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Teresa M. Przytycka (Ed.)

Research in Computational Molecular Biology

19th Annual International Conference, RECOMB 2015
Warsaw, Poland, April 12–15, 2015
Proceedings

Editor

Teresa M. Przytycka
National Center for Biotechnology Information
Bethesda
Maryland
USA

ISSN 0302-9743
Lecture Notes in Bioinformatics
ISBN 978-3-319-16705-3
DOI 10.1007/978-3-319-16706-0

ISSN 1611-3349 (electronic)
ISBN 978-3-319-16706-0 (eBook)

Library of Congress Control Number: 2015934031

LNCS Sublibrary: SL8 – Bioinformatics

Springer Cham Heidelberg New York Dordrecht London

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Printed on acid-free paper

Springer International Publishing AG Switzerland is part of Springer Science+Business Media
(www.springer.com)

Preface

The RECOMB conference series – with the full name of the Annual International Conference on Research in Computational Molecular Biology – was started in 1997 by Sorin Istrail, Pavel Pevzner, and Michael Waterman. The 19th RECOMB conference, RECOMB 2015, was held in Warsaw, Poland during April 12–15, 2015 and was hosted by the University of Warsaw.

This volume contains the 36 extended abstracts selected for oral presentation at RECOMB 2015 by the Program Committee (PC) out of 170 submissions. Each submission was assigned to at least three PC members and reviewed with the help of many external reviewers. Following the initial reviews, there was an extensive discussion of the submissions among the members of the PC, leading to the final decisions.

In 2015 RECOMB allowed for parallel submissions to the proceedings and a journal. Papers accepted for oral presentation that have simultaneously been submitted to a journal are published as 2-page abstracts. Parallel submissions which have not appeared in a journal by the time of the conference were to be deposited in the preprint server arxiv.org. All other papers that were accepted to RECOMB 2015 were invited for submission in an edited journal version to a special issue of the *Journal of Computational Biology*.

In addition to the paper presentations, RECOMB 2015 featured six invited keynote talks by leading scientists world-wide. The keynote speakers were M. Madan Babu (MRC Laboratory of Molecular Biology), Bonnie Berger (Broad Institute of Harvard and MIT), M. Magda Konarska (Rockefeller University and University of Warsaw), Michael Levitt (Stanford University), Bas van Steensel (Netherlands Cancer Institute), and Ulam's lecture by Wacław Szybalski (University of Wisconsin-Madison).

Following the tradition started at RECOMB 2010, RECOMB 2015 also featured a special highlights track containing computational biology papers that were published in journals during the last 18 months. There were 38 submissions, 8 of which were selected for oral presentation.

The success of RECOMB depends on the effort, dedication, and devotion of many colleagues who have contributed to the organization of the conference. I thank the PC members and external reviewers for the timely review of the assigned papers despite their busy schedules; Mona Singh for chairing the highlights track; Lenore Cowen for chairing the posters track; the Steering Committee and its chair, Martin Vingron, for many excellent suggestions on the organization of the conference; the Local Organizing Committee members, especially the Co-chairs Jerzy Tiuryn and Bartek Wilczyński, for hosting the conference and providing administrative, logistic, and financial support; and the authors of the papers, highlights, and posters and all the attendees for their enthusiastic participation in the conference. We also thank our generous sponsors, including the International Society of Computational Biology (ISCB), the US National

Science Foundation, the Polish Ministry of Science and Education, the Warsaw Center for Mathematics and Computer Science, the Polish Bioinformatics Society, the University of Pittsburgh, and Biogen Idec. Finally, I would like to thank Roded Sharan (Tel Aviv University; Program Chair of RECOMB 2014) for his support and advice.

February 2015

Teresa M. Przytycka

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Dates	Hosting Institution	Program Chair	Conference Chair
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March 22-25, 1998 New York, NY, USA	Mt. Sinai School of Medicine	Pavel Pevzner	Gary Benson
April 22-25, 1999 Lyon, France	Inria	Sorin Istrail	Mireille Regnier
April 8-11, 2000 Tokyo, Japan	University of Tokyo	Ron Shamir	Satoru Miyano
April 22-25, 2001 Montréal, Canada	Université de Montréal	Thomas Lengauer	David Sankoff
April 18-21, 2002 Washington, DC, USA	Celera	Gene Myers	Sridhar Hannenhalli
April 10-13, 2003 Berlin, Germany	German Federal Ministry for Education and Research	Webb Miller	Martin Vingron
March 27-31, 2004 San Diego, USA	University of California, San Diego	Dan Gusfield	Philip E. Bourne
May 14-18, 2005 Boston, MA, USA	Broad Institute of MIT and Harvard	Satoru Miyano	Jill P. Mesirov and Simon Kasif
April 2-5, 2006 Venice, Italy	University of Padua	Alberto Apostolico	Concettina Guerra
April 21-25, 2007 San Francisco, CA, USA	QB3	Terry Speed	Sandrine Dudoit
March 30-April 2, 2008 Singapore, Singapore	National University of Singapore	Martin Vingron	Limsoon Wong
May 18-21, 2009 Tucson, AZ, USA	University of Arizona	Serafim Batzoglou	John Kececioglu
August 12-15, 2010 Lisbon, Portugal	INESC-ID and Instituto Superior Técnico	Bonnie Berger	Arlindo Oliveira
March 28-31, 2011 Vancouver, Canada	Lab for Computational Biology, Simon Fraser University	Vineet Bafna	S. Cenk Sahinalp
April 21-24, 2012 Barcelona, Spain	Centre for Genomic Regulation	Benny Chor	Roderic Guigó
April 7-10, 2013 Beijing, China	Tsinghua University	Fengzhu Sun	Xuegong Zhang
April 2-5, 2014 Pittsburgh, PA, USA	Carnegie Mellon University and University of Pittsburgh	Roded Sharan	Russell Schwartz and Panayiotis (Takis) Benos

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