



An overview of the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs at the Federal agencies with research topics relevant to medical technology.



:: Introduction

The <u>Small Business Innovation Research (SBIR)</u> and <u>Small Business Technology Transfer (STTR)</u> programs encourage U.S. small businesses to conduct research and development (R&D) and commercialize innovation. Through a competitive awards-based program, SBIR and STTR grants and contracts enable small businesses to demonstrate the scientific and technical merit and commercial potential of a project. These awards also provide a foundation for private follow-on funding. The SBIR and STTR programs address the nation's specific R&D needs by including qualified small businesses in high-tech innovation.

Federal agencies with external R&D budgets greater than \$100 million are required to set aside 3.2% of this extramural R&D budget for small businesses through the SBIR and STTR programs. Each agency administers its own individual program within Congressional guidelines. Agencies designate R&D topics in their solicitations and accept proposals from small businesses. Awards are made on a competitive basis after proposal evaluation. The critical <u>difference between SBIR and STTR</u> is the STTR program requirement for the small business to formally collaborate with a research institution. The SBIR and STTR program is divided into <u>three phases of funding</u>.

- Phase I: Feasibility and proof-of-concept generally \$250,000 for six to 12 months
- Phase II: Continued R&D
 generally \$750,000 for two years
- Phase III: Commercialization no SBIR/STTR funding

This guide provides an overview and links to specific information on the SBIR/STTR programs at the National Institutes of Health (NIH), National Science Foundation (NSF), the Department of Defense (DoD), and the National Aeronautics and Space Administration (NASA), each of which fund grants and contracts relevant to medtech companies conducting R&D and product development.





Small Business Innovation Research (SBIR) Small Business Technology Transfer (STTR)

National Institutes of Health

The NIH SBIR/STTR program invests over \$1 billion annually in small companies through 24 participating Institutes and Centers (ICs). <u>Eligible companies</u> interested in <u>funding</u> <u>opportunities</u> are encouraged to identify ICs with relevant research topics by referencing the <u>NIH Matchmaker</u> tool. Prior to submitting an application, companies are advised to speak with an <u>HHS SBIR/STTR program manager</u>, and review the <u>Application Infographic</u> for in-depth information on each step of the application and review process.

Engage and connect with the NIH SBIR/ STTR program to stay informed of upcoming webinars and other educational programs. The NIH Small business Education & Entrepreneurial Development (SEED) office also fosters collaboration and connections across the spectrum of the NIH innovation community.



National Science Foundation

The <u>SBIR/STTR program</u> is housed within the Division of Industrial Innovation and Partnerships of the Directorate of Engineering at the NSF. <u>NSF funds startups with</u> <u>transformative science and engineering</u> <u>innovations</u> that have the potential for commercial success and societal impact. Following the three phase program startups can receive up to \$2M in non-dilutive funding to support translational R&D.

Get started by understanding these <u>basics</u> <u>of the program</u> and exploring the various technology topic areas, including the <u>Medical</u> <u>Devices topic</u>. Then prepare your <u>Project Pitch</u> to determine if your innovation is a good fit for NSF funding, before being invited to submit a full proposal. Stay informed by participating in <u>NSF events</u> and referencing the following applicant resources.

APPLICANT RESOURCES:

- <u>Contact the SEED Office</u>
- Small Business Support
- <u>Step-by-Step Application Instructions</u>
- NIH Grants & Funding Application Guide
- <u>Clinical Trial Requirements</u>
- Develop Your Budget
- Entrepreneurial Finance Course

APPLICATION RESOURCES:

- Project Pitch
- Full Proposal Guidance
- Proposal Review and Decision
- <u>Review Process</u>
- FastLane Guide
- Project Pitch Guide
- <u>COVID-19 Proposal Instructions</u>





Department of Defense

The DoD SBIR/STTR program is a

requirements-driven process, following specific topics (or technology gaps) that are set by each of the 14 participating Components within the DoD (i.e. Department of the Army, Defense Health Agency, DARPA). Topics relevant to medical technology are found in many of the DOD SBIR/STTR agency announcements. The DoD issues only contracts (not grants). Proposals are allowed a single submission and are reviewed by Government subject matter experts.

The Defense SBIR/STTR Innovation Portal

(DSIP) is the official proposal submission website with a searchable list of topics, the schedule of Broad Agency Announcements, and other applicant resources. When preparing a submission, companies should also note the registration requirement with the <u>System for Award Management (SAM)</u>, relevant <u>Export Control restrictions</u>, as well as the national network of <u>Procurement</u> <u>Technical Assistance Centers</u>.

