

HEC 2016

GMDS & DGEpi & IEA-EEF annual meeting,
Medical Informatics Europe – MIE 2016

Health – Exploring Complexity: an interdisciplinary Systems Approach

28 August – 2 September 2016

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Health—exploring complexity: an interdisciplinary systems approach HEC2016

28 August–2 September 2016, Munich, Germany

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Health is a complex process with potentially interacting components from the molecular to the societal and environmental level. Adequate research designs and data analysis methods are needed to improve our understanding of this complexity, to ultimately derive high quality evidence to inform patients, health professionals, and health policy decision makers. Also, effective patient-centred health care has to address the complexity of health, functioning, and disability, not only by implementing interventions, but also by using information technology that represents the complexity of health care to inform all actors.

Given this background, we developed the concept of our conference HEC2016 as an interdisciplinary European event in beautiful Bavaria, in the city of München. Quite ironically this is the place, where William of Ockham, whose ideas of parsimony are the very opposite of complexity, accused of heresy, spent 17 years under the protection of the Bavarian King Ludwig IV. Furthermore, our local public health hero Max von Pettenkofer (1818–1901) contributed a lot to the basic systemic understanding of health, especially the relevance of a healthy environment.

Under the joint theme of health as a complex system we joined the activities of five scientific disciplines:

Medical Informatics, Medical Biometry, Bioinformatics, Epidemiology and Health Data Management.

The mission behind this interdisciplinary effort was to serve as an important scientific forum for the exchange of new ideas and applications to strengthen health sciences on a national and international level. The analysis of health as a complex system opens needed perspectives on a challenging reality: filtering current hypotheses, resolving controversies, and tailoring interventions to the need of the individual within a health system environment. The conference encouraged the dialogue of the disciplines in order to advance our understanding of health and to decrease burden of disease.

HEC2016 brought together the annual conferences of the German Association for Medical Informatics, Biometry and Epidemiology (GMDS), the German Society for Epidemiology (DGEpi), the International Epidemiological Association- European Region (IEA-EEF) and the European Federation for Medical Informatics Association

(EFMI, MIE 2016). HEC2016 took place in München, Germany, in the main building of the Ludwig-Maximilians-Universität (LMU) from 28 August to 2 September 2016 under the auspices of the Institute for Medical Information Processing, Biometry and Epidemiology of LMU.

The conference received 832 contributions for oral and poster presentation (Table 1). Fourteen percent of them were from outside Europe with the largest group of 10 % from Asia (Table 2). Scientific program committees and reviewers selected 408 submissions as oral contributions and 303 for poster presentations. The program was surrounded by twelve tutorials held by international renowned scientists and covered a broad spectrum from innovative biostatistical and epidemiological methods to tutorials in application of innovative software, scientific writing and data protection issues. Over 50 panel discussions and workshops allowed in-depth exchange of ideas on specific topics and underscored the interactive nature of HEC2016.

A special focus of HEC2016 was on the promotion of young scientists from all disciplines whose participation was supported by numerous travel grants.

We would like to express our deepest gratitude to all the colleagues who supported us as speakers, committee members and reviewers, lent us a hand before, during and after the conference, gave critical but friendly comments at all stages of the preparations, supported us by providing coffee, audience or Butterbrezen, and specifically to those who submitted contributions to the conference and attended the conference and its many tutorials, lectures and sessions. We extend our gratitude to the Deutsche Forschungsgemeinschaft for generous

to thank our families who allowed us to spend most of our weekends with organizing this conference, to William of Ockham for lending us his razor (from time to time) and to Max von Pettenkofer for guidance.

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for the local organizing committee (Tables 1, 2)