



by NADIA EL-MABROUK

The MAGE conference took place in the Hôtel Château-Bromont, in Québec's beautiful Eastern Townships region on August 23-26, and gave a retrospective and prospective view on comparative genomics by commemorating the 50 years of scientific contribution of David Sankoff.

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*David Sankoff is known as one of the founding fathers of bioinformatics and computational biology. He has been at the origin of numerous fields in bioinformatics, starting with the fundamental problem of sequence alignment. In particular, he contributed to the early introduction of dynamic programming to computational biology.*

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This event brought together the most renowned scientists in computational biology as well as the future generation of young researchers and students. For example, Anne Bergeron of UQAM, Montréal, who kicked off the event by putting David Sankoff's early career into perspective, presented an amusing short film depicting a successful live test of David's 1990 music recognition algorithm.

Joseph Felsenstein of U. Washington, appeared via a web video from Seattle, recalling the precursors of bioinformatics and computational biology in David's work at the Centre de Recherches Mathématiques de l'Université de Montréal. He reminded us of Sankoff's collaboration with late Robert Cedergren, and his inspiring personality, which was deeply moving to many audience members who knew Robert.

Sunday was another eventful day. David Sankoff talked about his most recent work with Chunfang Zheng of U. Ottawa, on the evolution of plants through cycles of polyploidization and fractionation, followed by presentations on modeling (inference of ancestral genomes and of evolutionary distances) and applications (to the genome evolution of

tomato, coffee, *Utricularia* and other core eudicots).

Following Sankoff's talk, a couple of participants presented their more biologically oriented talks (participants were: Joseph Nadeau, Aoife McLysaght, Eric Lyons, Victor Albert). Later during the day, another group of participants (Tao Jiang, Pavel Pevzner, Dannie Durand, Meidanis and Yancopoulos, Binhai Zhu) gave talks on more methodological and algorithmic aspects of their research.

The three-day conference closed on Monday morning with presentations on future research directions. For example, Ron Shamir of U. Tel Aviv presented his work on the massive theoretical and empirical study of rearrangements in cancer cells.

This event was a unique opportunity to come together, to trace the developments that had led to the discipline of bioinformatics and computational biology, and to discuss the challenges that lay ahead. It was also a great occasion for the publication of a volume consisting of fourteen chapters by participants in MAGE, in the Springer series "Computational Biology". This book was highly anticipated by the community. For my part, some chapters are already serving as reading material for my graduate courses in bioinformatics!

For more detail on the MAGE conference, please check out their website:

<http://www.iro.umontreal.ca/~mabrouk/MAGE2013/index.php>



Participants at the MAGE meeting