

SBIR/STTR Funding

What is SBIR/STTR funding?

Small Business Innovation Research (SBIR), and Small Business Technology Transfer (STTR), are federal funding programs for small business to perform research required to develop early-stage innovative products to the point where they can attract outside capital. The SBIR program goals are to stimulate technological innovation, foster and encourage economically disadvantaged businesses, and increase competition, productivity, and economic growth. The goal of the STTR program is to facilitate the transfer of technology developed by research institutions through small businesses. For both, the application is submitted by the small business. The awards are broken up into phases:

- Phase I lasts six to twelve months and supports research to establish technical merit or feasibility.
- Phase II lasts up to two years and moves the Phase I results toward commercialization.
- Phase III moves the innovation from the laboratory to the marketplace.

In 2020, the combined SBIR/STTR budget across 11 federal agencies was over \$4 billion. Of that, half was provided to small businesses as contracts, and half as grants. This tip sheet will focus on grants.

Grant Requirements

For SBIR/STTR, the small business:

- Must be primarily U.S. owned (at least 51% owned by U.S. citizens and/or permanent resident aliens).
- Must be for-profit with <500 employees.

SBIR (11 agencies)

- Must be the primary employer of the grant PI (51%) during the award.
- May subcontract up to 33% of the Phase I research and up to 50% of Phase II.

STTR (5 agencies)

- Must subcontract 30 - 60% of the research to a non-profit entity referred to as the Research Institution (RI), often a university or federal lab.
- Must be the primary employer of the grant PI (51%) during the award for NSF and may be the primary employer during the award for DOD, DOE, NASA, and NIH.

Award Information

Funding is non-dilutive, therefore no equity is taken and the funding does not have to be repaid; this is a grant, not a loan. Funding typically starts around \$100,000, but over multiple phases can reach \$1 to \$2 million or more.

Since this is federal funding, the Bayh-Dole Act applies and the laws of inventorship determine ownership of resulting intellectual property.

Agency Solicitations

SBIR/STTR funding opportunities are delivered through solicitations, known by many names including: Request for Proposal (RFP), Funding Opportunity Announcement (FOA), or simply a solicitation. They document the agency's interests and provide guidance on how to prepare an application or proposal. Unsolicited proposals are not accepted by any SBIR/STTR program. SBIR.gov can be used to search all solicitations. Release dates are distributed throughout the year depending on the agency. Each solicitation will provide proposal preparation instructions, application and submission guidance, and evaluation criteria. A good method to find a solicitation is to first determine which agencies fund your topic of interest by searching previous awards, and then determine if those agencies have a current solicitation.

Team Qualifications

The SBIR/STTR review places a strong emphasis on the qualifications of the team to conduct the work.

- Do the principal investigator, key staff, subcontractors, and consultants have the appropriate experience or training? Qualifications include not only the ability to perform the research and development but also previous experience in commercializing results (business experience).
- Does the project team have access to the necessary instrumentation, machines, tools, facilities, etc. to fulfill the objectives of the project?

Proposal Evaluation

Grants are highly competitive. In FY2016, the NSF Phase I funding rate was 15% for SBIR and 19% for STTR. To increase your odds of getting funded, ask these questions:

- Are the objectives and tasks required to meet those objectives thoroughly described?

- Does the application challenge and/or seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches, or methodologies?
- Does the application demonstrate an understanding of the current state of the art and commercial need?
- Does the commercialization plan demonstrate a high probability of success?

Conclusion

The SBIR/STTR programs can be an avenue to move your research toward commercialization, but they are very different from traditional federal funding programs. If you would like more information or help with developing or submitting the application, you can go to <https://www.sbir.gov/tutorials>, or contact TAO to get connected with a business counselor.