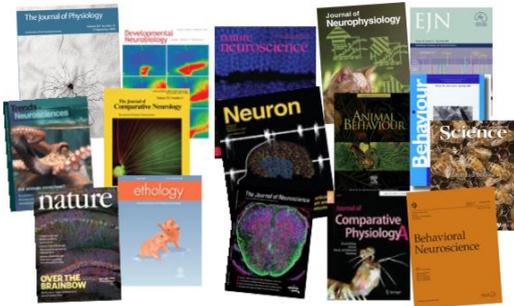


NEUROSCIENCE JOURNAL CLUB FOR UNDERGRADUATES



BioNB 4110
Neuroscience Journal Club
for Undergraduates
Carl D. Hopkins

Prof. Carl D. Hopkins

BioNB 4110

ID#17193

1 cr. (S/N)

Mondays: 4:30-5:30 358 Mudd Hall

<http://courses.cit.cornell.edu/bionb4110/>

Carl D. Hopkins cdh8 5-2259 263 Mudd Hall

HOURS: Tues 3-5 PM

Expected Outcomes

Outcome 1: Students will learn how to read, analyze, understand, and orally summarize a recent scientific paper in the subject areas of behavior and neuroscience.

Outcome 2: Students will learn about the structure of a typical research paper in neuroscience or behavior.

Outcome 3: Students will learn strategies for making effective oral presentations using slides and graphics and demonstrate creativity for engaging audience participation and discussion.

Outcomes

Outcome 4: Students will learn about the human and social dimensions of scientific research by learning about the authors, the institutions at which they work, the journals where the work is published, and the funding sources for research.

Outcome 5: Students will learn about electronic resources for searching and abstracting recently published papers in the scientific literature, and they will learn about various on-line support resources including encyclopedias, citation analysis services, review articles, news stories, and on-line resources.

Outcome 6: Students will learn to work in groups.

BIONB 4110

To receive credit for this course:

- Attend at least 10 out of the 12 presentations.
- Presentation of one research article
 - Pick article
 - Post article 1 week in advance
 - Make presentation in class
 - Post PPT on course website

Selecting an Article for Journal Club

Don't rush, pick carefully.

Shorter papers (3-5 pp; not 20 pp)

Contains original research (not a review paper)

reviews useful for background

note: some review papers present a conceptual point of view or concept (OK, but may be longer)

Science, Nature, Nature Neuroscience

News sections of Science, Nature

Cornell Chronicle reviews – Cornell specific

Search websites: Google scholar

Web of knowledge (web of science)

Faculty of 1000

Finding E-data base

go to library

<http://www.library.cornell.edu/>

Database search: Web of Knowledge

Web of Science

Faculty of 1000

Parts to the paper

Author

Institution

Journal

Introduction

Methods

Results

Discussion

References

Summarizing the Paper

- Provide some background (read the intro) carefully.
- Look up related papers
- Methods used
- Results in order
 - hypothesis, test, result, why significant
 - hypothesis, test, result, why significant
- Ripping figures from PDFs
- Copy figures to PPT one piece at a time.
- Add Discussion points for involvement of class

Engaging the Audience

Be original in your explanations: put the science in your own words. Use analogy, everyday examples. Models. Props.

Avoid jargon whenever you can. Make it accessible to others.

Think of questions to ask the group.

Read the Article in advance

- Look up unknown words using Google.
- Wikipedia – use with caution
- Scholarpedia
- On-line encyclopedias
 - Encyclopedia for Neuroscience (2009)
 - Encyclopedia for perception
 - Reviews
 - News

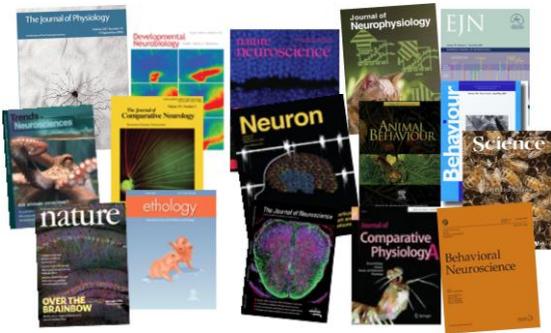
Visit with faculty to discuss

- background reading
- presentation strategy
- image management
- animations

Supplement Materials

- Read and review
- Video and other materials of interest
- More data

Neuroscience/Behavior Journals



See also: http://psychology.wikia.com/wiki/List_of_neuroscience_journals

More journals

http://redwood.berkeley.edu/i-stevenson/neuro_journals.html