RELEVANT PROGRAMS AND RESOURCES:

- Defense Health Agency (DHA) Office of Small Business Programs
 - <u>Military Health System: Research and</u>
 <u>Innovation</u>
- Department of the Army SBIR/STTR
 Program
- Defense Advanced Research Projects
 Agency (DARPA) SBIR/STTR Programs
- Defense Threat Reduction Agency (DTRA) <u>Contracts (Business Opportunities)</u>
- <u>Chemical and Biological Defense (CBD)</u>
 <u>SBIR Program</u>
- U.S. Army Medical Research and Development Command (USAMRDC)
 - OTA: Medical Technology Enterprise
 <u>Consortium (MTEC)</u>
- Joint Program Executive Office (JPEO) for Chemical, Biological, Radiological, & Nuclear Defense (CBRND)
 - OTA: Medical CBRN Defense
 Consortium
- <u>Congressionally Directed Medical</u> <u>Research Programs (CDMRP)</u>
- Homeland Defense and Security
 Information Analysis Center (HDIAC) –
 Medical Technical Focus Area





National Aeronautics and Space Administration

The National Aeronautics and Space Administration (NASA) is an independent Federal agency responsible for the civilian space program. NASA conducts research, testing, and development of aeronautics and space technologies to enable future exploration and benefit life on Earth. The NASA SBIR/STTR program funds technologies that fulfill NASA needs as described in the annual solicitations. While predominantly focused on space technologies, recent solicitations have included topics focused on "Human Research and Health Maintenance." Additionally, NASA has developed a Human Research Roadmap to investigate and mitigate the highest risks to astronaut health and performance for exploration missions. The NASA SBIR/STTR program awards Phase I and Phase II grants and contracts and has several initiatives to fund and support small businesses beyond Phase II.

APPLICANT RESOURCES:

- Interactive Participation Guide
- Program Schedule and Award
 Announcements
- Award and Solicitation Search
- <u>Awarded Projects' Abstracts Search</u>
- <u>Resource Library</u>



U.S. Small Business Administration

The U.S. Small Business Administration (SBA) serves as the coordinating agency for the SBIR and STTR program. SBA provides numerous resources for entrepreneurs, including in-depth <u>online tutorials</u> and extensive <u>frequently asked questions</u>. SBA offers a separate <u>Lender Matching Program</u> that enables companies to apply for business loans.

Beyond SBA, small business resources include the <u>Federal Laboratory Consortium</u>, which offers access to facilities and expert collaborators, and the US Patent and Trademark Office (USPTO), which maintains an <u>Investor and Entrepreneur Resources hub</u> for companies to protect their intellectual property.

State and Local Programs

Several states have created dedicated Phase 0 award programs to help small businesses navigate the complex and resource-intensive application process. Some states also offer matching programs that provide grant funding to match federal SBIR/STRR Phase I and Phase II awards. SBA publishes a list of <u>Phase 0 and State Matching</u> <u>Grant Programs</u>, and on page 5 of this guide, we have compiled a table of selected programs in states with concentrations of medtech companies. SBA also supports multiple <u>programs that offer local assistance</u> to small businesses throughout the application and award process.



:: State Funding Programs

STATE	PHASE 0 PROGRAMS	PHASE I/II STATE MATCHING FUNDS
Arizona	Arizona FAST Partnership Program	
Colorado	Colorado SBDC Techsource	
Florida		Florida High Tech Corridor Council Matching Grants Research Program
Indiana		Indiana SBIR/STTR Matching Awards
Illinois	FAST Partnership Center at the University of Illionois Urbana-Champaign	Illinois SBIR & STTR Matching Program
Massachusetts		MassVentures' START Award Program
Michigan	Michigan Assistance Program	Michigan Emerging Technologies Fund
Minnesota		Launch Minnesota SBIR/STTR Matching Grant
New Jersey		New Jersey CSIT SBIR/STTR Direct Financial Assistance Program
New York	New York WIN SBIR/STTR Assistance Program NY STAR SBIR/STTR Assistance Program	
North Carolina	SBIR/STTR Phase I Incentive Funds Program	SBIR/STTR Phase I Matching Funds Program
Pennsylvania	Innovation Partnership FAST Program	
Utah	Utah Innovation Center	Utah Technology Innovation Funding (UTIF)
Wisconsin	Wisconsin Center for Technology Commercialization - SBIR/STTR Assistance Microgrants	Wisconsin Center for Technology Commercialization - SBIR Advance

*This table includes select states with medtech industry clusters. SBA publishes a <u>full list of state funding programs</u>.

FEDERAL GRANT WRITING AND GRANT MANAGEMENT CONSULTANTS

- <u>BBC Entrepreneurial</u> <u>Training & Consulting</u>
- Eva Garland Consulting
- DeSalvo & Company
- Jameson & Company
- Intelispark
- Altaclair Consulting Services LLC
- BioScience Advising
- Amala Consulting
- Lighthouse Consulting

This is a list of known consultants and advisory firms providing grant writing and grant management support for small businesses. Inclusion on this list does not constitute a recommendation in any form.

