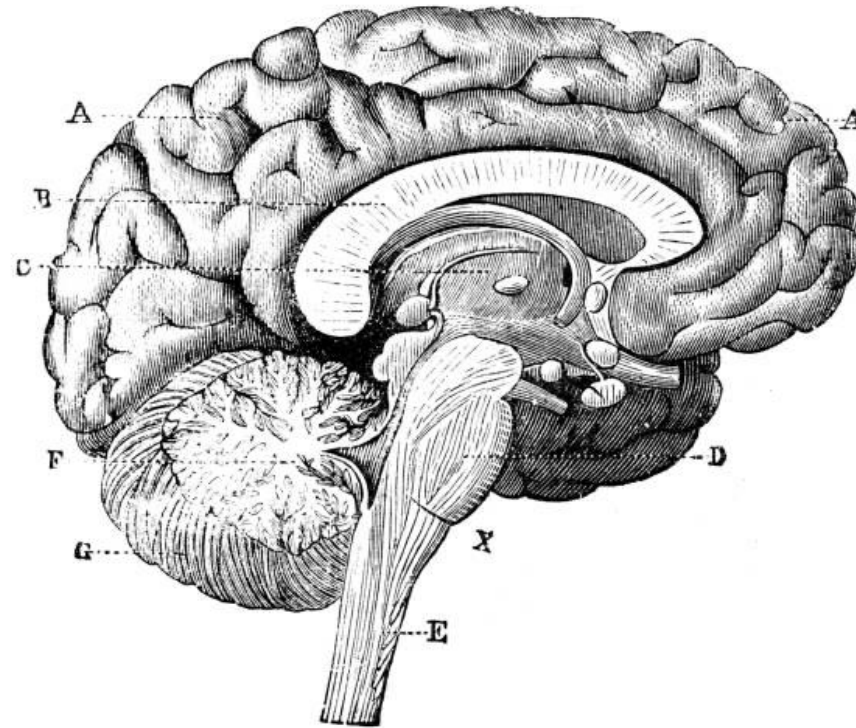# Welcome! And introduction
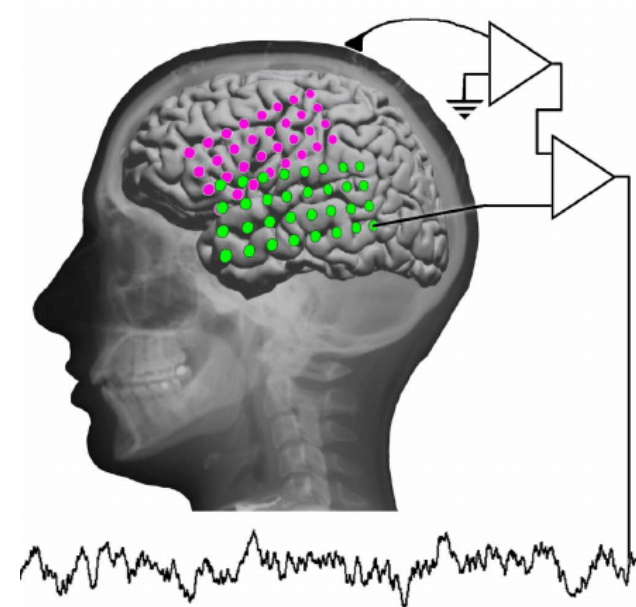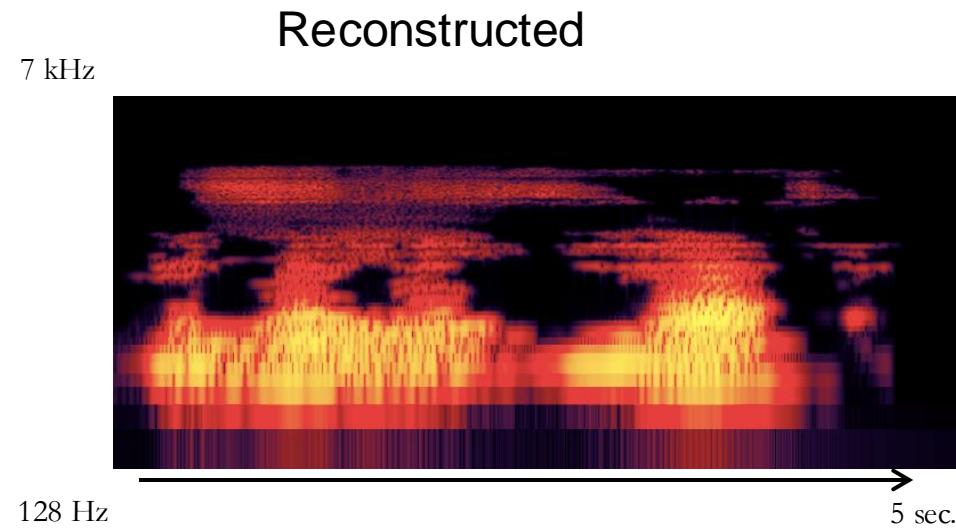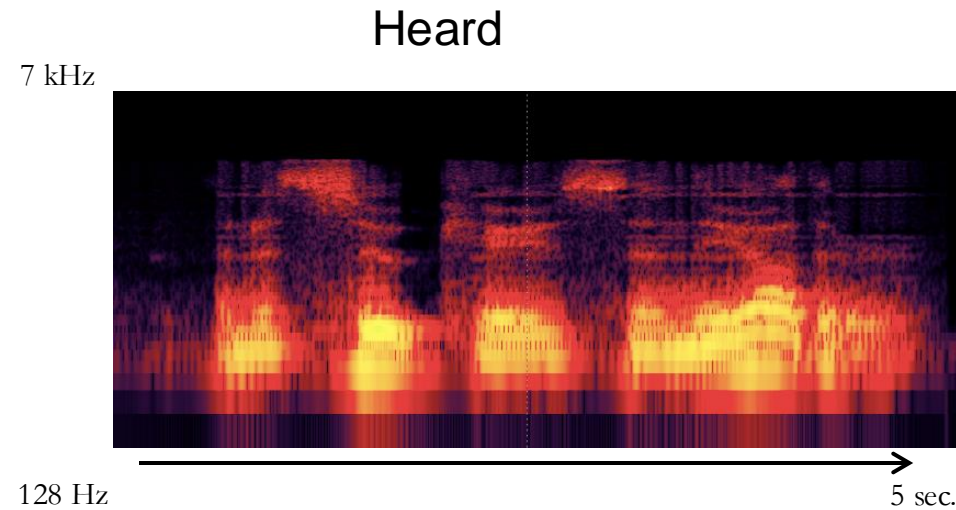
Introduction

