Modelling Methodology for Physiology and Medicine, Second Edition (Elsevier Insights)

Ewart Carson, Claudio Cobelli
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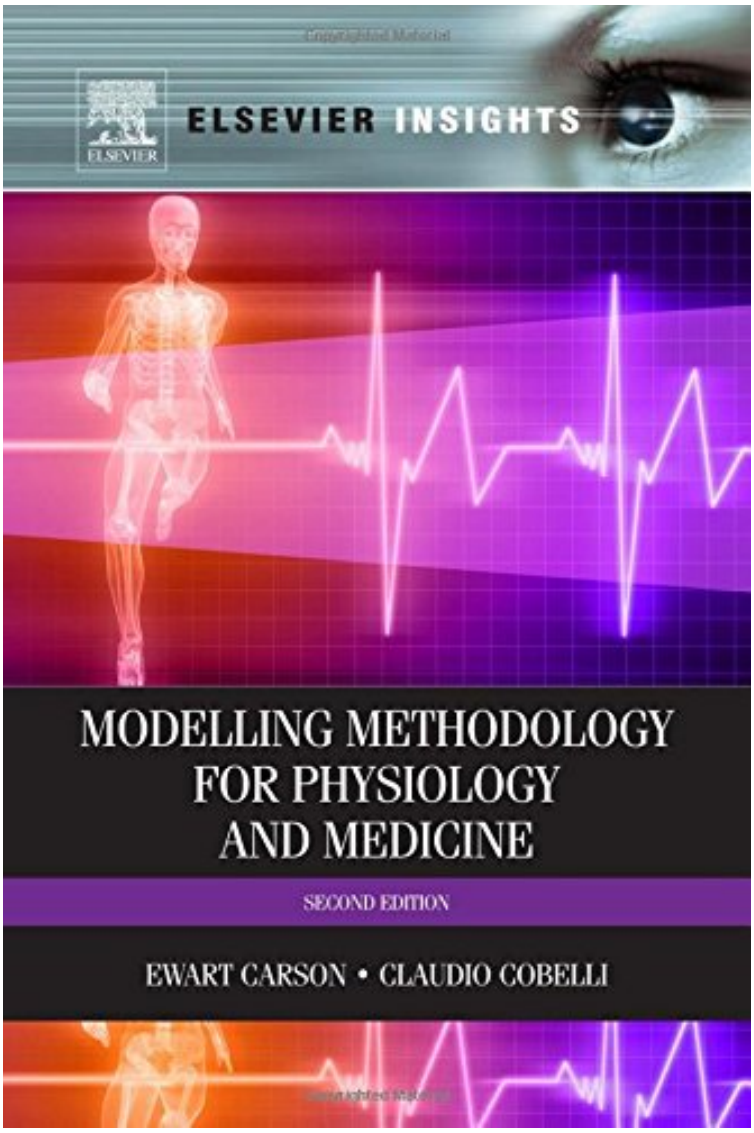

#358805 in Books Ewart Carson Claudio Cobelli 2013-12-26Original language:EnglishPDF # 1 9.02 x 1.25 x 5.98l, 2.10 #File Name: 0124115578588 pagesModelling Methodology for Physiology and Medicine Second Edition Elsevier Insights | File size: 38.Mb

Ewart Carson, Claudio Cobelli : Modelling Methodology for Physiology and Medicine, Second Edition (Elsevier Insights) before purchasing it in order to gage whether or not it would be worth my time, and all praised

Modelling Methodology for Physiology and Medicine, Second Edition (Elsevier Insights):

Modelling Methodology for Physiology and Medicine, Second Edition, offers a unique approach and an unprecedented range of coverage of the state-of-the-art, advanced modeling methodology that is widely applicable to physiology and medicine. The second edition, which is completely updated and expanded, opens with a clear and integrated treatment of advanced methodology for developing mathematical models of physiology and medical systems. Readers are then shown how to apply this methodology beneficially to real-world problems in physiology and medicine, such as circulation and respiration. The focus of Modelling Methodology for Physiology and Medicine, Second Edition, is the methodology that underpins good modeling practice. It builds upon the idea of an integrated methodology for the development and testing of mathematical models. It covers many specific areas of methodology in which important advances have taken place over recent years and illustrates the application of good methodological practice in key areas of physiology and medicine. It builds on work that the editors have carried out over the past 30 years, working in cooperation with leading practitioners in the field. Builds upon and enhances the reader's existing knowledge of modeling methodology and practiceEditors are internationally renowned leaders in their respective fieldsProvides an understanding of modeling methodologies that can address real problems in physiology and medicine and achieve results that are beneficial either in advancing research or in providing solutions to clinical problems

About the AuthorEwart Carson is Visiting Professor of Systems Science in the Centre for Health Informatics at City University, London. Educated at the University of St Andrews in Scotland and City University London, he holds a PhD in Systems Science and a DSc in Measurement and Information in Medicine. He holds Honorary Membership of the Royal College of Physicians (London) and Fellowships of the IEEE, the International Academy of Medical and Biological Engineering and the American Institute of Medical and Biological Engineers. Publications include 13 authored and edited books and more than 300 journal papers and chapters. Areas of research interest and expertise include: modelling in physiology and medicine; modelling methodology for health resource management; clinical decision support systems; evaluation methodologies with particular application in telemedicine; and integrated policy modelling for ICT enhanced public healthcare. As a systems scientist, all this research is undertaken within a clear systemic framework.Claudio Cobelli received a Doctoral degree (Laurea) in Electrical Engineering in 1970 from the University of Padova, Padova, Italy. From 1970 to 1980, he was a Research Fellow of the Institute of System Science and Biomedical Engineering, National Research Council, Padova, Italy. From 1973 to 1975 and 1975 to 1981, he was Associate Professor of Biological Systems at the University of Florence and Associate Professor of Biomedical Engineering at the University of Padova, respectively. In 1981, he becomes Full Professor of Biomedical Engineering at University of Padova. From 2000 to 2009, he has been Chairman of the Graduate Program in Biomedical Engineering. From 2000 to 2011, he has been Chairman of the Ph.D. Program in Bioengineering at the University of Padova. His main research activity is in the field of modeling and identification of physiological systems, especially metabolic systems. His research is currently supported by NIH, JDRF and European Comunity. He has published 450 papers in internationally refereed journals, co-author of 8 books and holds 11 patents. He is currently Associate Editor of IEEE Transaction on Biomedical Engineering and Journal of Diabetes Science Technology. He is on the Editorial Board of Diabetes and Diabetes Technology Therapeutics. Dr.Cobelli has been Chairman (1999-2004) of the Italian Biomedical Engineering Group, Chairman (1990-1993 1993-1996) of IFAC TC on Modeling and Control of Biomedical Systems and member of the IEEE EMBS AdCom Member (2008-2009). He has been a member of the Gruppo di Esperti della Valutazione (GEV), Area 09, of the Agenzia Nazionale per la Valutazione del Sistema Universitario e della Ricerca (ANVUR) for the period 2011-2013. He is President of the Organo di Indirizzo of the Azienda Ospedaliera Universita' di Trieste In 2010 he received the Diabetes Technology Artificial Pancreas Research Award. He is Fellow of IEEE, BMES and EAMBES.