

Web-based dynamic simulation environment for system-level understanding of cellular network systems

윤좌문, 이동엽¹, 오영균, 박선원, 이상엽*²

한국과학기술원 생명화학공학과, 초미세화학공정연구센터; ¹한국과학기술원 바이오시스템학과, 생물정보연구센터; ²한국과학기술원 생명화학공학과, 바이오시스템학과, 생물정보연구센터
(leesy@kaist.ac.kr*)

Abstract: We develop WebCellTM which is a java-based simulation environment for system-level understanding of biological systems. A web-accessible repository of cellular network models has been established to investigate the dynamics of such models. In addition, its efficient and user-friendly web interface allows users to import their own models described by SBML (Hucka et al., 2003) for representing computational models in systems biology. Consequently, dynamic simulations of the imported models can be carried out from anywhere an internet connection is available.

Acknowledgements: This work was supported by the National Research Laboratory Program (2000-N-NL-01-C-237) of the Ministry of Science and Technology (MOST), the Advanced Backbone IT Development Project (IMT2000-C3-1) of the Ministry of Information and Communication (MIC) and MOST, and by the Brain Korea 21 project from the Ministry of Education.