

**BENG800/BIOENGINEERING SEMINAR:
“IMPROVING INTEROPERABILITY OF CROSS-
INSTITUTIONAL CLINICAL RESEARCH DATA ANALYSIS
USING MACHINE LEARNING, BLOCKCHAIN TECHNOLOGY,
AND NATURAL LANGUAGE PROCESSING”**

Speaker

Dr. Tsung-Ting Kao

Location

Research Hall 163

Date

11:30am-12:30pm

(lunch will be provided)

Thursday, March 30,
2017



Biography: *Dr. Tsung-Ting Kuo is a Postdoctoral Fellow in DBMI, School of Medicine, UCSD. He earned his PhD and BS in Computer Science. His current research interests include machine learning, natural language processing, and Blockchain technology in biomedical and healthcare domain.*

Talk Overview: Cross-Institutional clinical research data analysis can accelerate research and facilitate quality improvement initiatives, such as comparative effectiveness, biomedical discovery, and patient-care. However, sharing electronic health records (EHR) data across institutes may introduce the risk of improper disclosure of protected health information (PHI). In this talk, I will introduce how to improve the interoperability among institutes using machine learning, distributed ledger technology (DLT, or Blockchain technology), and natural language processing (NLP) methods, on both structured (i.e., discrete/continuous variables) and unstructured (i.e., narrative texts) data.