



# CALL FOR PAPERS

## 3<sup>rd</sup> International Conference on Bioinformatics and Computational Biology

March 23-25, 2011

Holidan Inn Downtown-Superdome, New Orleans, Louisiana USA

Sponsored by the International Society for Computers and Their Applications (ISCA)

**BICoB-2011**

in conjunction with  
CATA-2011

The 3rd international conference in bioinformatics and computational biology (BICoB) will provide an excellent venue for researchers and practitioners in the fields of bioinformatics and computational biology to present and publish their research results and techniques. The BICoB conference seeks original and high quality papers in the fields of bioinformatics, computational biology, system biology, medical informatics and the related disciplines. We also encourage work in progress and research results in the emerging and evolutionary computational areas. Computational techniques have already enabled unprecedented advances in modern biology and medicine. This continues to be a vibrant research area with broadening of computational techniques and new emerging challenges. Work in the computational methods related to, or with application in, bioinformatics is also encouraged including: data mining, text mining, machine learning, modeling and simulation, pattern recognition, data visualization, biostatistics, .etc. The topics of interest include (and are not limited to):

- **Genome analysis:** Genome assembly, genome and chromosome annotation, gene finding, alternative splicing, EST analysis and comparative genomics.
- **Sequence analysis:** Multiple sequence alignment, sequence search and clustering, function prediction, motif discovery, functional site recognition in protein, RNA and DNA sequences.
- **Phylogenetics:** Phylogeny estimation, models of evolution, comparative biological methods, population genetics.
- **Structural Bioinformatics:** Structure matching, prediction, analysis and comparison; methods and tools for docking; protein design
- **Analysis of high-throughput biological data:** Microarrays (nucleic acid, protein, array CGH, genome tiling, and other arrays), EST, SAGE, MPSS, proteomics, mass spectrometry.
- **Genetics and population analysis:** Linkage analysis, association analysis, population simulation, haplotyping, marker discovery, genotype calling.
- **Systems biology:** Systems approaches to molecular biology, multiscale modeling, pathways, gene networks.

### SUBMISSION PROCEDURES:

BICoB welcomes submissions in all areas of computing with impact on life sciences including (but not limited to) algorithms, databases, languages, systems, and high performance computing. For example:

- Parallel and high-performance techniques
- Unifying computational techniques
- Data and image mining techniques
- Approximation and randomized algorithms and systems
- Computational biology on emerging architectures and hardware accelerators

Papers will be accepted only by electronic submission (PDF only). A full paper, including title, author's name(s) and affiliation, mailing address, telephone, fax and email of the principal author, should be submitted **before November 26, 2010** at the following web site: <https://cmt.research.microsoft.com/BICOB2011/>. The submitted manuscript should closely reflect the final paper as it will appear in the Proceedings. Maximum paper length for the proceedings is six pages, with up to two additional pages accepted with page charges (6+2). ISCA double-column format will be used. See: <http://www.isca-hq.org/sample-isca-manuscript-format.pdf>

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Authors wishing to have their papers reviewed for possible publication in the ISCA Journal of Computers and Applications should send by postal mail or email expanded versions of their papers directly to the Editor, Dr. Qiang Zhu, [qzhu@cmich.edu](mailto:qzhu@cmich.edu). (See Instructions to Authors at: <http://www.isca-hq.org/j-authr.htm> ).

### IMPORTANT DATES

<b>Full paper Submission Deadline:</b>	<b>November 26, 2010</b>
<b>Notification of Acceptance:</b>	<b>December 22, 2010</b>
<b>Pre-registration and Camera-ready paper due:</b>	<b>January 7, 2011</b>