Christopher Ray Olsen 1750 34th St. S. E. Cedar Rapids, Iowa (319)-365-7473 <u>colsen@mchsi.com</u> olsenc@grinnell.edu

May 21, 2013

Asst Professor, Mathematics & Statistics Grinnell College (2010-2014) Grinnell, IA

Statistics lecturer (April, May, 2010) Cornell College

Chris Olsen Vitae Page 1 of 13 9/26/2013

Chris Olsen Vitae Page 2 of Moderator, The AP Statistics Teacher Community

Springboard writing team (Writing course materials for the Common Core Curriculum) (2011 – 2012)

Member, AP Statistics Working Group (Developing AP Statistics tests for use in China) (2011-2013) Jim Clewley, College Board

Roxy Peck, CalPoly

Jeff Haberstroh, ETS

Member, Editorial Board Teaching Statistics 2009-Present

College Board Advisor to the AP Statistics Test Development Committee 2006-2009 Roger Johnson, Editor

Lien Diaz Associate Director, Curriculum and Content Development Calculus, Computer Science, Statistics The College Board Advanced Placement Program 3700 Crestwood Parkway, Suite 700 Duluth, GA 30096-5583

Chris Olsen Vitae Page 3 of 13 9/26/2013 Member, INSPIRE (INsight into Statistical Practice, Instruction, and Reasoning), an NSF funded grant administered through UCLA in collaboration with the American Statistical Association. 2002 -- 2004 Project Manager, Dr. Robert Gould, UCLA

AP Statistics Exam Reader, Table Leader, Question Leader 1997 - 2005; 2007-2009	Educational Testing Service
Scribe,	
Summer, 1999	"Beyond AP Statistics" The Summer Statistics Institute
	The North Carolina School of
	Science and Mathematics
	Dan Teague, NCSSM
Member,	The NAEP Mathematics Standing Committee
1996 - 2007	National Assessment of Educational Progress
	Jeff Haberstroh, ETS
Member	The Advanced Placement Statistics
1994 -2000	Test Development Committee
2006-2008	Jeff Haberstroh

Chris Olsen Vitae Page 4 of 13 9/26/2013 Member, SIMPAC, a team working under an NSF Grant to develop materials for teaching probability and statistics using simulations 1986-88 Grantee:

Dr. Mike Perry, Dept. of Math Sciences Appalachian State University Boone, NC

Siemens Award for Advanced Placement. 1999.

MIMS, Methods of Integrating Math & Science, an Eisenhower funds grant from the state of Iowa, administered through the University of Northern Iowa. 1995

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- 2013 Co-author. Peck, R., Olsen, C., Statistics: Learning from Data. Brooks/Cole.
- 2012 Author, Teaching Elementary Statistics with JMP. SAS Press
- 2010 Co-author. Peck, R., Olsen, C., & Devore, J. <u>Introduction to Statistics and Data Analysis</u>. Duxbury Press, (4th ed).
- 2007 Co-author. Peck, R., Olsen, C., & Devore, J. <u>Introduction to Statistics and Data Analysis</u>. Duxbury Press, (3<sup>rd</sup> ed).
- 2006: 2006-2007 Professional Development Workshop Materials, Special Focus: Sampling Distributions. College Board
- 2005: 2005-2006 Professional Development Workshop Materials, Special Focus: Inference. College Board

Chris Olsen Vitae Page 6 of 13 9/26/2013 "Diversification of the STEM Teacher and Major Pipeline" (presenter and panel member). Iowa Science and Mathematics Teacher Educators Summit: Cutting edge thinking in math & science teacher prep. Des Moines Area Community College, Aug 12, 2011.

"Dribbling into Bayes Theorem", "5 Real Life Quadratic Function Problems", "A Baker's Dozen Experimental Design Problems", "5 Real Life Exponential/Logarithmic Function Problems. South Dakota Council of Teachers of Mathematics Conference. Huron, SD., Feb 4-6, 2010.

