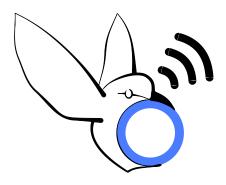




## University of Zagreb Faculty of Electrical Engineering and Computing and Nalecz Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences



## 3<sup>rd</sup> International Workshop of NEW TECHNOLOGIES IN MONITORING AND CONTROL OF DIABETES

This Workshop aims to present the state of art of diabetes monitoring and treatment technology, the research in that field, performed at the organizing institutions and the perspectives of application of the newest technology in Croatian health system from the point of health stakeholders. The technology is going to be presented by the researchers and from representatives of leading industry in the field. The emphasis will be put on promotion of continuous glucose monitors and the benefits expected in treatment and from analysis of the data as compared to self-control glucose measurements habitually performed by most patients. Finally, researchers and companies will demonstrate the newest versions of their devices and/or software.

Organized by: Prof. Ratko Magjarević, Zagreb, Croatia Prof. Piotr Ładyżyński, Warsaw, Poland

Supported by: Croatian Biomedical Engineering and Medical Physics Society

Venue: FER Congress Centre, Gray Hall

12<sup>th</sup> September 2017 Zagreb, Croatia

## Program

10:00 Opening and welcome

**Gordan Gledec,** Vice Dean for research, University of Zagreb Faculty of Electrical Engineering and Computing

Igor Lacković, Croatian Biomedical Engineering and Medical Physics Society Piotr Ładyżyński, Nalecz Institute of Biocybernetics and Biomedical Engineering Ratko Magjarević, University of Zagreb Faculty of Electrical Engineering and Computing

- 10:15 Selected projects on technical support for diabetes monitoring and treatment conducted at the Nalecz Institute of Biocybernetics and Biomedical Engineering of the Polish Academy of Sciences **Piotr Ładyżyński**, *Nalecz Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, Warsaw, Poland*
- 10:45 Research and development of technology for monitoring and treatment of chronic diseases at University of Zagreb Faculty of Electrical Engineering and Computing
   Ratko Magjarević, University of Zagreb Faculty of Electrical Engineering and Computing, Zagreb
- 11:15 Use of continuous insulin infusion with continuous measurement of glucose a step closer to artificial pancreas
  Manja Prašek, Diabetics Society Zagreb, Zagreb, Croatia
- 11:35 The Croatian Diabetes Registry as part of a unified Public Health Information System Borna Pleše, Tamara Poljičanin, Ivan Pristaš, Croatian Public Health Fund, Zagreb, Croatia
- 11:55 Coffee Break
- 12:15 Data driven prediction strategies for diabetes management applications Jorge Henriques, University of Coimbra, Coimbra, Portugal - Teleconference
- 12:30 Remote Patient Monitoring Systems for Diabetic Patients **Sara Žulj**, University of Zagreb Faculty of Electrical Engineering and Computing, Zagreb **Mladen Grgurević**, Medical Faculty University of Zagreb, University Clinic for Diabetes, Endocrinology And Metabolic Diseases, Zagreb, Croatia
- 12:45 Integration of the uniGluko diabetes ICT platform to national e-Health system Siniša Drobnjak, Domagoj Materni, SD Informatika d.o.o., Velika Gorica, Croatia Filip Šklebar, uniGluko d.o.o., Zagreb, Croatia
- 13:00 Current strategies and challenges in engineering an artificial pancreas **Prof. Piotr Ładyżyński**, Nalecz Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, Warshaw, Poland
- 13:15 Importance of physical activity programming in diabetics Goran Sporiš, University of Zagreb Faculty of Kinesiology, Zagreb, Croatia
- 13:30 Evaluation and tracking of human motion in strength exercises and rehabilitation Dominik Džaja, University of Zagreb Faculty of Electrical Engineering and Computing, Zagreb
- 13:45 Benefits of home based balance control in diabetics with peripheral neuropathy **Goran Šeketa**, University of Zagreb Faculty of Electrical Engineering and Computing, Zagreb
- 14:00 Evolution of IVD: test anytime, anywhere Jerry Chieh-Hsiao Chen, *iXensor Co., Taiwan* - Teleconference
- 14:15 Diabetic foot analysis and treatment FootLab BASPI areas of research **Martha Zequera**, *Pontificia Universidad Javeriana*, *Bogota*, *Colombia* - Teleconference
- 14:30 System demonstration and discussion
- 14:45 Conclusions and recommendations