

Neurobiology of Disease (NBI 762)**Spring 2018****Day/Time**

Wednesday/Friday 2-4 pm

Location

Bryan Research Building (311 Research Drive), Room 301

Instructor

Jim McNamara, MD (jmc@neuro.duke.edu)

Teaching Assistant

Gwenaëlle Thomas (get11@duke.edu)

Office Hours

By Appointment

Prerequisites

This course will build upon biology and neuroscience concepts. It is recommended, but not mandatory, that students complete [neuroscience bootcamp](#) or [concepts of neurobiology I](#).

Course Overview

This short course is open to neurobiology, psychology and neuroscience, and other school of medicine graduate program students. This course will expose you the **basic language, concepts, and techniques** used in the field of **clinical neuroscience**. We will study various psychiatric or neurological **disease mechanisms** by using peer reviewed journal articles and reviews. We have a teaching team of **physician scientists** who will lecture on their diseases of expertise. Some lecturers may use **clinical case studies** from real patients. Our featured physician scientist will present their research followed by a student orchestrated **journal club**. As a group, we will examine research questions asked, describe the methods and data, evaluate the benefits and limitations of applied techniques and technologies, and propose future directions. Each class will strengthen connections and concepts from previous lessons. This class will provide you with **critical thinking, analytical, evaluation, and discussion skills**.

Course Objectives

By the end of this course you will be able to:

- Describe data findings from **scientific figures**
- Present a scientific peer reviewed article in **journal club**
- Examine the pathology of at **least one psychiatric illness and neurological disorder**.

Required Reading

There are no required textbooks for this course. All required readings will be chosen by the featured physician scientist. You will receive your assigned readings at least three days before class.

Assignments and Grading

I look forward to our class discussions. In order to actively participate and contribute focused questions and commentary, students are expected to prepare before class by thoroughly reading assigned materials. Although I will upload all class materials online, **attendance is mandatory**. Students will be paired for a **journal club** presentation of a psychiatric illness or neurological disorder. A rubric will be provided and discussed in class.

Proposed Schedule

Date	Topic	Physician Scientist
January 3	Introductions and Organization Meeting	Jim McNamara, MD
January 5	Epilepsy	Jim McNamara, MD
January 8	Pain	Wolfgang Liedtke, MD
January 10	Huntington's Disease	Al LaSpada, MD, PhD
January 12	Autism Spectrum Disorders	Yong-Hui Jiang, MD, PhD
January 15	No Class: MLKJr Holiday	
January 17	Rett Syndrome	Anne West, MD, PhD
January 19	Movement Disorders	Nicole Calakos, MD, PhD
January 22	Dementia	Richard O'Brien, MD, PhD
January 24	Circuits and Mood Disorders	Kafui Dzirasa, MD, PhD
January 29	Amyotrophic lateral sclerosis (ALS)	Richard Bedlack, MD, PhD
January 31	Physician Scientist Panel Q&A	

Disability Statement

Students with physical or mental disabilities that need accommodations are encouraged to contact the Student Disabilities Access Office at 919.668.1267 or disabilities@aes.duke.edu. These resources will help you receive the accommodations you need. If you are comfortable, you may also contact me individually.

Title IX

Title IX are federal laws that prohibit sex discrimination in education, harassment, or violence. I want you to feel comfortable coming to me with issues you may be struggling with or concerns you may be having. Please be aware reporting requirements do not always allow for confidentiality.

For example, if you inform me of an issue concerning sexual harassment, assault or discrimination, I will keep the information as private, but I am required to bring it to the attention of the Office of Student Conduct for issues concerning another student, or the Office for Institutional Equity for issues concerning an employee.

You also have the right to contact these resources directly:

- Office of Student Conduct | 919-684-7336, conduct@duke.edu
- Office for Institutional Equity | 919-683-7336, oie.duke.edu

Academic Integrity

Much like Duke University, I value scholarship, accountability, and ethical learning. I expect you to commit to promote an inclusive learning environment and having academic integrity.

These means you will not:

- Plagiarize

- Cheat
- Behavior in a disrespectful or deceitful manner

Community Standards

We are all lifelong students that come with a variety of different experiences. We are not always going to know everything and that is okay. I aim to **empower all students** regardless of their race, ethnicity, gender, sexual orientation, ability, socioeconomic, first generation college, or immigrant status. I expect that we extend empathy, courtesy, and respect to each other.