- What will we learn?

- Who are we?

- How will we learn?

What will we learn?

Heard

7 kHz

128 Hz → 5 sec.

Reconstructed

7 kHz

128 Hz → 5 sec.

From Robert Knight, UC Berkeley

What will we learn?

What cognitive neuroscience is!

- The scientific study of brain processes underlying human mental processes - *cognition*

- What is the relationship between these cognitive processes and the activity of brain networks and their hubs?

What will we learn?

- How to read and critically evaluate scientific literature

- How to understand and evaluate primary methods currently used to understand the relationship between the human mind and brain

- About some questions the field has addressed, and what the data (to date) tells us about the answers
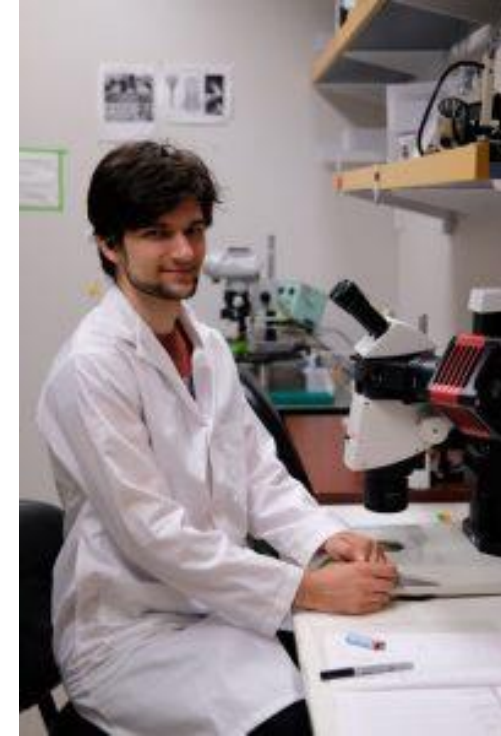
Who are we?

