BCHM 421/422 – 2018/2019

**Project Outline:** The goal of our work is to understand the contribution of circadian rhythms to nociception (or painful stimuli). In this project, we hope to isolate and profile sensory neurons at specific times of day.

**Supervisor:** Dr. Nader Ghasemlou

**Project Title:** Profiling circadian rhythms in sensory neurons

**Keywords (3-5):**
1. Circadian rhythms
2. Pain
3. Flow cytometry
4. Microarray
5. Bioinformatics

**Project Goals:** The goal of this project is to 1) isolate single-cell populations of sensory neurons from the dorsal root ganglia of mice and 2) carry out microarray analysis of these cells.

**Experimental Approaches:** The student will use surgical techniques and flow cytometry to isolate sensory neurons from the dorsal root ganglia of mice; they will then carry out bioinformatics to assess changes in gene expression.

**References:**
