



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



2019 SBIR/STTR Funding & Commercialization- Arizona Regional Summit: *Takin' Care of Business*

UA Tech Park - Event Center
Tuesday, March 26, 2019

Robert Vinson

NIH SBIR/STTR Program Office,
Office of Extramural Research





<https://sbir.nih.gov>

The screenshot shows the SBIR/STTR website homepage. At the top, there's a navigation menu with links: SBIR/STTR HOME, ABOUT, FUNDING, APPLY, REVIEW, POLICY, TECHNICAL ASSISTANCE, RESOURCES, STATISTICS AND SUCCESS, and ENGAGE AND CONNECT. A prominent yellow button says "New to SBIR/STTR".

Below the navigation menu, there's a section titled "Engage and Connect with SBIR/STTR" with the text "Meet us in person or connect with us virtually!" and a "MORE DETAILS" button.

The main content area is divided into two columns. The left column is titled "What are SBIR and STTR Programs?" and contains text explaining the programs. The right column is titled "NEW SBIR/STTR PROGRAMS" and lists recent updates.

What are SBIR and STTR Programs?

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, also known as American Small Plans, are one of the largest sources of early-stage capital for technology commercialization in the United States. These programs allow US-owned and operated small businesses to engage in federal research and development that has a strong potential for commercialization.

In Fiscal Year 2017, NIH's SBIR and STTR programs will invest over \$25 million dollars into health and life science companies that are creating innovative technologies that align with NIH's mission to improve health and save lives. A key objective is to translate promising technologies to the private sector and create the early innovations to

NEW SBIR/STTR PROGRAMS

NEWS

Registration Open for the 10th Annual Health and Human Services SBIR/STTR Conference in the Heartland of Biomedical Innovation - Indianapolis, IN [View](#) June 8, 2017

Just Released - 2017 NIH SBIR and STTR Conference Travel Schedule

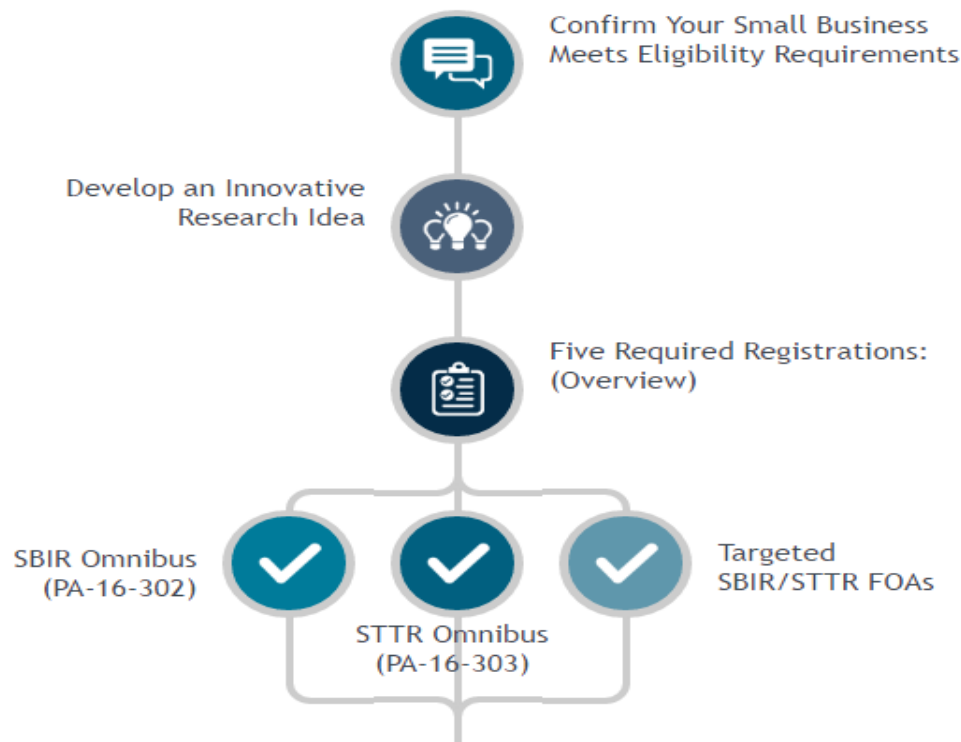




SBIR/STTR Application Process Infographic

Use this interactive chart that contains helpful information to guide you through the NIH SBIR/STTR application process. Click through the chart for answers to your related questions.

