

Liverpool, UK, September 6–8, 2010

WABI is sponsored by *EATCS*, the European Association for Theoretical Computer Science, and *ISCB*, the International Society for Computational Biology. WABI'10 is supported by Dep. of Comp. Sci., University of Liverpool.

Important Dates:

SUBMISSION	May 11, 2010
NOTIFICATION	May 28, 2010
FINAL VERSION	June 14, 2010
WORKSHOP	September 6–8, 2010

Scope:

All research in algorithmic work in bioinformatics, computational biology and systems biology. The emphasis is mainly 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, computational biology and systems biology including, but not limited to:

- *Exact and approximate algorithms for sequence analysis, gene and signal recognition, alignment and assembly, molecular evolution, structure determination or prediction, gene expression, molecular pathways and network, proteomics, functional genomics, and drug design.*
- *Methods, software, and dataset repositories for development and testing of such algorithms and their underlying models, as well as high-performance computing approaches to computationally hard learning and optimization problems.*
- *Novel approaches to analyzing and modeling next-generation sequence data, including sequence assembly, population genomics, metagenomics, metatranscriptomics and ncRNA sequencing.*

Submissions:

Submissions must be formatted in \LaTeX using the Springer LNCS style (www.springer.de/comp/lncs/authors.html) and not exceed 12 pages. 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 non-specialist readers.

Electronic submission is *required*; procedures for submission can be found on the WABI'10 web site. In case of problems, authors may, by prior arrangement, email a PDF file to the chairs, V. Moulton (vincent.moulton@cmp.uea.ac.uk) or M. Singh (mona@cs.princeton.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:

Proceedings will be published in the Springer series *Lecture Notes in Bioinformatics*; papers 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), 5251 (Karlsruhe 2008), and 5724 (Philadelphia 2009). By arrangement with the Editor-in-Chief, selected papers from WABI will be invited for an extended publication in a special issue of the *BMC Bioinformatics*.

Organizing Committee (Dep. Comp. Sci., U. Liverpool):

Leszek Gąsieniec (chair) Russell Martin Igor Potapov
Thelma Williams Prudence Wong

Keynote Speakers:

PAOLO FERRAGINA, U. Pisa, Italy
ERAN HALPERIN, ICSI, Berkeley, USA

Program Committee:

Tatsuya Akutsu, Kyoto U., Japan
Bonnie Berger, MIT, USA
Tanya Berger-Wolf, U. Illinois, USA
Mathieu Blanchette, U. McGill, Canada
Sebastian Böcker, U. Jena, Germany
Magnus Bordewich, U. Durham, UK
Mike Brudno, U. Toronto, Canada
Philipp Bucher, EPFL, Switzerland
Benny Chor, Tel Aviv U., Israel
Anne Condon, U. British Columbia, Canada
Lenore Cowen, Tufts U., USA
Keith Crandall, Brigham Young U., USA
Bhaskar Das Gupta, U. Illinois, USA
Nadia El-Mabrouk, U. Montreal, Canada
Liliana Florea, U. Maryland, USA
Olivier Gascuel, U. Montpellier, France
Barbara Holland, Massey U., New Zealand
Katharina Huber, U. East Anglia, UK
Daniel Huson, U. Tuebingen, Germany
Lydia Kavradi, Rice U., USA
Junhyong Kim, U. Penn, USA
Carl Kingsford, U. Maryland, USA
Mehmet Koyuturk, Case Western, USA
Jens Lagergren, KTH, Sweden
Chris Langmead, CMU, USA
Ryan Lilien, U. Toronto, Canada
Ion Mandiuc, U. Connecticut, USA
Joao Meidanis, Campinas, Brazil
Satoru Miyano, Tokyo U., Japan
Bernard M.E. Moret, Swiss Fed. Inst. Tech., Switzerland
Burkhard Morgenstern, U. Göttingen, Germany
Vincent Moulton, U. East Anglia, UK, co-chair
Gene W. Myers, Janelia Farms, USA
Mihai Pop, U. Maryland, USA
Teresa Przytycka, NIH, USA
Cenk Sahinalp, Simon Fraser, USA
David Sankoff, U. Montral, Canada
Russell Schwartz, CMU, USA
Joao Setubal, Virg. Tech., USA
Mona Singh, Princeton U., USA, co-chair
Jens Stoye, U. Bielefeld, Germany
Glenn Tesler, UCSD, USA
Olga Vitek, Purdue, USA
Lusheng Wang, City U. Hong Kong, HK
Tandy Warnow, U. Texas Austin, USA
Chris Workman, Tech U. of Denmark, Denmark
Louxin Zhang, Nat. U. Singapore, Singapore

Web site:

<http://algo2010.csc.liv.ac.uk/wabi.php>