Introduction to SBIR/STTR Grants

APIOix
Innovation Transfer

About SBIR/STTR Assistance

The Nevada Governor's Office of Economic Development provides assistance to companies in the preparation and submission of SBIR/STTR proposals

The goal is to increase the number of proposals submitted and grants awarded under the SBIR/STTR program to Nevada technology-based small businesses

APIO Innovation Transfer (APIOiX) works in partnership with UNLV's SAGE program (https://www.unlv.edu/econdev/sagesouth) to assist technology-based small businesses (https://apioix.com/sbir-assistance)

- Assessment of the business concept
- Guidance for registration of the company
- Review and input on project pitches and proposals
- Assistance in submitting the proposals

APIOiX Innovation Transfer

About APIOiX

Programs, Services, and Solutions to Accelerate Innovation Ecosystems

APIOiX accelerates innovation through business development, training, and technical assistance to innovators and inventors at universities, small businesses, and government entities across the globe.

Eligibility for SBIR/STTR Funding

"America's Seed Fund"

Technology based

Diverse portfolio

Commercial application

Non-dilutive funding

STTR requires partnership with a research institute

The Nation's largest source of early stage/high risk funding for start-ups and small business

- In the words of program founder Roland Tibbetts: "to provide funding for some of the best early-stage innovation ideas; ideas that, however promising, are still too high risk for private investors, including venture capital firms."

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Brief Overview of SBIR and STTR

The Nation's largest source of early stage/high risk funding for start-ups and small business

- In the words of program founder Roland Tibbetts: "to provide funding for some of the best early-stage innovation ideas; ideas that, however promising, are still too high risk for private investors, including venture capital firms."

Eligibility requirements:

- American-owned
- Organized as a for-profit entity
- Have less than 500 employees
- Structure and staff to focus on aggressive commercialization of the product/service

The Goals of SBIR and STTR Grant Programs

Stimulate technological innovation

Leverage small business to help meet Federal R/R&D needs

Facilitate academic technology transfer through formation of research-based startups and collaborations between researchers and entrepreneurs

Foster and encourage participation of socially and economically-disadvantaged small business and those that are 51 percent owned and controlled by women

Increase private sector commercialization of innovations derived from Federal R/R&D, thereby increasing competition, productivity, and economic growth

Before you Get Started - Preparing your Company

Incorporate (LLC is most common followed by "C" Corp.)					
Apply for and obtain EIN					
Register in SAM.gov and obtain UEI (Unique Entity ID) - https://www.sbir.gov/sites/default/files/Company_Registration_Guide.pdf					
ADDITIONAL REQUIRED REGISTRATIONS AND SUBMISSIONS					
	NASA	HHS	NSF	DOE	DOD/DARPA
Electronic Handbook (EHB)					
eRA Commons					
GRANTS.gov					
NSF Fastlane					
Portfolio Analysis and Management System (PAMS)					
FEDCONNECT.gov					
Funding Accountability and Transparency ANCT Subaward Reporting System					
DOD Submission Website					

SBIR and STTR Grant Programs

What types of innovations

- Create a proof-of-concept or prototype or will otherwise conduct R&D to demonstrate technical feasibility
- Involves a high degree of technical risk and differentiation
  - Technical objectives have never been attempted and/or successfully achieved before;
  - Requires overcoming large technical hurdles
- Has the potential for significant commercial impact and/or societal benefit
  - Potential to disrupt the targeted market segment
  - Address an important and scalable, yet-unfulfilled need for the target customer base
- Evidence of good product-market fit (as validated by direct and significant interaction with customers and related stakeholders)
- There is potential for broader societal benefit (sustainable business model)

SBIR Phases

Phase I

- Establish the technical merit, feasibility, and commercial potential of the proposed technology
- Determine the quality of performance of the small business
- SBIR/STTR Phase I awards are generally $50,000 - $250,000 for 6 months to 1 year (depends on agency)

