

## PREFACE

The inaugural International Workshop on Life Science Grid (LSGRID 2004) was held in Kanazawa (Japan) on 31 May – 1 June 2004. Riding on the overwhelming success of the first workshop, LSGRID 2005 was organized by the Agency for Science, Technology And Research (A\*STAR), Association for Medical and Bioinformatics Singapore (AMBIS), Asia Pacific Bioinformatics Network (APBioNet), National Grid Office (NGO) and National University of Singapore (NUS) on 5 – 6 May 2005, as a part of GridAsia 2005 conference in Singapore. It received kind sponsorship from the Initiative for Parallel Bioinformatics (iPAB) of Japan. The second workshop was held back-to-back to the PRAGMA 8 Meeting.

Like LSGRID 2004, this year's workshop focused on life science applications of Grid systems especially for bio-network research and systems biology which require heterogeneous data integration from genome to phenome, mathematical modeling and simulation from molecular to population levels, and high performance computing.

The two keynote addresses at LSGRID 2005 were:

“Grid as a ‘Ba’ for Biomedical Knowledge Creation” by Prof. Akihiko Konagaya (RIKEN Genomic Sciences Center, Japan).

“CIBs: Cyber-Infrastructure for Biosciences” by Prof. John Wooley (Associate Vice Chancellor for Research, University of California San Diego).

The two invited addresses were:

“Does Grid Technology Help Life Sciences? Lessons Learnt from BioGrid Project in Japan” by Prof. Shinji Shimojo (Director, Applied Information System Division, Cybermedia Center, Osaka University, Japan).

“Grid Usability Case Studies: Deployment of Bioinformatics Applications” by Dr. Wilfred Li (Executive Director, National Biomedical Computation Resource, USA).

A panel discussion on “Life Sciences Grid Standardization” was chaired by Associate Professor Tan Tin Wee (National University of Singapore), with Prof. John Wooley and Dr. Wilfred Li as panelists.

Besides the keynote and invited speeches as well as panel discussion, some 20 oral presentations were made. This volume of post proceedings comprises the revised versions of the accepted papers of the LSGRID 2005 workshop.

We gratefully acknowledge the contributions of all the Program Committee members in reviewing the submitted papers. Thanks also go out to the authors and participants of the workshop for their oral presentations, revised papers, discussions as well as exchange of knowledge and experience. In particular, we thank Dr Lee Hing Yan, Chairman of the Local Organizing Committee and his team at the National Grid Office for his kind coordination and tremendous assistance in making the event a success and this book publication possible.

We look forward to meet you again at future LSGRID workshops.



Tan Tin Wee



Peter Arzberger



Akihiko Konagaya

*Editors*  
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