Beyond Parametrics in Interdisciplinary Research: Festschrift in Honor of Professor Pranab K. Sen

N. Balakrishnan, Edsel A. Peña and Mervyn J. Silvapulle, Editors
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Preface

Pranab K. Sen has contributed extensively to many areas of Statistics including order statistics, nonparametrics, robust inference, sequential methods, asymptotics, biostatistics, clinical trials, bioenvironmental studies and bioinformatics. His long list of over 600 publications and 22 books and volumes along with numerous citations during the past 5 decades bear testimony to his work.

All three of us have had the good fortune of being associated with him in different capacities. He has given professional and personal advice on many occasions to all of us, and we feel that our lives have certainly been enriched by our association with him. He has been over the years a friend, philosopher and a guide to us, and still continues to be one!

While parametric statistical inference remains ever so popular, semi-parametric, Bayesian and nonparametric inferential methods have attracted great attention from numerous applied scientists because of their weaker assumptions, which make them naturally robust and so more appropriate in real-life applications. This clearly signals for “beyond parametrics” approaches which include nonparametrics, semi-parametrics, Bayes methods and many others. Motivated by this feature, and his drive in the “beyond parametrics” area, we thought that it will be only appropriate for a volume in honor of Pranab Kumar Sen to focus on this aspect of statistical inference and its applications. With this in mind, we have put together this volume in order to (i) review some of the recent developments in this direction, (ii) focus on some new methodologies and highlight their applications, and (iii) suggest some interesting open problems and possible new directions for further research.

With these specific goals in mind, we invited a number of authors to contribute an article for this volume. These authors are not only experts in parametric, semi-parametric, Bayesian and nonparametric inferential methods, but also form a representative group from former students, colleagues, long-time friends, and other close professional associates of Pranab Kumar Sen. All the articles received have been properly peer reviewed according to the conditions set forth by the IMS Lecture Notes Editor.

It is important to mention here that this volume is not a proceedings, but rather a carefully planned volume consisting of articles that are consistent with the goal of highlighting developments “beyond parametric inference” and their applications.

Our sincere thanks to Professor Sen for having given his consent to this venture and his advice on organisational matters whenever we asked. Next, our special thanks go to all the authors who have contributed to this volume. All these authors share our respect and admiration for the various contributions and accomplishments of Pranab Kumar Sen and provided great cooperation during the entire course of this project. We express our gratitude to Professors Rick Vitale and Anthony Davison, the Past and Present Editors of the IMS Lecture Notes, for lending their support to this project and also for providing constant encouragement and help during the preparation of this volume.

We would like to thank the numerous reviewers for helping us with the reviews of papers, Dr. Vytas Statulevičius for prompt assistance related to to \LaTeX, Ms Geri Mattson for carrying out the publications related tasks expeditiously and efficiently, and Ms Mala Raghavan and Mr Kulan Ranasinghe for editorial assistance. We
enjoyed immensely putting this volume together, and it is with great pleasure that we dedicate it to Pranab Kumar Sen!

N. Balakrishnan
Hamilton, Ontario, Canada

Edesl A. Peña
Columbia, South Carolina, USA

Mervyn J. Silvapulle
Melbourne, Australia
Contributors to this volume

Apanasovich, T. V., Cornell University
Balakrishnan, N., McMaster University
Bhattacharjee, M. C., New Jersey Institute of Technology
Bhattacharya, A., University of Georgia
Bogdan, M., Wroclaw University of Technology
Carroll, R. J., Texas A&M University
Chakraborti, S., University of Alabama
Chaubey, Y. P., Concordia University
Chevelu, J., University of Rennes
Chinchilli, V. M., Pennsylvania State University
Clarke, B. A., University of British Columbia
Datta, G. S., University of Georgia
El Barmi, H., City University of New York
Feuerverger, A., University of Toronto
Filar, J. A., University of South Australia
Gardiner, J. C., Michigan State University
Gervers, M., University of Toronto
Ghosal, S., North Carolina State University
Ghosh, D., Pennsylvania State University
Ghosh, J. K., Purdue University, Indian Statistical Institute
Ghosh, M., University of Florida
Gupta, M., University of North Carolina at Chapel Hill
Hall, P., Australian National University
Hallin, M., Université libre de Bruxelles
Hart, J. D., Texas A&M University
Horváth, L., University of Utah
Horváth, Z., University of Utah
Hušková, M., Charles University
Hudson, I., University of South Australia
Jurečková, J., Charles University
Kühl, S., Universidade Estadual de Campinas
Kochar, S., Portland State University
Kosorok, M. R., University of North Carolina-Chapel Hill
Lai, T. L., Stanford University
Liang, K.-Y., Johns Hopkins University
Liu, L., Michigan State University
Luo, Z., Michigan State University
Maity, A., *Texas A&M University*
Mathew, T., *University of Maryland Baltimore County*
Mazumder, R., *Indian Statistical Institute*
McLachlan, G. J., *University of Queenslan*
Mukerjee, H., *Wichita State University*
Nobre, J. S., *Universidade Federal do Ceará*
Nyska, A., *Tel Aviv University*
Paindaveine, D., *Université libre de Bruxelles*
Peddada, S. D., *NIEHS*
Peña, E., *University of South Carolina*
Pinheiro, A., *Universidade Estadual de Campinas*
Pinheiro, H. P., *Universidade Estadual de Campinas*
Roy, A., *University of Maryland Baltimore County*
Roychoudhury, S., *Schering Plough Research Institute*
Sarkar, S. K., *Temple University*
Sen, A., *Concordia University*
Sengupta, D., *Indian Statistical Institute*
Silvapulle, M. J., *Monash University*
Simon, L. J., *Pennsylvania State University*
Singer, J. M., *Universidade de São Paulo*
Sinha, B., *University of Maryland Baltimore County*
Su, Z., *Genentech*
Tang, Y., *SUNY Downstate Medical Center*
Teoh, E., *Insurance Institute for Highway Safety*
Tilahun, G., *University of Toronto*
Tokdar, S. T., *Carnegie Mellon University*
Van de Wiel, M. A., *VU University Amsterdam*
Wormser, U., *The Hebrew University of Jerusalem*
Zhou, H., *US Food and Drug Administration*
Zhu, J., *University of Queensland*