**START THE SBIR/STTR
APPLICATION PROCESS
INFOGRAPHIC**



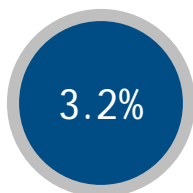
<http://sbir.nih.gov/infographic>





Congressionally Mandated Programs

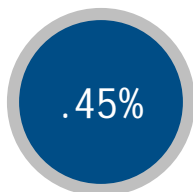
SET ASIDE



(FY18)

SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM

Set-aside program for small business concerns to engage in federal R&D -- with potential for commercialization



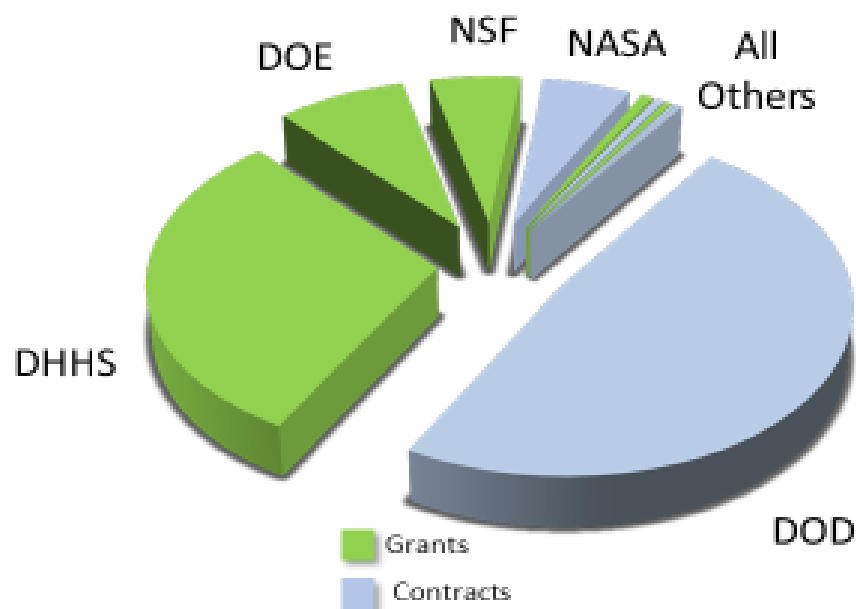
(FY18)

SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAM

Set-aside program to facilitate cooperative R&D between small business concerns and US research institutions -- with potential for commercialization



