Course Description: This course will cover recent developments in biochemistry and molecular biology with relevance to human disease. Short faculty lectures will be combined with in-depth discussion of research papers. Planned topics include signaling pathways and oncogenes, biochemical mechanisms of inherited retinal degeneration and neural regeneration, modeling of biochemical mechanisms with human stem cells, and regulation of gene expression by microRNAs and chromatin modifications, among others.

Intended audience: Graduate students or advanced undergraduates (with permission of instructor) with a wide range of interests in biochemistry and medicine.

Format: This course is a literature based discussion with an emphasis on reading and analyzing primary research papers. Grading is based on short, weekly problem sets, class participation, and a short in-class presentation at the end of the term.

Additional information: Meets Fridays, 1-3 pm, fall semester; 2 credits

Course Directors: Anne Vojtek and Uhn-Soo Cho