Phase II

- Continue the R/R&D efforts initiated in Phase I
- Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II
- Typically, only Phase I awardees are eligible for a Phase II award
- SBIR/STTR Phase II awards are generally $750,000 - $1.5M for 2 years

Phase III

- Small business pursue commercialization based on Phase I/II results
- The SBIR/STTR programs do not fund Phase III
- At some Federal agencies, Phase III may involve follow-on non-SBIR/STTR funded contracts for products, processes or services for use by the U.S. Government

SBIR and STTR Grant Programs

Small Business Innovation Research Program (SBIR)

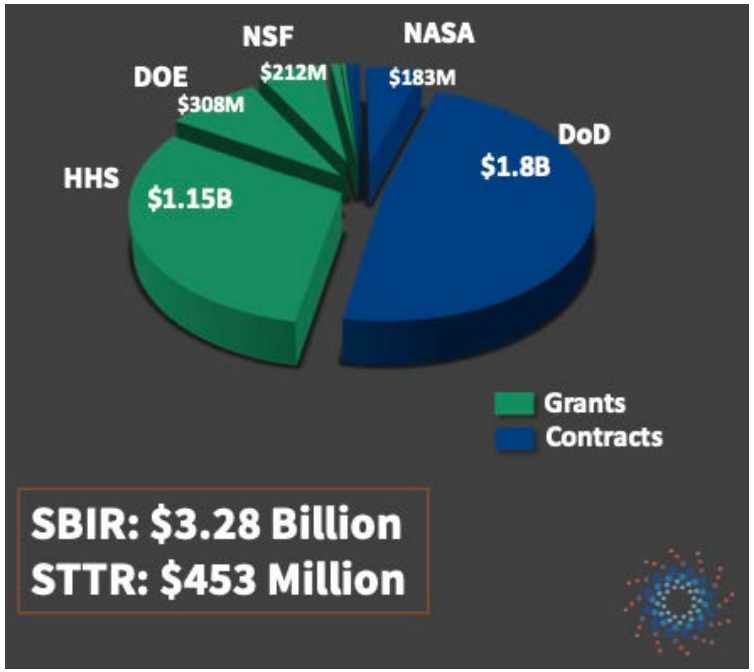
- 11 agencies have SBIR
- Extramural R&D budget of $100 M or more

Small Business Technology Transfer Program (STTR)

- Extramural R&D budget of $1B or more
- 5 agencies have STTR in addition to SBIR

Funding – FY 2019

Agencies with SBIR and STTR Programs Budget	Funding
Department of Defense (DOD)	$1.8 B
Department of Health and Human Services (HHS) including the National Institutes of Health (NIH)	$1.15 B
Department of Energy (DOE), including Advanced Research Projects Agency - Energy (ARPA-E)	$308 M
National Aeronautics and Space Administration (NASA)	$183 M
National Science Foundation	$212 M
Agencies with SBIR Programs Budget	
U.S. Department of Agriculture (USDA)	$30 M
Department of Homeland Security (DHS): Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO)	$17 M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)	$13.4 M
Department of Transportation (DOT)	$5.2 M
Department of Education (ED)	$8.4 M
Environmental Protection Agency (EPA)	$3.6 M



For the FY23 fiscal year, approximate funding for SBIR/STTR is $4 B.

Small Business Innovation Research Grants (SBIR)

Funding takes the form of contracts or grants

The recipient projects must have the potential for commercialization and must meet specific U.S. government R&D needs

Funds are obtained for the program by allocating ~3% of the total extramural (R&D) budgets of the 11 federal agencies with extramural research budgets in excess of $100 million

