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## **HARVARD PROFESSOR TYLER VANDERWEELE IS 2015 CAUSALITY IN STATISTICS EDUCATION AWARD HONOREE**

*Honor Recognizes Innovation in Teaching of  
Basic Causal Inference in Statistics Courses*

SEATTLE, WA, AUGUST 10, 2015 – Tyler VanderWeele, Harvard University professor of epidemiology with joint appointments in the departments of epidemiology and biostatistics, is the 2015 honoree of the American Statistical Association's (ASA) Causality in Statistics Education Award.

VanderWeele was honored for his innovative book titled [\*Explanation in Causal Inference: Methods for Mediation and Interaction\*](#). He was presented \$10,000 and a plaque last evening during a special awards ceremony at the [2015 Joint Statistical Meetings \(JSM 2015\)](#) in Seattle.

The Causality in Statistics Education Award, established in 2013, is presented annually to an individual or team that does the most to enhance the teaching and learning of causal inference in introductory statistics courses. It was founded by Judea Pearl to highlight the growing importance of introducing core elements of causal inference into undergraduate and lower-division graduate classes in statistics.

Pearl—who is a longtime ASA member, recipient of the 2012 Turing Award and professor of computer science and statistics at the University of California, Los Angeles—donated \$15,000 of his Turing Award prize to fund the award. Microsoft Research last year awarded a matching gift of \$10,000 that will enable the award to present a \$10,000 annual prize. Google recently donated \$5,000 to support the prize in 2016.

VanderWeele's book provides accessible and comprehensive coverage of causal explanations, which are fundamental to our understanding of the world. They tell us how and why causes transmit their influence to their effects so we can enhance the transmission when it is beneficial and prevent it when it is damaging. These tell us, for example, that malaria is transmitted by mosquitos not by "mal-air," as our grandparents once believed.

The unique nature of these so-called mediation questions is they cannot be answered or even articulated in the standard language of statistics. Only recently, we acquired a mathematical language in which we can express such questions and mathematical machinery with which we can answer them from data.

Through his book, VanderWeele has taken this development to another level by creating an in-depth science around the fundamental aspects of mediation and interactions. It offers statistics educators a scholarly course material that is teachable, comprehensive and rigorous. It is a milestone in statistics education and carries the potential of revolutionizing the way students in many disciplines will be introduced to the study of causation—in general—and to causal explanation in particular.

Pearl, who is co-chair of the prize-selection committee, said the goal of the award is to close a growing gap between research and education in the causal inference field. “While researchers are swept away by unprecedented excitement over new causal inference tools that are unveiled almost daily, the excitement is hardly evident among statistics educators and is totally absent from statistics textbooks.”

In response, Pearl established the [Causality in Statistics Education Award](#) to stimulate the creation of effective course material that will convince statistics instructors that causation is easy and they can teach it for fun and profit. “The fun comes from showing students how simple mathematical tools can answer questions that Pearson-Fisher-Neyman could not begin to address, and the profit comes from the fact that most customers of statistics ask causal—not associational—questions,” said Pearl about his motivations for establishing the new award.

JSM 2015 is being held August 8–13 at the Washington State Convention Center in Seattle. More than 6,000 statisticians—representing academia, business and industry, as well as national, state and local governments—from numerous countries are attending North America’s largest statistical science gathering.

### ***About JSM 2015***

JSM, which has been held annually since 1974, is being conducted jointly this year by 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. [Click here for more information about JSM 2015.](#)

### ***About the American Statistical Association***

The ASA is the world’s largest community of statisticians and the second-oldest continuously operating professional 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](http://www.amstat.org).

### **For more information:**

Jeffrey A. Myers

Office: (703) 684-1221, Ext. 1865; Mobile: (540) 623-7777

Email: [Jeffrey@amstat.org](mailto:Jeffrey@amstat.org)