ICBHI 2017
THESSALONIKI, GREECE 18-21 NOVEMBER 2017
VENUE: ELECTRA PALACE HOTEL, ARISTOTELOUS SQUARE
CALL FOR PAPERS

The 3rd International Conference in Biomedical and Health Informatics

Website http://icbhi.med.auth.gr/

Precision medicine powered by pHealth and connected health

The IFMBE WG on Health Informatics and eHealth, and the Aristotle University of Thessaloniki, Lab of Computing Medical Informatics & Biomedical-Imaging Technologies invites you to the 3rd ICBHI which will take place in Thessaloniki on 18 - 21 November, 2017.

The area of biomedical and health informatics is exploding at all scales. The developments in the areas of medical devices (MDD), eHealth, personalized health (pHealth) as enabler factors for the evolution of precision medicine are quickly developing and demand the development of new scaling tools and integration frameworks and methodologies at the following areas:

- Medical Devices
- Biomedical environmental and behavioral data acquisition
- Biodata management and analytics
- Advanced mHealth inspired applications
- User interaction systems and data/information exchange
- Applied connected health and integrated care systems
- Personalized health systems
- Preventive and multimorbid disease management tools
- Patient safety and efficient public health systems
- In-silico modelling of pathophysiological mechanisms
- Translational research
- Biomedical informatics
- Biomedical Informatics and Technology Education

It is expected that ICBHI 2017 can catalyze the personal health systems development methodology thus achieving convergence and integration mechanisms of the above mentioned main scientific areas for the enabling of precision medicine. The need for managing the new findings and capabilities, as well as integrating competencies and thematic areas are absolutely necessary for the area of biomedical and ealth informatics.

Taking into account the current needs in the biomedical and health informatics area, the conference is expected to streamline in two main axes. The first axis would include biosensors, mHealth/uHealth components and systems, biorobotics, electroceuticals and micro-bio-nano recording, bioparametric estimation and filtering. The second axis would involve machine learning, multiparametric analytics, bioinformatics, big biodata / biomedical computing, medical decision support, patient safety informatics, interoperability and security. Approaches that can be used for integrating these two streams linked to precision medicine applications will also be addressed.

The conference will feature a scientific challenge which shall revolve around the recent high interest in coordinated care theme. The interest is highly related to the increase in aged population and the high numbers of multimorbid patients. It is focused on cardio-respiratory problems related with multi-morbid COPD patients. The goals of the challenge would focus on detection of wheezes and crackles in respiratory sounds. The scientific challenge rules will follow the Physionet challenge rules. More details at: http://bhichallenge.med.auth.gr/

The ICBHI 2017 shall award to four student papers the sum of $500 per paper entering the best paper student competition as well as a waiver of the registration fee.

Keynote speakers will address the following themes:

• Ambient intelligence and home care in cardiorespiratory diseases
• Challenges in health telematics and pervasive computing
• User acceptance and educational issues
• Smart Connected Health Systems
• Big Data, Machine Learning, CDSS
• Point-of-Care Health Systems and technologies
• Genomics medicine bridging to physiology through Biomedical & Health Informatics

We expect to invite specific papers for a special issue in the flagship journal of the IFMBE, the MBEC journal. Additional special issues will be considered in due course in widely known journals in the area of biomedical and health informatics and technologies.

Key dates

Second call for papers: May 10 , 2017
Final call for papers: July 31 , 2017
Proposals for special sessions and workshops: September 20, 2017 (EXTENDED)
Submission of full length papers deadline: September 20, 2017 (EXTENDED)
Submission of Scientific Challenge papers deadline: 1 October, 2017
Review process ends – Notification of acceptance: 10 October 2017
Early registration by: October 15 , 2017
Final papers due: October 12 , 2017
Conference starts: November 18 , 2017

INVITED KEYNOTES (Tentative List)
Nitish Thakor, Jens Muehlsteff, Sanjay Mehrotra, Ratko Magjarevic, Y-T Zhang, Evangelia Charmandari, Theodoros Agorastos, Vassilis Koutkias
SCIENTIFIC CHALLENGE COORDINATORS :
Asst. Prof. Ioanna Chouvarda, Alda Marques, Prof. Paulo de Carvalho

Conference general chair
Professor Nicos Maglaveras, PhD
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