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Practical Applications of Computational Biology and Bioinformatics, 12th International Conference
Preface

Next generation sequencing technologies, together with other emerging and quite diverse experimental techniques are evolving rapidly, creating numerous types of omics data. These are creating new challenges for the expanding fields of Bioinformatics and Computational Biology, which seek to analyse, process, integrate and extract meaningful knowledge from these data. This calls for new algorithms and approaches from fields such as Databases, Statistics, Data Mining, Machine Learning, Optimization, Computer Science, Machine Learning and Artificial Intelligence. Clearly, Biology is increasingly becoming a science of information, requiring tools from the computational sciences. To address these challenges, we have seen the surge of a new generation of interdisciplinary scientists with a strong background in the biological and computational sciences.

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 12th edition of PACBB Conference will be held on 20–22 June 2018 in the University of Castilla-La Mancha, Toledo (Spain). In this occasion, special issues will be published by the Interdisciplinary Sciences-Computational Life Sciences, Journal of Integrative Bioinformatics, Neurocomputing, Knowledge and Information Systems: An International Journal covering extended versions of selected articles.

This volume gathers the accepted contributions for the 12th edition of the PACBB Conference after being reviewed by different reviewers, from an international committee from 13 countries. PACBB’18 technical program includes 26 papers spanning many different sub-fields 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 post-graduate 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’18 event. PACBB’18 wouldn’t exist without your assistance.

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