

Dedication

This volume is dedicated to our dear colleague Yehuda Vardi, who passed away in January 2005.

Yehuda was born in 1946 in Haifa, Israel. He earned a B.S. in Mathematics from Hebrew University, Jerusalem, an M.S. in Operations Research from the Technion, Israel Institute of Technology and a Ph.D. under Jack Kiefer at Cornell University in 1977.

Yehuda served as a Scientist at AT&T's Bell Laboratories in Murray Hill before joining the Department of Statistics at Rutgers University in 1987. He served as the department chair from 1996 until he passed away. Yehuda was a dynamic and influential chair. He led the department with great energy and vision. He also provided much service to the statistical community by organizing many research conferences, and serving on the editorial boards of several statistical and engineering journals. He was an elected fellow of the *Institute of Mathematical Statistics* and *International Statistical Institute*. His research was supported by numerous grants from the *National Science Foundation* and other government agencies.

Yehuda was a leading statistician and a true champion for interdisciplinary research. He developed key algorithms which are now widely used for emission tomographic PET and SPECT scanners. In addition to his work on medical imaging, he coined the term “network tomography” in his pioneering paper on the problem of estimating source-destination traffic based on counts in individual links or “road sections” of a network. This problem has since blossomed into a full-fledged field of active research. His work on unbiased estimation based on biased data was a fundamental contribution in the field, and was recently rediscovered as a powerful general tool for the popular Markov chain Monte Carlo method. He has explored many other areas of statistics, including data depth and positive linear inverse problems with applications in signal recovery. His seminal contributions played a leading role in advancing the scientific fields in question, while enriching statistics with important applications.

Yehuda was not just a scientist with remarkable breadth and insight. He was also a wonderful colleague and friend, and a constant source of encouragement and humor. We miss him deeply.

Regina Liu, William Strawderman and Cun-Hui Zhang