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Winners announced for the inaugural David Cox Medal for Statistics

Three leading mid-career statisticians have been announced as the winners of the David Cox Medal for Statistics, which has been awarded for the first time in 2025 to commemorate the work of the late world-leading statistician and former Royal Statistical Society president, Sir David Cox.

The three winners are Prof Eric Tchetgen Tchetgen of the University of Pennsylvania for his work improving our understanding of causal inference, Prof Nancy Zhang also of the University of Pennsylvania for her contributions to statistical genomics and its application in biomedical research and Prof Richard Samworth of the University of Cambridge for contributions to methodological and theoretical statistics.

Each recipient is a leader in their field; among Prof Tchetgen Tchetgen's contributions is the development of Proximal Causal Inference and instrumental variable methodology, while Prof Zhang has advanced the analysis of high-dimensional biological data and aided understanding of cancer genome evolution. Prof Samworth has made numerous contributions to the areas which have been of the most focus for statistics over the past decades, including shape-constrained modelling and change-point analysis.

The international prize was established to recognise researchers in the fields of statistical theory, methodology and applications whose work is original, with conceptual depth and novelty, and which moves the field or a substantive application area forward.

It celebrates mid-career researchers, as Sir David Cox published his seminal paper on regression models in the RSS Series B Journal, aged 48. The medal is awarded jointly by the Royal Statistical Society, the American Statistical Association, the Bernoulli Society, the International Biometric Society, the Institute of Mathematical Statistics and the International Statistical Institute.

Professor Peter McCullagh, chair of the Prize Committee said: "Sir David Cox's work led to great advancements in the field, so it feels fitting to celebrate those carrying on his great work in moving the profession and our understanding of statistics forward. Eric, Nancy and Richard are to be wholeheartedly congratulated for their contributions that have reshaped our understanding across the discipline."

Notes to editors

- The David Cox Medal for Statistics is jointly awarded by the [American Statistical Association \(ASA\)](#), [Bernoulli Society](#), [International Biometric Society \(IBS\)](#), [Institute of Mathematical Statistics \(IMS\)](#), [International Statistical Institute \(ISI\)](#) and [the Royal Statistical Society \(RSS\)](#).
- Further information about the medal can be found on the RSS website: <https://rss.org.uk/training-events/events/honours/david-cox-medal/>
- The full citations for each recipient are as follows:

Richard Samworth – Statistical Theory

Professor Richard Samworth, FRS is awarded the David Cox Medal for Statistics for his outstanding contributions to methodological and theoretical statistics. Richard has made numerous seminal contributions including to shape-constrained modelling, high dimensional statistics, change-point analysis and nonparametric classification. These important and broad areas of statistical science encompass the majority of the prevailing topics where statistics has focussed over the past two decades, and Richard has been at the forefront from the outset. In addition to his stellar research contributions, Richard has mentored with distinction many students and young researchers, as well as serving the profession tirelessly through journal editorships and other contributions to multiple statistical societies.

Eric Tchetgen Tchetgen – Statistical Methodology

Professor Eric Tchetgen Tchetgen is awarded the David Cox Medal for Statistics for his outstanding contributions to the development of pioneering statistical theory and methods that have reshaped our understanding and practice of causal inference. Eric's noteworthy contributions recognised by this award include the development of Proximal Causal Inference and groundbreaking contributions to instrumental variable methodology, two fundamental analytic frameworks for credible causal inference in the face of intractable confounding. Beyond his groundbreaking works on proximal inference and instrumental variables, Eric has made seminal contributions to multiple other areas, including interference, mediation analysis, missing data, conformal inference, survival analysis, higher order influence functions, and data fusion.

Nancy Zhang – Statistical Application

Professor Nancy Ruonan Zhang is awarded the David Cox Medal for Statistics for her pioneering contributions to statistical genomics, particularly in cancer and single-cell genomics and their applications in biomedical research. Her work has advanced the analysis of high-dimensional biological data through the development of methods for change-point detection and false positive control, noise reduction in single-cell RNA sequencing, single cell and spatial omic data integration, and cell type deconvolution in bulk tissue analysis. She has also made significant contributions to understanding cancer genome evolution through the development of allele-specific DNA copy number estimation methods that reveal intratumor heterogeneity. Through these contributions, Nancy has demonstrated exceptional leadership in bridging statistical innovation with real-world biomedical challenges, significantly influencing both the statistical and life sciences communities.