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Preface

Biological and biomedical researches are increasingly driven by experimental techniques that challenge our ability to analyze, process, and extract meaningful knowledge from the underlying data. The impressive capabilities of next-generation sequencing technologies, together with novel and ever-evolving distinct types of omics data technologies, have put an increasingly complex set of challenges for the growing fields of bioinformatics and computational biology. To address the multiple related tasks, for instance in biological modeling, there is the need to, more than ever, create multidisciplinary networks of collaborators, spanning computer scientists, mathematicians, biologists, doctors, and many others.

The International Conference on Practical Applications of Computational Biology & Bioinformatics (PACBB) is an annual international meeting dedicated to emerging and challenging applied research in bioinformatics and computational biology. Building on the success of previous events, the 11th edition of PACBB Conference will be held on June 21–23, 2017, in the Polytechnic of Porto, Porto (Portugal). In this occasion, special issues will be published by the Interdisciplinary Sciences-Computational Life Sciences, Journal of Integrative Bioinformatics, Neurocomputing, Journal of Computer Methods and Programs in Biomedicine, Knowledge and Information Systems: An International Journal covering extended versions of selected articles.

This volume gathers the accepted contributions for the 11th edition of the PACBB Conference after being reviewed by different reviewers, from an international committee from 13 countries. PACBB'17 technical program includes 39 papers of 61 submissions spanning many different subfields in bioinformatics and computational biology.

Therefore, this event will strongly promote the interaction of researchers from diverse fields and distinct international research groups. The scientific content will be challenging and will promote the improvement of the valuable work that is being carried out by the participants. In addition, it will promote the education of young scientists, in a postgraduate level, in an interdisciplinary field.

We would like to thank all the contributing authors and sponsors, as well as the members of the Program Committee and the Organizing Committee for their hard

and highly valuable work and support. Their effort has helped to contribute to the success of the PACBB'17 event. PACBB'17 would not exist without your assistance.

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