

**Indiana University-Purdue University  
Indianapolis**  
**Department of Mathematical Sciences**

STATISTICS SEMINAR

12:15pm—1:15pm, Tuesday, February 05, 2019  
LD 265

**Speaker:** **Zhi Huang**  
*School of Electrical and Computer Engineering, Purdue University*

**Title:** **Playing around with Deep Learning in Bioinformatics domain**

**Abstract:**

This talk is 3-folded: First, I would like to introduce the basic rationale of the neural network and deep learning. Second, I will introduce various tasks that were handled by deep learning models, such as regression, classification, and dimensionality reduction. Third, I would like to introduce how to bridge the relationship between deep learning and bioinformatics research. A neural network integrated with Cox proportional hazard model will be introduced to accurately predict patient's survival based on transcriptomic data (gene expression) and other omics data type.