October 12th Mentoring Groups

Journal Clubs & Seminars

Ask how rotation talks are going: summary of labs

**Journal Clubs & Seminars**

Journal Clubs

*Requirements (Attendance)*

1. Attendance is mandatory. MAKE SURE TO SIGN IN!!!
2. Get to Journal Clubs on time; walking in 5 minutes late is distracting for everyone
3. Do not leave journal club early; plan experiments accordingly
4. Pay attention during journal club!!
5. Read the paper prior to the presentation; minimally read the abstract and figure legends.
6. Contribute to the conversation by asking thought provoking questions.
   * Ask the presenter if you don’t understand the experiment or the rationale behind the experiment. Do not be afraid to ask mid-way through the presentation.
   * At minimum, try to understand the background slides & follow the logic of the talk.

*Expectations (Presentation)*

1. Presentation should be 45 minutes maximum so that questions can be asked at the end
2. Presentation should follow logical order:
   * Background / Introduction --> Relevant Methods (if needed for explanation) --> Figures --> Conclusion --> Future Directions --> "Critiques of Paper" (if necessary)
   * figures can be rearranged if it makes more logical sense; they do not always follow numerical order
3. Provide adequate introduction to paper & relevant information.
   * background slides are very important; they set up the groundwork for understanding the figure
   * Always answer: "what is the purpose of the experiment?"
   * make sure all background slides are relevant to the figures being discussed
   * background slides require use of other papers (review papers are a great source!)
4. Supplemental Figures
   * acknowledge there were supplemental figures (if this is true)
   * always send supplemental figures with the original paper
   * include supplemental figures if they are relevant or if they strengthen a point
5. Be able to answer questions related to the paper. If the question is not related to the paper and you don’t know the answer, either try to give an educated response based off prior knowledge or say “I don’t know” – it’s okay to say the latter.
6. Make sure to reference ALL slides & every single figure. If figures are out-of-order, it is important to keep figure #'s on the slide so that people who brought the paper can follow along

*How To Give An Outstanding Journal Club Presentation*

1. Selecting the RIGHT paper. - Picking the right paper provides the foundation to your journal club presentation. A lot of people make the mistake of picking the “wrong” paper (e.g. poorly written, too many figures, repetitive in content, poor experimental design), and therefore end up providing a poor presentation. A good paper is well-written, hypothesis driven, contains rational experimental design, and summarizes its results in an effective manner.
2. Presenting the paper proper - First, provide adequate background to the topic at hand. It is important to inform your audience of what you will be discussing. For me this section is known as “what do we know?”. Describe the relevant scientific information (introduction to a pathogen, cell, disease, etc.), along with the relevant rationale and hypothesis for performing this study. This is where you can highlight the paper & author’s background in this scientific domain and how it led to the current study.   
    - Second, describe the methods and experimental design. Clearly explain the experiment performed, the reason why it was used, and what the results indicate. This is the “what did they do?” section. A PowerPoint presentation provides an adequate medium to plainly illustrate the design used, the rationale can be discussed, and the results displayed, all while talking and being interactive with your audience. Explain statistical tests, difference, and significance when relevant. Obtain assistance from a statistician (or Google) if necessary.  
    - Third, and lastly, conclusions & discussion. This is the “what did we/they learn?” section. Present the author’s conclusions and their perspective on the study results, including odd or unexpected results. Here you have an opportunity to critique the paper for its conclusions and whether the data adequately answers the hypothesis/study question.

Seminars

Seminars provide an invaluable resource in obtaining information with research, clinical, or industrial relevance to your project or interests. Some of them may be completely unrelated to your research, but may provide professional development. It is paramount to attend the right seminars, pay attention, take the necessary notes, and ask questions.

Pay attention to:

1. Presenter: Do they look presentable, professional? This will start to give you an idea of the “nature” of the seminar you are about to experience.
2. Topic: The subject of the discussion will determine how engaged you are in the conversation. Always ask yourself: How is this seminar relevant to me? Is this for scientific or professional purposes? Understanding why you are there may help you determine what you want to obtain from the seminar.
3. Order: How are the slides and content organized to deliver this individual’s information? Is it more about them, or about their research? Did they properly introduce the topic and dive into the content seamlessly or with some interruptions?
4. Notes: This is different for everyone. Some may want to take notes the whole time, other’s will take sporadic notes. Do whatever works best for you. There are a variety of ways to take notes (phone, sticky notes, legal pad, paper, tablet, Mac/PC), use the one that suits you best and provides the least amount of distraction for you to concentrate on the seminar at hand.
5. Questions: Ask any sort of question you like. This is one of the most “casual” forms of conversations. This person is there FOR YOU to talk to, pick their brain, learn something. Don’t waste that opportunity. You can always save your questions for later and ask them in a more intimate setting after the seminar, if the presenter is available.