

# Call for Papers

## The 2<sup>nd</sup> International Conference on Bioinformatics and Systems Biology (BSB 2009)

Leipzig, Germany, 23-25 March 2009  
<http://siwn.org.uk/2009leipzig/BSB09.htm>

Systems Biology is concerned with the system-level study of complex interactions in biological systems and provides a quantitative systemic approach to understanding complex biological phenomena. On the other hand, the ultimate goal for the understanding and modeling of biological systems is at the synthesis and simulation of biological behaviors and functions, across which Bioinformatics plays an important underpinning role. Recent progresses in Bioinformatics and Systems Biology are extraordinarily exciting and are calling for even broader and further deep-stretching interdisciplinary research and collaboration.

BSB 2009 aims to provide a premier forum for stimulating exchange and in-depth discussion of advances, challenges and emerging areas in Bioinformatics and Systems Biology.

### Important Dates (New)

05 January 2009 Submission of manuscripts  
31 January 2009 Notification of acceptance  
15 February 2009 Camera-Ready Version (CRV) & due  
  
23-25 March 2009 Conferences

### Submission

BSB 2009 Technical Committee seeks original contributions in all areas of Bioinformatics and Systems Biology.

Submissions must be original contributions that neither have been published nor have been under review for publication elsewhere. All submissions must be in English and no more than 7 pages in the format specified in the Instructions for Authors, which are available on <http://siwn.org.uk/press/ita.htm>. To submit a paper, a file in pdf format containing the manuscript of submission must be uploaded to the BSB 2009 submission website.

All manuscripts submitted will be sent to 3-4 members of the International Technical Program Committees of the Conferences for peer reviews and assessed according to the technical merits and presentation, on which the acceptance decision will be based.

Accepted papers will be included in the CD-ROM Proceedings of SIWN 2009, which will be available for participants at the Conferences to promote the widest exchange and dissemination at the Conferences.

All accepted papers of the conference are invited to publish their revised versions in the international journal <<Communications of SIWN>> (CoSIWN) (ISSN 1757-4439) after the conference. Details can be seen on the SIWN 2009 website.

Proposals of workshops, invited sessions and tutorials on emerging areas are welcome. Please discuss your proposals with Dr Hong Yue, the Chair of Technical Committee.

### Topics of Interest

Topics of particular interest include but not limited to the followings.

#### (1) Bioinformatics

- bioinformatics database integration and interoperability
- biological data mining and visualization
- biomedical image processing
- bio-ontology and semantics

- brain informatics
- computational drug discovery
- computational genomics
- computational neurobiology, neuroinformatics
- computational proteomics
- computational tools for sequence analysis
- grid computing and service-oriented architecture for biological or medical applications
- high-performance biocomputing
- ICT infrastructure for bioscience and biotechnology
- immunoinformatics
- integrative data and text mining approaches
- molecular databases / data warehouses
- semantic analysis and knowledge discovery for high-throughput biological data
- semantic webs and web services for medical or biological applications
- software agent and multi-agent technology for medical or biological applications
- structural bioinformatics
- synthetic biological systems
- visualization methods for computational biology

#### (2) Systems Biology

- biological morphology
- biomedical systems modeling, simulation and visualization
- computational modeling, analysis and simulation of complex biological systems
- developmental biology
- dynamic modeling of cell processes (signal pathway, gene regulation, metabolics, protein-protein interactions)
- dynamics of complex biological systems
- evolution of biological networks
- gene expression networks
- kinetic modeling using various imaging techniques
- microarray design and data analysis
- model-driven experimental design of biological systems
- multi-scale modeling of complex biological systems/networks (molecular, cellular, tissue, organism, living individual)
- parameter identification and validation of cell network models
- quantitative approaches to cell processes
- systems theoretical analysis/interpretation of biological mechanisms/phenomena
- topological analysis of gene regulation, signal transduction and metabolic networks

### Online Submission Website

<http://www.easychair.org/conferences/?conf=BSBAL09>

### Technical Program Chair

Dr Hong Yue  
University of Strathclyde, UK

### Publicity Chair

Eloisa Vargiu, PhD  
University of Cagliari