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Preface

The complexity of genome evolution has given birth to exciting challenges for computational biologists. A various range of algorithmic, statistical, mathematical techniques to elucidate the histories of molecules are developed each year and many are presented at the RECOMB satellite workshop on Comparative Genomics. It is a place where scientists working on all aspects of comparative genomics can share ideas on the development of tools and their application to relevant questions.

This volume contains the papers presented at RECOMB-CG 2010, held on October 9–11 in Ottawa. The field is still flourishing as seen from the papers presented this year: many developments enrich the combinatorics of genome rearrangements, while gene order phylogenies are becoming more and more accurate, thanks to a mixing of combinatorial and statistical principles, associated with rapid and thoughtful heuristics. Several papers tend to refine the models of genome evolution, and more and more genomic events can be modeled, from single nucleotide substitutions in whole genome alignments to large structural mutations or horizontal gene transfers.

There were 35 submissions. Each submission was reviewed by at least 2, and on average 2.9, program committee members. The committee decided to accept 24 papers. The program also included 6 invited talks:

Brenda Andrews, University of Toronto
Andrew G. Clark, Cornell University
Nicolas Corradi, University of Ottawa
Jan Dvorak, University of California at Davis
Aoife McLysaght, University of Dublin
Nicholas Putnam, Rice University

I would like to thank all the participants of the conference, and in addition all the people who submitted a paper or a poster. Thanks also to the program committee members and the other reviewers, who did a great amount of work for the conference in a limited amount of time.

The work of the Program Committee was considerably facilitated by the EasyChair website. RECOMB CG 2010 was supported in part by grants from the Canadian Institute for Advanced Research, the Fields Institute for Research in Mathematical Sciences, the Mathematics of Information Technology and Complex Systems (MITACS) Network of Centres of Excellence, and the Vice-President of Research of the University of Ottawa.

Thanks are due to Chunfang Zheng for website design and management, and for implementation of the online registration process.

July 2010 Eric Tannier

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Previous Meetings

2003, Minneapolis, USA
2004, Bertinoro, Italy
2005, Dublin, Ireland
2006, Montreal, Canada
2007, San Diego, USA
2008, Paris, France
2009, Budapest, Hungary

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