

# History and Goals of the Emanuel & Carol Parzen Prize for Statistical Innovation

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by Emanuel Parzen - April 29, 1994

The discipline and profession of statistics has a public respect problem that is due in part to the scarcity of prizes regularly awarded to North American academic statisticians in recognition of the contributions of their careers to society.

The Parzen Prize for Statistical Innovation was established to respond to this need in a way that also celebrates: my 65th birthday on April 21, 1994; the increasing reputation which the Texas A&M Department of Statistics enjoys in 1994 due to its excellent faculty and programs; and the "Capturing the Spirit" Capital Campaign of Texas A&M University, which believes that faculty gifts are particularly welcome since they would impress all donors how important is public support to maintain and improve Texas A&M as a major research university.

Modern statistical theory and methods are often called the "*glue of science*". Statistical innovation (the development of applicable and innovative statistical methods) is required to accomplish this role. I define statistical innovation to be the balance between *outreach* research (enormously aiding solutions to important applied problems) and *core* research (mathematically synthesizing ideas drawn from many applications to create general methods that provide technology transfer between statistical innovations in different disciplines [such as econometrics, biostatistics, signal processing, industrial statistics, to name just a few]).

Confusion and tension continues to exist about the balance between outreach (practice) and core (theory) that we have defined as statistical innovation. This is well illustrated by polemical remarks of my friend Benoit Mandelbrot (in the April 1994 *Bulletin of the American Mathematical Society*, p. 194): "Take mathematical statistics. Jerzy Neyman disciplined his followers to practice the most exacting rigor. Now that the long shadow of Neyman has waned, the mood has changed, and mathematical statistics has been freed to seek a place in the community of sciences."

The Emanuel & Carol Parzen Prize, to be awarded for years to come, will help record the *contemporary history of statistical innovation*. It will contribute to maintaining the balance between outreach and core research which the discipline and profession of statistics requires for its continued independent existence, and to continue to attract outstanding talent. The Department of Statistics at Texas A&M, and Professor [H. Joseph Newton](#), deserve warm appreciation for undertaking the responsibility of supervising the awarding of the Parzen Prize every other year.

I would like to especially thank all those who are honoring me by their gifts to the endowment of the Parzen Fund. Their friendship enables me to enjoy a career which I believe demonstrates that "statistics is not only fundamental but fun".