

Preface

The origin of this volume is the NSF-CBMS Conference in Mathematical Sciences: New Horizons in Multiple Comparison Procedures, August 13–17, 2001, which was held at Temple University, Philadelphia, Pennsylvania. The conference was organized by Sanat K. Sarkar and Burt Holland, in response to the sudden upsurge of research that has taken place in the area of multiple comparisons. A number of newer ideas have emerged from the recent research activities that could generate a steady stream of new research. Providing a forum where a series of lectures presenting these ideas by a leading researcher in multiple comparisons is offered, and at the same time established as well as young researchers can meet to discuss and gain deeper understanding of these ideas to promote further research activities in this area, have been the primary goal of this conference.

Professor Yosef Hochberg of Tel Aviv University, Israel, was invited to be the principal lecturer. Yosef Hochberg delivered ten lectures and other senior researchers Yoav Benjamini, Helmut Finner, Jason Hsu, Sanat Sarkar, Juliet Shaffer, John Spurrier, Ajit Tamhane, and Peter Westfall gave additional one-hour talks. Professors Charles Dunnett and Pranab K. Sen offered additional insightful comments. Professor Hochberg's lectures, covering existing as well as newer statistical issues in multiple comparisons, and the supplementary in-depth talks of the other researchers, provided better understanding of the multiple comparison methodologies for the practitioners who came from FDA, NIH and a number of local and some foreign pharmaceutical companies. For these participants as well as for those who were either junior researchers or newcomers to the field, the talks laid out future directions of research.

The purpose of this volume was to accompany the monograph by Professor Hochberg containing the material discussed throughout the course of his lectures. His idea was to widen the treatment of his lectured topics further in the monograph, which he repeatedly noted in his presentations by saying that “this direction will receive fuller treatment in the monograph”. As it became clear that such a monograph would not be able to carry the contributions of other invited participants of the conference, Professor Hochberg asked us to shoulder the responsibility of bringing to print a volume containing the contributions of the others. We happily agreed, committing ourselves to publishing a book worthy of the monograph it is to accompany.

Unfortunately, the monograph is not ready yet, and we have decided not to delay the publishing of our volume as the latter carries important and timely contributions. We do hope that Professor Hochberg will be able to complete the monograph in the foreseeable future. However, in order to give the readers of this volume an idea of the scope of the topics covered by Professor Hochberg in his lectures, thereby giving them a flavor of what this book is planned to accompany, we add in the Appendix the subject outlines of Professor Hochberg's talks.

All of the papers included in this volume were invited personally by Professor Hochberg. The papers were subjected to refereeing process, and those passing the process are published. We were helped by many individuals in the refereeing effort and our gratitude goes to the following anonymous referees who contributed their time to help completing this volume: G. Bernhard, S. H. Cheung, C. W. Dunnett, A. Genz, A. J. Hayter, G. Hommel, M. Horn, L. A. Hothorn, J. C. Hsu, S. Kropf,