"Dribbling into Bayes Theorem", "A lucky 13 experimental design problems", "Sampling strategies", "Managing the AP Statistics project", "Crafting free-response questions", "Data!", "Using released exams in a diagnostic mode." Project Open Doors AP Conference, Rocky Hill, CT., Oct 2-3, 2009.

"Randomization in Statistics" Meeting within a meeting, The Joint Statistical Meetings, Washington, D.C. Aug 3, 2009.

"Observational studies as advance organizers for studying experimental design." The NCSSM Teaching contemporary Mathematics Conference. Durham, NC. January 3, 2009.

"A Primer on sampling strategies." Meeting within a meeting, The Joint Statistical Meetings, Denver, CO, Aug 5, 2008.

"The Anatomy of Blocking" The Advanced Placement Annual Conference, Seattle, WA. July 20, 2008.

"A Six-Pack of Experimental Designs" The Advanced Placement Annual Conference, Boca Raton, Fl. July 17, 2007.

"Principles of experimental design" The Georgia AP Math Conference, Atlanta, GA. December 4, 2006.

"The logic of confounding variables – identification, interpretation, and analysis." The California Mathematics Council 47th Annual Fall Conference. Palm Springs, CA. November 3, 2006.

"Disconfounding those confounding variables."

Chris Olsen Vitae Page 7 of 13 9/26/2013

Chris Olsen Vitae Page 8 of 13 "The Assessment of Reasoning in Statistics." Minnesota Spring Mathematics Conference. Duluth MN. April 25-26, 2003

"What to future teachers need to know about statistics?" Workshop on Next Steps in Mathematics Teacher Development, Grades 9-12. The National Academy of Sciences, Washington, DC. March 7-9, 2003.

"The Use of Conditional Probability in Epidemiology." The Advanced Placement Math Specialty Conference. The Maritime Institute of Technology, Lithicum Heights, MD., January 31 – Feb 1, 2003.

"The Nuts and Bolts of Writing Surveys." The Advanced Placement Math Specialty Conference. The Maritime Institute of Technology, Lithicum Heights, MD., January 31 – Feb 1, 2003.

"From Chevrolets and Cheetahs to Santa Claus and the Tooth Fairy: 50 AP Statistics Examples." NCTM Central Regional Conference, October 12, 2002. Paducah, KY.

"A Template for Designing, Executing, and Interpreting Simulations." The Advanced Placement Math Specialty Conference. Silver Spring, MD., February 22-23, 2002.

"Extending the Chi Square." The North Carolina School of Science and Mathematics Conference, Durham, NC, Feb 4, 2002.

"50 Real Examples of Statistical Ideas from the Scientific Literature." The Advanced Placement Math Specialty Conference. Long Island, NY., January 25-26, 2002.

"Assumptions in Statistics: Mathematical Reasoning or Witchcraft?" The California Mathematics Council 42nd Annual Fall Conference. Palm Springs, CA. November 3, 2001.

"Where does a 42,000 lb Gorilla Sit?" The 53rd Annual Meeting and Pre-Conference. The Illinois Council of Teachers of Mathematics. Peoria, IL. October 20, 2001.

"Some Data Explorations for your AP Statistics Class." The Advanced Placement Math Specialty Conference. Philadelphia, PA, February 23-24, 2001.

"Some experimental design problems for your AP Statistics Class." The Advanced Placement Math Specialty Conference. Philadelphia, PA, February 23-24, 2001.

"The best (or at least better!) use of multiple choice and free response items in classroom assessment." The North Carolina School of Science and Mathematics Conference, Durham, NC, Feb 3, 2001.

Chris Olsen Vitae Page 9 of 13 9/26/2013 "The practice and principles of constructing free-response items in an AP Statistics class." The California Mathematics Council 41st Annual Fall Conference. Palm Springs, CA., November 3, 2000.

"Experimental design for AP Statistics: Beyond the definition." 52nd Annual Meeting and Pre-Conference, Illinois Council of Teachers of Mathematics. Peoria, IL. October 21,2000.

"Five Cheap and Easy Experiments for AP Statistics." NCTM Central Regional Conference, October 19, 2000. Omaha, NE.

