

# Collaboration on Computational Biology among:

- MPI for Mathematics in the Sciences, Research Group on Complex Systems, Leipzig
- Interdisciplinary Center for Bioinformatics, University of Leipzig
- METU Institute of Applied Mathematics, Ankara
- CAS-MPG Partner Institute for Computational Biology, Shanghai
- Koç University, İstanbul
- Işık University, İstanbul

## 1 Introduction

The scientists from the above-mentioned institutions participated in the *Networks in Computational Biology* Workshop which was held at the Institute of Applied Mathematics at METU on September 10–12, 2006. The objective of the workshop was to identify challenging open problems in the field of biological networks and suitable mathematical approaches. Due to the success of this workshop, the scientists from CAS-MPG Partner Institute for Computational Biology in Shanghai emphasized the importance of collaboration among the above-mentioned institutions for addressing these problems. Therefore, the involved scientists agreed to collaborate on various research projects.

## 2 Scientific Basis of Collaboration

During the workshop, the participants identified the following potential topics for scientific collaboration:

- mathematical modeling of biological networks
- network dynamics and information processing
- algebraic structure of graphs
- discrete and continuous optimization problems in computational biology

## 3 Mechanisms of Collaboration

- exchange and co-supervision of Ph.D. students
- joint research projects
- short-term visits by faculty and postdoctoral associates
- organization of workshops and summer schools
- participation in international conferences
- joint development of computational tools

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