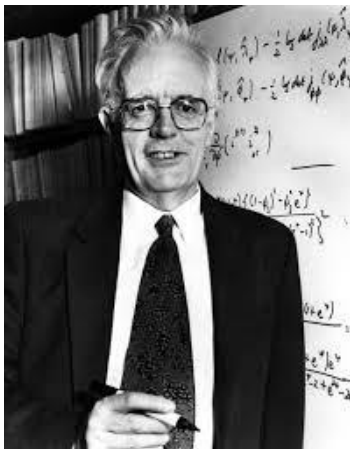


# ***-Special Edition- News from the World of Statistics***



**October 20, 2016**

## **International Prize in Statistics Awarded to Sir David Cox for Survival Analysis Model Applied in Medicine, Science, and Engineering**



Prominent British statistician Sir David Cox has been named the inaugural recipient of the International Prize in Statistics. Susan Ellenberg, chair of the International Prize in Statistics Foundation, made the historic announcement via [video statement](#).

A giant in the field of statistics, Sir David Cox is being recognized by the International Prize in Statistics Foundation specifically for his pioneering 1972 paper in which he developed the proportional hazards model that today bears his name.

The Cox Model is widely used in the analysis of survival data and enables researchers to more easily identify the risks of specific factors for mortality or other survival outcomes among groups of patients with very different characteristics. From disease risk assessment and treatment evaluation to product liability to school dropout, re-incarceration, and AIDS surveillance systems, the Cox Model has been applied essentially in all fields of science, as well as in engineering, that involve discovering and understanding natural or human-induced risk factors on survival.

Interestingly, Cox considers himself to be a scientist who happens to specialize in the use of statistics, a chord that resonates among many statisticians and data scientists. His model has been used in life-changing research breakthroughs, some of which include:

- demonstrating that a major reduction in smoking-related cardiac deaths could be seen within just one year of smoking cessation, not 10 or more years as previously thought
- showing the mortality effects of particulate air pollution, a finding that has changed both industrial practices and air quality regulations worldwide
- identifying risk factors of coronary artery disease and analyzing treatments for lung cancer, cystic fibrosis, obesity, sleep apnea and septic shock.

His mark on research is so great that his 1972 paper is one of the three most cited papers in statistics and is ranked 16th in *Nature's* list of the top 100 most cited papers of all time for all fields.

In 2010, he received the Copley Medal, the Royal Society's highest award that has also been bestowed upon such other world-renowned scientists as Peter Higgs, Stephen Hawking, Albert Einstein, Francis Crick, and Ronald Fisher. Knighted in 1985, Cox is a fellow of the Royal Society, an honorary fellow of the British Academy and a foreign associate of the U.S. National Academy of Sciences. He has served as President of the Bernoulli Society, the Royal Statistical Society, and the International Statistical Institute.

His 50-year career included technical and research positions in the private and nonprofit sectors as well as numerous academic appointments as professor or department chair at Birkbeck College, Imperial College of London, Nuffield College and Oxford University. He obtained his PhD from the University of Leeds in 1949, and prior to that studied mathematics at St. Johns College. Though he retired in 1994, Sir David Cox remains active in the profession in Oxford, England.

The International Prize in Statistics comes with a monetary award of \$75,000 USD, and will formally be presented to Cox at the ISI World Statistics Congress in Marrakech, Morocco next July. Akin to the Fields Medal, Abel Prize, Turing Award and Nobel Prizes, the International Prize in Statistics is considered the highest honor in its field. It will be bestowed every other year to an individual or team for major achievements using statistics to advance science, technology, and human welfare.

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