Brandon Forys (he/him)

Instructor

Jacob Gerlofs (he/him)

Teaching Assistant

Nikolas Kokan (he/him)

Teaching Assistant

Who are we?

Brandon Forys (he/him)

Instructor

- Intro: I'm a PhD student working with Dr. Rebecca Todd and Dr. Alan Kingstone.

- Interests:
  - How and when we deploy cognitive effort
  - Developing fMRI analysis methods
  - Open science
  - Outside the lab, I enjoy reading science fiction and fantasy, exploring bookstores, and travelling.

Who are we?

**Jacob Gerlofs** (he/him)

Teaching Assistant

- Intro: PhD student working with Dr. Alan Kingstone. I study social cognition and attention.

- Interests:
  - How our cognitive/attentional systems operate in social environments.
  - Outside the lab, I enjoy travel, photography, karate, skiing, hiking, weight lifting, rock climbing, hockey, film, and salsa dancing.
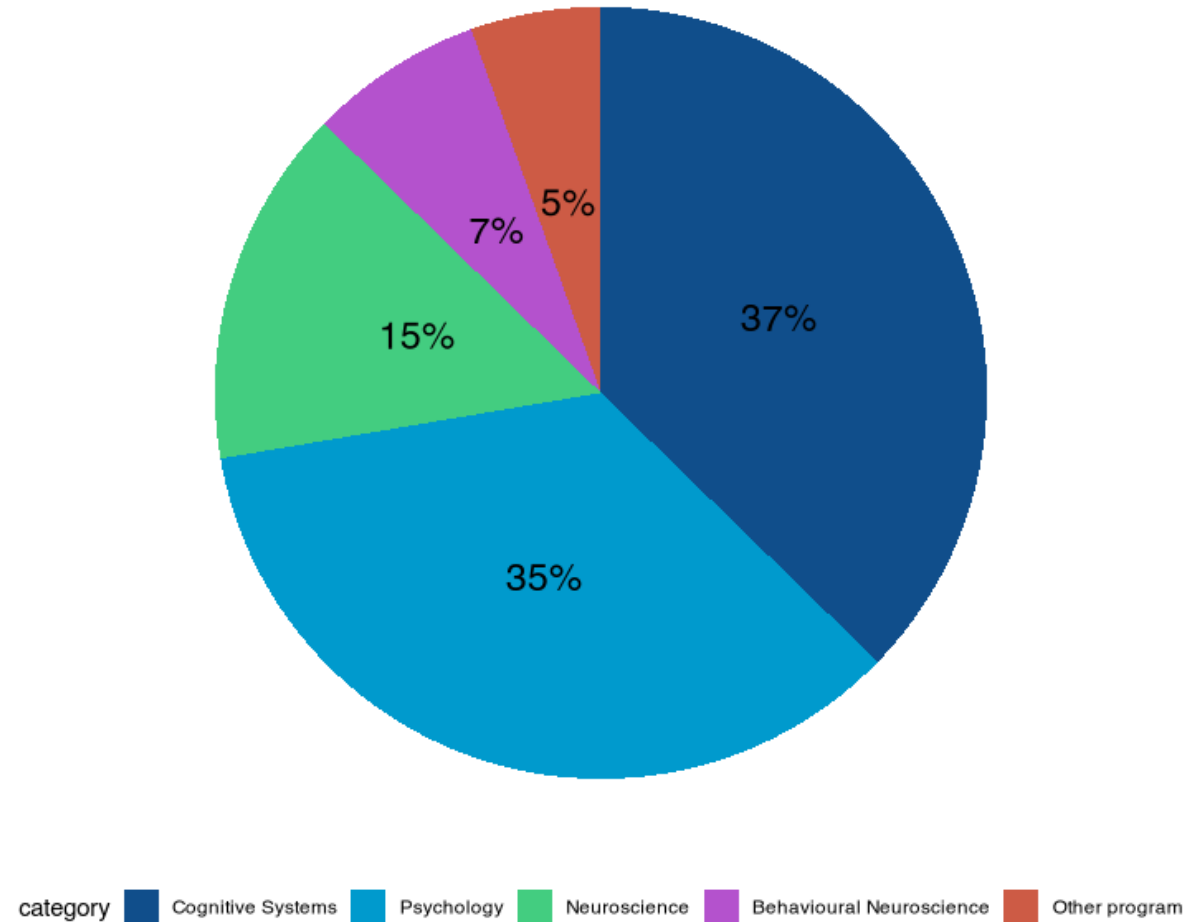
Who are we?

