

National Institutes of Health

Department of Health and Human Services




A Quick Course in Reviewing Grant Applications

(Press “Enter” or the right arrow key
to continue with each slide.)

A Quick Course in Reviewing Grant Applications

This course is designed to give you a quick orientation to the grant review process and your role in it.



We hope this course will help you give other applicants the same quality of peer review that you, yourself, hope to receive when you apply for grants.

PLUS.....The 10 minutes you
spend in this course will

SAVE YOU TIME

as you complete the reviews!

After this course....

- ◆ You'll be focused!
- ◆ You'll be efficient!
- ◆ You'll be the kind of reviewer that Scientific Review Administrators love!
- ◆ You'll be invited back....

Before the meeting...

- ◆ You'll receive a package with the applications, review instructions, and logistics information for travel.
- ◆ Open the package and read the instructions immediately.
- ◆ Because this course cannot cover everything you need to know, it is important to read the instructions carefully so that you fully understand what you need to do and can give the applicant fair and full consideration. Reading them upon receipt avoids last minute problems with travel and with your reviews.

Before the meeting...

- ◆ Check applications for conflicts of interest. Make sure you have no financial interest in the application or applicant organization.
- ◆ Keep material confidential. This means you should not share ANY information about the applications with ANYONE (apart from review staff), including colleagues or graduate students. NIH wants your independent judgment of the application. Plus, the confidentiality of the applicant must be protected.

Before the meeting...

- ◆ You should know that NIH separates the functions of “program” and “review” staff. Program staff work closely with applicants and are considered to have an interest in the outcome of the review. Review staff manage the scientific and technical aspects of the review and are required to maintain impartiality. Therefore, in consideration of confidentiality and conflict of interest concerns, you should not discuss the application or review—even after it is complete-- with any NIH staff except review staff.

Before the meeting...

◆ Make your travel arrangements

Hotels have cut-off dates, the travel contractor has requirements, and, in general, last-minute arrangements cause headaches for you and us.

Get the arrangements made and avoid problems. Call your SRA if you have any special needs or questions.

Before the meeting...

- ◆ Make sure you clearly understand the purpose of the review.
- ◆ The purpose of the review is to advise the NIH staff and council(s) on the merit of the applications. You provide this advice through (1) the scoring and (2) your written critiques.
- ◆ The purpose is not to tutor the applicant or suggest how to make the study better. Your role is purely to provide an evaluation.

POP QUIZ!!!!

- ◆ Does the review group make funding recommendations?

Hint: Think about the purpose as stated in the previous slide....

Answer

- ◆ No. The reviewers only give an evaluation of the merit of the application.

It is very important to understand that a recommendation for funding (or “support”) should not be made.

Answer continued...

- ◆ NIH staff make the funding recommendations, not reviewers. They will have knowledge about the availability of funds and, perhaps, of Congressional or scientific priorities that affect funding decisions. As they weigh those issues, they need to be sure that YOUR rating reflects ONLY scientific merit and not other issues.

Before the meeting...

- ◆ Assess the merit of the applications.
- ◆ You'll want to at least read the abstracts of all the applications to be familiar with them, but you'll want to be very knowledgeable about the applications specifically assigned to you. You'll write a critique for these and present the critiques at the meeting.
- ◆ The length of the critique will vary, but in general, a page or two is sufficient.

Before the meeting, continued...

- ◆ Follow the instructions you receive to write the critiques, and make comments only on the review criteria. For most applications, these are Significance, Approach, Innovation, Investigator, Environment, and other issues related to sample composition and protection of subjects. You may also be asked to comment on the budget and data sharing, if the instructions mention these.
- ◆ Some types of applications have unique review criteria; again, make sure you check the instructions.

Before the meeting...

- ◆ Make your comments evaluate strengths and weaknesses, not just re-tell what is proposed.
- ◆ Keep comments scholarly and concise.
- ◆ Be fair and objective; discuss the application and not the applicant (except under the “Investigator” criterion).
- ◆ Use the 3rd person, not “I think...”
- ◆ Avoid tutoring the PI or re-designing the work.
- ◆ Write declarative sentences (“It is not clear why...”) not questions (Why didn’t ...?).

Before the meeting, continued ...

- ◆ Organize your writing by addressing each review criterion separately, and within the section for each criterion, address strengths and then weaknesses in separate paragraphs.
- ◆ Remember to stay focused on main issues; there is no need to “prove” that you covered every detail.
- ◆ There is always something positive in an application.

