

International Conference

Systems for Medical Decision Support and Forensic Identification

Principles, methods and assessment

Keynote speakers

Mor Peleg, Israel

Norah Rudin, United States of America

and

Mentoring Course

Decision Support Systems for Medicine and Forensics

February 22nd – 24th 2017, Prague, The Czech Republic

www.euromise.net











SYSTEMS FOR MEDICAL DECISION SUPPORT AND FORENSIC IDENTIFICATION

Principles, Methods and Assessment

February 22nd - 24th 2017

by the EuroMISE Mentor Association, Czech Society of Biomedical Engineering and Medical Informatics and Czechoslovak Society for Forensic Genetics under the auspices of Charles University, First Faculty of Medicine

Conference venue: House of Physicians, Sokolská 31, Prague 2

This fourth EuroMISE Mentor Association conference has as goal to present and discuss on the one hand the principles and methods behind decision support systems and on the other hand the benefits and limitations of decision support systems applied in medicine and forensics.

Although the conference focuses on two different application areas, the decision making problems encountered in both areas show similarities. Medical decision support software uses several items of patient data to generate case-specific advice, regarding medical treatment or regimen. Forensic identification software uses subject-specific knowledge to evaluate the evidence from single source samples. With a medical decision support system, a doctor or patient becomes a client. With forensic identification, criminalist or finally a judge is a client. The same methods and techniques can be used to help clients to make decisions regarding health or guilt.

The Scientific Programme Committee asks for contributions about new methods, about existing decision support systems applied to new areas and about the evaluation of methods, techniques and systems. Decision support systems usually do not function stand-alone but depend on the data stored in feeder systems. Standardization is necessary to make communication between both types of systems possible. Contributions about encountered problems with communication between such systems and their solution are solicited.

The conference topics cover:

- Knowledge representation (including rules, logic, frames, objects, etc.)
- Reasoning methods
- Dealing with uncertainty
- Statistical approaches to decision making
- Machine Learning approaches
- Evaluation of evidence by likelihood ratio
- Bayesian networks for combination of evidence
- Natural language approaches
- Examples of decision support systems applied to new areas
- Interfacing problems with feeder systems and their solution
- Guideline based decision support systems
- Evaluation of performance of decision support systems
- Studies of user acceptance of decision support systems

Submissions of original papers (2-6 pages) and opinion papers, short communications or posters (1-2 pages) on the conference topics are invited. Accepted papers will be published in the International Journal of Biomedicine and Healthcare according to the template in Word (http://www.ijbh.org/word) or Latex (http://www.ijbh.org/latex). Submission of contributions must be performed via www.euromise.net.

Submission deadline is November 20th 2016. Results of the review process are delivered by December 20th 2016.

Registration for the conference at www.euromise.net:

- Early bird registration fee until January 22nd, 2017 (including 4 coffee breaks, 2 lunches, Get together party and conference proceedings).): 190,00 EUR, Accompanying person 50 EUR.
- Regular registration fee after January 22nd 2017: 250€, Accompanying person: 80,00EUR.
- Discount 30 EUR for members of the EuroMISE Mentor Association, members of the Society of Biomedical Engineering and Medical Informatics and Czechoslovak Society for Forensic Genetics (only 1 discount for person is possible)
- Special discount 90 EUR for Ph.D. students, booked for the Mentoring Course simultaneously.

Scientific Program Committee:

Arie Hasman, The Netherlands, Chair Bernd Blobel, Germany Jiří Drábek, Czech Republic Pirkko Nykänen, Finland John Mantas, Greece Ivan Mazura, Czech Republic Jaroslav Pokorný, Czech Republic Jan Rauch, Czech Republic Bernard Richards, United Kingdom Ignacio Serrano, Spain Halina Šimková, Czech Republic Milan Tuček, Czech Republic Arnošt Veselý, Czech Republic Jana Zvárová, Czech Republic

Local Organizing Committee

Jana Zvárová, Chair Lenka Lhotská, Vice-Chair Anna Andrlová Martin Ouvín Anna Schlenker Libor Seidl

DECISION SUPPORT IN MEDICINE AND FORENSICS

Academic club of the 1st Faculty of Medicine, Charles University, Faust House, Karlovo náměstí 40, Prague 2, The Czech Republic

Lectures are given by university professors:

Petr Berka, Bernd Blobel, Arie Hasman, Radim Jiroušek and Jana Zvárová

February 22nd 2017, 9:00 - 16:30

Registration fee for the course: Early bird $100 \in$ (including 2 coffee breaks, lunch and teaching materials). Registration fee from January 22^{nd} 2017 onwards 150€. Registration opens at <u>www.euromise.net</u>



Date and location of events

Date	Event	Place	Event
Wednesday, 22.2.2017	Mentoring course I	Faust House	
Thursday, 23.2.2017	Conference	House of Physicians	Get together party
Friday, 24.2.2017	Conference	House of Physicians	