Life sciences and medicine are very data intensive disciplines. Modern technologies such as micro-arrays, high-throughput mass-spectrometry, high-resolution imaging, and huge literature databases provide new challenges for scientists and medical practitioners. There has never been more potentially available information to study biological systems like cells, organs, or patients. To fully exploit the information potentially contained in the data, effective and application-specific database solutions for data organization, storage, management and exchange are required. On top of these database techniques guaranteeing privacy, accessibility and data quality, data mining techniques allow us to explore complex patterns in the data, which often represent novel valuable knowledge.

The third edition of DBLM held in conjunction with the International Conference on Database and Expert Systems Applications (DEXA 2011) intends to bring forward interdisciplinary approaches involving database management and data mining on the one side and biomedical applications on the other side. In this edition, five papers have been accepted for presentation and inclusion in the workshop proceedings. These papers cover various important technical issues in databases and data mining including data integration, design of information systems, clustering, classification and scalability of data mining. Moreover, the papers provide solutions for diverse exciting biological applications covering genome wide association studies, prediction of three-dimensional protein structure and organization of large volumes of experimental data in neuroscience. The medical applications of DBLM 2011 are medical imaging and the analysis of stillbirth data.

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