International Statistical Review
August 2012 Issue
Marc Hallin and Vijay Nair
Co-editors-in-Chief

Table of Contents

The first two articles in this issue deal with the history and the changing nature of statistics research in two large industrial organizations in the US. The first article by Kettenring describes the accomplishments at Bell Laboratories, the research arm of the telecommunications giant American Telephone and Telegraph that operated as a monopoly until 1984. Kettenring outlines the structure and the environment that made Bell Labs a crown jewel of research in general and statistics in particular. He goes on to discuss if, and how, such industrial research can still be done in the modern competitive arena. The second article, by Hahn, Hoerl, Doganoksoy and Gardner, describes the environment and experiences at General Electric that led to the many accomplishments there. Both articles also provide views on the current state of statistics research in business and industry.

The third article, by Dey and Mukherjee, covers the development of research in experimental design in India over the last 70 years. It provides a coherent history of the developments in different types of design. Flournoy, May, and Secchi consider response-adaptive designs, a class of designs that are especially popular in clinical trials. Their paper provides a historical overview of designs that are asymptotically optimal in the sense of being able to select the best treatment with probability one.

Guttorp and Thorarinsdottir cover the history of stochastic point processes, including the Poisson process, the doubly stochastic processes, cluster processes, and the application of the Markov property to point processes. This is followed by a paper by Hoppe and Senata that provides a unified treatment of probability bounds on a union of events by Bonferroni, Galambos–Rényi, Dawson–Sankoff, and Chung–Erdös. It is shown that all these bounds arise in a more general setting in terms of binomial moments of a general non-negative integer-valued random variable.

The final article, by Vannieuwenhuyze, Loosveldt, and Molenberghs, deals with mixed mode surveys where respondents complete a survey by different modes and the mode effects can be confounded. The paper proposes a method for circumventing the problem and estimating the individual mode effects.

The rest of the issue contains short reviews of books.