

ITCH 2019 KEYNOTE SPEAKERS

Friday, February 15 (James Coward Keynote Lecture)

[Consumer Health Informatics – Opportunities, Challenges and Trends](#)



Sabine Koch, MSc, PhD

Sabine Koch is the Strategic Professor of Health Informatics at Karolinska Institutet in Stockholm, Sweden and director of its Health Informatics Centre. Dr. Koch received both a M.Sc. and a Ph.D. degree in Medical Informatics from Ruprecht-Karls University Heidelberg, Germany. Her early research was in dental informatics, especially dental imaging and IT supported integrated care concepts for dental offices. Her fields of interest include models for collaborative care, especially homecare, human factors/ usability and evaluation of information

systems. Current research concerns a socio-technical perspective on integrating health, social and selfcare but also guideline-based clinical decision support and information visualization for enhanced decision making. Dr. Koch is the President-elect of the International Medical Informatics Association (IMIA) and Editor-in-Chief of *Methods of Information in Medicine*. She is a frequent member of the Scientific Program Committees for different international conferences in the field, associate editor of *Applied Clinical Informatics* and member of the editorial board of the *International Journal of Medical Informatics*.

<https://ki.se/en/people/sabkoc>

Saturday, February 16 (Steven Huesing Keynote Lecture)

[AI for Safer and Earlier Medicine](#)



Yu-Chuan (Jack) Li, MD, PhD

Prof Dr. Yu-Chuan (Jack) Li has been a pioneer of Medical Informatics research in Asia. He served as a Vice President of Taipei Medical University (TMU) (2009-2011) and currently, he has been the Dean of College of Medical science and Technology since 2011 and Distinguished Professor of the Graduate Institute of Biomedical Informatics since 1998. He obtains his M.D. from TMU in 1991 and his PhD in Medical Informatics from University of Utah in 1994. Due to his achievement in establishing EHR exchange models among hospitals and his dedication to IT applications in patient safety and care, he was awarded as one of the Ten Outstanding Young Persons of the Year in 2001. He has been Principal

Investigator of many national and international projects in the domain of Electronic Health Record, Patient Safety Informatics and Medical Big Data. He is author of 130 scientific papers and 3 college-level textbooks. He became an elective fellow of American College of Medical Informatics (FACMI), (2010), Australian College of Health Informatics (FACHI), (2010), founding members of International Academy of Health Sciences Informatics (IAHSI), (2017) and also the President of Asia Pacific Association for Medical Informatics (APAMI) from 2006 to 2009. Currently, he is the Editor-in-Chief of two internationally renowned journals - *Computer Methods and Programs in Biomedicine* and *International Journal for Quality in Health Care*. His main areas of expertise are: AI in Medicine, Patient Safety Informatics, and Medical Big Data Analytics.

<http://www.jackli.cc/>

Sunday, February 17 (Denis Protti Keynote Lecture)

[The Electronic Health Record as a Catalyst for Quality Improvement in Patient Care](#)



Thomas Payne, MD, FACMI

Thomas Payne is a primary care internist, Professor of Medicine and the Medical Director for Information Technology Services at University of Washington Medicine. He is Past Board Chair of the American Medical Informatics Association (AMIA).

Dr. Payne's major professional interest is the use and evaluation of clinical computing systems, especially electronic health records (EHRs) in patient care, clinical research, and quality improvement. He graduated from Stanford and received his medical degree from the University of Washington. He completed his residency in medicine at University of Colorado and an NLM fellowship in Medical Information Science at Massachusetts General Hospital and Harvard School of Public Health. He is attending physician at UW Medical Center and Harborview Medical Center.

He chaired the AMIA EHR 2020 Task Force and is currently on the faculty of the AMIA Clinical Informatics Board Review course. He is the Associate Director of the UW Medicine Center for Scholarship in Patient Care Quality and Safety, where he partners with colleagues from the UW Washington School of Medicine and College of Engineering to explore ways to write better and more accurate clinical notes and apply natural language processing tools to content of notes.

<http://bime.uw.edu/faculty/thomas-payne/>

Keynote Abstracts

Consumer Health Informatics – Opportunities, Challenges and Trends

Consumer Health Informatics (CHI) focuses on information structures and processes and informatics tools that empower consumers and patients to manage their own health by giving them the knowledge they need to make their own health decisions. Application of information and communication technology in CHI can provide information to patients and the public, promote self-care, enable informed decision-making, promote healthy behaviors and promote peer information exchange and social support. New consumer health information technology applications are being developed that allow patients to manage, share and control their health information electronically and to assume a more active role in the management of their health. The development within these areas will be discussed with special focus on lessons learned from past and current research in order to describe challenges, opportunities and trends.

AI for Safer and Earlier Medicine

Artificial Intelligence (AI) has had a great impact on the healthcare field and will continue to transform health systems radically. Every healthcare professional should arm themselves with the knowledge to face these changes. In light of the AlphaGo program that win over two of the best Go chess players in the world, Artificial Intelligence (AI) is now back to the spotlight again. Given advice and warnings from some of the top minds like Elon Mush and the late Steven Hawkings, it seems inevitable that AI is going into a fast-pace development in the next few years and likely to impact every aspect of our lives very

soon. This talk will describe some of the most important AI applications in healthcare, namely, quality and patient safety, early detection of diseases and individualized prevention. We will also discuss how Big Data and AI will go hand-in-hand in the future of health care for all the stakeholders, in terms of high-performance healthcare and precision medicine.

The Electronic Health Record as a Catalyst for Quality Improvement in Patient Care

Electronic health records (EHRs) are now broadly used following decades of development and programs in the US, UK and elsewhere providing incentives for their use. EHRs have been shown to improve reliability of performance of many basic tasks in acute, preventive, and chronic care through use of reminders, prompts, electronic order sets and other means. They assist with collecting, summarizing, and displaying the large volumes of information in patient records, and support implementation of guidelines and care pathways. Diagnostic decision support is receiving renewed attention to address care quality in deeper ways. Broad use of EHRs has brought into focus weaknesses of the current generation of EHRs: their user interface, high training requirements, implementation difficulties, time required to use them that can detract from patient care, and others. Addressing these weaknesses and adopting new technologies, including use of voice, natural language processing, data analytic techniques is necessary for EHRs to achieve their full potential: to gather information from routine care, to learn from it, and to be an integral component of efforts to continuously improve and to transform care.