COGS 107B
Monday 2pm Section

Thomas Donoghue
What’s Going On?

Who?
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When & Where?
- Section: Mondays at 2 in CSB 005
- Office Hours: Monday at 3 in CSB 226

What / Why / How?
- Discussion / Review / Synthesis
- To Complement Lectures / Clarify Material
- Interactive, Bring Questions, Minimal ‘Lecturing’
- Try to pull ideas together / focus on big picture
- Sections are not graded
Schedule

Material will cover the previous week’s lectures + putting it into the bigger picture

Exams: Feb 2nd, Feb. 23rd, Mar. 16th

Jan. 16th – NO SECTION (Holiday)
Jan. 23rd – Intro Section
Jan. 30th – Midterm 1 Review / Questions
Feb. 6th – Normal Section
Feb. 13th – Section + Midterm 2 Questions / Review
Feb. 20th – NO SECTION (Holiday)
Feb. 27rd – Normal Section
March 6th – Normal Section
March 13th – Final Review / Questions
What is Systems Neuroscience?
Systems Neuroscience

The Study of the Function of Neural Circuits and Systems

Structure & Dynamics
Core Vocabulary

- Monism / Dualism
- Reflex
- Stimulus
- Nuclei
- (Electrical) Potentials:
  - Field, Equilibrium, Synaptic, Action
- Neuromodulator
- Afferent / Efferent
- Myelinated
- Analog / Continuous vs. Digital Discrete
- Cortical Layer
- Adaptation
Neuronal Potentials

- Synaptic
- Action
- Field
Levels of Analysis
Principles of the Week

1 - The Neuron Doctrine
   Cajal Vs. Golgi

2 - Law of Dynamic Polarization
Santiago Ramon y Cajal