IN SILICO IMMUNOLOGY

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Darren Flower should like to dedicate this book to the two most important people in his life: his wonderful, if long suffering, wife Christine and his beautiful daughter Isobel.

Jon Timmis should like to dedicate this book to his wife, Gráinne, without whom life would not be complete, and to his as yet unborn child: welcome to the mad house.

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Preface

Whatever its final readership and impact, we, the Editors, feel this book is important. It addresses the realisation that there is a deep and abiding synergy, albeit one only now being properly explored and exploited, between immunology and computational science. This area of intersection we christen *in silico* immunology. Immunology is an inspiration for computational scientists seeking practical and philosophical metaphors for their work; but, at the same time, it is itself a biological discipline of such discombobulating complexity that only computational help as different as simulation and data warehousing can make its modern study tractable. Thus immunology both inspires but also requires computational science. This book deals in detail with the three main areas of *in silico* immunology: theoretical immunology, immunoinformatics, and artificial immune systems. While all of these are now well-established the interactions between the three are only beginning to be developed. It is a truly exciting time to be working in *in silico* immunology. We are reaching a critical mass that will enable great strides to be taken and significant achievements to be made. Like David Hume, we may yet come to regret that this book falls still born from the press but we hope not. Hopefully it will instead strike a cord and tap into a burgeoning zeitgeist ready to capitalise on the remarkable potential that is *in silico* immunology.

It is a rare book indeed that is the product of one mind, and this multi-author tome is certainly not an example of that, and it is never the case that the creation, production, and dissemination of a book lies solely in the hands of a single individual. So, we have many people to thank for helping us to bring this book before the public:

All the authors, without whose contributions this book would not be possible.

Springer staff, in particular Frank Holwarth who provided Latex support and Marcia Kidston our Editorial Assistant.

Referees of our original book proposal, who recommended that we pursue this venture, and provided excellent feedback to us.

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We also have some more personal thanks to give.

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Compton, July 2006
York, July 2006

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