



Peer Review: The 'Ole One, Two

If you submitted a proposal for the April 5 NIH SBIR/STTR deadline, the fruit of your labors is now wending its way through an exhaustive peer review process. What's happening and how long will it be before you hear anything? Peer review is covered in great detail on the NIH website, so a visit to their [Peer Review Process](#) page should be on your to-do list. But, if an abridged version is what you have time for at the moment, read on.

NIH uses a dual peer review system to evaluate SBIR/STTR proposals to ensure that:

- The grant evaluation process is fair, equitable, timely, and free of bias, and
- Only the most meritorious scientific proposals are funded.

The First Review

Once you submit your application, it is sent to the [NIH Center for Scientific Review](#) (CSR), where it is assigned to the appropriate Institute or Center (IC), and to a Scientific Review Officer (SRO) to a study section. The SRO recruits subject expert volunteers (primarily non-federal scientists who have expertise in relevant scientific disciplines and current research areas) who serve on the peer review committee.

Before the peer review meeting, the application is reviewed by several (typically 3) individual members of the study section given a *preliminary* overall impact score of 1 to 9, with 1 being best and 9 being worst. This preliminary score is used to determine which applications will be discussed by the full group when the committee meets. Reviewers consider and score each of five review criteria -- Significance, Investigators, Innovation, Approach, and Environment -- in assessing scientific and technical merit.

Applications discussed at the meeting are given an Overall Impact Score by each reviewer. This score reflects the committee's evaluation of the overall impact the project is likely to have on the research field(s) addressed. It is determined by calculating the mean score from all the eligible members' individual final impact scores, and multiplying the average by 10. The final overall impact score, ranging from 10 (high impact) through 90 (low impact), is reported on the summary statement. Applications that are not discussed don't receive an overall impact score but instead a designation of 'not discussed' or '++'.

The study section discusses applications based on a ranking of the preliminary reviewers' impact scores typically discussing those in the top ~50%. Therefore, if you receive a numerical final impact score your proposal ranked in approximately the top half of applications reviewed by that section. The lower half do not receive an overall impact score since they are not discussed, but they do receive the individual ~3 reviewers' written critiques and the individual criterion scores. However, all applications receive the

written review, known as the Summary Statement, containing the full critiques. The Summary Statement is available in the PI's eCommons account after review.

An application may be designated Not Recommended for Further Consideration (NRFC) by the Scientific Review Group if it lacks significant merit; presents serious ethical problems in the protection of human subjects from research risks; or presents serious ethical problems in the use of vertebrate animals, biohazards, and/or select agents. Applications designated as NRFC do not proceed to the second level of peer review (National Advisory Council/Board) because they cannot be funded.

And the Second

The Advisory Council/Board of the potential awarding IC performs the second level of review and gives recommendations to the IC staff and its director. The Councils/Boards are chosen by the respective IC and composed of scientists from the extramural research community and public representatives for their expertise or activity in matters related to health and disease. The Dept. of Health and Human Services approves all appointments.

In considering funding decisions, the Councils/Boards weigh the scientific and technical merit of the proposed project as determined by scientific peer review committee; the availability of funds; and the relevance of the proposed project to program priorities.

The IC director makes the final funding decisions based on staff and Advisory Council/Board advice. The IC Program Officer (PO) interacts with the applicant after peer review. If an application isn't funded, they can discuss how the application can be improved and resubmitted.

If you submitted a proposal for an April 5 deadline, you should receive your score and Summary Statements from around mid-late July (or occasionally early August) depending on when your particular study section meets. Dates of study section meetings can be found on the [CSR website](#). After the meeting you should proactively check your [eCommons](#) account for information. Only the PI will be able to view the detailed Summary Statements.

For more information on the peer review process be sure to check the [NIH website](#), where it is covered in great detail.