

Call for nominations: Rousseeuw Prize for Statistics

Statistics is a cornerstone of science, health, industry, economics, government and more, and benefits society as a whole. The Rousseeuw Prize for Statistics awards pioneering work in statistical methodology. The prize recognizes a statistical innovation, that is, an outstanding contribution or tool that has had significant impact and found wide application in statistical practice, with relevance to society.

The biennial Rousseeuw Prize for Statistics is awarded by the King Baudouin Foundation (<https://www.kbs-frb.be/en/about-us>), a large public utility foundation in Belgium. The prize is named after its sponsor, the statistician Peter J. Rousseeuw. The prize focuses on the innovation rather than on a single individual. This allows recognition of several individuals who made significant contributions to it. One of the goals of awarding the people who created such an innovation, is to promote awareness of the important role and intellectual content of statistics and its profound impact on human endeavors.

The prize is awarded in even years and started in 2022. The award amount is one million US dollars per prize, to be split over awardees if there are several, which it is hoped will typically be the case. The award ceremony is scheduled in the fall of 2024 at the University of Leuven, Belgium.

For the purpose of the prize, statistics is defined as "the science and technology of obtaining useful information from data, taking its variability into account". Statistical work in the above sense can be found under a variety of flags, such as astrostatistics, big data, biometrics, chemometrics, classification, data analysis, data collection, data mining, data science, data visualization, design of experiments, econometrics, environmetrics, genomic statistics, machine learning, multivariate analysis, pattern recognition, psychometrics, quality assurance, quantitative finance, regression, sociometrics, statistical computing, statistical learning, technometrics, time series analysis, etc.

There is no time window for the work, in the sense that it would have to be done in the last x years. Likewise, there is no age limit on awardees. The awardees must be living persons, not organizations. If one of the main contributors is no longer alive, the surviving author(s) of the joint work can still be awarded. The deceased contributor(s) will of course be named explicitly.

Nominations will propose a particular innovation as well as a list of awardees. When making this list it is encouraged to consider gender diversity when applicable. Self-nomination is not permitted. The nominations, including letters of recommendation, are to be submitted by February 29th 2024 on the website <https://www.rousseeuwprize.org> which contains all information about the prize and nomination procedure.

The King Baudouin Foundation appoints an international jury consisting of ten reputed statisticians. The jury will make a ranked shortlist of 3 options, in case some awardees do not accept the prize or are unwilling to be present at the award ceremony. To avoid undue pressure on the jury, its members are anonymous while they do their work.

The selection of the award is aimed to be impartial and balanced. The members of the jury may not be related to the people on the shortlist by family ties, past or present life partner, PhD advisor-student, or being a co-author in the last 15 years. When selecting the award topic and awardees, the jury takes into account important contributions and contributors irrespective of gender, race, sexual orientation, ideology, or religion.

In October 2022 the inaugural prize went to a topic in biostatistics: *Causal inference with applications in Medicine and Public Health*. The laureates were James Robins, Miguel Hernan, Andrea Rotnitzky, Thomas Richardson and Eric Tchetgen Tchetgen. They carried out this research mainly in the United States.

In 2024 the prize can be awarded in any of the other four subfields of statistics: (1) general statistical methodology, (2) computational statistics and data science, (3) statistics in the physical sciences and industry, and (4) statistics in economics and humanities. To ensure geographic diversity over time, the 2024 prize cannot go to work carried out in the United States, Australia, Canada, Ireland, New Zealand, or the United Kingdom. Also, to avoid any appearance of a conflict of interest the award cannot be in Peter Rousseeuw's research areas. More information on the rules can be found on the website.

For the organizers,
Mia Hubert and Stefan Van Aelst