

## **BACKMATTER**

Computational modeling of biomedical processes is gaining more and more weight in the current research into the etiology of biomedical problems and potential treatment strategies. Computational modeling allows to reduce, refine and replace animal experimentation as well as to translate findings obtained in these experiments to the human background.

However these biomedical problems are inherently complex with a myriad of influencing factors, which strongly complicates the model building and validation process. This book wants to address four main issues related to the building and validation of computational models of biomedical processes:

1. Modeling establishment under uncertainty
2. Model selection and parameter fitting
3. Sensitivity analysis and model adaptation
4. Model predictions under uncertainty

In each of the abovementioned areas, the book discusses a number of key-techniques by means of a general theoretical description followed by one or more practical examples. This book is intended for graduate students and researchers active in the field of computational modeling of biomedical processes who seek to acquaint themselves with the different ways in which to study the parameter space of their model as well as its overall behavior.