

HWCOC Community Journal Club

Summary:

Monthly paper discussion

1. One (1) hour session divided into two (2) 30-minute presentations with Q&A
2. Two (2) student presenters are assigned with supervising faculty member(s)
3. Emphasis on critical reading and group discussion
4. Faculty involvement in paper selection and discussion moderation

Goals/Objectives:

1. Create an avenue for students to gain practice in critically reading scientific articles
2. Provide students and faculty/advisors a research network and the opportunity to build professional connections
3. Expand students' scientific repertoire to a greater diversity of research topics
4. Provide an opportunity for students to hone their presentation skills while building their resume
5. Learn about landmark articles that can define the way we will practice in the future
6. Create an archive of presentations for students to learn from based on interested fields

Platform:

HWCOC Community Journal Club leaders will advertise and assign student interest, make a schedule and work with HWCOC IT to plan and present virtual ZOOM meetings. The HWCOC Community Journal Club will adhere to CDC and FIU guidelines regarding in-person encounters and will transition to in-person meetings as guidelines change.

Participating Faculty:

All HWCOC Basic Science and Clinical Faculty

Faculty Responsibilities:

Student presenters (2) will identify HWCOC Faculty members, who will then:

1. Suggest papers/topics for students to choose from **or** advise on the student's paper choice
2. Meet with trainee to review slides within 1 week of presentation
3. Make every effort to attend meeting
4. Provide insights / expertise and facilitate discussion (as needed)

Student/Presenter Responsibilities:

The responsibilities of student/trainee presenters are:

1. Make a note of your assigned journal club date and your fellow presenter if applicable
 - a. Presenter is responsible for finding a replacement / switching time slots if not available on scheduled date
2. Meet with co-presenter if applicable
 - a. Choose paper from faculty provided list **or** suggest a paper
 - b. Divide up duties for presentation
3. Prepare presentation at least a week in advance (see guidelines below)
4. Meet again with co-presenter to compile and review slides if applicable
5. Meet with advising faculty member within one week of presentation to review slides
6. Have fun discussing the paper at journal club!

Guidelines for Journal Club Presentation

1) Background (~5-10 minutes)

- Reason you selected the paper
- Background info required to understand the paper
- The "knowledge gap"
 - Why was this research necessary? What was missing from common knowledge?
- Main question and hypotheses

2) **Methods** (~1-2 minutes, if necessary)

- Only if a new system is introduced (can also do this before the relevant figure)

*The following slides should be used as a tool for discussion, **not** as a formal presentation:*

3) **Figures / Data** (~5-10 minutes)

- Emphasize the key figures that advance the main questions of the paper and/or are required to understand the data. It is not necessary to review every panel in detail.

- Panels should be enlarged for clarity, and discussion should be encouraged.

- Address:

- o QUESTION asked in each figure
- o METHODS used to address that question
- o DATA INTERPRETATION
- o CONCLUSIONS
- o QUALITY OF DATA (if necessary)

For example, "The authors wanted to know if Protein X was expressed in B cells. To do so, they sorted B cells by FACS, prepared lysate, and assessed protein expression by Western Blot. The authors observed a 50kDa band in B cell lysate, but not in control T cells. Therefore, the authors conclude that Protein X is abundantly expressed in B cells. However, additional bands suggest that the antibody may not be highly specific for Protein X.

4) **Summary of key data** (~1-2 minutes)

- A model can be helpful to diagrammatically depict the main conclusions.

5) **Discussion: Critical analysis** (~2-3 minutes)

- Are the authors' claims / conclusions supported by the data in the paper?
 - o Look at the paper title, figure titles, abstract, concluding sentences – are these claims justified?
 - o Are there experiments missing from the paper that would have been helpful to advance the claims in the paper?
- How does the paper advance the field?
 - o Does it fill a “knowledge gap”?

6) **Future experiments** (~2-3 minutes)

- What additional questions are raised based on the findings of this paper?
- What follow-up experiments could be performed to answer these questions?
- Do the findings have broader scientific impact and/or translational potential?

7) **Appendix**

- If necessary, consider having an appendix of other relevant information that may help to add to the discussion

8) **Question and Answer Session**

- Please make sure to allow time for questions at the end of the presentation