Approximate SBIR/STTR Budgets by Agency, FY2018



~ \$3.6B in FY2018 across all agencies

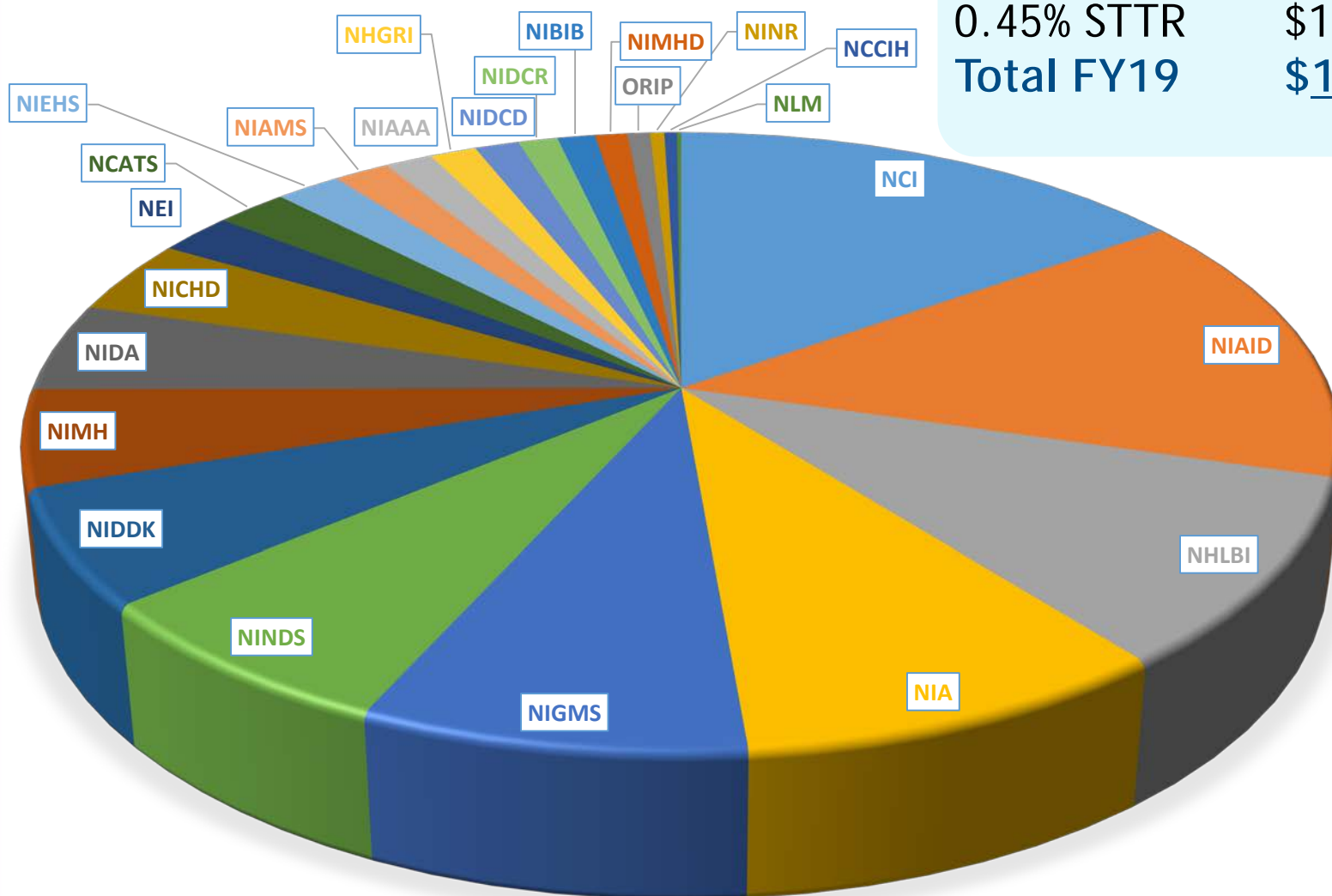
Agencies with SBIR & STTR Programs	Approx. Budget
Department of Defense (DOD)	\$1.750B
Department of Health & Human Services (DHHS), including the National Institutes of Health (NIH)* *DHHS also issues contracts	\$1.088B
Department of Energy (DOE), including Advanced Research Projects Agency – Energy (ARPA-E)	\$280M
National Science Foundation (NSF)	\$202.4M
National Aeronautics and Space Administration (NASA)	\$198.0M
Agencies with Only SBIR Programs	Approx. Budget
Department of Agriculture (USDA)	\$27.0M
Department of Homeland Security (DHS): Science and Technology Directorate (S&T) & Countering Weapons of Mass Destruction Office (CWMD)	\$20.8M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) & National Institute of Standards and Technology (NIST)	\$14.2M
Department of Transportation (DOT)	\$8.5M
Department of Education (ED)	\$7.5M
Environmental Protection Agency (EPA)	\$4.2M



2019 Budget	SBIR	STTR
NIH	\$1B	\$141M
CDC	~\$12M	N/A
ACL (NIDILRR)	~\$3M	N/A
FDA	~\$1M	N/A

NIH SBIR/STTR Budget Allocations FY2019

3.20% SBIR \$1B
0.45% STTR \$141M
Total FY19 \$1.141B





SBIR/STTR 2018 Success Rates by Funding

Fiscal Year	SBIR/STTR	Phase	Number of Applications Reviewed	Number of Applications Awarded	Success Rate	Total Funding
2018	SBIR	Phase I	3,607	665	18.4%	\$164,092,776
2018	SBIR	Fast Track	730	147	20.1%	\$41,420,240
2018	SBIR	Total Phase II	619	258	41.7%	\$214,967,591
2018	SBIR	Regular Phase II	531	224	42.2%	\$176,948,384
2018	SBIR	Phase IIB	84	32	38.1%	\$36,023,223
2018	STTR	Phase I	1,011	211	20.9%	\$52,320,567
2018	STTR	Fast Track	129	27	20.9%	\$8,767,497
2018	STTR	Total Phase II	79	27	34.2%	\$20,972,412
2018	STTR	Regular Phase II	78	27	34.6%	\$20,972,412
2018	STTR	Phase IIB	1	0	0.0%	\$0
2018	FY TOTAL		6,177	1,337	21.6%	\$504,146,584

