COGS 107B

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Office Hours: (will change) right after in CSB114 1-3
Week 1

- Technically no section this week.

- You’re here so let’s get to know each other.
  - What is your year? Major/specialization?
  - What do you want to get out of the class?
  - Have any fun-facts you want to share?

- I will have limited office hours right after this in CSB 114 for those of you who are interested

- Any questions about the set-up of the class?
My background

- Undergrad at University of Michigan - GO BLUE!
  - Studied Neuroscience
  - Got into a basal ganglia electrophysiology lab (Berke Lab - now at UCSF)

- Worked for ~3 years as a lab manager in a molecular neuroscience lab
  - Hnasko Lab here at UCSD
  - Got to help publish 2 papers on glutamate/dopamine

- Now I work with Prof. Nitz
  - How does the hippocampal “cognitive map” form?
  - What representations do structures around it have?
Week 1 Material - Systems Neuroscience

- What is a system in the brain?
  - Do you have any examples?

- Transformation of information & Across fiber coding

- Frames of reference
  - Whole brain as a system & Hippocampus as a system
Week 1 Material - Neurons, How do they work?

- Santiago Ramon y Cajal v Camillo Golgi
- Dynamic polarization
- How can we ‘listen’ to the language of neurons?
Week 1 Material - Representations & Reception

- Neurons “like” certain things in the real world
  - When experiencing OR when imagining
- Breaking things into parts
- Combining parts in clever ways
- Information content
Thank you!

- Next week will be a full section
- Email me! You are paying for this, make it your own
  - What will help you engage with the material better?
- See you all next Friday 1/19/2018