

MSCS MESS

Department of Mathematics, Statistics, and Computer Science
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Math Across the Cannon

Understanding p-values and the Controversy Surrounding Them.

Whom: Jessica Utts

Where: RNS 410

When: Tuesday, April 24th | 3:30-4:30

About the talk: Most researchers and journals rely heavily on p-values for determining whether results of a study are statistically significant, and if the study is worthy of publication. But recently p-values have come under attack, and one social science journal has gone as far as banning their use for papers submitted to the journal. These developments led the American Statistical Association (ASA) to release a statement in 2016 titled “Statement on Statistical Significance and P-values,” with six principles underlying

the proper use and interpretation of p-values and statistical significance. What’s wrong with p-values? Should their use be abandoned? This talk explores what p-values really mean, some common misunderstandings about them, what the ASA’s statement said about them, and what steps statisticians and researchers can take to make sure p-values are not misused.

Math Across the Cannon

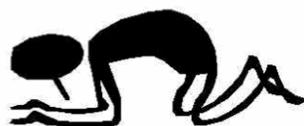
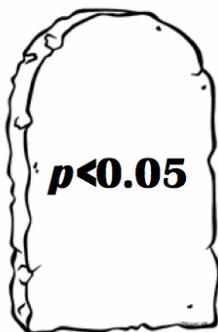
How Basic Statistical Literacy Can Save You Money, and Maybe Even Save Your Life!

Whom: Jessica Utts

Where: Weitz Cinema (Carleton)

When: Tuesday April 24th | 3:45 p.m.

About the talk: A headline proclaims that coffee lovers live longer. Should you start drinking coffee? You test positive for a disease. How likely is it that you actually have the disease? Are there ways to increase your chance of winning the lottery? Should you buy an extended warranty? Should you pay the advance purchase, non-refundable cost for a hotel room, or wait and pay **more when you arrive?** All of these are questions that can be



(cont.) more when you arrive? All of these are questions that can be answered with a little understanding of statistics and probability. This talk will discuss these and other examples of how statistics and probability permeate our lives, and how a little knowledge can help us make better decisions.



About the speaker: Jessica Utts is Professor of Statistics at the University of California – Irvine. Jessica received her BA in Math and Psychology from SUNY – Binghamton and her MA and PhD in Statistics from Penn State University. Among numerous awards, she was the recipient of the 2009 Founders Award from the American Statistical Association, which recognizes distinguished service to the association. She has had leadership roles in the National Institute of Statistical Sciences, the Consortium for the Advancement of Undergraduate Statistics Education, and International Biometric Society, and was the 2016 president of the American Statistical Association. Jessica’s interests are in applied statistics, particularly in the use of statistics in parapsychology, and in statistics education and literacy. She is the author of three popular introductory textbooks on statistics and many research publications.

To submit an article or event for publication in the mess, email nevilleq@stolaf.edu; to receive the Mess digitally each Friday, email habero1@stolaf.edu; visit <http://wp.stolaf.edu/mscs/mscs-mess/> for a digital archive of previous MSCS Mess issues.



Math Club and PME Elections

Math Club and PME are seeking motivated students to serve on its leadership team for the 2018-2019 academic term.

Those of you which are not graduating seniors are invited to apply for a role on our team. Elections will be held for all leadership positions. (President, Vice President, Treasurer, Chief of Communications, Class Representatives, and PME Coordinator). If you are interested in applying, you can [read more about each position and its responsibilities here](#). Applications can be found here and are due by *11:55 p.m.* on *Wednesday, May 2*. Elections will be held on *Thursday, May 3, 2018* at *11:10 a.m.* in the *6th floor lounge of RMS*.

MSCS Student Work Deadline

If you are interested in working for the MSCS department next fall as a Teaching Assistant, Grader, Supplemental Instructor or anything else, the deadline for applications is tomorrow *Tuesday, April 24th*. The application form can be found at <https://goo.gl/forms/8VsEUUDg2nMVHw4C3>, so make sure to get that in on time!

Quinton Neville, Editor
William Grodzicki, Adviser
Ellen Haberoth, Mess Czar