

**The Faculty of Management
The Department of Knowledge and Information Management
Invites you to attend a seminar**

Systems Engineering Approaches Applied to Biomedical Research

Judith Somekh, PhD
Faculty of information Systems, Haifa University

Monday, June 4th at 12:00 pm
Jacobs Building, room no. 506

Abstract

Biologists are required to integrate large amounts of data to construct a working model of the molecular system under investigation. Alterations of these molecular models can be used to understand diseases mechanisms - a major challenge in biomedical research. In this talk, I will present systems engineering approaches used to model molecular biology systems and to suggest novel diseases risk genes. These approaches can pinpoint the biological research on where to focus as well as enhance the understanding of altered systems in disease compared to healthy conditions.

Bio

Judith Somekh, PhD, conducted her post-doctoral researcher at the Department for Biomedical Informatics, Harvard Medical School at the Harvard University, USA, 2015-2017. Her BSc, MSc and PhD in Information Systems Engineering are from the Technion-Israel Institute of Technology. Somekh is interested in the challenge of modeling complex biological systems and their alterations in health and disease conditions as well as new knowledge inference from gene expression data. Her research draws on system engineering and statistical analysis to explore data. Her current focus is on developing a combined approach for representing dysfunctional biological systems and their manifestation in diseases as well as analyzing hormonal interaction networks.

All Are Welcome

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