# Table of Contents

**Special Issue on Biostatistics and Computational Mathematics for Life Sciences Research (Part 2)**

**Guest Editorial Preface**

- **iv**

  Athina Lazakidou, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece

  George Kaimakamis, Hellenic Army Academy, Vary Attikis, Greece

**Research Articles**

- **1** Computational Modeling and Simulations in Life Sciences
  - Athina Lazakidou, Department of Nursing, Faculty of Human Movement and Quality of Life Sciences, University of Peloponisse, Sparta, Greece
  - Maria Petrídou, School of Computer Science & IT, The University of Nottingham, Nottingham, UK

- **8** Cathelicidins Revisited: Molecular Evolution, Structure and Functional Implications
  - Athanasia Pavlopoulou, Biomedical Research Foundation, Academy of Athens, Athens, Greece

- **33** A Novel Radial Basis Function Networks Locally Tuned with Differential Evolution for Classification: An Application in Medical Science
  - Ch. Sanjeev Kumar Dash, Department of Computer Science, Silicon Institute of Technology, Patia, Bhubaneswar, India
  - Ajit Kumar Behera, Department of Computer Application, Silicon Institute of Technology, Patia, Bhubaneswar, India
  - Satishdananda Dehuri, Department of Systems Engineering, Ajou University, Suwon, South Korea
  - Sung-Bae Cho, Department of Computer Science, Soft Computing Laboratory, Yonsei University, Seoul, South Korea

- **58** 3D Printing: Basic Concepts Mathematics and Technologies
  - Alexander Rompas, Biomedical Engineering Laboratory, School of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece
  - Charalampos Tsirmpas, Biomedical Engineering Laboratory, School of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece
  - Ianos Papatheodorou, Biomedical Engineering Laboratory, School of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece
  - Georgia Koutsouri, Biomedical Engineering Laboratory, School of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece
  - Dimitris Koutsouris, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece

- **72** Statistical Power and Sample Size in Personalized Medicine
  - Alexander Rompas, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece
  - Charalampos Tsirmpas, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece
  - Athanasios Anastasiou, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece
  - Dimitris Koutsouris, Biomedical Engineering Laboratory, National Technical University of Athens, Athens, Greece

**Copyright**

The International Journal of Systems Biology and Biomedical Technologies (IJSBBT) (ISSN 2160-9586; eISSN2160-9594), Copyright © 2013 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.