Success Rates Posted Online: <https://sbir.nih.gov/statistics/award-data>





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

SBIR/STTR 3-Phase Program



Discovery

Phase
I

Phase I Feasibility Study

Budget Guide: \$150K for SBIR and STTR

Project Period: 6 months (SBIR); 1 year (STTR)



Development

Phase
II

Phase II Full Research/R&D

\$1M for SBIR and STTR, over two years

Phase
IIB

Phase IIB Competing Renewal/R&D

Clinical R&D; Complex Instrumentation/to FDA

Many, but not all, IC's participate

Varies~\$1M per year; up to 3 years



Commercialization

Phase
III

Phase III Commercialization

NIH, generally, not the "customer"

Consider partnering and exit strategy early



Mission



*To seek fundamental knowledge about the nature and behavior of living systems and the **application of that knowledge to enhance health, lengthen life, and reduce illness and disability.***

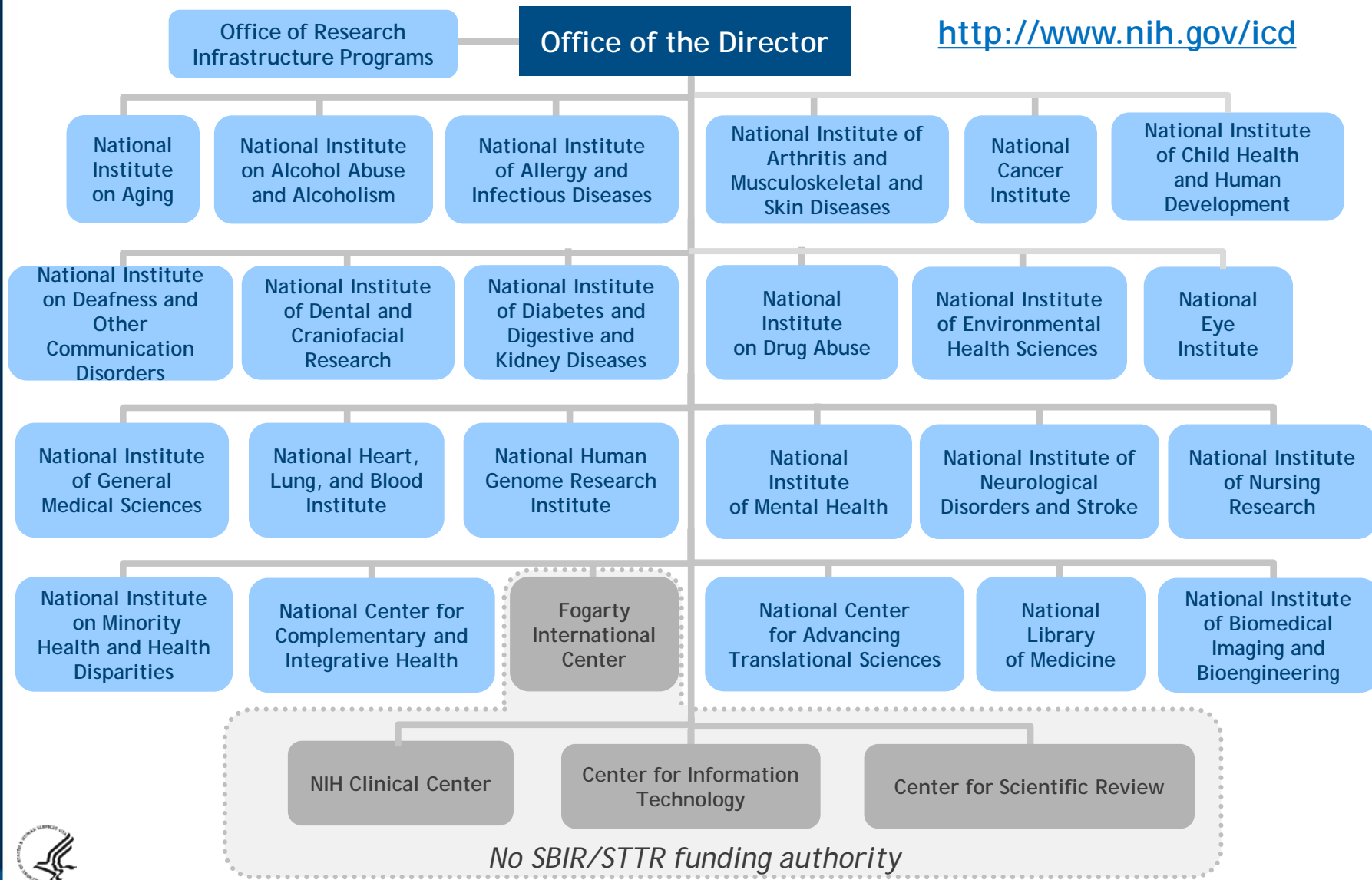




Small Business Innovation Research (SBIR)
Small Business Technology Transfer (STTR)

