

Text mining to enable routine personalized cancer therapy

Hua Xu

University of Texas Health Science Center
Houston, TX, USA

Abstract—Genomic profiling information is frequently available to oncologists, enabling targeted cancer therapy. Because clinically relevant genomic information is rapidly emerging in narrative data sources such as biomedical literature and clinical trials documents, there is a need for text mining technologies to support targeted therapies. In this talk, we will present two projects about developing text-mining tools to enable personalized cancer therapy, including 1) to identify

molecular effects of drugs in biomedical literature, and 2) to create a knowledge base of cancer treatment trials with annotations about genetic alterations. We believe such tools would be valuable for physicians and patients who are seeking information about personalized cancer therapy, thus facilitating their decision making.

Keywords— *text mining; NLP; precision medicine*