Record Nr. UNINA9910299758303321 8th International Conference on Practical Applications of Computational **Titolo** Biology & Bioinformatics (PACBB 2014) / / edited by Julio Saez-Rodriguez, Miguel P. Rocha, Florentino Fdez-Riverola, Juan F. De Paz Santana Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-07581-0 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (298 p.) Advances in Intelligent Systems and Computing, , 2194-5357;; 294 Collana Disciplina 570.285 Soggetti Computational intelligence Artificial intelligence **Bioinformatics** Computational Intelligence Artificial Intelligence Computational Biology/Bioinformatics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Applications -- Data Analysis and Mining -- Proteins -- Sequence Analysis -- Systems Biology -- Text Mining. Sommario/riassunto Biological and biomedical research are increasingly driven by experimental techniques that challenge our ability to analyse, process and extract meaningful knowledge from the underlying data. The impressive capabilities of next generation sequencing technologies, together with novel and ever evolving distinct types of omics data technologies, have put an increasingly complex set of challenges for the growing fields of Bioinformatics and Computational Biology. The analysis of the datasets produced and their integration call for new algorithms and approaches from fields such as Databases, Statistics, Data Mining, Machine Learning, Optimization, Computer Science and Artificial Intelligence. Clearly, 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'14 contributes to this effort promoting this fruitful interaction. PACBB'14 technical program included 34 papers spanning many different sub-fields in Bioinformatics and Computational Biology. Therefore, the conference promotes the interaction of scientists from diverse research groups and with a distinct background such as computer scientists, mathematicians, or biologists.