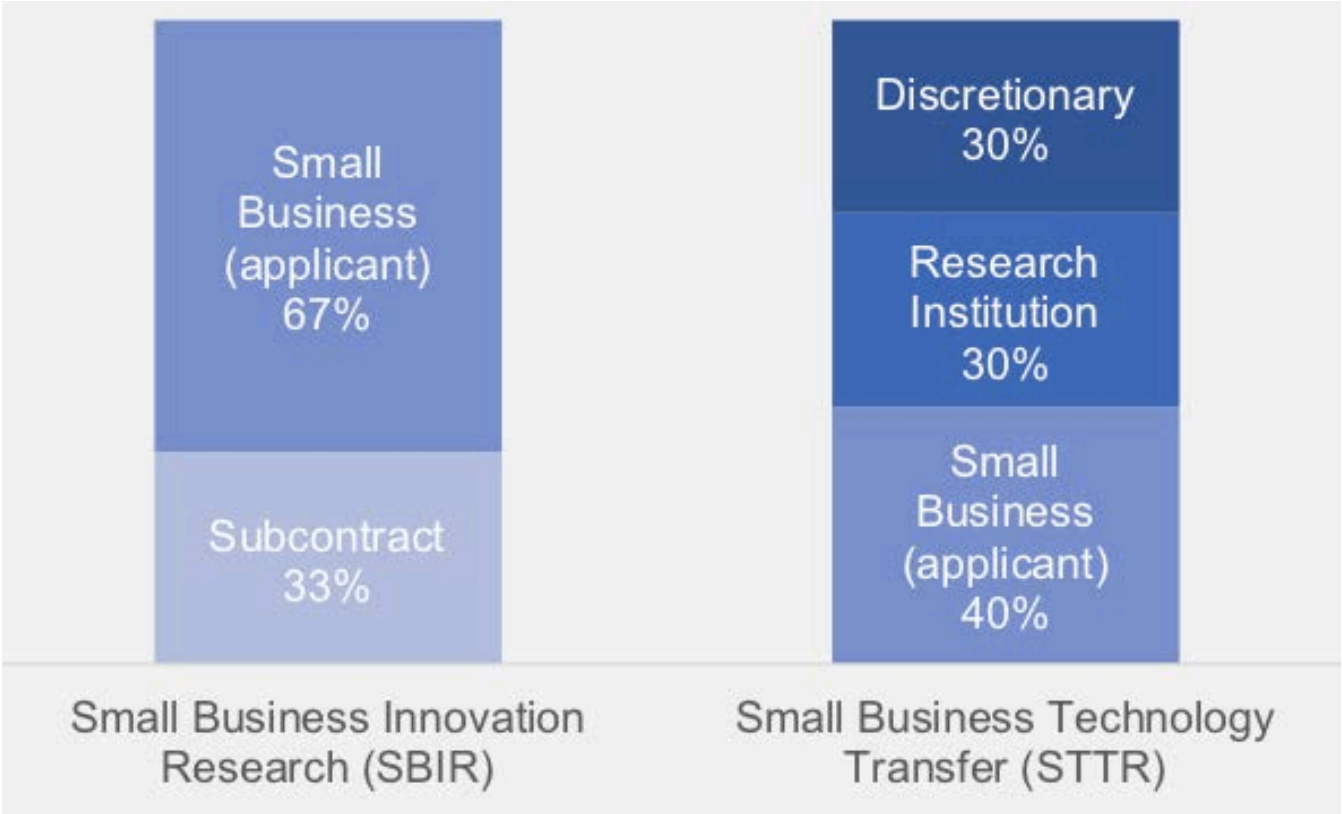
Approximately $3.7 billion is awarded each year

Small Business Technology Transfer Program (STTR)

STTR funding program is similar to the SBIR program and seeks to expand public/private sector partnerships between small businesses and nonprofit U.S. research institutions.

The significant difference between SBIR and STTR programs is that the STTR program requires the company to have a partnering research institution that is awarded a minimum of 30% of the total grant.

As of 2014 federal agencies with external R&D budgets over $1 billion were required to fund STTR programs using an annual set-aside of 0.40%.



