

9TH WORKSHOP ON ALGORITHMS IN BIOINFORMATICS



WABI 2009

Philadelphia, USA, September 12-13, 2009



The Workshop on Algorithms in Bioinformatics (WABI) is sponsored by EATCS (the European Association for Theoretical Computer Science) and ISCB (the International Society for Computational Biology). WABI'09 is supported by the Penn Genome Frontiers Institute and the Penn Center for Bioinformatics.

Important Dates:

Submission deadline	May 8, 2009
Notification to authors	May 29, 2009
Final version due	June 15, 2009
Symposium	September 12-13, 2009

Scope:

All research on algorithmic work in bioinformatics and systems biology. The emphasis is on discrete algorithms and machine-learning methods that address important problems in molecular biology, that are founded on sound models, that are computationally efficient, and that have been implemented and tested in simulations and on real datasets. The goal is to present recent research results, including significant work-in-progress, and to identify and explore directions of future research.

Topics:

Original research papers (including significant work-in-progress) are solicited in all aspects of algorithms in bioinformatics, including, but not limited to:

- Exact, approximate, and machine-learning algorithms for sequence analysis, gene and signal recognition, alignment and assembly, molecular evolution, structure determination or prediction, gene expression, pathways, gene networks, proteomics, functional genomics, and drug design.
- High-performance computing approaches to computationally hard learning and optimization problems in bioinformatics.
- Methods, software and dataset repositories for development and testing of such algorithms and their underlying models.

Submissions:

Submission must be formatted in the Springer LNCS style (www.springer.de/comp/lncs/authors.html) and not exceed 12pp. Each paper must contain a succinct statement of the issues and of their motivation, a summary of the main results, and a brief explanation of their significance, all accessible to a non-specialist reader.

Electronic submission is *required*; procedures for submission can be found in the WABI'09 web site. In case of problems, authors may, by prior arrangement, email a PDF to the chairs, Steven Salzberg (salzberg@umd.edu) and Tandy Warnow (tandy@cs.utexas.edu).

Simultaneous submission to another conference with published proceedings is not allowed, but simultaneous submissions to journals are allowed, provided that the authors notify the program chairs; if published in a journal before the conference date, such contributions will be published as short abstracts (1 page) in the WABI proceedings.

Proceedings:

Accepted papers will be published in the Springer series *Lecture Notes in Bioinformatics* and will be allotted 12 pages. Previous proceedings of WABI appeared in LNCS/LNBI volumes 2149 (Aarhus 2001), 2452 (Rome 2002), 2812 (Budapest 2003), 3240 (Bergen 2004), 3692 (Mallorca 2005), 4175 (Zurich, 2006), 4645 (Philadelphia 2007), and 5251 (Karlsruhe 2008). By arrangements with the Editor-in-Chief, selected papers from WABI will be invited for an extended publication in a special issue of *IEEE/ACM Transactions on Computational Biology and Bioinformatics*.

Organizing Committee (U. of Pennsylvania):

Junhyong Kim (chair)	Biology & Penn Genome Frontiers Institute
Li-San Wang	Penn Institute on Aging

Keynote Speakers:

Shelley Berger, Wistar Inst., USA
Elchanan Mossel, UC Berkeley, USA

Program Committee:

Elizabeth Allman, U. Alaska Fairbanks, USA
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Bernard Moret, EPFL, Switzerland
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Tandy Warnow, U. Texas, USA, co-chair
Chris Workman, Technical U. Denmark, Denmark

Website:

[HTTP://WWW.WABI09.ORG](http://www.WABI09.ORG)