National Institutes of Health

<http://www.nih.gov/icd>





- SBIR/STTR programs authorized through **FY22**
- 4 pilot programs extended through **FY22**
 - **SBIR Direct Phase II** (some by 1/7/19, rest by 4/5/19)
 - Apply at Application Level for SBIR Direct Phase II (New)
 - NIH Only, not available for STTR by law
 - **Commercialization Readiness Pilot Program** (SB1 or other options targeting 4/5/19)
 - **3% Agency SBIR Admin funds** (more outreach, more commercialization assistance, etc.)
 - **NIH Phase 0 Proof of Concept Centers** (REACH - planning)





- Increase Technical and Business Assistance
 - Up to \$6,500 per year per Phase I (up from \$5K/year)
 - Up to \$50,000 per Phase II **project** (up from \$5K/year)
 - Request at time of APPLICATION
 - Request in F. Other Direct Costs lines 8-10 on SBC budget
 - Label as “Technical Assistance”

F. Other Direct Costs

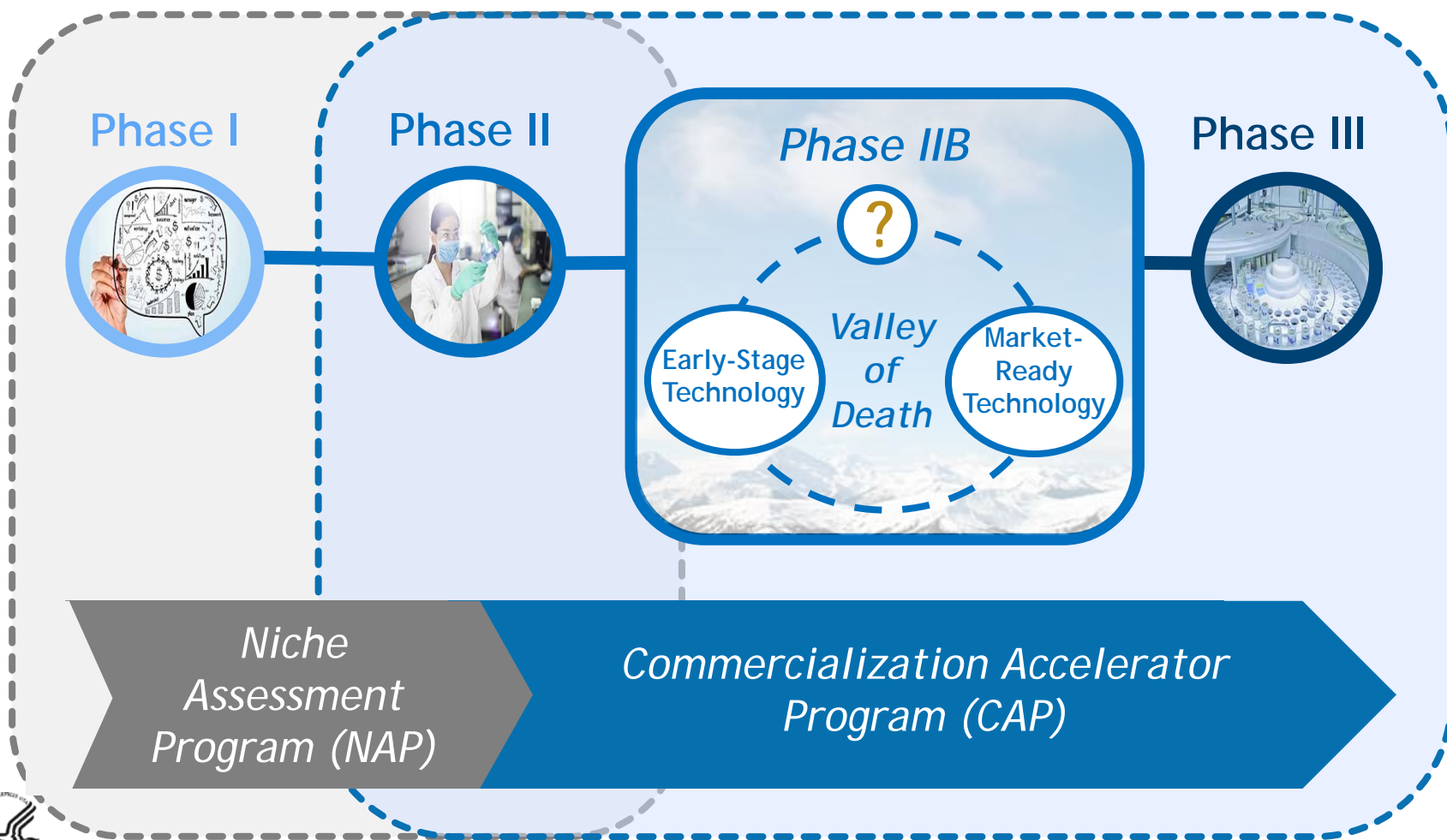
Funds Requested (\$)

