

"This is a very comprehensive read that provides a solid base in computational biology. The book is structured in 4 parts and 14 chapters which cover all the way from the more basic concepts to advanced material, including the state-of-the-art methodologies in synthetic and systems biology. This is a bedside book for those researchers embarking to do investigation in computational biology and a great office companion for anyone working on systems and synthetic biology."

**Rodrigo Ledesma Amaro**, *Lecturer, Imperial College London*

"This is a fantastic book. It offers an elegant introduction to both classical and modern concepts in computational biology. To the uninitiated, it is a terrific first read, bringing alive the glory of the past and the promise of the future. To the interested, it handholds and offers a springboard to dive deep. To the practitioner, it serves as a valuable resource bringing together in a panoramic view many diverse streams that adorn the landscape."

**Narendra M. Dixit**, *Professor, Indian Institute of Science*

**An Introduction to Computational Systems Biology: Systems-Level Modelling of Cellular Networks** delivers a comprehensive and insightful account of applying mathematical modelling approaches to very large biological systems and networks—a fundamental aspect of computational systems biology. The book covers key modelling paradigms in detail, while at the same time retaining a simplicity that will appeal to those from less quantitative fields.

### Features

- A hands-on approach to modelling
- Covers a broad spectrum of modelling, from static networks to dynamic models and constraint-based models
- Thoughtful exercises to test and enable understanding of concepts
- State-of-the-art chapters on exciting new developments like community modelling and biological circuit design
- Emphasis on coding and software tools for systems biology

This book is highly multi-disciplinary and will appeal to biologists, engineers, computer scientists, mathematicians and others.



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