7th International Workshop on Innovative Simulation for Health Care (IWISH 2018)

Held at the International Multidisciplinary Modeling and Simulation Multiconference (I3M 2018)

Budapest, Hungary 17 – 19 September 2018

Editors:

Agostino G. Bruzzone Marco Frascio Francesco Longo Vera Novak

ISBN: 978-1-5108-7228-8

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright[©] (2018) by CAL-TEK S.r.l. All rights reserved.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact CAL-TEK S.r.l. at the address below.

CAL-TEK S.r.l. Via Umberto Nobile 80 87036 Rende (CS) Italy

Phone: +39 333 7042 612 Fax: +39 0984 937849

info@cal-tek.eu

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2633 Email: curran@proceedings.com Web: www.proceedings.com

<u>Index</u>

Simulation framework for Mobile Patient Monitoring Systems M. Aleithe, P. Skowron, A. Carell, D. Böttger, T. Goblirsch, B. Franczyk	1
Benefits of automated wheelchairs in a hospital: a simulation approach I. Castilla-Rodríguez, R. Arnay, J. Rodríguez, R. Rodríguez	8
Evaluation of hardware-based evolutionary algorithms for the identification of motion-based action potentials in neural bundles V. Klinger	14
Simulation study on the influence of leaflet shape on blood flow through mechanical artificial heart valve C. Sukta, P. Uangpairoj	22
The spread of AI, coming changes in healthcare delivery and the implications for simulation in healthcare C. D. Combs	27
Phase contrast-MRI integrated CFD simulation: effect of C <i>thres</i> on blood flow fields for patient- specific cerebrovascular M. Azrul Hisham Mohd Adib, N. Najihah Mohd Nazri, M. Shafie Abdullah	32
An approach for attenuation corrected 3D internal radiation dosimetry W. Backfrieder	38
Skill-based routing problem in Emergency Call Centers: toward an improvement of response time E. Petitdemange, F. Fontanili, E. Lamine, M. Lauras	43
Three dimensional model of left ventricle: computational investigation of flow in presence of pathology L. T. Gaudio, G. Fragomeni	52
DEXHELPP health care atlas of Austria M. Wastian, M. Rößler, I. Hafner, C. Urach, N. Weibrecht, N. Popper, G. Endel, M. Gyimesi	57
The association of demographic and health factors with working capability in elderly L. Aponte-Becerra, A. Padovano, F. Longo, V.A Lioutas, P. Novak, L. Ngo, R. McGlinchey, C. Fortier, V. Novak	63
A study on simulation for capability assessment and safety: mitigating the impact of neurodegenerative diseases A.G. Bruzzone, Paolo Fadda, M. Massei, G. Fancello, K. Sinelshchikov, A. Padovano	71
Author's index	77