Journal Club Tips
How to Give a Good Journal Club Presentation

Paper Selection

Step 1: pick a good paper. What makes a "good" J. Club paper? Papers that present an important concept in a clear manner. Many excellent papers are published but the data does not lend itself well to a clear presentation. Overall features:

- should clearly state WHY doing the problem in the first place (significance) – find in introduction, should be well referenced, shouldn't have to go to additional sources unless need to check specifics.
- should clearly state WHAT is the problem to be solved – see introduction.
- should clearly state HOW the problem is to be solved – see Experimental Procedures.
- should clearly state the CONCLUSIONS of the paper – see Discussion.

If you have been assigned a mentor for journal club, consult the mentor at least 2 weeks in advance and choose a paper that is interesting to your mentor. Before you prepare your JC presentation, read a good recent review on the topic.

General Presentation Tips

Never Assume...

- Never assume the audience understands the technique – always explain how each experiment is done and the limitations of the technique.
- Never assume the audience is thinking – always explain what question the experiment is going to answer, explain the conclusion of each experiment, the limits of interpretation and if the experiment answers the question.
- Never assume the audience is listening – at the end of your presentation, again present the problem or question, the minimum relevant pieces of data that answered the question, the conclusion and if the data supports the conclusion.
- If the paper focusses on a specific protein, it is important to look up some basic aspects of this protein family. You will invariably get questions about the functional domains, orthologs and homologs.

Make figures large enough to read. Re-label if necessary.

Organizational Tips

Identify the problem and place it in scientific context

- Present overall model that is being addressed and identify which part of the model the paper you are going to present is addressing (in other words, you are presenting the introduction to the paper even before you tell them what paper you are going to be presenting).
- Present background, but only enough so that audience can understand the question
- Identify the paper title, authors and Journal.
- Present only relevant data that supports model and present that data thoroughly.
- You do not need to present every experiment in a paper. Once again, majority of the experiments are controls, you need to know how to identify the controls and present them as data that supports the relevant data. Eliminate any obviously redundant or irrelevant experiments.
- If paper being presented is using a number of mutants, rename mutants so that they are easier to remember, color code them so they are easier to remember.

Take Home Message!

At the end of J. Club everyone in the room should be able to answer three simple questions:

- What was the question the authors were trying to answer?
- What was the most significant piece of data the authors presented to answer the question?
- Did the data conclusively answer the authors' question?

If they can, you have given a good J. Club.

Figure Presentation Tips

Only present one experiment/slide. Make sure that the figure is LARGE enough to be seen from the back of the room. When you present the relevant data, remember:

- to have all parts of the figured labeled clearly (use color)
- Define abbreviations, and avoid too much jargon
- to state what technique is being used
- to explain clearly what this technique measures
- to clearly explain the results
- AND, last but not least, explain how the experiment answers the overall question, what limits there are on the interpretation of the result and how any limits were addressed in the paper (additional experiments, controls, etc.)

Some Psychological aspects for those who will be presenting for the first time to the department

Presenting these journal clubs can be a stressful experience – especially, if this is your first presentation to the entire department. There are a few things to keep in mind.

- The attending faculty members are not there to judge you – they are there because they find the paper or the topic interesting.
- You are not expected to be an expert in this area but you are expected to put in a sincere and determined effort.
- When you are confronted with critical comments about the paper, don't take it personally. It is not your work – you are merely presenting it.
- An active discussion (including criticisms about the results and conclusions) means that the audience is engaged and you are doing your job.
- You should feel free to play the devil's advocate and defend the authors but you are not obliged to.
- If you feel extremely nervous before the presentation, take a moment and tell the audience that you are nervous and it will take a few minutes before you settle down.