Welcome Cohort of 2024!

Mount Sinai

Center for Computational Psychiatry

Introductions

Name

School

Lab / Mentor

Main interests

What are you most excited about and/or want to learn this summer?

Computational Psychiatry & Neuroscience

Class 1	Foundations of Neuroscience
Class 2	Brain Development Across the Lifespan
Class 3	From Classical to Computational Psychiatry
Class 4	Research Methods in Computational Psychiatry and Neuroscience
Class 5	Movement & Sensory Processing
Class 6	Memory & Learning
Class 7	Decision-Making
Class 8	Metacognition
Class 9	Emotions and Social Decision Making

Computational Psychiatry & Neuroscience

Class 1	Foundations of Neuroscience
Class 2	Brain Development Across the Lifespan
Class 3	From Classical to Computational Psychiatry
Class 4	Research Methods in Computational Psychiatry and Neuroscience
Class 5	Movement & Sensory Processing
Class 6	Memory & Learning
Class 7	Decision-Making
Class 8	Metacognition
Class 9	Emotions and Social Decision Making

What if these processes go awry?

Computational Sciences & Python

Class 0	Introduction / Installation
Class 1	Jupyter Notebooks
Class 2	Python Basics
Class 3	Data Structures
Class 4	Data Processing
Class 5	Data Visualization
Class 6	Numerical Operations
Class 7	Hypothesis Testing
Class 8	Linear Modeling

The Research Project

By now you should have …

- Met your mentor and talked about potential projects.
- Think about your project and do some reading if possible.

The project should …

- Interest you and your mentor.
- Be doable in 8 weeks (2 weeks part-time).
- Be relevant to computational psychiatry and/or neuroscience.
- Not rely on newly collected data.

If you have questions or need support, please let us know!

Timeline & Core Dates

Weeks 1 & 2:

- Daily sessions on **Psychiatry & Neurosciences** (10:00 AM/9:30 AM - 11:00/10:30 AM) and **Computational Sciences/Python** (1:30 PM/11:30 AM - 3:00/1:00 PM)
- Specific times will be on Slack
- **Guest lecture** by **Dr. Matan Mazor** (Oxford University) on **Ethics** (July 10th, 9:30 AM - 10:30 AM)

SPICE Social (July 12th, 3:00 PM - 5:00 PM)

Weeks 3 - 8:

- Research project (timing depends on agreement with mentor)

Final Presentations (August 20th and August 21st)

Expectations

Active Engagement

- Participate fully in the crash course, lectures, discussions, and tutorials.
- Collaborate with your peers.
- Be present at the Center for Computational Psychiatry.

Collaborative Spirit

- Maintain professional and respectful interactions.
- Foster a collaborative and inclusive learning environment.
- Seek support from co-directors when needed.

Focused Research

- Partner with your mentor to define a compelling research question.
- Dedicate time outside of class to your project.
- Communicate openly with your mentor.

Showcase Your Work

- Prepare a presentation highlighting your research findings.
- Focus on background, motivation, methods, and results (if available).
- Present your work on August 20 or 21.

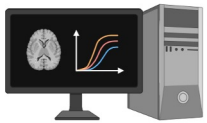
Overview Expectations: https://center-for-computational-psychiatry.github.io/course_spice/expectations.html

Outcome

Basis in Neuroscience & Psychiatry

Basis in Computational Sciences & Python

Practical Research Experience



Science Communication Experience

Resources & Announcements

- Check **Slack** for announcements and updates.
- Find lecture slides, exercises and schedule online.
- If you need a **laptop** please let us know!
- Please use the space at the center to engage in group work, class preparation and your research project.
- If there are meetings in the seminar room, please make it available.
- Feel free to use the kitchen.
- Center is open from **9am-5pm** on work days.
- Shuttle going from Mount Sinai East (Icahn School of Medicine, in front of food trucks)
    - 9:30am
    - 5:20pm

Wifi: Select Mount Sinai Guest

Bathroom Codes:

Women: 6789

Men: 0234

Questions?