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**The First International Conference on Advances in
Bioinformatics and Applications
BIOINFO 2010**

March 7-13, 2010 - Cancun, Mexico

<http://www.aria.org/conferences2010/BIOINFO10.html>

Important deadlines:

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

Tracks:

Bioinformatics

Bioinformatics modeling
Bioinformatics databases
Epidemic models
Informatics and statistics in bio-pharmaceutical research
Machine learning and artificial intelligence in molecular design
Systems biology and metabolic networks
Medical informatics
Genomics informatics
Biostatistics
Structural and functional genomics
Identifying molecular sequence and structure databases
Mechanisms for specifying molecular interactions and structure predictions
Formalisms for gene regulation and expression databases
Algorithms for gene identification and pattern discovery
Techniques for gene expression analysis
Modeling and simulation of biomarkers

Advanced biocomputation technologies

Stochastic modeling
Computational drug discovery
Graph theory and bioinformatics
Biological databases and information retrieval
Experimental studies and results
Application of computational intelligence in medicine and biological sciences (artificial neural networks, fuzzy logic, evolutionary computing, and simulated annealing).
High-performance computing as applied to natural and medical sciences
Hardware computing accelerators
Computer-based medical systems (automation in medicine, ...)
Other aspects and applications relating to technological advancements in medicine and biological sciences.
Novel applications

Chemoinformatics

Computer-aided drug design
Concepts, methods, and tools for drug discovery
Virtual screening of chemical libraries
ADMET - absorption, distribution, metabolism, excretion, and toxicity
QSAR - quantitative structure-activity relationships
Protein-ligand docking and scoring functions
Chemical similarity and diversity
Chemogenomics in drug discovery
QSPR - quantitative structure-property relationships
Theoretical models in chemical reactivity
Mathematical chemistry and chemical graphs
In silico environmental toxicology
Computer-assisted chemical engineering
Combinatorial chemistry
Graph theory in chemistry
Prediction of drug toxicity
Property prediction
Molecular mechanics and quantum chemical calculations
Modeling and measurements of solid-liquid and vapor-liquid equilibria
Blood-brain barrier penetration
Comparison of the similarity/diversity of chemo-data libraries
Chemoinformatics applications

Bioimaging

Image processing in medicine and biological sciences
Measurements techniques
Mass spectrometry
Numerical/mathematical approaches
Biological data integration and visualization

Neuroinformatics

Neurosciences
Neurocomputing