"High School AP Statistics." Iowa Mathematics Association of Two-Year Colleges Conference. Ankeny, IA. October 8,1999.

"Beond AP Statistics: Experimental Design." Conference-within-a-Conference. National Council of Teachers of Mathematics Annual meeting. San Francisco, CA. April 23, 1999.

"The Advanced Placement Statistics Exams: the first two years." Invited paper, Joint Statistical Meetings of the American Statistical Association, Institute of Mathematical Statistics, International Biometric Society, and Statistical Society of Canada. Dallas, TX. August 11,1998.

"Experiencing AP Statistics: Designing and Implementing a Course Involving Activities-Based Components." Conference-within-a-Conference. National Council of Teachers of Mathematics Annual meeting. Washington, DC. April 3, 1998.

"Resampling/Simulation in the AP Statistics Course." Panel discussion, Joint Statistical Meetings of the American Statistical Association, Institute of Mathematical Statistics, and International Biometric Society. Anaheim, CA. August 11,1997.

"The (T)I's of Texas are Upon Us: Some Perspectives on the Best Thing Since Sliced Bread." Keynote Presentation on Technology, Iowa Council of Math Teachers Annual Conference, February 17, 1996. Des Moines, Iowa.

"Estimation and Espionage: A Statistical Peek at Yankees couting Rebels in 1861." NCTM Southern Regional Conference, October 6, 1995. Knoxville, TN.

"Connecting with the Science Department: Strategies, Culture Shock, and (Gasp!) Successes. NCTM Central Regional Conference, October 13, 1995. Springfield, Missouri.

"You Can't Get Silk Out of a Sow's Ear, nor Statistical Literacy without All of Us." Keynote Speaker, Tennessee Math Teachers' Fall Conference, Sept 23, 1995. Nashville, TN.

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Can Math and Science Teachers Work Together? Five Success Stories and Only a Little Grumbling about Physics Teachers." Tennessee Math Teachers' Fall Conference, Sept 23, 1995. Nashville, TN.

"Civil War Espionage & Estimation: A Data Analysis of Yankee Spies Counting Rebel Troops in 1861", Northeastern Regional NCTM Conference, Nashua, NH, November, 1991. This talk was repeated with varying titles at the Southwestern NCTM Regional in Little Rock, AK, in August, 1992 and then at the Annual NCTM meeting in Seattle, WA in April, 1993, and at Southeastern NCTM Regional , Knoxville, 1995.

"Bring Interdiscipline to your Discipline: 15 Data Sets for your Fondue Statistics Class" presentation at the Iowa Council of Teachers of Mathematics, February, 1994; also presented at regional NCTM meetings in Tulsa, OK, and Omaha, NE in October of 1994.

"High School Statistics and the Standards: Some Practical Blueprints for Action", invited presentation at the Northcentral Regional NCTM Conference, Des Moines, IA, January, 1992.

"Teaching Statistics: Methods, Materials, and Software", mini-course at the Northeastern Regional NCTM Conference, Philadelphia, December, 1989.

"Using Simulations to Teach Statistics: Methods, Materials, Software, and Sources for More", IBM computer workshop, NCTM Southwestern Regional Conference, October, 1989.

"Transformations of Data -- Magic Wands!", presentation at the Green Lake annual meeting of the

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Chris Olsen Vitae Page 12 of 13 The University of Iowa Iowa City, Iowa 1981 - 84

## Ph. D. Educational Administration

Concentration:

- Measurement and Evaluation
- Research Methodology

Dissertation:

- Educational Computing Systems

Thesis Advisors

Professor William C. Bozeman Professor Harold Schoen Professor Warren Boe Professor Walter J. Foley Professor James Maxey

The University of Iowa Iowa City, Iowa 1972 - 78 "Decision Support for Statistical Hypothesis Testing: An Experiment"

MA Mathematics Education Concentration: - Statistics - Computers - Mathematical Analysis

Iowa State University Ames, Iowa 1966 - 70 BA Mathematics

Iowa, Secondary; Permanent Professional

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