

CALL FOR PAPERS

ICSB•2001

The Second International Conference on Systems Biology (ICSB2001)

November 4-7, 2001, California Institute of Technology, Pasadena, USA

<http://www.ICSB2001.org>

SCOPE

Systems biology is the synergistic application of experiment, theory and modeling towards understanding biological processes as whole systems instead of isolated parts. Understanding biological processes from the systems perspective is an essential cornerstone of a true understanding of biological function. Advances in this field promise to have an impact on an increasingly vast range of related areas in this century. The Second International Conference on Systems Biology (ICSB2001) will bring together researchers working in systems biology and related areas to present the current status of their research and to discuss future directions for the field. Topics include (but are certainly **not** limited to):

Experiment:

- Quantitative behavioral measurements for systems biology
- Quantitative microscopy and imaging methods
- Gene expression arrays
- Mass spectrometry
- Pharmacological methods
- In vitro reconstituted systems

Theory:

- Metabolic control theory & biochemical systems theory
- Biological engineering control theory
- Stochastic and multiscale simulation
- Robustness, modularity and evolvability
- Network structure and dynamics
- Spatio-temporal systems
- Optimization methods
- Bifurcation analysis

Modeling:

- Modeling of gene, signal and metabolic networks
- Novel computational algorithms
- Software for systems biology
- Databases for systems biology
- Standards for systems biology
- Visualization of networks and dynamics
- Application of modeling to drug targeting

The conference format will begin with tutorials and workshops on the morning of Sunday, November 4. The formal scientific sessions will begin on Monday, November 5, at 8:30 AM and end at noon Wednesday, November 7. The sessions will feature keynote speeches and presentations by world-renowned researchers, along with afternoon poster sessions and evening social activities.

KEYNOTE SPEAKERS

Dr. Alfred G. Gilman

Nobel laureate and head of the Alliance for Cellular Signaling

Dr. David Botstein

Chair of the Department of Genetics at Stanford University

Dr. Adam Arkin

Professor of Biophysical Chemistry and Bioengineering,

Lawrence Berkeley Laboratories and UC Berkeley

IMPORTANT DATES

Paper submission deadline	Aug 1, 2001
Poster submission deadline	September 2, 2001
Acceptance notification	August 15, 2001
Camera-ready copy due	September 2, 2001

SUBMISSION FORMAT

Full-length papers submitted to the conference by the deadline (August 1, 2001) will be reviewed by a panel of experts and judged on quality, originality, clarity and topical content. Poster abstracts submitted to the conference will be accepted as-is. Accepted papers, along with the abstracts of posters and invited presentations, will be published in a printed proceedings volume distributed at the conference. The full papers and abstracts of posters and presentations will also be made available online at <http://www.icsb2001.org> prior to the conference. In addition, papers accepted for the conference will be submitted to a special issue of a journal to be announced. The papers will be reviewed separately by the journal's editorial board; a subset of the papers will be selected for publication as a special issue of the journal. Please visit the conference website (or contact us via email at ICSB2001@caltech.edu) for instructions about the format requirements, style templates and the submission procedure.

PROGRAM COMMITTEE

Mel Simon	<i>Division of Biology, Caltech</i>
John Doyle	<i>Control and Dynamical Systems, Caltech</i>
Hiroaki Kitano	<i>ERATO Kitano Symbiotic Systems Project, JST, and The Systems Biology Institute</i>

LOCAL ORGANIZING COMMITTEE

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