



Center for
Scientific Review

DEMYTH-DEFYING REVIEW: SUBMISSION TO SCORE

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***CENTER FOR SCIENTIFIC REVIEW, NATIONAL INSTITUTES OF HEALTH**

****SEED, NATIONAL INSTITUTES OF HEALTH**

SESSION OBJECTIVES

After this session, you will be able to answer...

- What happens after you submit your SBIR application?
- How is bias and conflict of interest managed during peer review?
- How do you put your best application forward (mistakes to avoid)?

WHAT HAPPENS AFTER YOU SUBMIT YOUR SBIR/STTR APPLICATION?

Institutes or Centers (IC) based on...

Overall mission and guidelines of the Institute or Center(s);
Specific programmatic mandates and interests of the Institute or Center(s)

Integrated Review Groups (IRG) based on...

Specific review guidelines for each IRG.

Special Emphasis Panels (SEPs)

- + When certain types of grants are sought (e.g., fellowships, SBIRs).
- + Ad hoc reviewers recruited

RECURRING SPECIAL EMPHASIS PANELS REVIEWING SBIR/STTR



There are ~40 SBIR/STTR different Study Sections in CSR that review ~6,500 applications/year

- Locate the one that best fits your application by using the CSR Assisted Referral Tool: <https://art.csr.nih.gov>
- Or browse CSR's list of SBIR/STTR study sections: <https://public.csr.nih.gov/StudySections>
- Use the Assignment Request Form to suggest a specific Study Section

RECEIPT & REFERRAL – START OF YOUR APPLICATION’S JOURNEY

Common mistakes that can result in withdrawal of a SBIR/STTR application.

FOA inappropriateness

Submitting an application after the submission deadline

Submitting an application too early for the due date

Submitting an incomplete application or with errors

Application is not-compliant (violates NIH policies)

- Overstuffed
- Mis-classified Clinical Trial
- Font, format, page limit violations
- A new application that refers to prior review

Contact a Program Officer before you write.
Read the entire FOA.

Complete all the appropriate registrations.
Read the FOA due date information.
Submit EARLY!
Check that sections are correctly included.

Read and follow the SBIR/STTR SF424 Instructions.

KEY PLAYERS TO CONSIDER AS YOU PREPARE YOUR APPLICATION



Program Officer

- Point of contact to PIs pre- and post-award
- Provides post-award oversight
- Responsible for programmatic aspects of a grant
- **Answers questions about IC priorities**



DRR Staff

- First touch of your application*
- Assigns application to NIH Institute/Center
- Assigns to an SBIR study section
- **Answers general submission questions**



SRO

- Point of contact to PIs during the review process
- Oversees review of applications
Provides a summary of the evaluation of an application
- **Answers questions about study section scope and review.**



ROLE OF THE SCIENTIFIC REVIEW OFFICER (SRO)



The SRO...

- selects the reviewers and chair for the panel.
- manages conflict of interests and assigns applications to reviewers.
- produces a summary statement for all applications (discussed applications include a summary of the discussion; non-discussed applications contain just the 3 assigned reviewers' critiques).



Expert SBIR/STTR panels have 20-40 members (ad hoc) from the scientific and business community.



Review panels review ~60 to 100 applications during each round of review.



Each application is assigned to 3 or possibly more reviewers.

HOW ARE BIAS AND CONFLICT HANDLED IN PEER REVIEW?

CSR implements these core values



Expert assessment

Transparency

Impartiality

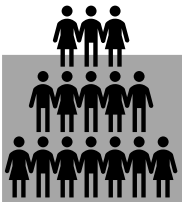
Fairness

Integrity

Confidentiality

Efficiency

REVIEWER AND REVIEW PANEL RESPONSIBILITIES



The review panel...

- scores the 5 core review criteria + overall impact of the application (1-9 scale)
- determines the top half of applications.
- give final scores to the discussed applications.
- provide written critiques for both discussed and non-discussed applications.



Preliminary scores assigned by the assigned reviewers.



Applications are discussed in clusters. Within each cluster applications are **discussed** in random order and receive final scores by the full panel.



Applications that score in the lower half are **not discussed** and receive no final scores.

PEER REVIEW CONSIDERATIONS

Common misperceptions about SBIR/STTR review

After seeing the roster, I can request specific reviewers to review or not review my application.

NO. Requests for expertise or identification of competitor conflicts can be described at the time of application submission, not after.

For my discussed application, the score reflects a mean of the reviewers' criteria scores.

NO. The final score is the average of each of the panel members' scores (who are not in conflict).

Since my application was not discussed, I will not receive any scores.

NO. While ND applications do not receive a final score, they do receive scores on the 5 main criteria by the 3 assigned reviewers.

I addressed the prior reviewers' concerns, which means a better score this time around.

NO. Resubmitted applications are assigned to new reviewers who may identify continuing or new concerns.

None of the reviewers have the expertise to review my application.

NO. While no one reviewer may be a 100% fit, the panel has the collective expertise to review the applications.

I can talk with you (the SRO) after review is over.

NO. After review, you should discuss next steps with your PO.

AT THE MEETING: WHAT IS DISCUSSED?

**Overall
Impact
+
Overall
impact score**

- **Significance**
- **Rigor of the prior research**
- **Investigators, Innovation, Environment**
- **Approach, Aims, Timelines**
- **Potential barriers/alternative solutions**
- **Human Subjects/Vertebrate Animals**
- **Inclusion of women, minorities, age across the lifespan**
- **Sex as a biological variable**
- **Biohazards**



A competitive application is...

What are the common errors that reduce reviewers' assessment of overall impact?

How do you put your best application forward?



Not planning your writing time wisely.

↳ Submit early – gather LOS.

Too much jargon or acronyms in the application.

↳ Be clear; speak to an expert, lay audience.

Does not provide a strong rationale for the product.

↳ Describe impact on the field, not just the problem.

Not enough scientific rigor.

↳ Justify aims based on rigorous prior research.

Vague approach and sparse methodological details.

↳ Provide solid reasoning in the approach.

Unrealistic aims and timeline.

↳ Acknowledge potential barriers and how they will be addressed.



BECOME A SBIR/STTR REVIEWER!

Contact a **CSR Scientific Review Officer**

Introduce yourself and send them your CV.



Learn more at this conference and from the **CSR website!**

www.csr.nih.gov



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NIH PEER REVIEW INFORMATION ON THE WEB

National Institutes of Health: <http://www.nih.gov>

- **Office of Extramural Research** <http://www.nih.gov/grants/oer.htm>
- **Grants Policy** <http://www.nih.gov/grants/policy/policy.htm>
- **Electronic Submission** <http://era.nih.gov/ElectronicReceipt>

Center for Scientific Review: <http://www.csr.nih.gov>

- **Resources for Applicants** <http://www.csr.nih.gov/ResourcesforApplicants>
- **CSR Study Section Descriptions** <http://public.csr.nih.gov/StudySections>
- **CSR Rosters and Meeting Dates** <http://public.csr.nih.gov/RosterAndMeetings>



Thank you!!

QUESTIONS AND DISCUSSION