**BIOL6930/Fall 2018**

**Ling Wang**

**Assignment: Project title and Abstract**

**Title:** Identify the differential gene expression in cephalic glia cells of the *hlh-17* mutant in *Caenorhabditis elegans*

**Abstract:** In *Caenorhabditis elegans*, the Olig ortholog HLH-17 strongly and predominantly expressed in the astrocyte-like cells of the cephalic sheath that protects and supports the dopaminergic neurons in hermaphrodites and males. Dissecting the glia cell identity and the regulation of glia cells helps to design effective treatments for glia-associated diseases. RNA-sequencing will conduct to determine the unique transcriptomes of CEPglia cells, and further to dissect the role of *hlh-17* on glia type determination and maintenance.