DESCRIPTION

Since modeling multiscale phenomena in systems biology and neuroscience is a highly interdisciplinary task, the editor of the book invited experts in bio-engineering, chemistry, cardiology, neuroscience, computer science, and applied mathematics, to provide their perspectives.

Each chapter is a window into the current state of the art in the areas of research discussed and the book is intended for advanced researchers interested in recent developments in these fields. While multiscale analysis is the major integrating theme of the book, its subtitle does not call for bridging the scales from genes to behavior, but rather stresses the unifying perspective offered by the concepts referred to in the title.

It is believed that the interdisciplinary approach adopted here will be beneficial for all the above mentioned fields.
ABOUT THE AUTHOR

Dr. Misha (Meyer) Z. Pesenson has held positions in academia, including UCLA and Caltech, since 1990. He is currently Research Scientist at the Computing and Mathematical Sciences Dept., California Institute of Technology. Dr. Pesenson's research focuses on multiscale modeling, nonlinear dynamics, neural networks, and complex information processing.

The Series Editor

Heinz Georg Schuster is Professor of Theoretical Physics at the University of Kiel in Germany. He was a visiting professor at the Weizmann-Institute of Science in Israel and at the California Institute of Technology in Pasadena, USA. He authored and edited many books on nonlinear phenomena and chaos control.

SERIES

Annual Reviews of Nonlinear Dynamics and Complexity (VCH)

For additional product details, please visit https://www.wiley.com/en-us