

# Proposal Peer Review

What's going to happen over this next week...

You will each be reviewing four proposals.

You will fill out a Proposal Review Form for each proposal  
(due beginning of class next week)

You will participate in a Review Panel in class next week



# Process of Peer Review

- When an article is submitted to a funding agency or body, the editors send it out to other scholars in the same field (the author's peers) to get their opinion on the quality of the scholarship, its relevance to the field, its appropriateness for the goals of the funding agency, etc.
- In some cases, reviewers submit direct reports. Sometimes there is a subsequent panel where groups of reviewers are brought together to discuss the proposals and rank them. (The agency decides who to fund, not the proposers!)
- Proposal review is typically one-way anonymous.



# What do peer reviewers do?

Comment on:

- Originality and significance of the proposal.
- Are the methods appropriate and reasonable?
- Are they presented in sufficient detail?
- Are the proposed experiments in line with the proposal objectives?
- What is the impact of the proposed work on the field?
- *Does the proposal fit in with the goals stated by the funding body's "call for proposals"?*
- *Are the resources being asked for commensurate?*
- *Is there a reasonable Data Management Plan?*

Provide a numerical ranking (usually 1 to 5)

# What don't peer reviewers do?

## **Confidentiality**

- *DON'T TELL OTHERS ABOUT THE PROPOSAL.*  
*The manuscript is a privileged communication; the data and findings are the exclusive property of the author(s) and **should not be disclosed to others** who might use this information in their research.*
- *DON'T HOLD ON TO THE PROPOSAL.*  
*The manuscript, figures, tables, etc. **should be destroyed upon completing the review.***

# What you'll be doing before the panel

**You will receive four proposal to review  
(from the other CHEM396 class)**

**Fill out the Peer Review Form for each proposal  
(discussed in the next slides).**

**You will turn in four of these (one per proposal) at the  
beginning of next class before the panel discussion.**

You should have a second copy for yourself because you will  
be called on to either

- (1) present a summary of the proposal, or
- (2) provide your formal comments on the quality of the  
proposal or any problems in the proposal.



# CHEM396 Peer Review Form (Part 1)

Evaluate the research proposal draft on the following points using the grading scale:

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>			
	Poorly done				Very well done			
Do the authors clearly formulate the research question?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Do the authors clarify or define terms for the reader?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Is the proposal clear and easy to read?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Is the proposal written at a level appropriate for an advanced undergraduate chemistry or biochemistry major?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Are there sentences that are so unclear that you cannot tell what the author is trying to say?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Are there spelling and/or grammar errors?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Do the authors provide appropriate and adequate background information to understand and position the research plan?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Do the authors appropriately cite sources when presenting previous work or contributions?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Do the authors make clear the purpose and rationale for the proposed research plan?				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

# CHEM396 Peer Review Form (Part 2)

## **General Comments**

- *Summary of the proposal (one short paragraph)*
- *Anything noteworthy (good or bad) in the Introduction section*

## **Technical Comments**

- *Anything noteworthy (good or bad) in the Proposed Research section*
- *Minor issues of formatting, terminology (to be fixed)*

**Write these in complete sentences.  
(I will be evaluating your written work.)**



**You will present either the blue or the red at the panel.**

# *How the Panel will work*

***We will discuss each of the proposals in turn.***

You will randomly be assigned a role as either:

- (1) Presenter who summarizes the proposed work and its significance.
- (2) Commenter who discusses some of the plusses and minuses of the proposal based on your reading.

You will present for 1-2 minutes each.

**Each proposal will have 1 presenter and 3 commenters.**

Then we will open the floor for further comments.



At the end, you will individually rank the proposals.



# *What I will assess*

***Your group's written research proposal is assessed by me (the instructor). While I might consider points made by reviewers in the review sheets or in the panel discussion, the grade of your written proposal is decided by me based on how I rate its quality.***

***I will assess your Review Sheets and your presentations on the Panel based on whether I think they accurately reflect the quality of the proposal. Basically if you're thoughtful and honest in your comments, and you're not way off from my assessment, you receive full credit.***

**Questions?**



# *Final Presentation*

*Other groups in this class have not read your proposal, so be sure to include relevant background information and context when presenting.*

*The presentation isn't just to transmit information to your listeners. You're trying to "sell" your proposal, backed up by good science (of course)! Think of your audience as venture capitalists looking to fund a worthy scientific project.*

