## **Preface**

The venue for the  $3^{rd}$  Lehmann Symposium was the School of Engineering at Rice University from May  $16^{th}$  through May  $19^{th}$ , 2007. The collection of refereed papers included in this volume represents a selection of the papers submitted for publication. Most of the work was presented at the Symposium but there are some contributions that were submitted by participants who did not present their work during the conference.

All activities of the Symposium, except for a banquet held at the student center, were held in Duncan Hall – home of the Statistics Department. Duncan Hall's floor plan, with its open atrium, its main auditorium, and several conveniently located meeting rooms, allows for, and facilitates, interaction among the participants.

As it has been the tradition of the Symposia, the event opens with a session for young investigators. The purpose of initiating the Symposia in this way is to free the young investigators from this activity, and introduce them to other more senior investigators with the goal that the young investigators may more easily mingle with the group. For the third Lehmann Symposium the four young investigators were Yolanda Muñoz Maldonado, Brisa Sánchez, Farinaz Koushanfar, and José Enrique Figueroa-López. At the end, due to unforeseen circumstances, José Enrique was moved to the probability session. All four young investigators provided motivating talks and three of them submitted their work for this volume. All four have a bright future ahead of them.

It is also the tradition of the Symposia that the young investigators session is immediately followed by the first Plenary session and this spot has always been filled by Erich L. Lehmann. Erich provided a great lecture on the history of optimality. The rest of the program, I hope that the reader will agree with me, was excellent.

The papers presented here cover several areas: some of the works consider classical aspects of the discipline and others deal with contemporary aspects of the theory and applications of statistics. Thus, the reader will find a fascinating section dedicated to the subject of optimality. Lehmann, Bahadur and Bickel, and Huber provide excellent discussions on various aspects of optimality. Semi-parametric and non-parametric inference, bootstrap tests of hypotheses, functional data analysis, asymptotic theory, ad-hoc networks, and finance are some of the areas represented in the volume. Intentionally, I left probability to the end. It has been a goal of the Symposium to have a probability component. It is felt that the perceived distancing of probability and statistics, even at the level of Ph.D. programs, cannot be healthy. Future Lehmann Symposia will continue to encourage a closer relationship between the two subjects.

The Symposium could not occur without the financial support of several generous contributors. Several institutions have provided support for the series of Symposia. I want, however, to acknowledge the explicit support and work of the individuals within those institutions responsible for securing the funding. Demissie Alemayehu of Pfizer has been a constant and faithful supporter of the Symposia and has been responsible for Pfizer's generous contributions to the  $2^{nd}$  and  $3^{rd}$  Lehmann Symposia. I also want to acknowledge the support of the National Science Foundation. Shulamith Gross, Grace Yang, and Gábor Székely have been instrumental in supporting the  $2^{nd}$  and  $3^{rd}$  Lehmann Symposia. Gary Rosner, from the U.T. MD