



IEEE 7th International Conference on Bioinformatics and Bioengineering
Oct. 14-17, Harvard Medical School
Conference Center, Boston U.S.A
www.cs.gsu.edu/BIBE07



Call for Papers

Bioinformatics and bioengineering are complementary disciplines that hold great promise for the advancement of research and development in medicine, pharmaceuticals, public health, agriculture, and environmental studies. Combined research and development in bioinformatics and bioengineering is helping us understand living organisms at multiple levels, develop innovative implants and prosthetics, create new medical imaging technologies, and improve tools and techniques for the detection, prevention and treatment of diseases.

The 7th IEEE International Conference on Bioinformatics and Bioengineering (The 7th IEEE BIBE) will provide a platform for the cross fertilization of ideas, bridging these two important and complementary disciplines and helping shape knowledge and scientific achievements. The 7th IEEE BIBE conference solicits original contributions in the following areas:

Bioinformatics

Bio-molecular and Phylogenetic Databases, Bio-Languages, Interoperability in Bio-Databases, Bio-Ontology and Data Mining; Identification and Classification of Genes; Sequence Search and Alignment; Protein Structure Prediction and Molecular Simulation; Molecular Evolution and Phylogeny; Functional Genomics, Proteomics; Drug Discovery; Gene Expression Analysis; Bioinformatics Engineering; Bio-Data Visualization; Systems Biology; Algorithms, Modeling and Simulation of Bio-Sets; Biomarkers of Toxicity; Bio-Imaging; Signaling and Computation, System Biology, Genetics and Genomics.

Bioengineering

Biological Systems and Models; Engineering Models in Bio-Medicine; Image Guide Radio Therapy; 4-D Images; Intensity Modulated Radiation Therapy; Intensity Modulated Proton Therapy; Dose Calculation and Optimization; Monte Carlo Simulation; Biological Modeling; Cancer Detection and Medical Images; Computer Assisted Intervention Systems and Medical Robotics; Biomedical and Biological Sensors; Cell Engineering; Molecular and Cellular Systems; Body's and Cell's Bio-Signatures; Tissue Engineering; Biomedical Image Processing/Analysis; Microarray Technologies; Biomedical Data Engineering; Biomaterials; Diagnosis-Discoveries for Disabled; Medical Devices for Disabled. Biomedical Technologies.

Interdisciplinary and Multidisciplinary

THE 7th IEEE BIBE will host sessions focusing on Interdisciplinary and Multidisciplinary research in order to foster collaboration between the bioinformatics and bioengineering domains. IEEE 7th BIBE is also funded by National Science Foundation (NSF).

All accepted papers will be published by IEEE/CS and indexed in EI, INSPEC, DBLP and Library of Congress. Accepted papers can be also included into one of the special journal issues, dedicated to IEEE BIBE07, that can be also indexed into SCI, such as BMC Genomics (Impact factor 4+), IEEE Transactions on SMC, Springer's LNCS Transactions on Computational Systems Biology and Journal of Supercomputing, UnderScience's **International Journal of Computational Biology and Drug Design (IJCBD)**, **International Journal of Functional Informatics and Personalized Medicine (IJFIPM)**, Taylor & Francis' IJGS and World Scientific's IJPRAI. In addition, World Scientific's Journal of Bioinformatics and Computational Biology (JBCB) will warmly invite extended-version submission by selected authors based on recommendation by the 7th IEEE BIBE PC chair.

Featured Keynote Speakers (Partial List):

Dr. A. Keith Dunker, Indiana University - Purdue University
Dr. Mary Qu Yang, National Human Genome Research Institute, NIH, U.S. DHHS – Oak Ridge, U.S. DOE
Dr. John Quackenbush, Harvard University, USA

Dr. Steven Seltzer, Harvard University / Brigham & Women Hospital
Dr. Chih-Ming Ho, Member of National Academy of Engineering, UCLA
Dr. Yi Pan, Georgia State University and Editor-in-Chief, Wiley and IJBRA
Dr. Ruzena Rajcsy, Member of NAE & Institute of Medicine, UC Berkeley

Important Dates

Submission deadline (IEEE/CS Conference Format, 8-page maximum): June 7, 2007

Paper Notification: July 15, 2007 Camera-ready version deadline: July 22, 2007

Early Registration: **July 31, 2007: \$280/\$330** (Student IEEE/Non-IEEE member), **\$495/\$595** (IEEE/Non-IEEE Member)

Conference Organizers

General Chair: Dr. Jack Y. Yang, Harvard University, USA; Editor-in-Chief, IJFIPM. [jYang \(at\) hadron \(dot\) mgh \[d o t \] Harvard.edu](mailto:jYang@hadron.mgh.harvard.edu)
 Program Chair: Dr. Michelle M. Zhu, Oak Ridge Nat'l Lab DOE–South. Illinois U., USA; Secretary-General, ISIBM. [mzhu\[at\]cs.siu.edu](mailto:mzhu@cs.siu.edu)
 Program Co-Chair & Bioinformatics Track Chair: Dr. Yanqing Zhang, Georgia State Univ., USA; [y Zhang\[at\]cs.gsu.edu](mailto:y Zhang[at]cs.gsu.edu)
 Program Co-Chair & Bioengineering Track Chair: Dr. George T. Y. Chen, Harvard University and Massachusetts General Hospital.
 Program Co-Chair and Budget Committee Chair: Dr. Youping Deng, University of S. Mississippi, USA [Youping.Deng\[at\]usm.edu](mailto:Youping.Deng@usm.edu)
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 Chair of Founding Steering Committee: Dr. Nikolaos G. Bourbakis, Wright State Univ. USA; [nikolaos.bourbakis\[at\]wright.edu](mailto:nikolaos.bourbakis@wright.edu)
 Workshop Committee Chairs: Dr. A.K. Dunker, Indiana University Purdue University; Dr. Ying Xu, Univ. of Georgia - Oak Ridge, USA
 Scientific Review, Advisory and Steering Committee Chair: Dr. Mary Qu Yang, National Human Genome Research Institute, National Institutes of Health, U.S Department of Health and Oak Ridge, DOE USA, Editor-in-Chief, IJCBD. [yangma\(at\)mail\[dot\]NIH\(dot\)GOV](mailto:yangma@mail.nih.gov)

Sponsors / Collaborators

IEEE, IEEE/SMC/Computer Society/EMBS, International Society of Biological Medicine (ISIBM), Indiana University, Purdue Univ., Univ. of Texas at Austin, Georgia Institute of Technology, Georgia State University, Southern Illinois University, Wright State Univ., Univ. of Massachusetts, Massachusetts General Hospital, Brigham & Women Hospital, Harvard Medical School and Harvard University.

