



2012 International Conference on Intelligent Biology and Medicine (ICIBM)

April 22-24, 2012, Nashville, TN, USA

<http://bioinfo.mc.vanderbilt.edu/icibm/index.html>

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Call for Paper

The **International Conference on Intelligent Biology and Medicine (ICIBM)** will be held on April 22-24, 2012 in Nashville, Tennessee, USA. You are invited to submit papers with unpublished original work describing recent advances on all aspects of Bioinformatics, Systems Biology and Intelligent Computing, including, but not restricted to the following topics:

Bioinformatics:

- Functional genomics, personalized medicine, genetics and genomics,
- Multi-dimensional data integration, biomedical data analysis and modeling
- Next generation sequencing analysis, Bio-ontology, text mining, and data mining
- Protein structure prediction, molecular simulation and evolution, and proteomics
- Drug discovery, design, and repurposing, translational bioinformatics
- Bio-data visualization, bio-imaging, signaling and computation

Systems Biology:

- Modeling and simulation of biological processes, pathways, and networks
- Mathematical and quantitative models of cellular and multi-cellular systems
- Synthetic biological systems, high performance bio-computing
- Self-organization in living systems (cells, organisms, swarms, ecosystems, etc.)
- Platforms for computational modeling of living systems
- Applications of systems biology towards understanding disease mechanisms, pharmaceutical drug discovery and drug target validation

Intelligent Computing:

- Machine learning, data mining, pattern recognition, and knowledge discovery
- Natural language processing, literature mining, semantic ontology
- Neural computing, kernel methods, feature selection/extraction
- Evolutionary computing, swarm intelligence / optimization, ensemble methods
- Manifold learning theory, artificial life and artificial immune systems

Paper Submission and Publication: Prospective authors are invited to submit unpublished work to ICIBM'12. All papers have to be submitted through the online submission system at: <http://bioinfo.mc.vanderbilt.edu/icibm/submission.html>. All submitted papers will be peer-reviewed. **All accepted papers of registered authors will be published in special issues of several journals**, including BMC Genomics, BMC Systems Biology, Journal of Biomedicine and Biotechnology, International Journal of Computational Biology and Drug Design, International Journal of Functional Informatics and Personalized Medicine. Authors need to prepare manuscripts in the format of the corresponding journal that they prefer. Although we try our best to accommodate authors' preferences, there is no guarantee that every accepted paper will be published in authors' preferred journals. We will contact individual authors in that case.

Abstract Submission: Participants who do not submit papers are encouraged to submit abstract through the website above.

Travel Awards: Up to 20 travel awards are available to students/postdocs; awards will be granted through an NSF grant. The deadline to apply for the Award is March 16, 2012.

Important Dates

- Deadline for paper submission: **extended to February 15, 2012**
- Notification to authors of papers: March 15, 2012
- Deadline for abstract submission: March 10, 2012
- Notification to authors of abstracts: March 16, 2012
- Conference early registration: March 20, 2012
- Conference Dates: April 22-24, 2012



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