The size and complexity of genome- and proteome-scale data sets in bioinformatics continues to grow at a furious pace, and the analysis of these complex, noisy, data sets demands efficient algorithms and high-performance computer architectures. Hence high-performance computing has become an integral part of research and development in bioinformatics, computational biology, and medical and health informatics. The goal of this workshop is to provide a forum for discussion of latest research in developing high-performance computing solutions to data- and compute-intensive problems arising from all areas of computational life sciences. This year's program will feature a keynote talk by Ajay Royyuru from IBM Research and two invited talks, by Ariful Azad from Indiana University and Rayan Chikhi from Institut Pasteur. We received nine submissions to the workshop. All submissions were reviewed by three program committee members, and we accepted five submissions as full papers and one submission as a short paper. The authors of the accepted papers will also present at the workshop. We thank the paper authors, the program committee members, and the keynote and invited speakers for contributing to this year's high-quality technical program.

Workshop General Chairs:
Alba Cristina M. A. de Melo, University of Brasilia
Ananth Kalyanaraman, Washington State University

Program Chair:
Kamesh Madduri, Pennsylvania State University

Program Committee:
Mukul Bansal, University of Connecticut
Mario Cannataro, University Magna Gracia of Catanzaro
Jose Cecilia, Universidad Catolica de Murcia
Somali Chaterji, Purdue University
Tim Clark, University of Virginia
Sally Ellingson, University of Kentucky
Oliver Eulenstein, Iowa State University
Xin Gao, King Abdullah University of Science and Technology
Sandra Gesing, University of Notre Dame
Imran Haque
Fumihiko Ino, Osaka University
Seunghwa Kang, NVIDIA
Marghoob Mohiyuddin, Roche Sequencing Solutions
Fahad Saeed, Florida International University