CALL FOR PAPERS

2nd International Workshop on
Biological Knowledge Discovery and Data Mining (BIOKDD'10)

Held in parallel with

21st International Conference on Database and
Expert Systems Applications (DEXA'10)

www.dexa.org

Bilbao, Spain

August 30-September 3, 2010

With the development of Molecular Biology during the last decades, we are witnessing an exponential growth of both the volume and the complexity of biological data. For example, the *Human Genome Project* provided the sequence of the 3 billion DNA bases that constitute the human genome. And, consequently, we are provided too with the sequences of about 100,000 proteins. Therefore, we are entering the post-genomic era: after having focused so many efforts on the accumulation of data, we have now to focus as much effort, and even more, on the analysis of these data. Analyzing this huge volume of data is a challenging task because, not only, of its complexity and its multiple and numerous correlated factors, but also, because of the continuous evolution of our understanding of the biological mechanisms. Classical approaches of biological data analysis are no longer efficient and produce only a very limited amount of information, compared to the numerous and complex biological mechanisms under study. From here comes the necessity to use computer tools and develop new *in silico* high performance approaches to support us in the analysis of biological data and, hence, to help us in our understanding of the correlations that exist between, on one hand, structures and functional patterns of biological sequences and, on the other hand, genetic and biochemical mechanisms. *Knowledge Discovery and Data Mining* (KDD) are a response to these new trends.

Topics of BIOKDD'10 workshop include, but not limited to:

Data Preprocessing: Data Storage, Representation and Management, Data Cleaning, Feature Extraction, Feature Selection.

Data Mining: Biological Data Clustering/Biclustering, Biological Data Classification, Biological Data Regression, Association Rule Learning from Biological Data, Parallel/Cloud/Grid Computing for Biological Data Mining, Text Mining and Application to Biological Sequences, Web Mining and Application to Biological Data, Analysis of Biological Networks.

Data Postprocessing: Knowledge Filtering, Knowledge Representation and Visualization, Knowledge Combination and Integration, Error Rates and Numerical Indicators.

PAPER SUBMISSION DETAILS: Authors are invited to submit electronically original contributions in English. Submitted papers should not exceed 5 pages in IEEE format <www.ieee.org/web/publications/authors/transjnl/index.html>. All accepted papers will be published in the proceedings of DEXA'10 Workshops with IEEE CSP. One of the authors of an accepted paper must register to DEXA'10 conference and present the paper at BIOKDD'10 workshop. For paper registration and electronic submission see <http://confdriver.ifs.tuwien.ac.at/dexa2010/>, starting from January 2010.

IMPORTANT DATES: Submission of Full Papers: March 30, 2010
Notification of Acceptance: April 20, 2010
Camera-ready Copies: May 17, 2010

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