Differences Between the SBIR and STTR Grant Programs

An STTR project requires the small business, which is always the applicant, to be teamed with a non-profit research institution

- However, the PI for the project can be from the research institution.

The STTR program is focused on the transfer of technology from the Research Institution, also referred to as the RI, to the small business and ultimately to the marketplace

- This has been expanded over time to include situations where the innovation belongs to the small business, but the firm desires to include important resources from a nonprofit RI in the technology's development, such as facilities, equipment and expertise

Resources

APIOiX Small Business and Technical Assistance: https://apioix.com/sbir-assistance
- Provide general information and email link to obtain additional information

SBIR / STTR Tools & Resources: https://apioix.com/tools-resources
- Links to finding grant solicitations, examples of successful proposals (Phase I, Phase II, Fast Track), NSF Project Pitch rubric, budget templates for NIH and NSF Phase I proposals, budget justification templates for NSF and NIH

APIOiX Learning Center: https://apioix.com/learning-center
- Access to presentations on SBIR/STTR topics such as budgeting basics, subcontracting, how to write a winning proposal, basics of customer discover, and agency specific requirements.

SBIR presentations and slides: https://www.sbir.gov/tutorials/accounting-finance/

Salary validation: https://www.bls.gov/oes/current/oes_nat.htm#11-0000

NIH annotated SF424: https://grants.nih.gov/grants/ElectronicReceipt/files/Annotated_Forms_SmallBus_forms-e.pdf

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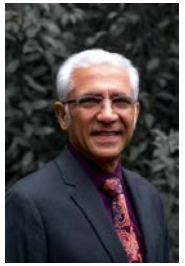
Thank You



Arundeep S. Pradhan, MS Pharm Ad., RTTP has been engaged in technology transfer for over 30 years; was at the forefront of creating the biotech burst in Salt Lake City; helped develop the first biotech roadmap for Colorado; and, helped create the first biotech incubator and the first translational research development center in Portland, Oregon. Mr. Pradhan served on the AUTM Board, was the AUTM President in 2009, and AUTM Foundation President and Board Chair in 2011. He was the interim CEO of a research tools startup and currently serves as the president of Apio Innovation Transfer (APIOiX) and as the CEO and the vice-president for business development of Practical Biotechnology, an oncology therapeutics startup. Mr. Pradhan managed technology transfer offices at the University of Utah, Colorado State University Research Foundation, and Oregon Health and Science University. He continues to work with clients across the globe. arundeep@apioix.com

Ray Wheatley, MS CLP(E) is former Director for Technology Commercialization in the Office for Technology Development at the University of Texas Southwestern Medical Center, retiring in 2015 with 31 years of service. Mr. Wheatley and his staff evaluated over 2,500 new invention disclosures which led to more than 650 issued US patents and hundreds of foreign patents. These efforts resulted in more than 900 negotiated option agreements, license agreements and intellectual property management agreements generating more than $178 million in license revenues. In addition, over 30 start-up companies were created. He has worked with US and foreign companies, including major pharmaceutical companies, venture capital firms and leading medical device manufacturers. He has been an invited speaker at many national and international meetings and has spoken on a variety of topics, most notably on negotiation skills and advanced licensing topics. ray@apioix.com

Michael Batalia, PhD is a serial entrepreneur and an expert in academic technology commercialization. He is also a member of the Mission II Team for the Perlan Project, an effort to fly engineless aircraft to the edge of space. He has over 16 years of experience in academic technology transfer, intellectual property management, and licensing at Wake Forest University as executive director of commercialization and North Carolina State University as associate director then director of technology transfer. Dr. Batalia is active regionally and internationally in support of technology transfer and biotechnology. He has served on the Boards of the Association of University Technology Managers, the North Carolina Biotechnology Center, the Biotechnology Advisory Committee of Piedmont Triad, and the North Carolina Center of Innovation for Nanobiotechnology. He is a co-founder of Wide Eyed Technologies and the CSO for Arctic, Inc. michael@apioix.com

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