



## International Joint Meeting EuroMISE 2015

June 16<sup>th</sup> – 18<sup>th</sup> 2015, Prague, Czech Republic

[www.euromise.net](http://www.euromise.net)



### CALL FOR PAPERS

1. INFORMATION-BASED PREVENTION IN HEALTHCARE (Symposium, Prague, June 16<sup>th</sup> 2015)
2. BIG DATA CHALLENGES FOR PERSONALISED MEDICINE (Conference, Prague, June 17<sup>th</sup> 2015)

### MENTORING COURSES

3. BIG DATA – ANALYSIS AND MODELLING CHALLENGES (Course, June 16<sup>th</sup> 2015)
4. INTRODUCTION TO TECHNOLOGY ACCEPTANCE (Course, June 18<sup>th</sup> 2015)

**REGISTRATION** is opened at April 1<sup>st</sup> 2015 ([www.euromise.net](http://www.euromise.net))



## **INFORMATION-BASED PREVENTION IN HEALTHCARE**

by the EuroMISE Mentor Association and Czech society of occupational medicine  
under the auspices of Charles University in Prague, First faculty of medicine

**Symposium venue:** Institute of Hygiene and Epidemiology,  
First Faculty of Medicine of Charles University in Prague, Studničkova 7, Prague 2, **June 16<sup>th</sup> 2015**

Prevention in healthcare consists of measures taken for disease prevention, as opposed to disease treatment. Although there is no general consensus as to whether or not preventive healthcare measures are cost-effective and worth long-term investment, the preventive measures most worth exploring and investing in are those that could benefit a large portion of the population to bring about cumulative and widespread health benefits at a reasonable cost. Applying scientific principles to preventing disease and disability is basic to healthcare practice and is necessary for medical staff and decision makers. The accessibility and usability of relevant information for decision-making are crucial. The symposium is aimed at exchanging experience on the availability and usability of information for the correct and effective decision making in healthcare.

### **This symposium themes cover:**

- Health promotion and disease prevention,
- Health services and public health,
- Occupational health and safety, fitness for work,
- Environmental health, military health and aerospace medicine,
- Clinical preventive and lifestyle medicine,
- Population health and prevention policy,
- Health risk / impact assessment,
- Epidemiological and clinical studies,
- Global health.

Submissions are called on the symposium themes for original (4 pages) and opinion papers (1-2 pages). Accepted papers will be published in International Journal of Biomedicine and Healthcare according to the template in Word (<http://www.ijbh.org/word>) or Latex (<http://www.ijbh.org/latex>). **Paper submission is opened April 1<sup>st</sup> 2015** via <http://ijm2015.euromise.net>.

**Deadline for paper submissions is April 20<sup>th</sup> 2015** and the results of the review process are delivered by **May 4<sup>th</sup> 2015**. **Resubmission of revised papers by May 15<sup>th</sup> 2015**.

### **Registration for this 1-day symposium:**

- Early bird 190 € until May 15<sup>th</sup> 2015 (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings). Special discount of 30 € for the Members and Supporters of the EuroMISE Mentor Association, for Ph.D. students, members of the Society of Occupational Medicine and members of the First faculty of Medicine, Charles University in Prague.
- Registration fee from May 16<sup>th</sup> 2015 onwards 250 € (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings).
- Registration opens April 1<sup>st</sup> 2015, at [www.euromise.net](http://www.euromise.net)

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## **BIG DATA CHALLENGES FOR PERSONALISED MEDICINE**

by the EuroMISE Mentor Association and Czech society of biomedical engineering and medical informatics  
under the auspices of Charles University in Prague, First faculty of medicine

**Conference venue:** House of Physicians, Sokolská 31, Prague 2, **June 17<sup>th</sup> 2015**

The challenges of big data in health informatics are not only in capturing and storing information but also in providing the methods and tools to analyze and manage big data. One challenging obstacle in personalized medicine is the translation of scientific discoveries into effective clinical outcomes that relate to the individual. A critical factor in the successful translation is the access, management, and analysis of integrated patient data, within and across different functional domains. The power of big data is that it can provide individualized evidence leading to the development of truly personalized medicine. Big data can also provide the means for decision support across all aspects of health care, e.g. for assessing safety and efficacy of drugs, for health technology assessments and for improving prevention, diagnosis and treatment. Big data offers a challenge for biomedical informatics to connect molecular and cellular biology to the clinical world allowing us to consider individual variations and not simply population averages.

### **This conference themes cover:**

- Standards for consolidating, characterizing, validating and processing big data,
- Ontologies for knowledge and relationships between knowledge entities such as genes, drugs, diseases, symptoms, patients and treatments,
- Integration of various data sources and information systems,
- Integration of environmental data with individual genomic measurements,
- Open access – availability, readability and usability of big data,
- Security and privacy requirements for personal health data in regulated and non-regulated environments,
- Reuse of data, secondary use of health data.

