

Computational systems neurobiology

Nicolas Le Novere, editor

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20417388&lokasi=lokal>

Abstrak

This book introduces the many different types of computational studies one can develop to study neuronal systems. The first part of the book deals with molecular systems biology. Functional genomics is introduced through examples of transcriptomics and proteomics studies of neurobiological interest. Quantitative modelling of biochemical systems is presented in homogeneous compartments and using spatial descriptions. A second part deals with the various approaches to model single neuron physiology, and naturally moves to neuronal networks. A division is focused on the development of neurons and neuronal systems and the book closes on a series of methodological chapters. From the molecules to the organ, thinking at the level of systems is transforming biology and its impact on society.