Another POP QUIZ!!!!

- ◆ The application makes it clear that the proposed methods of data collection are included at the suggestion of NIH staff. How does that affect your assessment of the approach?

Hint: Ask yourself if compliance with staff is a review criterion.

Answer

- ◆ It doesn't affect your evaluation. You are asked to give your opinion on the merit of the ideas in the application, regardless of the source (e.g., staff suggestion, previous review committee) of those ideas.
- ◆ Unless a comment in your critique relates directly to a review criterion, it should not be included (except for occasional brief descriptions as needed to provide a context for your evaluative comment).

Before the meeting, still continued...

- ◆ Decide on a preliminary score or determine that the application should not be scored, for each application assigned to you.
- ◆ You'll present these recommendations at the meeting.

Before the meeting, continued...

- ◆ Recommend “Unscored” if the application is in the poorer (lower) half of the distribution of the group of applications being considered. (The next slide will say more about this term “group of applications being considered”.)
- ◆ Even in a pool of terrific applications, there’s always a bottom half of those that aren’t just quite as terrific as the other 50%. NIH asks you to designate those as “unscored.” This procedure, called “streamlining,” needs to be applied evenly across the NIH for it to be fair.

Before the meeting– more on “unscored”...

- ◆ The term “group of applications being considered” means different things at different times.
- ◆ For standing review committees, the reference group of applications for unscoring is usually all those in the current and past two meetings. For an RFA, it is usually all those in the current meeting.
- ◆ Sometimes the group of applications being reviewed at a meeting is very small or of exceptional quality. In such cases, “unscoring” 50% may not be in the best interests of science. If you think this is the case, check with the SRA.

Before the meeting, thinking about scoring....

- ◆ For an application in the upper 50%, you need to be ready to suggest a score at the meeting. Each review group has slight variations on how it matches a number with the quality of an application. But, in all cases, you'll use a 1-5 scale. "1" is best, "5" is worst. Because the poorer applications, ("3-5" scores) are already designated "unscored," you'll suggest a score from 1-3. Use increments of .1 (e.g., 1.3, 1.4, 2.7, but not 2.72).

Thinking about the score, continued

◆ Consider the application's strengths and weaknesses in regards to only the review criteria, and use the table on the next slide to anchor your scores. In the actual review meeting, you'll modify your score as you hear other perspectives.

(Note: The table is illustrative, not complete, and it shows scores of 3-5 where "unscored" would be designated.)

Scoring Anchors

Priority Score Range	Balance of Strengths and Weaknesses
1.0 – 1.9	<p>1.0 ← Many substantial strengths; few, if any minor weaknesses</p> <p>Many strengths and some remediable weaknesses → 1.9</p>
2.0 – 2.9	<p>2.0 ← Several strengths, some problems</p> <p>Limited or few strengths and/or many problems → 2.9</p>
3.0 – 5.0	<p>Limited or few strengths and/or serious problems</p>

Priority Score Range	Approximate Distribution	Potential Impact	Weakness
1.0 – 1.5	10%	High Impact	Few if any minor weaknesses
1.5 – 2.0	13%	High Impact	Some easily remedied weaknesses
2.0 – 2.5	13%	High Impact	Some moderate problems
2.5 – 3.0	13%	Moderate Impact	<u>and/or</u> Many moderate problems
UNSCORED	50%	Minor Impact	<u>and/or</u> Serious problems

An alternate scoring scheme.. You

see, there are different ways to think about scoring.

But in all of these, 1.0 is the best score, and the poorer applications are scored worse than 3.0 or are designated

“unscored.”

At the meeting...

- ◆ Arrive on time, stay to the end.

We know that you are busy and that reviews take time. Still, to develop consistent scoring norms, to allow a common understanding of any policy changes, and to promote maximum fairness to the applicants, we ask you to be present when the meeting starts. By staying until the end, a consistent scoring pool is maintained and all scores within a meeting can be compared.

At the meeting...

- ◆ Present only the main ideas of your critiques. Your colleagues admire brevity and focus.
- ◆ Applications will be discussed one at a time, except the “unscored” ones.
- ◆ For those discussed, the Chair will ask for your recommended score and critique.
- ◆ Procedures vary among groups, but present only the main ideas from your critiques. You should be able to do this in 5-7 minutes.
- ◆ If you present after another reviewer and have no new information to add, it’s fine to just say “I agree and have nothing to add.”

