Mathematical and computational biology is playing an increasingly important role in the biological sciences. This science brings forward unique challenges, many of which are, at the moment, beyond the theoretical techniques available. Developmental biology, due to its complexity, has lagged somewhat behind its sister disciplines (such as molecular biology and population biology) in making use of quantitative modeling to further biological understanding. This volume comprises work that is among the best developmental modeling available and we feel it will do much to remedy this situation.

This book is aimed at all those with an interest in the interdisciplinary field of computer and mathematical modeling of multi-cellular and developmental systems. It is also a goal of the Editors to attract more developmental biologists to consider integrating modeling components into their research. Most importantly, this book is intended to serve as a portal into this research area for younger scientists - especially graduate students and post-docs, from both biological and quantitative backgrounds.

* Articles written by leading exponents in the field
* Provides techniques to address multiscale modeling
* Coverage includes a wide spectrum of modeling approaches
* Includes descriptions of the most recent advances in the field

Contents:

1. Introduction
2. Models of biological pattern formation: from elementary steps to the organization of embryonic axes
3. Robustness of embryonic spatial patterning in Drosophila melanogaster
4. Integrating morphogenesis with underlying mechanics and cell biology
5. The mechanisms underlying primitive streak formation in the chick embryo
6. Grid-free models of multicellular systems, with an application to large-scale vortices accompanying primitive streak formation
7. Mathematical models for somite formation
8. Coordinated Action of N-CAM, N-cadherin, EphA4 and ephrinB2 Translates Genetic Prepatterning into Structure during Somitogenesis in Chick
9. Branched organs: Mechanics of morphogenesis by multiple mechanisms
10. Multicellular sprouting during vasculogenesis
11. Modelling lung branching morphogenesis
12. Multiscale Models for Vertebrate Limb Development
13. Tooth morphogenesis in vivo, in vitro and in silico
14. Cell mechanics with a 3D kinetic and dynamic weighted Delaunay-triangulation
15. Cellular automata as microscopic models of cell migration in heterogeneous environments
16. Multiscale modeling of biological pattern formation
17. Relating Biophysical Properties Across Scales
Chapter 18
Complex Multicellular Systems and Immune Competition: New Paradigms Looking for a Mathematical Theory

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