Record Nr. UNINA9910438040403321 7th International Conference on Practical Applications of Computational **Titolo** Biology & Bioinformatics / / edited by Mohd Saberi Mohamad, Loris Nanni, Miguel P. Rocha, Florentino Fdez-Riverola Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2013 **ISBN** 9783319005782 3319005782 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (153 p.) Collana Advances in Intelligent Systems and Computing, , 2194-5365;; 222 Altri autori (Persone) Mohd Saberi Mohamad 570.285 Disciplina Soggetti Computational intelligence Artificial intelligence **Bioinformatics** Computational Intelligence Artificial Intelligence Computational and Systems Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes index. Nota di contenuto Sequencing and Microarray -- Analysis -- Tools. Sommario/riassunto The growth in the Bioinformatics and Computational Biology fields over the last few years has been remarkable and the trend is to increase its pace. In fact, the need for computational techniques that can efficiently handle the huge amounts of data produced by the new experimental techniques in Biology is still increasing driven by new advances in Next Generation Sequencing, several types of the so called omics data and image acquisition, just to name a few. The analysis of the datasets that produces and its integration call for new algorithms and approaches from fields such as Databases, Statistics, Data Mining, Machine

Learning, Optimization, Computer Science and Artificial Intelligence. Within this scenario of increasing data availability, Systems Biology has also been emerging as an alternative to the reductionist view that dominated biological research in the last decades. Indeed, Biology is more and more a science of information requiring tools from the

computational sciences. In the last few years, we have seen the surge of a new generation of interdisciplinary scientists that have a strong background in the biological and computational sciences. In this context, the interaction of researchers from different scientific fields is, more than ever, of foremost importance boosting the research efforts in the field and contributing to the education of a new generation of Bioinformatics scientists. PACBB'13 hopes to contribute to this effort promoting this fruitful interaction. PACBB'13 technical program included 19 papers from a submission pool of 32 papers spanning many different sub-fields in Bioinformatics and Computational Biology. Therefore, the conference will certainly have promoted the interaction of scientists from diverse research groups and with a distinct background (computer scientists, mathematicians, biologists). The scientific content will certainly be challenging andwill promote the improvement of the work that is being developed by each of the participants. .