

Seminar: Distributed Research Networks for Next-Generation Knowledge Acquisition

Speaker : John H. Holmes, PhD

Over the past half-century and longer, researchers from many quarters have successfully investigated many varied health-related questions using existing data from clinical settings such as hospitals, clinics, and health systems. These included evaluating the comparative effectiveness of therapeutic modalities, identifying new adverse effects of drugs, conducting disease surveillance, and performing retrospective studies of diseases. However, it was not long before researchers and clinicians realized the inadequacy of these data for teasing out the complexities of disease or for establishing results that are generalizable to a population broader than that which was investigated. It became evident that larger, more representative datasets were needed in order to conduct these investigations. As a result, researchers have been turning to Distributed Research Networks (DRNs) to investigate myriad health problems. DRNs provide researchers, clinicians, and administrators with a sophisticated platform for sharing and using data across multiple institutions in such a way that patient privacy and confidentiality are preserved, while facilitating rapid access and dissemination of analytic results. However, DRNs also create substantial challenges for the informatics community in areas such as syntactic and semantic harmonization, data currency, and data governance. We will explore the opportunities and challenges posed by the DRN model, from its beginnings to the current day in the US, especially with the advent of the Clinical Data Research Networks of the Patient Centered Clinical Research Network (PCORnet). Most importantly, we will explore the use of DRNs not only as sources of data, but their potential as platforms for acquiring, and managing new knowledge.

John H. Holmes is Professor of Medical Informatics in Epidemiology at the University of Pennsylvania Perelman School of Medicine. He is the Associate Director of the Penn Institute for Biomedical Informatics and is Chair of the Graduate Group in Epidemiology and Biostatistics. Dr. Holmes' research interests are focused on several areas in medical informatics, including evolutionary computation and machine learning approaches to knowledge discovery in clinical databases (data mining), interoperable information systems infrastructures for epidemiologic surveillance, regulatory science as it applies to health information and information systems, clinical decision support systems, semantic analysis, shared decision making and patient-physician communication, and information systems user behavior.

24 novembre 2016 ore 15:30

Aula Seminari ELN - D Floor
Former Electronics Department.
Via A. Ferrata, 5 - Pavia

Per Maggiori Informazioni
cht@unipv.it