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First International Conference on Biology,
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Selected Papers



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Series Editors

Gerhard Goos, Karlsruhe University, Germany
Juris Hartmanis, Cornell University, NY, USA
Jan van Leeuwen, Utrecht University, The Netherlands

Volume Editors

Olivier Gascuel
Laboratoire d'Informatique, de Robotique et de Microelectronique de Montpellier
161 rue Ada, 34392 Montpellier Cedex 5, France
E-mail: gascuel@lirmm.fr

Marie-France Sagot
Institut Pasteur, Laboratoire d'Algorithmique Combinatoire
28, rue du Dr. Roux, 75724 Paris Cedex 15, France
E-mail: sagot@pasteur.fr

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Preface

The papers contained in this volume were presented at the first annual JOBIM conference (“Journées Ouvertes: Biologie, Informatique et Mathématique” – Open Days: Biology, Informatics and Mathematics), held May 3–5, 2000, at the ENSA-M (“École Nationale Supérieure d’Agronomie de Montpellier”), Montpellier, France. The beautiful park-like ENSA-M campus contains trees that are several hundred years old, and is only a ten minute walk from the center of the old town.

The idea of JOBIM was born two years ago, at the Place Bellecour in Lyon. We were strolling towards one of Lyon’s fine restaurants. It was late one evening in April, during the RECOMB’98 conference. It seemed important to us to organize a Francophone conference that would be open to all people working at the frontier between biology, computer science, mathematics, and physics, and interested in the analysis, comparison, and exploitation of genomic data. JOBIM covers word algorithms, comparative genomics, evolution and phylogeny, data and knowledge bases, functional analysis, genome annotation, graph theory and combinatorics applied to biology, macromolecular structures (RNA and proteins), metabolic pathways and regulatory networks, statistics and classification.

We wanted JOBIM to be an annual meeting which would take place in surroundings facilitating exchanges between people, and where younger researchers in particular would be encouraged to present their work. The idea was greeted very favourably, and a program committee was rapidly set up. The initiative was well timed because at the start of the summer of 1999 the French Ministry of Research, through the Genome program, had decided to give new incentives to work in this interdisciplinary area. The IMPG project (Informatics, Mathematics, and Physics for Genomics) was created as a consequence of that decision.

The IMPG project provided an important part of the funding for JOBIM, established a precise scientific context for the conference, and assisted with publicity. Following the call for papers, we received 67 contributions. We chose to select as many papers as possible. There were 60 presentations in total, 20 long presentations for works of general interest and 40 short presentations for specialized contributions. This approach enabled a large number of researchers to present and discuss their results. There were also five invited talks, from Philipp Bucher, Christian Gautier, Gene Myers, David Sankoff, and Mike Steel. The presence of such guests contributed greatly to the scientific interest of the conference and all are gratefully thanked.

A second much stricter selection was then made for the papers that would appear in an English version of the proceedings. These are the 13 papers the reader will find in this volume. The subjects range over as broad an area as the 60 originally selected.

JOBIM was an unexpectedly huge success, with around 330 participants, showing that the field is rapidly maturing in France and the other French-speaking

countries. This includes Belgium, Canada, and Switzerland. The next JOBIM will take place in Toulouse, in the south of France, May 30 to June 1, 2001. It is hoped that JOBIM 2001 will attract an even greater number of participants than the first JOBIM.

JOBIM 2000 was organized by the LIRMM at the University of Montpellier II. The Local Organizing Committee of JOBIM 2000 was headed by Gilles Caraux. The efforts of all, and general support of the French computational biology and bioinformatics community, are gratefully acknowledged.

March 2001

Olivier Gascuel
Marie-France Sagot
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