



## Biomedical and Health Informatics Lecture Series

Tuesday, January 26, 2010 12:00 - 12:50 p.m., Room T-663

## Imre Solti, MD, PhD

K99/R00 Pathway to Independence Fellow Division of Biomedical and Health Informatics University of Washington, Seattle

## "Natural Language Processing for Clinical Informatics and Translational Research Informatics"

In this presentation Dr. Solti will outline his vision for the role of Natural Language Processing (NLP) in the Clinical Informatics and Translational Research Informatics domains and their intersections with health care and health care policy. He will provide specific use cases of NLP applications:

- Generating medical problem lists from narrative physician notes
- Classifying radiology reports for Acute Lung Injury
- Extracting medication events from discharge summaries

Finally, Dr. Solti will describe his research effort that was funded by the National Library of Medicine. In this project he aims to increase clinical trial accrual rates by semi-automating the clinical trial eligibility screening process.

The use cases will highlight his collaborative approach in biomedical informatics research.

Dr. Solti is a K99/R00 Pathway to Independence Fellow at the Division of Biomedical and Health Informatics, University of Washington, Seattle. He joined the division in 2007 as a National Library of Medicine postdoctoral fellow. His research is centered around Natural Language Processing projects in Clinical and Translational Research Informatics. He is interested in developing Natural Language Processing tools to achieve the six aims (safe, effective, patient-centered, timely, efficient and equitable) that the Institute of Medicine identified to improve the quality of health care. Before joining the University of Washington he worked for eight years as systems manager and administrator for a health care informatics startup.

At the University of Washington, through his projects, Dr. Solti established collaboration with physicians, nurses, computational linguists, and biomedical informatics researchers. Nationally he collaborates with biomedical informatics faculty at Pittsburgh, Columbia and i2b2/Harvard. In 2009 he helped to organize the Third i2b2 (Informatics for Integrating the Biology and the Bedside) International Natural Language Processing Challenge for Clinical Records and corresponding American Medical Informatics Association workshop.

Dr. Solti holds an M.D. degree from Albert Szent-Gyorgyi Medical School, Szeged, Hungary and a Ph. D. in Health Services Organization and Research from the Medical College of Virginia, Virginia Commonwealth University, Richmond, Virginia.