James Orlin
Harold Larnder Prize Winner

Some random musings on elementary probability theory

Abstract. Uncertainty is everywhere! And probability theory is the most important mathematical theory for understanding uncertainty. Yet even elementary questions in probability are remarkably subtle, and well trained mathematicians often get them wrong. This talk presents random musings on probability while addressing the following three questions:
(1) Why do so many people (even experts) make simple conceptual errors when thinking about questions in elementary probability?
(2) How can one improve one's probabilistic intuition? And,
(3) What are some things that the O.R. community can do to help out?

Bio. James Orlin is the Edward Pennell Brooks Professor of Operations Research at the MIT Sloan School of Management. He is best known for his research on obtaining faster algorithms for problems in network and combinatorial optimization, and for his text with Ravi Ahuja and Tom Magnanti entitled *Network Flows: Theory, Algorithms, and Applications*. The authors won the 1993 Lanchester Prize (given by INFORMS for the best publication in O.R. for the year) for this book. He has also won recognition for several co-authored publications that address (in one form or another) optimization under uncertainty. In particular, he has won the following awards: the 2004 EXPLOR Award (for leadership in online marketing research), the 2007 INFORMS Computing Society Prize (for research in the interface of O.R. and computer science), the 2008 IEEE Leonard G. Abraham Prize (for research in communication theory), the 2008 INFORMS Koopman Prize (for research in military operations research), and the 2011 IEEE Bennett Prize (for research in communication theory).