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. Nevertheless, research in statistics does not yet receive the same level of recognition as in related fields such as mathematics, physics, and computer science.

To help remedy this gap, a new biennial prize has been created 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 Rousseeuw Prize for Statistics will award 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 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 will be awarded in even years, starting 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 first award ceremony is scheduled for November 2022 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 important contributors. 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 March 31st 2022 on the website https://www.rousseeuwprize.org which contains all information about the prize and nomination procedure.

The King Baudouin Foundation appoints an international Selection Committee (SC) consisting of ten reputed statisticians. The SC 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 SC, its members are anonymous while they do their work. When the award is announced, the identities of the SC members whose terms have ended will be communicated.

The selection of the award is aimed to be impartial and balanced. The members of the SC 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 SC takes into account important contributions and contributors irrespective of gender, race, sexual

orientation, ideology, or religion.

For the purpose of the prize, a rough subdivision of the field of statistics is considered: (1) general statistical methodology, (2) computational statistics and data science, (3) biostatistics and environmetrics, (4) statistics in the physical sciences and industry, and (5) statistics in economics and humanities. To promote diversity of topics, once an innovation is awarded in one of these five subfields, that subfield cannot be awarded again in the next three cycles. There is a similar rule to ensure geographic diversity over time. Also, to avoid any appearance of a conflict of interest the first few awards 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