CALL FOR PAPERS

# 6TH WORKSHOP ON ALGORITHMS IN BIOINFORMATICS

EATCS

# WABI 2006

iSCB — INTERNATIONAL SOCIETY FOR COMPUTATIONAL BIOLOGY

*Zürich, Switzerland, September 11–13, 2006*

WABI is sponsored by *EATCS*, the European Association for Theoretical Computer Science, and *ISCB*, the International Society for Computational Biology.

### Important Dates:

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| SUBMISSION | MAY 15, 2006 |
| NOTIFICATION | JUNE 9, 2006 |
| FINAL VERSION | JUNE 25, 2006 |
| WORKSHOP | SEPTEMBER 11–13, 2006 |

### Keynote Speaker:

RON SHAMIR, TEL AVIV U.

### Program Committee:

Philipp Bücher, ISREC, Switzerland (co-chair)
Rita Casadio, U. Bologna, Italy
Nadia El-Mabrouk, U. Montréal, Canada
Olivier Gascuel, LIRMM, U. Montpellier, France
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Jens Lagergren, KTH, Sweden
Randall Linder, U. Texas Austin, USA
Joao Meidanis, Unicamp, Brazil
Satoru Miyano, Tokyo U., Japan
Bernard Moret, U. New Mexico, USA (co-chair)
Gene Myers, HHMI Janelia Farm, USA
Luay Nakhleh, Rice U., USA
Cedric Notredame, CNRS Marseille, France
Sven Rahmann, U. Bielefeld, Germany
Knut Reinert, Freie U. Berlin, Germany
Marie-France Sagot, U. Claude Bernard, France
David Sankoff, U. of Ottawa, Canada
Adam Siepel, Cornell U., USA
Jijun Tang, U. South Carolina, USA
Olga Troyanskaya, Princeton U., USA
Alfonso Valencia, CNB-CSIC, Spain
Jaak Vilo, Egeen Inc., Estonia
Tandy Warnow, U. Texas Austin, USA
Lusheng Wang, City U. Hong Kong, China
Tiffani Williams, Texas A&M U., USA
Louxin Zhang, National U. Singapore

### Organizing Committee:

Michael Hoffman, ETHZ (chair)
Angelika Steger, ETHZ
Emo Welzl, ETHZ
Peter Widmayer, ETHZ

### Web site:

http://algo06.inf.ethz.ch/wabi/

### Scope:

The workshop covers research in all aspects of algorithmic work in bioinformatics. 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) or state-of-the-art surveys 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, gene networks, proteomics, functional genomics, and drug design.
- Methods, software, and dataset repositories for development and testing of such algorithms and their underlying models.
- High-performance computing approaches to computationally hard learning and optimization problems in bioinformatics.

### Submissions:

Authors are invited to submit papers no exceeding 12 pages when formatted in the Springer LNCS style (www.springer.de/comp/lncs/authors.html). A paper should 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 non-specialist readers. A more technical exposition should follow and an optional short appendix may contain proofs or additional data to be consulted at the discretion of the program committee.

Electronic submission is *required*; procedures for submission can be found on the WABI'06 web site. In case of problems, authors may, by prior arrangement, email a PDF file to the chairs, Philipp Bücher (Philipp.Bucher@isrec.unil.ch) or Bernard Moret (moret@cs.unm.edu).

Simultaneous submission to another conference with published proceedings is not permitted, but simultaneous submission to a journal is allowed, provided that the authors notify the program chairs; if published in a journal, such a contribution will be published as a short abstract in the WABI proceedings.

### Proceedings:

Accepted papers will be published in the Springer series *Lecture Notes in Computer Science*, under the series heading of *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), and 3692 (Mallorca 2005). By arrangement with the Editor-in-Chief, selected papers from WABI will be invited for an extended publication in a special issue of the *IEEE/ACM Transactions on Computational Biology and Bioinformatics*.