

Editorial

This special issue comprises the papers accepted for presentation at the 19th Annual International Conference on Intelligent Systems for Molecular Biology, joint with the 10th European Conference on Computational Biology, an official conference of the International Society for Computational Biology (ISCB; <http://www.iscb.org>). ISMB/ECCB 2011 (<http://www.iscb.org/ismb2011/>) will take place in Vienna, Austria, from July 17 through July 19, 2011; preceded during July 14–16 by eight 1- or 2- day Special Interest Group (SIG) meetings, three satellite meetings and nine half-day tutorials; and followed by two additional satellite meetings.

The 48 papers in this volume were selected from 258 submitted papers. Submitted papers were assigned to 13 areas. Area Chairs led each topic area by selecting their area's program committee and overseeing the reviewing process. Many Area Chairs were new compared to 2010, and two completely new areas were added in 2011, 'Data Visualization' and 'Mass Spectrometry and Proteomics'. Six papers for which Area Chairs were in conflict were reviewed under a 'Conflicts Management' section headed by the Proceedings Chairs; one such paper was accepted in 'Bioimaging'. Areas, co-chairs and acceptance information are listed in Table 1.

Compared to prior years, five mature topic areas had steady submissions, 'Evolution and Comparative Genomics', 'Gene Regulation and Transcriptomics', 'Protein Structure and Function', 'Sequence Analysis', 'Text Mining'. Two areas newer to ISMB were underrepresented this year, 'Bioimaging' and 'Disease Models and Epidemiology'. One area doubled, 'Applied Bioinformatics', renamed from last year's 'Other Bioinformatics Applications'; and one tripled, 'Protein Interactions and Molecular Networks'.

Across the areas, 326 members of the bioinformatics community provided reviews. Most papers received three reviews and several received four or more. There was significant discussion of the merits of the papers first between referees and the Area Chairs, and then between Area Chairs and the proceedings chairs. Initial decisions to accept papers were made during a comprehensive conference call with the Area Chairs, and several papers underwent a further

evaluation by additional Area Chairs before acceptance decisions were finalized. We appreciate that in several cases reviewers' opinions might have changed with additional input or further clarifications from the authors; because the ISMB 2010 timeline did not allow for a second round of reviews, however, only papers where referees suggested minor revisions could be accepted.

For several papers where referee comments might have been unclear to the authors, Area Chairs added additional comments and explanations. In total, 48 papers were conditionally accepted, pending revision. After acceptance notices were sent, the authors had 2 weeks to modify their papers according to the suggestions made by the reviewers and to respond to the reviewers' comments. Modified papers and authors' responses were reexamined during the next week to ensure each paper was modified appropriately in response to the reviewers' comments. We were pleased that all 48 conditionally accepted papers were finally accepted for the conference.

The final acceptance rate was 19%, similar to the rates of 20% and 19% in the two prior years. Collectively, the 48 accepted papers had 185 authors from 18 countries across 6 continents, with 82 authors from North America, 54 from Europe, 25 from Asia (excluding Israel), 10 from Israel, 9 from Australia, 4 from South America and 1 author from Africa.

We thank the area chairs and reviewers for their hard work and dedication to maintaining a professional review process. We thank all authors of submitted papers and authors of accepted papers for their diligences in responding to reviewer comments within 2 weeks. We thank Steven Leard's team for extensive technical support with the EasyChair submission and reviewing system; Mona Singh and Joel S. Bader for sharing their experience from last year; the team at Oxford University Press for typesetting the papers; Conference Chairs Burkhard Rost, Michal Linial, Peter Schuster and Kurt Zatloukal, as well as the ISMB/ECCB 2011 Steering Committee, for their valuable input; and Steven Leard for helping us oversee the process.

Terry Gaasterland (ISMB Proceedings Chair)

Martin Vingron (ISMB Proceedings Co-Chair)

Table 1.

Topic area	Area Co-Chair 2010	No. of submitted papers 2010	No. of accepted papers 2011	No. of submitted papers 2011	No. of accepted papers
Applied bioinformatics	Larry Hunter and Philip E. Bourne	11	2	30	5
Bioimaging and data visualization	Robert F. Murphy, Gene Myers and Sean O'Donohue	23	8	3	0
Databases and ontologies	Alex Bateman and Suzanna E. Lewis	23	3	12	2
Disease models and epidemiology	Niko Beerenwinkel and Yves Moreau	15	2	8	2
Evolution and comparative genomics	Dannie Durand and Teresa Przytycka	11	4	13	4
Gene regulation and transcriptomics	Eric P. Xing	32	3	34	6
Mass spectrometry and proteomics	Knut Reinert and Nuno Bandiera	x	x	5	1
Population genomics	Eleazar Eskin and Eran Halperin	20	6	11	3
Protein interactions and molecular networks	Trey Ideker and Robert Russell	28	4	41	8
Protein structure and function	Anna Tremantano	34	7	38	8
Sequence analysis	John Kececioğlu and S. Cenik Sahinalp	31	7	31	6
Text mining	Hagit Shatkay and Alfonso Valencia	7	2	7	2
Conflicts management	Terry Gaasterland and Martin Vingron	x	x	6	1