

# Preface

With honor we welcome you to the 14<sup>th</sup> IEEE International Conference on BioInformatics and BioEngineering (BIBE), in Boca Raton, Florida, USA. Our Florida Sunshine and proximity to Boca Raton's world-famous beaches provide the ideal backdrop for this event. With a carefully crafted program and engaging keynote speakers, we are certain you will enjoy your stay while sharing in the growth of this premier international event.

As one of the major research forums for Biomedical, Bioinformatics, and Bioengineering research, BIBE 2014 has attracted submissions world-wide. The main conference received 90 submissions from over 26 countries/regions. All submissions were first opened to all Program Committee members for bidding. After that, each paper was assigned to four PC members, and the PC Co-Chairs then carefully assessed the decisions based on each paper's overall ranking and recommendations from the PC members. The above review process resulted in the selection of 41 regular papers and 14 short papers for the main conference. The 55 papers are included in the first part of the BIBE proceedings.

The main conference includes thirteen technical sections varying from gene and network analysis, advanced learning for biomedical data, bio-imaging and pattern recognition, privacy, security, and personalized diagnose, bio-signal processing, gene discovery and identification, biomedical document and multi-source mining, bio-engineering and decision support systems. In addition to the main conference, we also have two workshops with focus on big data and data analytics, and health informatics. For both workshops, the workshop chairs were fully in charge of their submissions and control the quality of the papers in the workshops. The BIBE program co-chairs and the program committee did not participate in the selection of the papers in respective workshops. The 12 workshop papers are included in the second part of the proceedings.

Many people and organizations have made this event possible. The dedication and support of the Organizing Committee members and volunteers helped us deliver a successful conference program on time. We are particularly grateful to the Program Committee members who reviewed papers from a broad range of disciplines and applications, within a very short timeframe. We would also like to thank all the authors who submitted papers to BIBE 2014. Without your support, we could not have made this conference a success. Last, but not least, our thanks go to the sponsors, including IEEE, IEEE Computer Society, Biological and Artificial Intelligence Society, and Florida Atlantic University.

With great efforts by the authors, keynote speakers, program committee members, and conference organizers, we are confident that BIBE-2014 will provide a unique opportunity to foster collaborative interactions and connections among the participants – promoting new ideas and innovations from all aspects related to the Bioinformatics and Bioengineering research.

Once again, we welcome you to Boca Raton and BIBE 2014. We look forward to your enjoyment of this year's conference, while finding this experience genuinely pleasant and rewarding.

Reda Alhajj  
Xingquan (Hill) Zhu  
**BIBE 2014 Program Committee Co-Chairs**  
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