

BIO-ALGORITHMS AND MED-SYSTEMS

EDITOR-IN-CHIEF

Irena Roterman-Konieczna, Krakow

HONORARY ADVISOR

Ryszard Tadeusiewicz, Krakow

SCIENTIFIC COMMITTEE

Piotr Augustyniak, Krakow

Adam S.Z. Belloum, Amsterdam

Michal Brylinski, Baton Rouge, LA

Marian Bubak, Krakow

Jacques Chomilier, Paris

Marc Ebner, Tübingen

Dragan Gamberger, Zagreb

Inga Hege, Munich

Sören Huwendiek, Heidelberg

Wiktor Jurkowski, Luxembourg

Kalina Kawecka-Jaszcz, Krakow

Leszek Konieczny, Krakow

Valeria Krzhizhanovskaya, Amsterdam

Silvia Delgado Olabarriaga, Amsterdam

Gabriele Pierantoni, Dublin

Fabio Polticelli, Rome

Mikhail Posypkin, Moscow

Thomas Röblitz, Göttingen

Reinhard Schneider, Luxembourg

Pawel Spolnik, Krakow

Katarzyna Stgpor, Gliwice

Andrzej Walczak, Warsaw

Nabil Zary, Stockholm

DE GRUYTER

ABSTRACTED/INDEXED IN BazTech; Celdes; CNKI Scholar (China National Knowledge Infrastructure); CNPIEC; EBSCO Discovery Service; Google Scholar; Index Copernicus; J-Gate; Naviga (Softweco); Primo Central (ExLibris); PubsHub; Summon (Serials Solutions/ProQuest); TDOne (TDNet); WorldCat (OCLC)

All information regarding notes for contributors, subscriptions, Open access, back volumes and orders is available online at www.degruyter.de/bams

The publisher, together with the authors and editors, has taken great pains to ensure that all information presented in this work (programs, applications, amounts, dosages, etc.) reflects the standard of knowledge at the time of publication. Despite careful manuscript preparation and proof correction, errors can nevertheless occur. Authors, editors and publisher disclaim all responsibility for any errors or omissions or liability for the results obtained from use of the information, or parts thereof, contained in this work.

The citation of registered names, trade names, trademarks, etc. in this work does not imply, even in the absence of a specific statement, that such names are exempt from laws and regulations protecting trademarks etc. and therefore free for general use.

ISSN 1895-9091 · e-ISSN 1896-530X

RESPONSIBLE EDITOR Irena Roterman-Konieczna, Department of Bioinformatics and Telemedicine, Jagiellonian University – Medical College, Lazarza 16, 31-530 Krakow, Poland, Tel.: +48 (0)12 6199693, Fax: +48 (0)12 6199693, Email: iroterman@cm-uj.krakow.pl

TECHNICAL EDITORS Piotr Walecki, Zdzisław Wisniewski, Anna Zaremba-Smietanska, Jagiellonian University Medical College, Department of Bioinformatics and Telemedicine, Sw. Lazarza 16, 31-530 Krakow, Poland, Tel.: +48 (0)12 6199693, Fax: +48 (0)12 6199693, Email: bams@cm-uj.krakow.pl

JOURNAL MANAGER Heike Jahnke, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany, Tel.: +49 (0)30 260 05-220, Fax: +49 (0)30 260 05-325, Email: heike.jahnke@degruyter.com

RESPONSIBLE FOR ADVERTISEMENTS Heiko Schulze, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany. Tel.: +49 (0)30 260 05-358, Fax: +49 (0)30 260 05-264, Email: anzeigen@degruyter.com

© 2015 Walter de Gruyter GmbH, Berlin/Boston

TYPESETTING Compuscript Ltd., Shannon, Ireland

PRINTING Franz X. Stückle Druck und Verlag e.K., Ettenheim
Printed in Germany



Contents

Special issue: E-learning Techniques in Medicine

Guest Editors: Inga Hege and Andrzej A. Kononowicz

Editorial

Andrzej A. Kononowicz and Inga Hege

Breaking down barriers to medical e-learning — 77

Reviews

LeRoy Heinrichs, Parvati Dev and Dick Davies

Authoring, deploying, and managing dynamic Virtual Patients in Virtual Clinical Environments — 79

Moritz Mahling, Alexander Münch, Christoph Castan, Paul Schubert, Leopold Haffner, Jan Griewatz, Andreas Manger, Nora Celebi, Reimer Riessen, Verena Conrad, Anne Herrmann-Werner and Jörg Reutershan

Building an audio/video-feedback system for simulation training in medical education — 89

Research Articles

Inga Hege, Iris Schröpfer and Katja Radon

Development and evaluation of a virtual patient-based exam in occupational medicine — 101

Barbara Vogel, Christina Kormann, Michael Mehring, Antonius Schneider, Martin Offenbacher, Niko Kohls and Jörg Schelling

E-learning innovations for the education of general practitioners at the Bavarian Virtual University (BVU) – a model for other countries — 107

Natalia Stathakarou, Nabil Zary and Andrzej A. Kononowicz

Evaluation of three educational use cases for using Virtual Patients in Massive Open Online Courses (MOOCs): a Delphi study — 113

William Melton

Creation of an iBook aimed at medical students – a student's perspective — 121

Online Only: Congress Abstracts

<http://www.degruyter.com/view/j/bams.2015.11.issue-2/issue-files/bams.2015.11.issue-2.xml>

International Conference Cybernetic Modelling of Biological Systems MCSB 2015

May 14–15, 2015, Kraków, Poland — eA1