



Journal clubs can play a valuable part of your time in grad school. They promote critical thinking skills, dissemination of scientific information, and generate novel research ideas. They allow faculty and students at varying stages of education to interact and discuss topics not otherwise discussed, on a level not otherwise approached. Additionally, the Club provides a forum to practice journal review skills, which are an essential component of the Comprehensive Exams in the spring, and of life as an epidemiologist.

For those new to the idea of presenting in a Journal Club setting, we present a few ideas on how you might find an article to present at Journal Club, and how to make the most of this opportunity overall. Most importantly, we strongly urge presenters to seek out an Epi faculty member to advise you in your selection, review, and presentation of an article.

1. Select an article: This may seem challenging considering how many options are before you! Consider articles on topics of interest to you that will generate conversation. Also consider topics discussed at the Journal Club meetings earlier in the year...variety is a good thing! Finally, you should also be aware of how much information the first year students will have covered in the Epi series by the time of your Journal Club presentation. Articles presenting straightforward methods might be better earlier in the year.

Once you've narrowed down the pool of options to a few articles, you might ask yourself: Was a new association (positive or negative) or novel method presented? Did the results contradict previous knowledge? Did the study make a major public health impact? Were many critical letters written to the editor in response to it?

2. Read the article: Based on what you are currently learning and what you already know, read the article with a critical eye. Consider hypothesis, study design, bias, methods of analyses used, etc. How can readers make sense of the numbers in the tables? Are the results reproducible? Does the discussion accurately interpret results, specifically in the context of existing knowledge? Are limitations and advantages discussed? How did peer reviewers respond? *What would you have done differently?* It's a good idea to keep the Guidelines to Reviewing Journal Articles (Symons/McClellan) on hand while you go through the article. (A pdf copy of these guidelines is available on Epi Journal Club e-reserves.)

3. Present the article: Be prepared to describe what you've read in a few sentences at the start of the Journal Club meeting. Even people that have read the article will appreciate a brief synopsis of the main points before you dive into more in-depth assessments. Give some thought to how you can present the article in a way that makes sense to your discussion

group and draw its attention. Remember: the group has a range of experience from Epi 1 to a lifetime of experience in epidemiology. Will handouts be appropriate? Maybe a few transparencies would help? Will there be something for everyone in the discussion? Finally, it's a good idea to prepare a few focused discussion questions rather than to present your article and wait for people to react to your thoughts. (e.g. Rather than saying, "I think it would have been interesting to see the results of x type of analysis," you might try "I thought these were some of the pros to using x type of analysis. What are some of the cons to x analysis? What method could have been better or just different?")

4. Summarize and process: Finally, did you and the group, learn some information and/or skills from the time spent on reviewing the article? That is, of course, the most important measure of learning: getting the most out of your time and efforts!

Journal club (seminar) presentation tips

I. Preparation

- A. Choose an interesting paper with presentable data
 - 1. Only one paper
 - 2. Research paper, not a review
- B. Make sure you understand the background
 - 1. Look up references
- C. Make sure you understand the experimental details
 - 1. Look up references
- D. Make sure visuals are easy to see - enlarge the figures and tables.
 - 1. Preview your slides in a real auditorium from the back of the room. If you can't read them easily, change them.
- E. Beware of Power Point
 - 1. Concentrate on content, not gloss.
 - 2. Use a minimum of slides.
 - 3. Avoid low contrast colors. White backgrounds work best.
 - 4. Avoid excessive text and avoid reading text to the audience. It is better to use minimal bullet points where necessary and elaborate by speaking directly to the audience.
 - 5. Avoid excessive "cute" animations or graphics. It's distracting.
 - 6. In general, concentrate on the audience, not on the slides. (See II-G)

II. Presentation

- A. Practice your presentation with a timer. 50 minutes for a one hour slot is optimum.
- B. No one understands anything. Start from the beginning, keep it as simple as possible, remember the big picture. It is far better to insult an arrogant know-it-all than to leave someone behind.
- C. At least half of your responsibility is to tell the audience what you are doing during the presentation, to guide them through the presentation.
- D. Present an outline of the talk.
 - 1. Better yet, put it on the board, or use it repeatedly during the talk to track your progress.
- E. Presentation drill
 - 1. Tell 'em what you're gonna tell 'em (outline)
 - 2. Tell 'em (body of the presentation)
 - 3. Tell 'em what you told them (concluding summary)
- F. Figure drill
 - 1. Hypothesis
 - 2. Experimental design & details - use written outlines
 - 3. Experimental data
 - 4. Interpretation
 - 5. Conclusions
 - 6. New Hypothesis - how it leads to the next experiment

7. CAUTION

- a. Don't show a figure unless you intend to actually address specific elements of the figure in detail
- b. If you are not going to discuss all of the data in a figure, tell the audience this and direct their attention to the things you *are* going to discuss.
- c. It takes the audience a long time to assimilate a figure. If you carefully point out all of the features of a figure as it is presented (abscissa, ordinate, symbols, columns, etc.) it helps them to understand it and it forces you to keep a reasonable pace.
- d. Make sure you understand the difference between data, interpretation and conclusions, and that you make these distinctions during the presentation.

G. Communicate with the audience

1. Make eye contact with everyone; concentrate as much as possible on the audience rather than the slides.
2. Ask for questions
3. Listen carefully when a question is asked. Often there is a lot of confusing wasted discussion that revolves around a misunderstood question. If you don't understand the question, ask for clarification.

H. Don't try to be humorous

1. Most likely you will just distract the audience and embarrass yourself
2. Usually the most humorous stuff is spontaneous or unintentional