Games for Teaching Statistics from the Data Games and Playing Games with a Purpose Projects", Invited Presentation, Electronic Conference On Teaching Statistics, May 2012, http://www.causeweb.org/ecots/breakouts/3/

Ensley, D., Esselstein R., Kuiper S., Henle J., "Beyond Jeopardy! Games for learning mathematics", Invited Panel Discussion for Project NEXT, Boston, Massachusetts, January 2012.

Kuiper S., "Innovations in Teaching Statistics in the New Decade", Topic Contributed Presentation, Joint Math Meetings, Boston, Massachusetts, January 2012.

Kuiper S., "Playing Games with a Purpose, NSF Grants in Education", Invited Presentation, Joint Math Meetings, Boston, Massachusetts, January 2012.

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Kuiper, S., Pearl, D., Lesser, L., Posner, M., "Letting Go of the Idea that Stats Class Can't be Fun and Functional." USCOTS, Columbus, Ohio, June 2009.

Kuiper, S. "Integrating research from multiple disciplines into a second statistics course." Conference Celebrating 75 Years of Statistics at Iowa State, Invited Presentation, Ames, Iowa, May 2009.

Kuiper, S. "Stirring the Pot: Radical Ideas in Statistics Education." American Statistical Association Joint Statistical Meetings Invited Paper Presentation, Denver, Colorado, August, 2008.

Kuiper, S. "Integrating Research Projects in a First Statistics Course." USCOTS: CAUSE Webinar, July, 2008. Recorded and available at http://www.causeweb.org/webinar/

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