At the meeting, continued

- ◆ After the critiques are presented, the Chair will lead general discussion and scoring of each application.
- ◆ As you participate in the discussion, remember that other reviewers will assume you have expertise and are credible, so there is no need to “prove” yourself, which some reviewers tend to want to do. In other words, don’t “nit pick.” Stick to main issues. Stick to the review criteria.

At the meeting, continued

- ◆ While you don't have to "prove" yourself, neither do you have to be modest. If you have been assigned an application or want to comment, do so without prefatory remarks such as "This isn't my area..." or "I'm not an expert...". The committee will understand that you speak from your own perspective and may not be knowledgeable about all aspects of the application. (For example, a statistics expert isn't expected to know dosing schedules.) Comments that denigrate your skills impugn the quality of the review and seem to question the SRA's judgment in bringing you to the meeting.

At the meeting, continued

- ◆ Give a hard copy and diskette copy of your critique to the GTA at the end of the meeting or after each application is finished. You'll turn in all your scores on a score sheet at the end of the meeting. You'll also turn in certification that you had no conflicts of interest in the review meeting.

After the meeting...

- ◆ Maintain confidentiality of the meeting

You may be asked by other NIH staff, applicants, or colleagues how the meeting proceeded. Apart from very general comments such as “We worked hard,” or “I enjoyed it,” please say nothing to anyone outside the review staff. As far as the meeting goes, your memory banks should be erased.

After the meeting...

- ◆ Turn in reimbursement requests quickly. The Federal government has audit guidelines that NIH is expected to meet in providing reimbursement, and it will help us very much if you do not delay in submitting your reimbursement forms.

After the meeting...

- ◆ Be proud that you have contributed to the scientific progress of the nation.
- ◆ Reviewers play an extremely important role in furthering the scientific goals of the NIH and the public health goals of the Department of Health and Human Services. NIH hopes you will be proud of that contribution. Please know that you have our sincere gratitude for your help!

FINAL EXAM!!!!

Relax, it's true /false

- ◆ You hear a reviewer say, “This applicant is very young and can’t do this complex work”. This is a reasonable comment for a critique, T or F?
- ◆ False. The applicant’s age is not a review criterion. Further, the comment could be better addressed as a concern about the application, not the applicant. The reviewer ought to say, “The application does not document that this investigator has the skills or experience needed for this complex work.”

Next....

- ◆ In assigning a score, you sometimes must guess what score will be good enough to encourage the applicant to re-apply but not good enough for immediate funding. T or F?
- ◆ False. In assigning a score, you should do no more and no less than try to match a number with your assessment of the application's scientific and technical merit. Don't worry about funding or whether someone will or will not re-apply.

Next....

- ◆ A reviewer reads an application that is technically very good, but she doesn't think the research is going to address a very important issue. It is fine for her to suggest it should be unscored because it is just not interesting or important science T or F?
- ◆ True. An application can be in the lower 50% for any number of weaknesses. If you are convinced that the work has little significance (e.g., addresses a clearly resolved or trivial issue), a clear statement about lack of significance is adequate justification for not scoring—weaknesses in the approach are not required.

Next....

- ◆ The range of scores for an application should be very small. That is, most reviewers should give it the same or nearly the same score. T or F?
- ◆ False. Even on the same application, reviewers may disagree about issues. Others may agree on the strengths and weaknesses but differently weight the review criteria. If you are planning to enter a score not consistent with those you've heard discussed, you need to participate in the discussion and explain your perspective. In other words, all scores should reflect perspectives that were discussed openly

Next....

- ◆ It is important to turn in your written critiques immediately after the meeting, not waiting to send them via e-mail in a few days. T or F?
- ◆ True. The timelines for preparation of summary statements are increasingly tight. If you need to modify your review because of the discussion in the meeting, you can just mark up the hard copy or, if you have a lap top, edit the disk before you leave the meeting.

Next....

- ◆ When a reviewer doesn't understand something either before, during or after a review, the thing to do is to contact the SRA. T or F?
- ◆ True. Always feel free to check with the SRA when something is not clear. Reviewing applications is a complex enterprise, and the SRA is available to help you do the good job you want to do. Even experienced reviewers discover that policies and rules change, so questions arise!

You have completed the course
and passed!!!.

- ◆ Once again, we appreciate your service! Now you can volunteer for your next review group!

Credits

“A Quick Course in Reviewing Grant Applications” was developed by William C. Grace, Ph.D., Office of Extramural Affairs, National Institute on Drug Abuse, NIH, DHHS. Please direct suggestions and comments to him at wg15v@nih.gov.