

Preface to the Special Issue

This is the second special issue dedicated to Modelling in Medicine and Biology, a topic in which Wessex Institute of Technology has been very interested for a number of years.

The idea of preparing this issue originated from the ever increasing importance of computational modeling of complex problems in medicine. Considerable advances have been made in this area as demonstrated by the continued success of the International Conference on Modelling in Medicine and Biology organized by WIT the first of which was held in Southampton (1991), followed by Bath (1993), Milan (1995), Acquasparta (1997), Ljubljana (2003), Bologna (2005), The New Forest (2007) and Crete (2009).

The work reported at the meetings and the research carried out at WIT indicated the increasing interaction and collaboration between medical and engineering scientists. The advances presented at some of the conferences are now being used in practice for a wide range of medical and surgical applications.

The considerable improvements and evolution of the field led me to invite some of the best scientists who have participated in our conferences to write a paper on their most recent research. This has led to 11 outstanding articles published in this issue and its companion, *Journal of Design & Nature and Ecodynamics* 5(2).

The papers encompass areas of research that have produced important contributions to biomedical modelling. The field, however, continues to evolve and new research is currently being reported. This led to reconvening the WIT Conferences every two years, the next is to take place in Riga, Latvia 27–29 July 2011 (website: <http://www.wessex.ac.uk/11-conferences.html>) with the support not only of our Institute but the Riga Stradins University.

I hope that readers will appreciate the quality of the excellent papers in these two issues. As Editor in charge of them I am indebted to the authors for their contributions which help to enhance the quality of our Journal.

Carlos A. Brebbia
Director
Wessex Institute of Technology
The New Forest, 2010