**Neuroscience Graduate Group – First Year Journal Club (2024-2025)**

**Faculty Co-Directors.**

* Erica Korb, Ph.D., ekorb@pennmedicine.upenn.edu
* Tim Machado, Ph.D., Timothy.Machado@Pennmedicine.upenn.edu

**Time / Location.**

* Monday, 9:00am – 9:45 pm, Journal Club discussions, Barchi Library
* Wednesday, 4 – 5 pm, MINS seminar, Barchi Library
* CHECK the schedule and add to your calendar now. Not every week has a MINS seminar and there a few weeks we don’t have class.
* MINS Seminar speakers, faculty “Host” mentors, student presenter schedule (not posted until signups are available), and Journal Club papers are at:

o <https://www.med.upenn.edu/ngg/first-year-journal-club.html>

**Course Description and Overview.**

The goals of this weekly course are: (1) to learn how to read and critique research papers; (2) to learn how to present a polished, professional summary of a recent research paper; and (3) to acquire some background information and context to more fully appreciate research seminars in the MINS Seminar Series.

Each **Monday** session will consist of a 45-minute presentation and discussion of a research paper. Some of these classes are related to that week’s MINS Wednesday seminar. The faculty member who is hosting that seminar speaker will be the mentor for the week (see below) and will attend the Monday class to help answer questions and provide feedback. Other classes are focused on a paper from a UPenn faculty. For these weeks, the faculty member whose work is featured will be the mentor and will attend the Monday class to help answer questions and provide feedback. **Wednesday** sessions consists of attending the one-hour formal MINS seminar by faculty invited from other institutions to speak about their work. Note that MINS seminars do not occur every week. Attendance at both the Monday and Wednesday sessions is required.

Papers are posted on the web at the Neuroscience Journal Club site (*see website listed above*). Each student who is not presenting is required to read and be prepared to discuss the paper and answer the assigned questions (see below).

One research papers will be presented during each Monday session. Sometimes an optional second paper or review article is provided for context for those interested in the field, but is not required reading. Students will be able to sign up for a session that works for them. Please look for an email with a link for signups from the directors.

Attendance/absences: if you need to miss class for any reason (personal, attending a conference, etc) then please email Erica and Tim to let us know the date(s) you will not be able to attend. Even if you miss class you must still send us your answers to the questions associated with that week's papers on time as usual.

**Guidelines for Monday Journal Club meetings**

**Presenters.**

1. PRESENTATION STYLE / STRUCTURE: The weekly designated presenters will format their PowerPoint presentations and lead the class discussion as follows: include slides on the relevant background, objectives, slides of individual figures, overall conclusions, one major strength and one major weaknesses of the study, and future directions. Following your presentation or throughout the presentation, your other main job is to help lead a discussion amongst the class. We recommend having some questions prepared including asking the class for other strengths and weaknesses they identified and their other ideas for future directions. Another great option is to have some questions posed throughout the talk to encourage discussion as you present the paper. Please also be prepared to answer questions about the content of the paper if your peers do not understand the data figures or methods.
2. TIMING: Each presenter should plan a 45-minute presentation/discussion. A nice balance is about 25 minutes of presentation, and the remainder dedicated to discussion and questions. If questions and discussion occur throughout the presentation you can simply use the full 45 minutes for a mix of presenting the figures and for leading discussion. One of your jobs is to manage the time effectively. Importantly, you do not have to exhaustively cover every figure and supplemental panel in your presentation. Think about what information needs to be presented to lead a productive conversation about a paper that everyone in the class will have already read.

1. HOST/MENTOR: You can meet with your faculty Host/Mentor to discuss your respective paper assignment and/or to prepare your presentation. Faculty members are very busy – so schedule your meetings with the faculty mentors at least *2 WEEKS IN ADVANCE*. Please come to these meetings having fully read the paper and its methods, put together your presentation to the best of your ability, and have a list of specific topics/questions to discuss with your mentor. Please treat these interactions as a professional and collegial meeting. Your mentor can also listen to a formal run-through of your presentation. Occasionally a faculty member is not available to attend the class or meet with the student in which case, we instead have a senior member of the faculty member’s lab take their place. Please let the Course Directors know if you cannot get in touch with the Faculty Host/Mentor and we will assist with communications.

