PREFACE

The Symposium on Inequalities in Statistics and Probability was held at the University of Nebraska-Lincoln during October 27–30, 1982. It was sponsored by the National Science Foundation, the Office of Naval Research, and the University of Nebraska-Lincoln. The organizer of the Symposium was Y. L. Tong, and the Advisory Board consisted of Ingram Olkin, Michael D. Perlman, Frank Proschan, and C. R. Rao. The general study of inequalities has experienced a remarkable growth during the past decade, and is currently expanding at an even faster rate. In view of this growth, the purpose of the Symposium was to provide an opportunity for research workers in inequalities-related areas to meet together, to exchange and share ideas, and to present their latest developments.

There were 15 sessions consisting of 28 invited papers and 7 contributed papers. The topics of the sessions were: (a) Matrix Related Inequalities, (b) Multivariate Majorization and Dilations, (c) Stochastic Optimization and Rearrangement Inequalities, (d) Probabilities of Geometric Regions, (e) Moment and Markov Inequalities, (f) Perspectives on Inequalities and Entropy Functions, (g) Association and FKG Inequalities, (h) Inequalities for Selecting and Ordering Populations, (i) Trends and Order Restrictions, (j) Inequalities in Multivariate Analysis (two sessions), (k) Convex and Stochastic Orderings, (l) Inequalities in Reliability, (m) Contributed Papers (two sessions). In addition there was a general problem session. More than 70 research workers attended and participated in the conference.

Almost all of the papers included in this volume were presented at the conference. The contents of a few papers differ slightly from the conference presentations due to arrangements already made for prior publications. The original Symposium program can be found at the end of this volume.