Preface

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Biographical notes: Dr. Hu is currently an Assistant Professor at the College of Information Science and Technology, Drexel University. He joined Drexel University in September 2002 after working in industry as a Research Scientist for eight years. His current research interests are in biomedical literature data mining, bioinformatics, text mining, rough set theory and application, information extraction and information retrieval. He has published more than 100 peer-reviewed research papers in various journals, conferences and books such as various IEEE/ACM Transactions, PR, JIS, KAIS, CI, IJBRA, SIGIR, KDD, ICDM, ICDE, CIKM, BIBE, CICBC etc and received a few awards including the 2005 NSF Career award, the best paper award at the 2004 IEEE CIBCB, and the 2001 IEEE Data Mining Outstanding Service Award.

Mining bioinformatics data is an emerging field at the intersection of its two composite disciplines, bioinformatics and data mining. The objective of the *International Journal of Data Mining and Bioinformatics (IJDMB)* is to facilitate collaboration between data mining researchers and bioinformaticians by presenting cutting edge research topics and methodologies in this emerging area. The journal's perspective acknowledges the inter-disciplinary nature of the research in data mining and bioinformatics and provides a unified forum for researchers, practitioners, students, and policy makers to share the latest developments in this fast growing, multidisciplinary research area.

IJDMB aims to publish articles highlighting the latest research and developments in the areas of bioinformatics, data mining and knowledge discovery, techniques for integrating and interpreting bioinformatics data sets, and methods for improving the effectiveness, efficiency, and quality of bioinformatics data analysis. The major objective of *IJDMB* is to stimulate new multidisciplinary research and the development of cutting-edge data mining methods, techniques and tools to solve problems in bioinformatics. The journal aspires to help readers understand the state-of-the-art techniques, algorithms and methods used in bioinformatics data gathering, data pre-processing, data mining and data management, and disseminate these ideas to a large audience. The intended audiences include data mining researchers and practitioners; bioinformatics specialists in academia and industry; chemists; systems and molecular biologists who rely on computer tools for data integration, management and analysis; mathematicians and statisticians interested in model development and simulation for life science data; computer scientists; and post-graduate students with an interest in developing or applying novel algorithms and methods to biology or biomedical domains.

The five papers that comprise the inaugural issue of *IJDMB* are excellent examples of the type of high-quality submissions that the journal seeks to publish.

- 'Adaptive Fuzzy Association Rule mining for effective decision support in biomedical applications', by Yuanchen He, Yuchun Tang, Yan-Qing Zhang and Rajshekhar Sunderraman

- 'Text analysis of MEDLINE for discovering functional relationships among genes: evaluation of keyword extraction weighting schemes', by Ying Liu, Shamkant B. Navathe, Alex Pivoshenko, Venu Dasigi, Ray Dingledine and Brian J. Ciliax

- 'Bi-level clustering of mixed categorical and numerical biomedical data', by Bill Andreopoulos, Aijun An and Xiaogang Wang

- 'State-space approach with the maximum likelihood principle to identify the system generating time-course gene expression data of yeast', by Rui Yamaguchi and Tomoyuki Higuchi

- 'Kernel design for RNA classification using Support Vector Machines', by Jason T.L. Wang and Xiaoming Wu

I hope that our readers find these articles as informative and stimulating as I did, and I thank the authors for contributing their research and writing to *IJDMB*.

I would also like to offer my special thanks to everyone who has been working hard behind the scenes of *IJDMB*: Our editorial board members who have devoted their valuable time and thought to creating a high-quality resource for our intellectual community; Inderscience Publishers, whose experience has guided us from the beginning; the iSchool at Drexel, whose support for and dedication to the advancement of scholarship has been unparalleled; and the efforts of all the other support staff, consultants and organisations without whom this journal would not have been possible. I thank you all for your continued support.

Finally, I would like to extend my thanks outward, to all the members of our intellectual community. Without you – the researchers, the scientists, the teachers, the students, the curious – there would be no need for *IJDMB* or publications like it, and the world would be a lesser place as a result.