BOUNDARY-SPANNING SEMINAR SERIES

Artificial Intelligence:
A Catalyst for Data-Driven Medicine

Seminar by Dr. Mei Liu
University of Kansas Medical Center

Abstract: Routinely collected patient electronic medical record (EMR) data are approaching the genomic scale in volume and complexity. Clinical researchers could answer valuable questions for broader populations with this data. However, there can be thousands of distinct variables recorded in the EMR. Most of these variables are not exploited in traditional statistical analyses. Artificial intelligence could enable EMR analysis, revolutionizing diagnosis of complex diseases and patient care. This could be especially valuable for chronic conditions such as chronic kidney disease (CKD), which is one of the most frequent complications in patients with diabetes, and it is associated with substantial morbidity and mortality. Machine learning offers an efficient approach to incorporate the entire EMR in identifying key risk factors and the effects of their interactions on diseases. Dr. Mei Liu will discuss how to develop novel machine learning methods to facilitate EMR data-driven risk factor discovery and accurate prediction of CKD in diabetic patients.

Bio: Dr. Mei Liu is Associate Professor of Medical Informatics at the University of Kansas Medical Center (KUMC). After earning her PhD in computer science at KU, she completed postdoctoral training in medical informatics at Vanderbilt University. At KUMC, she has been involved in building their clinical data repository for research as well as leading the data integration efforts for the Patient Centered Outcome Research Network (PCORnet) Greater Plains Collaborative. She currently develops machine learning methods for predicting disease risks with federal funding support from NIH and NSF.

**9:00 a.m.
October 13, 2020**

Join us by Zoom:
https://kansas.zoom.us/j/94193463789
Passcode: 2020

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Seminar overview: this seminar series nurtures learning across academic boundaries. Expect rich conversations, spanning machine learning to catalysts, from lab bench to smokestack, with an eye toward protecting nature. Sponsoring units include: KU's Center for Environmentally Beneficial Catalysis (CEBC), the Internet of Catalysis National Science Foundation Research Traineeship (NRT), Information and Telecommunication Technology Center (ITTC), and the Departments of Chemistry, Chemical and Petroleum Engineering, and Electrical Engineering and Computer Science

You belong here! We invite everyone from the KU community to join us for this inclusive seminar.

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