Research Opportunity

Preceptor Name: Cui Tao, PhD
Campus: UTHealth Houston

Overall grant or other program name:
An integrative ontology-based tool for novel cancer drug therapy

Briefly describe your overall research program:
Aim1: To create an integrative knowledgebase for cancer relevant drugs, genes, SNPs, and pathways. We will extract data from heterogeneous databases and resources and use formal ontological representation to model relevant concepts, classes, individuals, and relationship among them.
Aim2: To develop rules for inferring new drug candidates for cancer therapy.
Aim3: To evaluate the drug candidates by literature review.

Name of specific project in which a student will participate:
Ontology-based cancer drug repurposing

Specific duties of student:
Data collection, curation, and integration for cancer relevant data
Data retrieval interface implementation

This would be a good fit for someone with what major or interests?
Students with database and Java programing skills will be working on the implementation of the tool.

Students with biology background will be working on data collection and validation.

Who would serve as preceptor during your absence (name and credentials, please)?

NB: you may submit as many research opportunities as you like, but to be competitive you should probably limit yourself to no more than three.

E-mail your finished form(s) to cpritsummer@uth.tmc.edu