

# Neuroscience Summer Academy Syllabus- 2024

## General Schedule:

- Lectures: 9:00-10:15 am / 12:30-1:30 pm
- Journal Club: 10:30 am- 11:30 am
- Neuroscience Labs- 1:30 pm-3:30 pm
- Neuroethics Series: 3:30 pm-4:30 pm

## Location:

LSRM Auditorium

Williams Building (Rm. 302, 303, 315, 316, 317, 318)

**Dry Lab:** Levin 111; **Wet Labs:** Leidy 101, 104, 117

Williams Building (Rm. 302,303, 315, 316, 317, 318)

**Lunch: 11:30-12:30 pm daily**

## Trip:

- **July 17<sup>th</sup>- Franklin Institute**

**Director:** Dr. Mary Ellen Kelly ([kellymek@sas.upenn.edu](mailto:kellymek@sas.upenn.edu))

	Monday- 8 <sup>th</sup>	Tuesday-9 <sup>th</sup>	Wed.-10 <sup>th</sup>	Thursday-11 <sup>th</sup>	Friday-12 <sup>th</sup>
<b>Morning Lecture</b> (LRSM AUD) (9:00-10:15)	<b>Program Welcome</b> (Dr. Kelly)	<b>Fundamentals of the Neuron/ Resting Potential</b> (Dr. Kelly)	<b>Pharmacology</b> (Dr. Kane)	<b>Drugs II Nicotine</b> (Dr. Kelly)	<b>Neuroanatomy I</b> (Dr. McLean)
<b>Break/Walking</b> (10:15-10:30)					
<b>Journal Club</b> Williams Building (10:30-11:30)	Journal Club	Journal Club	Journal Club	Journal Club	Journal Club
Lunch Block (11:30-12:30)		College Counseling w/Scholarship Students (Dr. Heerding)		College Counseling w/Scholarship Students (Dr. Heerding)	
<b>Afternoon Lecture</b> (LRSM AUD) 12:30-1:20	<i>Neuroscience through the Lens of Epilepsy</i> (Dr. Kelly)	<b>Action Potential and Synaptic Communication</b> (Dr. Kelly)	<b>Drugs I Opioids</b> (Dr. Kane)	<b>Drugs III Cannabis and the Adolescent Brain</b> (Dr. Kelly)	<b>Neuroanatomy II</b> (Dr. Mclean)
<b>Neuroscience Lab</b> (1:30-3:30)	<b>Introduction to Labs/Memory Lab Part 1</b> (Dr. Kelly) Levin 111	<b>Build your own Neuron/ Action Potential PlayDoh Simulation</b> (Dr. Kelly) Levin 111	<b>Addiction Documentary (PBS)/Start Infographic</b> (Dr. Kelly) LRSM Aud.	<b>Make an Infographic Topic: Neuro Public Health Topic</b> (Dr. Kelly) Levin 111	<b>Cranial Nerves and Autonomic Nervous System</b> (Dr. Kelly) Levin 111
<b>Neuroethics Club</b> (3:30-4:30)	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>

	Monday- 15 <sup>th</sup>	Tuesday-16 <sup>th</sup>	Wed.-17 <sup>th</sup>	Thursday-18 <sup>th</sup>	Friday-19 <sup>th</sup>
<b>Morning Lecture</b> (LRSM AUD) (9:00-10:15)	<b>Auditory System</b> (Dr. McLean)	<b>Visual System I</b> (Dr. McLean)	<b>Olfaction</b> (Dr. Schmidt)	<b>Intro to Monkey Island</b> (Platt Lab Group)	<b>Zebrafish and Decision Making</b> (Dr. Jain)
<b>Break/Walking</b> (10:15-10:30)			Bus To Franklin Institute		
<b>Journal Club</b> Williams Building (10:30-11:30)	Journal Club	Journal Club		Journal Club	Journal Club
Lunch Block (11:30-12:30)					
<b>Afternoon Lecture</b> (LRSM AUD) 12:30-1:20	<b>Touch and Pain</b> (Dr. McLean)	<b>Visual System II</b> (Dr. McLean)		<b>Studying Neuroeconomic in Non-Human Primates</b> (Dr. Jiang)	<b>The Neuroscience of Birdsong</b> (Dr. Schmidt)
<b>Neuroscience Lab</b> (1:30-3:30)	<b>Sheep Brain Dissections</b> (Dr. McLean) Leidy 101,104,117	<b>Sensation and Perception/Cow Eye Dissection Lab</b> (Dr. McLean) Levin 111/Leidy 101,104,117		<b>Lie Detection/Galvanic Skin Response</b> (Dr. Hipolit) Levin 111/Wet Lab Leidy 104	<b>Taste Lab/Franklin Trip Discussion</b> (Dr. Kelly) Levin 111
<b>Neuroethics Club</b> (3:30-4:30)	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Return 4:30 pm</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>

	Monday- 22 <sup>nd</sup>	Tuesday-23 <sup>rd</sup>	Wed.-24 <sup>th</sup>	Thursday-25 <sup>th</sup>	Friday-26 <sup>th**</sup>
<b>Morning Lecture</b> (LRSM AUD) (9:00-10:15)	<b>Neuronal Development</b> (Dr. Hipolit)	<b>Learning and Memory</b> Part I (Hipolit)	<b>Sex and Hormones Part I</b> (Dr. Flanagan-Cato)	<b>Pregnancy and the Brain</b> (Dr. Been)	<b>Student Journal Club Presentations</b>
<b>Break/Walking</b> (10:15-10:30)					
<b>Journal Club</b> Williams Building (10:30-11:30)	Journal Club	Journal Club	Journal Club	Journal Club	<b>Student Journal Club Presentations</b>
Lunch Block (11:30-12:30)					
<b>Afternoon Lecture</b> (LRSM AUD) 12:30-1:20	<b>The Neuroscience of Moral Decision Making</b> (Dr. Hipolit)	<b>Learning and Memory Part II</b> (Dr. Hipolit)	<b>Sex and Hormones Part II</b> (Dr. Flanagan-Cato)	<b>Academy Wrap-Up</b> (Dr. Kelly)	<b>Student Journal Club Presentations</b>
<b>Neuroscience Lab</b> (1:30-3:30)	<b>Memory Lab</b> (Dr. Hipolit) Levin 111	<b>Recording from Crickets Part I</b> (Dr. Wengert) Levin 111/Leidy 101,104, 117	<b>Recording from Crickets Part II</b> (Dr. Wengert) Leidy101,104,117	<b>Recording from Crickets Part III</b> (Dr. Wengert) Leidy 101,104,117	<b>2 pm-3pm Student Panel (College and Grad School)</b>
<b>Neuroethics Club</b> (3:30-4:30)	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>Neuroethics Club</b>	<b>3- 4 pm UPenn NRSC Program Discussion (Dr. Flanagan-Cato/Dr. Schmidt)</b>