# SBIR Proposal Writing Basics: The Importance of “Innovation” in NIH’s SBIR & STTR Programs

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If you asked us “what is the most common criticism of NIH reviewers about Phase I proposals?”, we’d likely say it is the reviewer not being convinced that the proposed project is truly innovative. A focus on innovation makes sense, given SBIR stands for Small Business INNOVATION Research, but NIH reviewers (along with their counterparts at NSF) seem especially critical of this issue. NIH even asks applicants to dedicate one whole section of the Research Strategy (RS) in their proposal to the topic of Innovation.

One problem that NIH SBIR/STTR applicants face, then, is convincing the reviewers that the proposed project is innovative. A suggestion for making sure you and the reviewers are on the same page on innovation is to use NIH’s definition of the term. Our logic is simple: if you are applying to NIH, and they are reviewing on behalf of NIH, then using an NIH definition of innovation ought to be common ground for both you and the reviewers to agree that your proposed project is innovative (or not).

The “definition” that’s most useful, in our humble opinion, is found in the instructions for preparing NIH SBIR/STTR proposals. Referred to as the Application Guide, its full title is SBIR/STTR Instructions for NIH and Other PHS Agencies, SF424 (R&R) Application Packages. You can find the most recent version under the “Resources” tab on NIH’s SBIR/STTR website—as of this writing, that is Forms Version D Series, Updated March 24, 2017, but a new one is expected to be issued in 2018. Turn to page B-89, where you find the instructions for the RS portion of an NIH Phase I or II application. One section of the RS, as mentioned earlier, is titled “Innovation,” and on page B-89 are NIH’s three guidelines on how you should describe the innovative aspect(s) of your proposed project. We interpret these as the conditions that, if your project meets one or more of them, then your project is innovative. They are:

* Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
* Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
* Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

We think this gives you three very distinct conditions that a project must meet to be deemed innovative. Be ready to convincingly argue your project meets one of these three measures of innovation, and it is even better if you can do so for two or even all three conditions.

So, when writing the Innovation section of the RS, we offer the following advice:

1. Give adequate room in the RS for the Innovation section. We find many NIH applicants just toss in 1 or 2 quick paragraphs, when the importance of the innovation aspect of your project to most NIH reviewers suggests it deserves more discussion—we recommend budgeting 1 page to this section of the RS
2. Start the section by defining the 3 conditions NIH has stated are relevant to deciding if an SBIR/STTR project is innovative and indicate that you have used these 3 conditions in determining your proposed project is innovative. Implicitly, you want to suggest that you think the reviewers should use these 3 conditions in judging your project’s innovativeness, since they come from NIH. Copy and paste the bullets and reference the Application Guide.
3. Now explain how your proposed project satisfies one or more of the Application Guide’s bulleted conditions. Key here is to not just state it, but explain it and argue how your project fits the condition(s).
4. Finish the section with a summary and conclusion that your project meets one or more conditions specified in the NIH Application Guide, and that you therefore believe your project meets the definition of being innovative.
5. Now be sure to pepper some phrases around other key sections of the NIH application (e.g., project summary, specific aims, RS significance and approach subsections), so the RS Innovation section is one but not the only place you argue that your project is innovative.

We wish we could guarantee that, if you follow our advice, reviewers will always agree with your conclusion about the innovativeness of your project. But (most) reviewers are human, and they are free to conclude otherwise. But put significant attention on the innovation issue, amply discuss and argue for the innovativeness of the project, and tie that discussion to NIH’s own Application Guide’s innovation conditions. Then if the reviewers disagree, they hopefully will not just casually dismiss your project as not being innovative, but instead give you a more reasoned explanation of why so you can respond accordingly on any resubmission you make.