

Title: Pathology Informatics for Data Integration in Healthcare

Abstract: Pathology informatics has spawned investigations in a variety of fields, machine learning, spatial modeling and integrative bioinformatics. In this talk, we will briefly review these tools in the context of motivating problems from oncology --- studying the interplay between radiology-derived phenotypic measurements and molecular pathology; as well as with image analytics from H&E slide images. We will discuss some challenges in the development and deployment of these tools and also hypothesis generation paradigms for biological investigation.