Nikolas Kokan (he/him)

Teaching Assistant
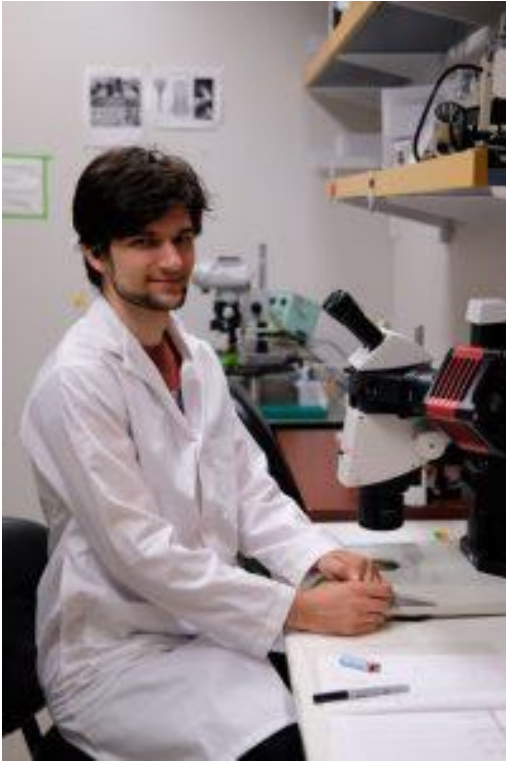
- Intro: I am a fourth year PhD student studying the effect of timing on simple learning (habituation) in the microscopic round worm C. elegans.

Who are you?

Distribution of Programs of Study

37% Cognitive Systems
35% Psychology
15% Neuroscience
7% Behavioural Neuroscience
5% Other program

category: Cognitive Systems · Psychology · Neuroscience · Behavioural Neuroscience · Other program

What will we aim to do?

- Introduce
    - Questions that drive research in cognitive neuroscience
    - The main methods that we can use to answer them

- Teach you
    - How to read scientific papers

- Engage you in
    - Active and critical discussion of current research and controversies in the field

How will we learn?

- **Lectures** and the **textbook:**

Richard Passingham (2016). *Cognitive Neuroscience: A Very Short Introduction.*

- Oxford University Press. Available at the Bookstore and the library. Also available as an ebook!
- ISBN: 9780198786221
- Highly readable, offers background info

- **Scientific papers:** Posted on Canvas (Modules -> Course Readings)
  - I'll post tips on reading the papers
  - Read these tips – they'll help you do well on exams!
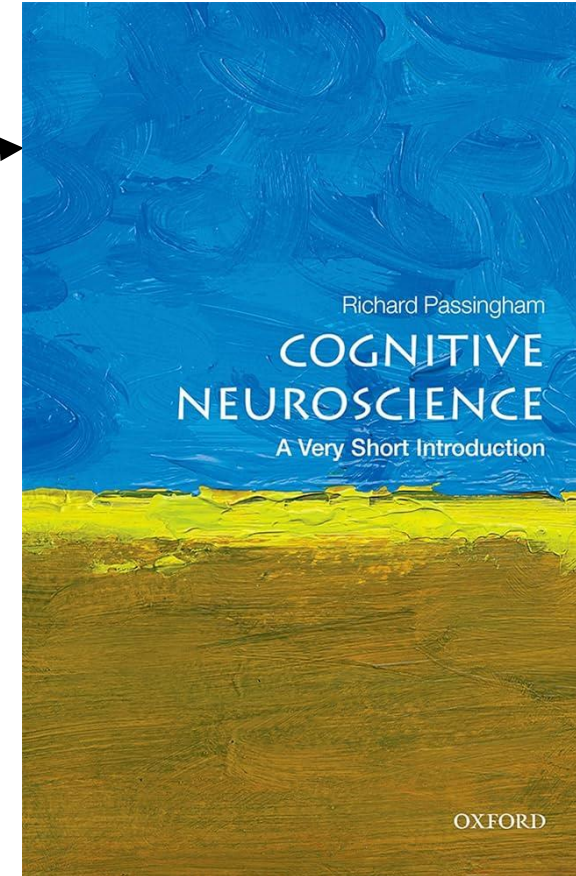
How will we learn?

