

International Workshop on Molecular Evolution in Biology

June 24, 2002

Chairperson: Dr. Chao Tang (汤超)

8:40 – 9:40 Dr. Willem Stemmer (Maxygen)

Molecular Breeding by DNA Shuffling

9:40 – 10:40 Dr. Bailin Hao (郝柏林) (Institute of Theoretical Physics, CAS)

Molecular Phylogeny of Prokaryotes without Sequence alignment--a

Comparison with the Burgeg's Manual

10:40 – 11:00 Coffee break

11:00 – 12:00 Dr. Christopher Voigt (Caltech)

Outrunning Nature: Optimizing the In Vitro Evolution of Proteins

12:00 – 13:30 Lunch

Chairperson: Dr. Bailin Hao (郝柏林)

13:30 – 14:30 Prof. Qi Ouyang (欧阳颀) (Center for Theoretical Biology, PKU)

In vitro evolution of Lac I operator

14:30 – 15:30 Dr. Chao Tang (汤超) (Center for Theoretical Biology, PKU & NEC

Research Inst.)

Simulating in vitro DNA evolution

Chairperson: Prof. Qi Ouyang (欧阳颀)

15:30 – 15:50 Coffee break

15:50 – 16:50 Dr. Shumo Liu (刘树谋) (NEC Research Institute)

Generating Promoter in E.coli by Molecular Evolution

16:50 – 17:50 Prof. Terry Hwa (华泰立) (University of California, San Diego)

Model for in vitro DNA evolution

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June 25, 2002

Chairperson: Prof. Leihan Tang (汤雷翰)

8:40 – 9:40 Dr. Antoine Danchin (HKU-Pasteur Research Centre)

**Large Scale Gene Function Prediction in Genomes by the Analysis of
Neighborhoods**

9:40 – 10:40 Prof. Liaofu Luo (罗辽复) (University of Inner Mongolia)

The Evolution of Ribosome Sequence of the Genetic Code in Evolution

10:40 – 11:00 Coffee break

11:00 – 12:00 Prof. Hao Li (李浩) (University of California, San Francisco)

A Systematic Approach to Constructing the Regulatory Network of a Cell

12:00 – 13:30 Lunch

Chairperson: Prof. Feng Gai (盖峰)

13:30 – 14:30 Prof. Jeffery Saven (University of Pennsylvania)

Theory of Protein Sequence Ensembles: Functional Interpretation of

Databases and Combinatorial Protein Design

14:30 – 15:30 Prof. Hongya Gu (顾红雅) (College of Life Sciences, PKU)

Molecular Evolution of Bowman-Birk Trypsin Inhibitor Gene Family in Rice

June 26, 2002

Chairperson: Prof. Hao Li (李浩)

8:40 – 9:40 Dr. Yaping Zhang (张亚平) (Kunming Institute of Zoology, CAS)

Evolution of genes by duplication

9:40 – 10:40 Dr. Wentian Li (李问天) (North Shore - LIJ Research Institute)

Statistical Property of Human Isochore Sequences

10:40 – 11:00 Coffee break

11:00 – 12:00 Prof. Yang Zhong (钟扬) (Fudan University)

Advances in Molecular Phylogenetic and Evolutionary Studies of Plants

12:00 – 13:30 Lunch

Chairperson: Prof. Luhua Lai (来鲁华)

13:30 – 14:30 Prof. Feng Gai (盖峰) (University of Pennsylvania)

Helix-Coil Transition and Helix Interaction

14:30 – 15:30 Dr. Stephen Bryant (NCBI)

Comparison of Protein 3D Structures and Identification of Remote Homologs

15:30 – 15:40 Closing Remarks