

FREE PUBLIC LECTURE

"Born on Friday the Thirteenth: The Curious World of Probabilities"

Jeffrey S. Rosenthal, Professor of Statistics, University of Toronto Monday, July 30, 2018, at 7:00 p.m. <u>Vancouver Convention Centre</u>, West Ballroom A

We're all fascinated by randomness. We love the thrill of surprises—when they're good. We dream of winning the lottery; we marvel at the improbable series of random events and exquisitely calibrated coincidences that end with two people falling in love.

But we fear the uncertain too—accidents, catastrophes, crime, and terrorism. A one-in-a-million risk looks small in theory, but, in practice, someone has to be that *one* person, right?

Or what about the news media and pollsters who predicted Hillary Clinton had an 85% (*The New York Times*) or even a 99% (Princeton Election Consortium) chance of winning the 2016 U.S. presidential election? Or the polls showing 'Remainers' would triumph over 'Brexiteers' in the UK? Were the polls biased, and if so, why?

This is where statistics comes in. And in the first public lecture to be held at the largest annual meeting of statisticians in North America, award-winning University of Toronto statistician and bestselling author Jeffrey Rosenthal will take you on a tour through the mysteries of probability.

From the randomness of romance to why you get invited to three parties on the same night, Rosenthal will explain the concepts—and entertain you with numbers. Did it ever occur to you that you might actually have 250,000 friends of friends and what this could mean for your social life? Or that if you play the lottery every week, then you will hit the jackpot about once every 250,000 years?

In an accessible, no-math-required style, Rosenthal will free you from the tyranny of misleading stats (a 40-year-old woman is *not* more likely to die of terrorism than get married) and show how mastering the basics of probability will help you make better decisions in all aspects of your life (or at least enjoy the lottery for the thrill of playing rather than the likelihood of winning).

"So many aspects of our lives are ruled by probability," says Rosenthal. "By thinking logically about the likelihood of various outcomes, we can make better decisions and understand our lives more deeply. We can better cope with the uncertainties we face, and even learn to enjoy them. When viewed properly, randomness isn't confusing, or scary, or mysterious—it's fun!"

Jeffrey S. Rosenthal is a professor of statistics at the University of Toronto. He earned his BSc from the University of Toronto at the age of 20, his PhD in mathematics from Harvard University at the age of 24, and tenure at the University of Toronto at the age of 29. He received the 2006 CRM-SSC Prize, the 2007 COPSS Presidents' Award, the 2013 SSC Gold Medal and teaching awards at both Harvard and Toronto. He is a fellow of the Institute of Mathematical Statistics and Royal Society of Canada. Rosenthal's book for the general public, *Struck by Lightning: The Curious World of Probabilities*, was published in 16 editions and 10 languages, was a bestseller in Canada, and led to numerous media and public appearances and his work exposing the Ontario lottery retailer scandal. His web site is *www.probability.ca*. Despite being born on Friday the Thirteenth, Rosenthal has been a very fortunate person.

About JSM 2018

JSM 2018 is the largest gathering of statisticians and data scientists in the world, taking place July 28–August 2, 2018, in Vancouver. Occurring annually since 1974, JSM is a joint effort of the American Statistical Association, International Biometric Society (ENAR and WNAR), Institute of Mathematical Statistics, Statistical Society of Canada, International Chinese Statistical Association, International Indian Statistical Association, Korean International Statistical Society, International Society for Bayesian Analysis, Royal Statistical Society and International Statistical Institute. JSM activities include oral presentations, panel sessions, poster presentations, professional development courses, an exhibit hall, a career service, society and section business meetings, committee meetings, social activities and networking opportunities.

About the American Statistical Association

The ASA is the world's largest community of statisticians and the oldest continuously operating professional science society in the United States. Its members serve in industry, government and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare. For additional information, please visit the ASA website at *www.amstat.org*.