Exams:

- **Neuroanatomy quizzes**: 2% of your grade
  - Online, based on Canvas module, multiple attempts
  - A primer on the brain's key structures – important to understand papers in this course!

- **3 midterms**: 20%, 30%, and 30% - the one you do worst on is weighted the least
  - All midterms are in person, pencil and paper
  - Based on in-class materials and assigned readings
  - Mixture of multiple choice and short answer

How will we learn?

Final presentation (15% total):

- Groups of 2 or 3 (with solo option)

- Choose a recent cognitive neuroscience paper (from list of approved journals) present the highlights

- Creative format encouraged! (podcast, video, artwork, poster, poetry)

- Last 2 weeks of class

Participation:

- Discussion question: due **March 15th**

- Multiple choice exam questions (yes, you get to make them!): Due 1 week before midterms 1 and 2

Extra credit!

- You can participate in psychology studies for up to **2** extra credit grade points via the Psych Department Human Subject Pool!

- You can also do a library report for those extra points
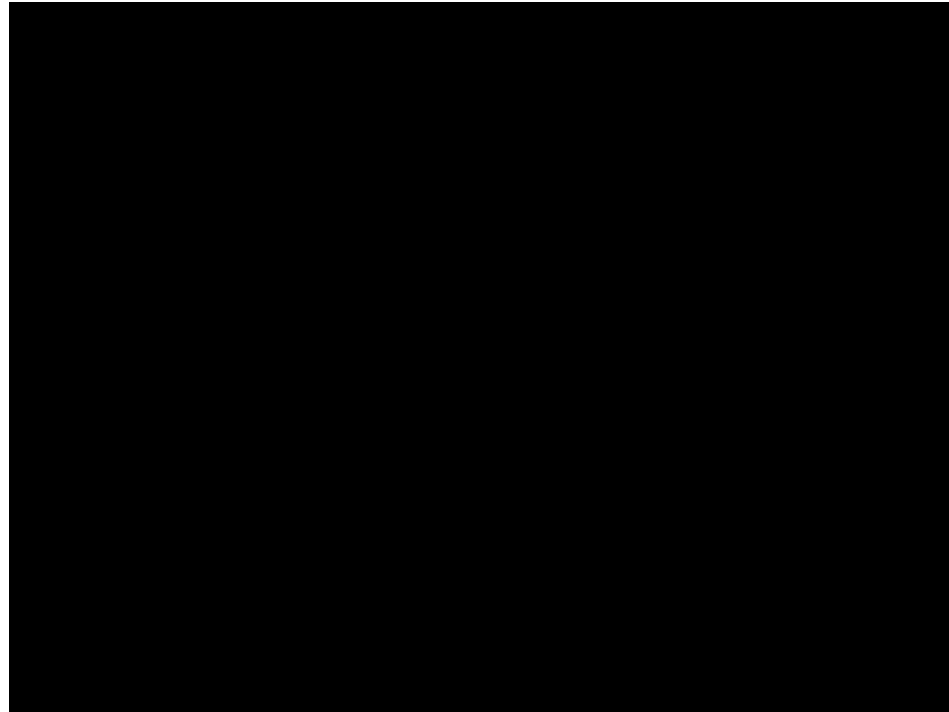
  - Details in syllabus

Support is available!

- At this link on the Canvas page for the course:

https://psych.ubc.ca/undergraduate-wellbeing/

PSYC 365: Class 1

Questions? Anyone?

See you next class!

PSYC 365: Class 1