Submissions are called on the conference themes for original (4 pages) and opinion papers (1-2 pages). Accepted papers will be published in International Journal of Biomedicine and Healthcare according to the template in Word (<http://www.ijbh.org/word>) or Latex (<http://www.ijbh.org/latex>). **Paper submission is opened April 1<sup>st</sup> 2015** via <http://ijm2015.euromise.net>.

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- Early bird 190 € until May 15<sup>th</sup> 2015 (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings). Special discount of 30 € for the Members and Supporters of the EuroMISE Mentor Association, for Ph.D. students and members of the Society of Biomedical Engineering and Medical Informatics.
- Registration fee from May 16<sup>th</sup> 2015 onwards 250 € (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings).
- Registration opens April 1<sup>st</sup> 2015, at [www.euromise.net](http://www.euromise.net)

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### **Local Organizing Committee**

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Anna Andrlová  
Nora Neumannová  
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Libor Seidl  
Anna Schlenker

## **BIG DATA ANALYSIS AND MODELLING CHALLENGES**

by the EuroMISE Mentor Association under the auspices of Charles University in Prague, First faculty of medicine

**Garant: Pirkko Nykänen**

**Mentoring course venue:** First Faculty of Medicine, Charles University, Studničkova 7, Prague 2, Czech Republic

**June 16<sup>th</sup> 2015 2.00 pm – 5.00 pm**

The challenges of big data in health informatics are not only in capturing and storing information but also in providing the methods and tools to analyze and manage big data. Many questions need to be solved with big data to be able to improve research and exploit research outputs to improve health both at a public health level and at personalized medicine level.

One of the most significant obstacles in personalized medicine is the translation of scientific discoveries into effective clinical outcomes that relate to the individual. A critical factor in the successful translation is the access, management, and analysis of integrated patient data, within and across different functional domains. Currently most clinical and basic research data are stored in disparate and separate systems, and it is often difficult for clinicians and researchers to access and share these data. Furthermore, inefficient workflow management in clinics and research laboratories has created many obstacles for clinical decision-making and assessment of outcomes. We need to open our perspectives from closed disconnected data silos which will restrict the analysis and utilization of big data.

The power of big data is that it can provide individualized evidence leading to the development of truly personalized medicine. Big data can also provide the means for decision support across all aspects of health care, e.g. for assessing safety and efficacy of drugs, for health technology assessments and for improving prevention, diagnosis and treatment. To achieve these we need advanced statistical methods and tools to analyze and manage big data, to retrieve and analyze data using data text mining and semantic tools, to retrieve information through population-based data mining, to develop patient-oriented tools for data sharing and patient empowerment and to promote collaboration between research, clinics and industry.

The challenges of big data include: Standards for consolidating, characterizing, validating and processing of data; ontologies for knowledge and relationships between knowledge entities such as genes, drugs, diseases, symptoms, patients and treatments; integration of various data sources and information systems and integration of environmental data with individual genomic measurements; and open access – availability, readability and usability of big data. In all these, we need to take into account the security and privacy requirements for personal health data which means that data users should be accountable for the custodianship of personal medical information. This will be a challenge with big data as we are dealing with both regulated and non-regulated healthcare environments and with reuse of data, secondary use of health data. Big data offers a challenge for biomedical informatics today – to connect molecular and cellular biology to the clinical world thus allowing us to consider individual variations and not simply population averages.

Registration fee for the course: Early bird 90 € (including coffee break, Get together party, proceedings), Discount of 30 € for Members and Supporters of the EuroMISE Mentor Association, for Ph.D. students and members of the First faculty of Medicine, Charles University in Prague). Registration fee from May 16<sup>th</sup> 2015 onwards 120 € (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings).

## **INTRODUCTION TO TECHNOLOGY ACCEPTANCE**

by the EuroMISE Mentor Association under the auspices of Charles University in Prague, First faculty of medicine

**Garant: Arie Hasman**

**Mentoring course venue:** Faust house, First Faculty of Medicine, Charles University, Karlovo náměstí 40, Prague, Czech Republic

**June 18<sup>th</sup> 2015 9.00 am – 12.00 am**

Underutilization of information systems is still a problem nowadays. Therefore it is important to obtain insight in why these systems are not successful in order to be able to design better systems. In the past user satisfaction with information systems was used as a proxy for system success. The idea was that the more satisfied users are about a system, the more they will use it. Several questionnaires were developed to measure user satisfaction. However, user satisfaction appeared not to be a good predictor of system's success. In this introduction it is explained why that was the case and why system acceptance can be better measured by using one of the Technology Acceptance Models that will be discussed during the lecture.

Registration fee for the course: Early bird 90 € (including coffee break, Get together party, proceedings), Discount of 30 € for Members and Supporters of the EuroMISE Mentor Association, for Ph.D. students and members of the First faculty of Medicine, Charles University in Prague). Registration fee from May 16<sup>th</sup> 2015 onwards 120 € (including 2 coffee breaks, lunch and Get together party on the evening June 16<sup>th</sup> 2015, proceedings).