



## *Melvin R. Novick*

(1932–1986)

Melvin R. Novick, Professor of Measurement and Statistics at The University of Iowa, was born in Chicago, Illinois, on September 21, 1932, and died in Princeton, New Jersey, on May 20, 1986. He was world renowned for his contributions to the development and application of Bayesian statistical methods, to computer assisted data analysis, to policy, legal, and standards issues in educational and psychological testing, and to psychometric theory.

Mel Novick was a graduate of Roosevelt University in Chicago, where he was awarded BA and MA degrees in psychology and a BS degree in mathematics, and of The University of North Carolina at Chapel Hill, where he received his PhD in mathematical statistics in 1963. His career included affiliations with Educational Testing Service, The American College Testing Program, University College, London, and The University College of Wales, Aberystwyth. He had been a member of the faculty at The University of Iowa since 1970.

*Statistical Theories of Mental Test Scores*, which Mel coauthored with Frederic M. Lord, was published in 1968. It continues to be recognized today as the standard reference in the field of test theory, providing a unified, comprehensive, and rigorous statistical treatment of traditional and modern topics.

Mel's second book, *Statistical Methods for Educational and Psychological Research*, was written together with Paul H. Jackson and published in 1974. It gives a lucid introduction to Bayesian statistical inference, including many extensive illustrations using data from education and psychology.

At about the same time, Mel began work on a continuing project, the development of the Computer Assisted Data Analysis (CADA) Monitor—a package of statistical procedures designed to facilitate the learning and application of a wide variety of Bayesian and exploratory statistical analyses. CADA's interactive, menu-driven structure anticipated by a decade current developments in software design. Intermediate statistics courses based on the combination of *Statistical Methods* and CADA have provided uniquely rewarding experiences for a generation of teachers and students.

Mel was founding editor of the *Journal of Educational Statistics* from 1976 to 1979, and was Chair of its Management Committee at the time of his death. His commitment to the advancement of his profession may further be seen from the many boards and committees on which he had served or was serving: the Board of Trustees of the Psychometric Society; the Board of Directors of the American Statistical Association; the Board of Directors of the National Council of Measurement in Education; the APA Committee on Psychological Tests and Assessments; Chair of the Joint AERA, APA, NCME Committees to Review and Revise the Standards for Educational and Psychological Testing; the Committee on Ability Testing of the National Research Council, National Academy of Sciences; the Defense Advisory Committee on Military Personnel Testing; and the Committee on National Education Policy for Science and Engineering of the Human Resources Commission.

Recognition of Mel's scientific contributions by his colleagues may be found in his election as President of the Psychometric Society for 1980, as President of Division 5 of APA for 1981, as a Fellow of the American Statistical Association, and as a Fellow of the American Psychological Association (Divisions 5 and 15). In 1985, Mel received recognition awards from AERA and NCME for "distinguished contributions to psychological measurement and evaluation . . ."

In addition to his originality and productivity, Mel Novick brought a tremendous sense of commitment to his work. For him, it was not enough that a theoretical solution to a given problem be found. He was vitally interested in applications of statistical theory, especially to practical problems in educational and psychological measurement. Moreover, he firmly believed that these problems, however intractable they might seem, really did have solutions which could be found through the consistent application of the correct statistical principles. In particular, as he demonstrated time and time again, a fully Bayesian analysis of a problem, including careful attention to the assessment of both prior beliefs and utilities for all involved parties, could lead to clarity and insight where previously only confusion and apparent contradiction had existed.

Mel was encouraged by the growth in the use of Bayesian inference in the field of psychometrics, but was also frustrated that this growth did not occur more rapidly. Anyone who ever took a course in Bayesian statistics from Mel, or heard him give a talk on the subject, could not fail to be impressed by his enthusiasm and the persuasiveness with which he "made his case," to use the sort of courtroom metaphor of which he was so fond.

Mel clearly enjoyed working with others, a fact reflected by his many coauthors, ranging from other eminent statisticians to graduate students, and including both his children, Laura and Raymond. We also enjoyed working with him, and will miss his stimulation and his kindness. The members of the Psychometric Society extend their deepest sympathies to his wife Naomi and his family.