1. FEEDBACK: Each presenter will receive comments about their presentations from the faculty mentor and course director(s) at the end of class. Please plan to stay ~10-minutes after class on the day of your presentation. You will also receive feedback from your classmates (see below).
2. You do not need to complete the weekly assignment on the week you present a paper.

1. ALTERNATIVE PAPERS: In rare cases, the students presenting, and their faculty mentor may decide to change one of the papers to be presented and read by the class. In this case, you should notify all students and faculty no later than the preceding Monday and send the course directors a PDF of the paper(s).

**Non-presenters.**

We ask that you spend a minimum of 1-hour reading each of the assigned papers prior to class. For each class, the non-presenters must prepare the following:

1. WEEKLY ASSIGNMENT: Prepare 4 very brief paragraphs (each answer should be 3+ sentences) answering the following questions:

* 1. *What was the main take-home message of the paper?*
	2. *What part did you like best and why?*
	3. *What part did you find the least convincing or the most confusing and why?*
	4. *What would you propose to do next to follow up on the paper’s findings?*

Your document should not exceed one page (must be typed, not handwritten). These assignments should be emailed to NGG.journal.club@gmail.com before the start of class. When appropriate, these will be used as a basis for discussion following the paper presentation. If the student-lead discussion wanes at any point, the course directors will select a few answers and have the authors explain them to the class. ASSIGNMENTS MUST BE SUBMITTED BEFORE CLASS STARTS TO RECEIVE CREDIT. See late policy below.

1. CLASS DISCUSSION / PARTICIPATION: The expectation is that this is a student-led/volunteer discussion-based class. Part of the course requirement to receiving a passing grade is to participate regularly. You can ask questions about parts of the paper that is confusing, critiques a paper, discuss future directions and how you would continue this work or what you would have done differently. We expect that all students will participate in nearly every class.
2. FEEDBACK: A major goal of the class is to learn how to present scientific findings effectively. We ask that you provide feedback to your classmates so that everyone learns what was effective and what wasn’t in their presentation. Learning to provide constructive feedback on someone else’s work is also an important skill. With that in mind, you will be required to provide two sentences containing specific feedback to each presenter: one sentence about something they did well, and one sentence about something they could improve. Generic feedback that could be given to any presentation constitutes an incomplete assignment. Feedback will be anonymous but regardless we’d like to remind you to be polite and considerate when making suggestions for improvements. You can submit your feedback <https://forms.gle/c6MzP5Ty8fDp1dNo8>. We will compile feedback and send to presenters following their presentation. You must provide feedback on each presentation unless you had an excused absence. See late policy below.

**Wednesday Seminar sessions.**

Attending the MINS seminar is a requirement of the class. Please let us know in advance if you have a conflict that can’t be resolved. If too many sessions are missed, there are alternate seminar series that we will identify for you to attend and we will have you complete an additional related assignment. Everyone is encouraged to ask questions of the seminar speaker. These can be questions that were raised at the Journal Club or ones you think of during the seminar itself.

**Evaluations.**

Students will receive oral and/or written feedback on their journal club presentation from the faculty mentor and/or Co-Directors. In addition, the students will receive a grade at the end of the class, which is evaluated based on a student’s presentations (40%), participation in the student-led discussions (40%), and weekly written assignments (20%). A satisfactory evaluation for a total of two semesters is needed to complete this NGG requirement.

**Late Policy.**

For students *not* presenting, this class has two assignments each week: (1) answers to the questions about the paper due by the start of class each week (i.e. Monday by 9 AM), and (2) the feedback for the presenting student, due by midnight on the day of class (i.e. Monday night). If an assignment is not turned in on time, you will be sent a written warning and asked to do a makeup assignment. After receiving 2 warnings, if another assignment is missed, you will be assigned a much more arduous assignment to complete instead. All assignments (and makeup assignments if needed) must be completed to receive a passing grade in the class.