

MCB 529 sxn HAD: Topics in Health and Disease (Spring 2019)

Information and Policies

This course will explore recent advances and current challenges in the fields of health and disease. Critical assessment of journal articles and introduction to modern experimental techniques will feature prominently. This will be a largely discussion based course with interspersed lectures and student presentations. Topics will be chosen based on the requests of the students, but can include cancer, endocrine and developmental disorders, aging and modern pharmacology. This course would be of interest to graduate students in any life science.

Lecture time: Thursdays, 2pm-3:20pm except for University-designated holidays.

Lecture location: Burrill Hall 501

Your final grade will be in letter grade (with plus/minus). It will be determined by your mean performance as weighted below:

- Written assignment (30%)
 - A relevant topic will be selected by the student and approved by the instructor. In the format of a written report, the student will critically evaluate the recent literature on the selected topic proposing future directions and experiments. The written assignment will be due at the beginning of class on the first day of oral presentations. This date will be assigned within the first two weeks of class.
- Oral presentation (30%)
 - Each student will present a mini-lecture based on their written assignment, educating the class on their chosen topic.
- Class participation (40%)
 - Group discussion is an essential element of the course.

Total scoring above 90% or in the top third of the class guarantees an A, scoring above 80% or in the top two thirds of the class guarantees a B.

Instructors

Faculty	Office Phone	Office Address	Email Address	Office Hours
Dr. Erik Nelson*	244-5477	523A Burrill Hall	enels@illinois.edu	1-3 Wednesday
Dr. Nien-Pei Tsai	244-5620	423A Burrill Hall	nptsai@illinois.edu	1-3 Wednesday

* = course coordinator

Lecture Sequence

The topics outlined below are subject to change, depending on the interests of the students.

Date	Subject	Instructor
January 17	Introduction to Scientific Literature Questionable Ethics	Tsai (80 min)
January 24	Trinucleotide Repeats	Tsai (80 min)
January 31	Alzheimer's	Tsai (80 min)
February 7	Schizophrenia	Tsai (80 min)
February 14	Viral Infection and Cellular Host Response	Tsai (80 min)
February 21	Data Reproducibility	Nelson (80 min)
February 28	Cell Fate and Aging	Tsai (80 min)
	Introduction to pharmacology	
March 7	The Problem of Antibiotic Resistance	Nelson (80 min)
	Introduction to cancer and the tumor microenvironment	
March 14	Tumor Microenvironment – Linking Inflammation to Recurrence	Nelson (80 min)
March 21	SPRING BREAK	Nelson (80 min)
March 28	Immune Therapy and Antibiotics?	
April 4	Drug Development Old school on steroids	Nelson (80 min)
April 11, 18 and 25	Student Led Presentations Students will present a mini-lecture critically evaluating a topic of their choice, and approved by instructor.	Nelson/Tsai (80 min each)