

CALL FOR PAPERS - IEEE-EMBC 2006
28TH ANNUAL INTERNATIONAL CONFERENCE
IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY

Theme 3: Computational Biology and Bioinformatics

New York City, New York, USA, August 30-Sept 3, 2006
<http://embc2006.njit.edu/index.php>

The Annual Conference of IEEE Engineering in Medicine and Biology Society (EMBC)2006 provides a general forum for disseminating the latest developments in bioinformatics. The Computational Biology and Bioinformatics Theme of EMBC'06 brings together researchers and students from bioengineering, computer science, mathematics, statistics, molecular biology, and medicine. The scope includes computational problems in the analysis and understanding of biological information.

Relevant topics include: protein structure, protein function, genomics, comparative genomics, proteomics, molecular sequence analysis, evolution and phylogenetics, molecular interactions, molecular structure, structural bioinformatics, gene expression, gene network, microarray analysis, metabolic pathways, regulatory networks, systems biology.

Computational techniques of interest include: pattern recognition, machine learning, combinatorics, string and graph algorithms, data mining, text analysis, knowledge representation, databases, stochastic modeling, Bayesian modeling, mathematical programming, visualization, high performance computing, robotics, and constraint satisfaction. See (embc2006.njit.edu/onlineregistration.php) for submission details

Technical Tracks and Chairs:

- Algorithm and software system for bioinformatics,
Chair: Bhaskar DasGupta (U Illinois at Chicago),
- Computational genomics and epigenomics
Chair: Elebeoba E May (Sandia Lab), Michael Zhang (Cold Spring Harbor)
- Computational proteomics,
Chair: Dong Xu, U Missouri.
- Regulatory elements and gene networks,
Chairs: May Wang (Georgia Tech), Junhyong Kim (U Penn), Chris Wiggins (Columbia U)
- Mathematical modeling and simulation of cell,
Chairs: Luonan Chen (Osaka Sangyo/Tokyo U), Stephe Davies (U Toronto)
- Gene expression and microarray analysis,
Chairs: Yang Dai (U Illinois at Chicago), Wentian Li (North Shore LIJ)
- Structural and functional bioinformatics,
Chairs: Jenn-Kang Huang (National Chiao Tung U), Jie Liang (U Illinois at Chicago)
- Novel technologies for computational biology and bioinformatics,
Chairs: David Fenstermacher (U Penn), Metin Akay (Arizona State U)

Research papers are solicited in all of the above areas. Attendees are invited to submit papers for presentation at IEEE-EMBC06. Submitted papers should be a maximum of 4 pages.

Important Dates of Deadline:

April 3, 2006	June 15, 2006	July 30, 2006	August 1, 2006
Paper submissions	Notification of acceptance	Early registration	Hotel reservation

Theme Co-chairs:

Metin Akay (Arizona State U), Jie Liang (U Illinois at Chicago), Michael Zhang (Cold Spring Harbor and SUNY Stony Brook)