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**The First International Conference on Computational and  
Systems Biology and Microbiology  
BIOCOSM 2010**

**March 7-13, 2010 - Cancun, Mexico**

<http://www.aria.org/conferences2010/BIOCOSM10.html>

**Important deadlines:**

Submission (full paper)	October 17, 2009
Notification	November 20, 2009
Registration	December 5, 2009
Camera ready	December 10, 2009

**Tracks:**

**Bio-ontologies and semantics**

Software environments for bio-computation, bio-informatics,  
and biomedical applications  
Medical informatics  
Epidemic models  
Biological data mining  
Biomedical knowledge discovery  
Pattern classification and recognition  
Mathematical biology  
Graph theory and bio-informatics  
Stochastic modeling  
Biological databases and information retrieval  
Processing mutation information  
Archiving of mutation specific information

**Biocomputing**

Computational biology  
Bioengineering  
Biomedical image computing and informatics  
Biomedical automation and control  
Image-based diagnosis and therapy  
Modeling and simulation of systems biology  
Applications of large-scale bio-systems

**Genetics**

Gene regulation  
Gene expression databases  
Gene pattern discovery and identification  
Genetic network modeling and inference  
Gene expression analysis  
RNA and DNA structure and sequencing  
Evolution of regulatory genomic sequences  
Biological data mining and knowledge discovery

Bio-pattern classification and recognition  
Bio-sequence analysis and alignment  
Comparative genomics  
Structural and functional genomics  
Amino acid sequencing  
Metagenomics and drug resistance  
Microbes and alternative energies

**Molecular and Cellular Biology**

Protein modeling  
Molecular interactions  
Metabolic modeling and pathways  
Evolution and phylogenetics  
Macromolecular structure prediction  
Proteomics  
Protein folding and fold recognition  
Molecular sequence and structure databases  
Molecular dynamics and simulation  
Molecular sequence classification, alignment and assembly

**Microbiology**

Bio-nanotechnologies  
Self-assembly and self-replication  
Global regulatory networks and mechanisms  
Microbial propagation and immunity  
Microbial therapies  
Microbial life under extreme energy limitation  
Cellular microbiology and contact systems  
Phylogenetics  
Genome dynamics  
Transmission dynamics and evolution of emerging diseases