PrefaceBITS 2012: Ninth Annual Meeting of the Bioinformatics Italian Society













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The Annual Meeting of the Bioinformatics Italian Society (BITS) is an important event for scientists and professionals working in the field of Bioinformatics or using the software tools developed within this scientific discipline. The meeting provides a thorough view of how and in which directions the Italian scientific community is investing financial and human resources, and an opportunity to establish and strengthen scientific collaborations.

The first gathering of Italian scientists involved with bioinformatics was held in Rome in 1999. The next three meetings, in 2000, 2001 and 2002, took place in the Certosa di Pontignano, in the neighbourhood of Siena. In the fourth meeting, held again in Rome, the Italian Bioinformatics Society was grounded. Since then, the meetings of Padua (2004), Milan (2005), Bologna (2006), and Naples (2007) were characterized by an increasing number of participants and a growing quality of the works presented. In 2008, the meeting was held in Cagliari, in conjunction with the European

Conference of Computational Biology (ECCB), as a further demonstration of the relevance that it was achieving. In the last three years the meeting has been held in Genoa (2009), Bari (2010), and Pisa (2011).

The Bioinformatics Italian Society, the University of Catania, and the J. T. Schwartz International School for Scientific Research have supported the BITS 2012 meeting. It takes place in Catania, Sicily, from the 2nd of May to the 4th of May. The meeting is kindly hosted by the Department of Mathematics and Computer Science of Catania University. The University of Catania was founded in 1434 and among its famous scholars it had Napoleone Ferrara, molecular biologist, winner of the 2010 Lasker-DeBakey Clinical Medical Research Award.

The high quality of BITS 2012 is witnessed by the number of applications for oral presentation (45), of which only 33 could be selected and scheduled during the three days of the meeting. Selection of best contributions for oral presentation was carried out by the Scientific Committee after a well established peer-review procedure based on two reviews and scores per paper. Overall, 26 referees were involved in the selection of oral communications, both BITS members and non members.

Accepted contributions, whose authors have released the copyright licence agreement to the EMBnet.journal and are presenting their work at the conference, are published in this EMBnet. journal Supplement. The total number, including oral presentations and posters, was 89, divided in 14 thematic areas: Systems Biology, Genomics, Comparative genomics, Molecular evolution, Metagenomics, Next Generation Sequencing, Transcriptomics, Pharmacogenomics, Proteins structure and function, Proteomics, Algorithms for Bioinformatics, Biobanks, Biological Databases, and Technological track.

The number of contributions in each area, shown in Table 1, provides an interesting perspective of the kind of applications the Italian bioinformatics community is presently most involved in.

We are grateful to all the lecturers and co-authors for their excellent contributions, to the Steering Committee of the Bioinformatics Italian Society, to the referees, and to all the people, Institutes, projects, companies, and local authorities that supported this event and contributed to make it successful.

Moreover, we are especially grateful to the keynote speakers for accepting our invitation to contribute to the meeting: Prof. Charles E. Lawrence, Brown University (US); Prof. Eugene Myers, HHMI Janelia Farm Research Campus (US) and Max Planck Institute for Cellular Molecular Biology and Genetics (DE); Dr. Ileana Zucchi, CNR-Institute for Biomedical Technologies (IT).

Their outstanding, well recognized scientific value and their participation to the meeting confirm the high respect that the Italian Bioinformatics Society receives from the international scientific community.

Moreover, we are especially grateful to the keynote speakers for accepting our invitation to constitute to the managinary Prof. Charles E. Layrenson

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Speakers

Oral presentations

Bicciato S. Gherardini P.F. Calogero R. Liberti S. Calviello L. Mazza T. Canakoglu A. Micale G. Cangelosi D. Pappalardo A.M. Cannataro M. Pendino V. Caselle M. Pio G. Pohl M. Castrignanò T. Colantoni A. Pozzoli U. Cordero F. Romano C. D'Antonio M. Rossi E. Di Domenico T. Sinha S. Stupka E. Ferrarini A. Valentini G. Frasca M. Gaido L. Vicedomini R.

Tutorial

Micale G.

Keynote Speakers

Charles E. Lawrence

Eugene W. Myers, G. Preparata Lecture lleana Zucchi, Dulbecco Lecture

Editors

Rosalba

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