1. Materials and Supplies	
2. Publication Costs	
3. Consultant Services	
4. ADP/Computer Services	
5. Subawards/Consortium/Contractual Costs	
6. Equipment or Facility Rental/User Fees	
7. Alterations and Renovations	
8.	
9.	
10.	
Total Other Direct Costs	

Subaward/Consortium/Contractual Costs are not pre-populated. Include both Direct and Indirect costs.



Helping companies cross the “Valley of Death”





Niche Assessment Program - *Foresight Science & Technology*

(Phase I Awardees)

<https://sbir.nih.gov/nap>

- Helps jump start commercialization efforts
- Determines competitive advantages
- Develops market entry strategy



Commercialization Accelerator Program - *Larta, Inc.*

(Phase II Awardees)

<https://sbir.nih.gov/cap>

- Technical Assistance/Training in:
 - Strategic/business planning
 - FDA requirements
 - Technology evaluation
 - Manufacturing issues
 - Patent and licensing issues
- Helps build strategic alliances
- Facilitates investor partnerships
- Individualized mentoring/consulting





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

Multi-IC Technology Development Programs

(open to eligible Awardees from participating ICs)

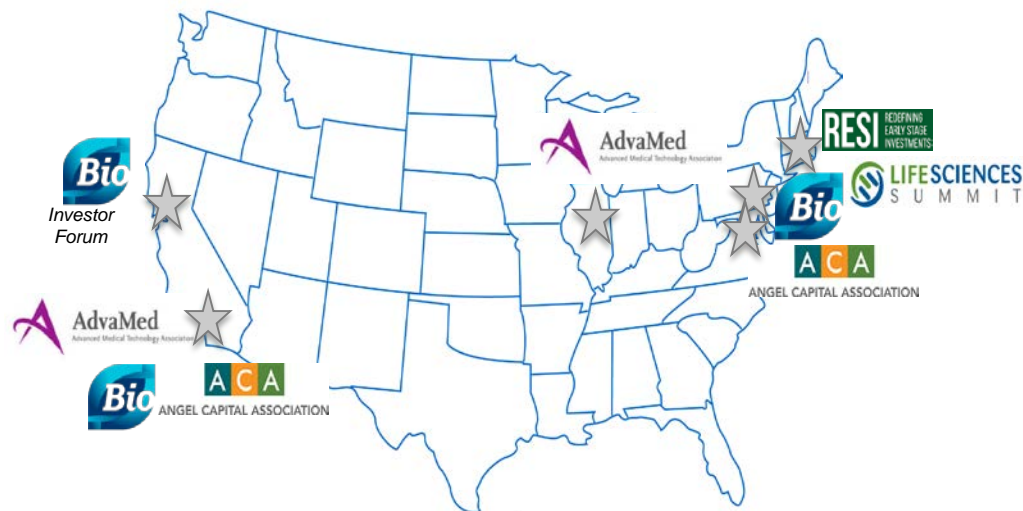
I-Corps™ at NIH

An intensive *Entrepreneurial Immersion* course for scientists

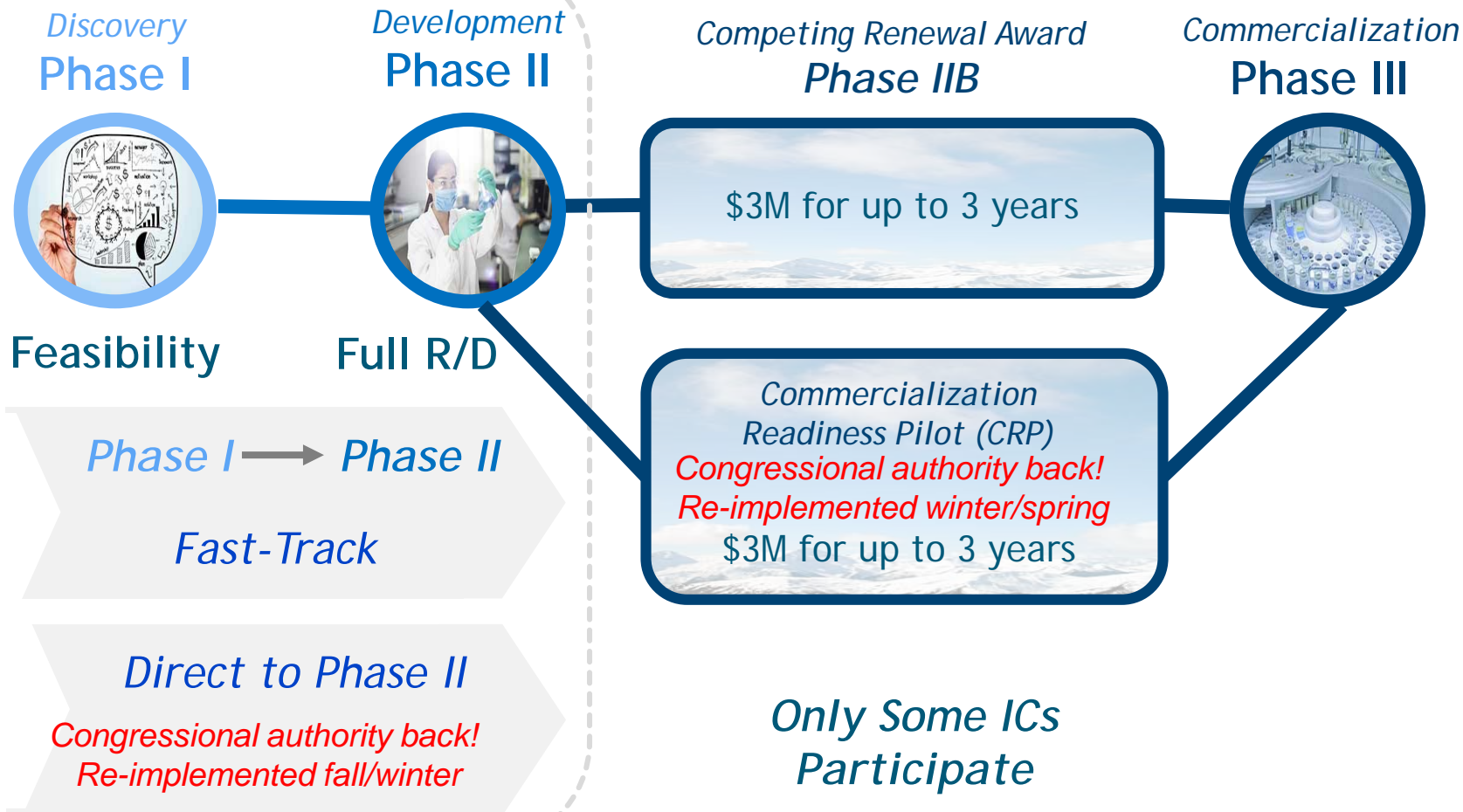


12 Participating ICs + CDC

Facilitating Partnerships



SBIR/STTR 3-Phase Program





SBIR/STTR Fast-Track

Discovery
Phase I



Feasibility

Development
Phase II



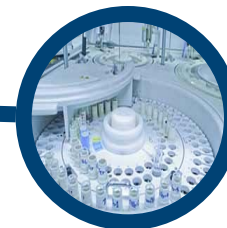
Full R/D

Competing Renewal Award
Phase IIB



Additional R/D

Commercialization
Phase III



Phase I → Phase II

Fast-Track

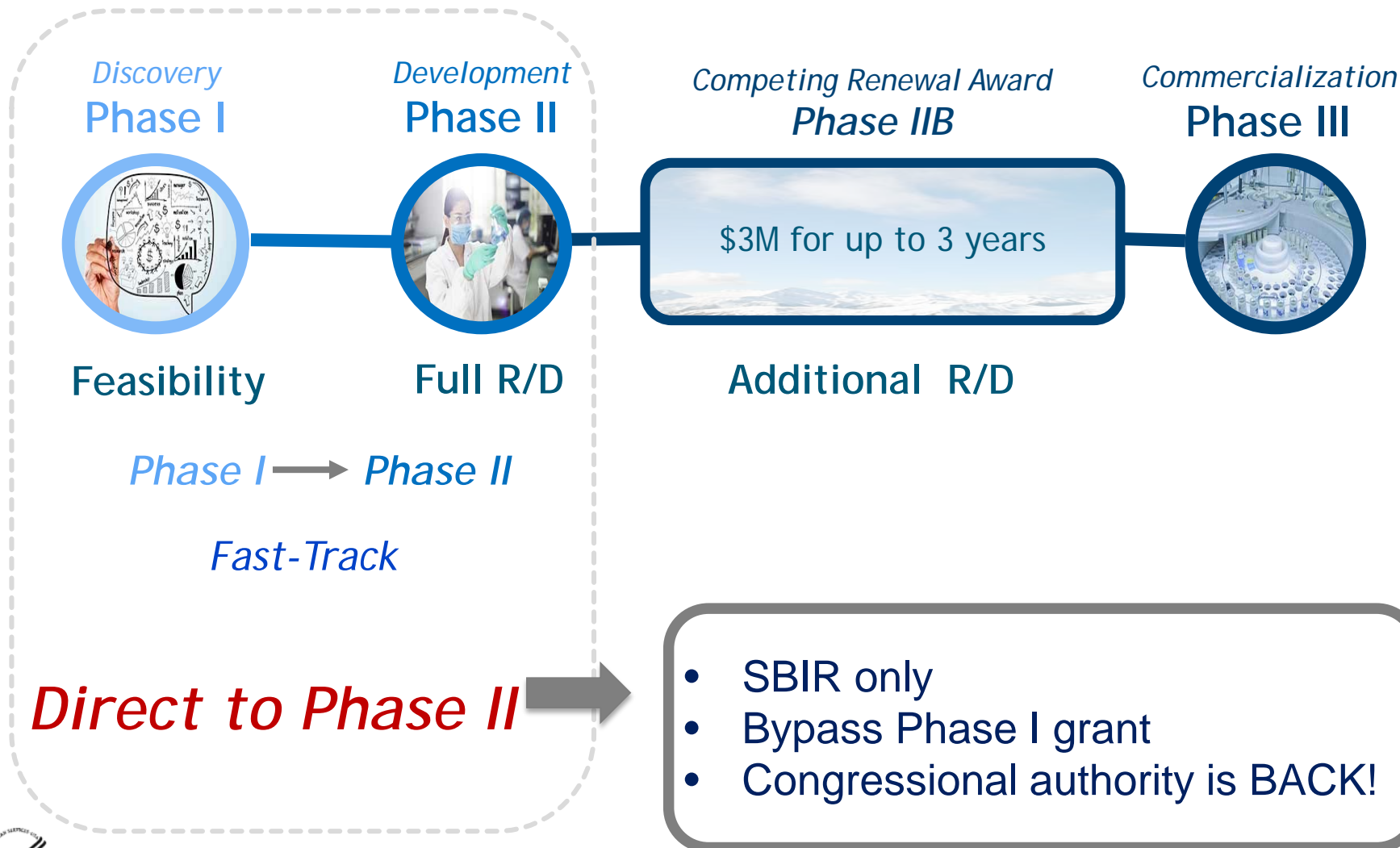
Direct to Phase II

- Simultaneous submission and review of Phase I and II
- Phase I is awarded
- Milestones/aims of Phase I are assessed by program staff BEFORE Phase II is awarded



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

SBIR/STTR Direct to Phase II





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

Phase IIB Competing Renewal Award

Discovery
Phase I



Development
Phase II



*Competing Renewal
Phase IIB*

\$3M for up to 3 years

Commercialization
Phase III



- SBIR/STTR Phase II awardee
- Technologies that require extraordinary time/effort to develop, and often require FDA regulatory approval
- Awards up to **\$1M/year for up to 3 years**
- IC must accept Competing Renewal applications (NIA, NIAAA, NIAID, NICHD, NIDA, NIDCD, NIDDK, NEI, NIGMS NHLBI, NIMH, NINDS, NCATS, ORIP, NCI, NHLBI, NINDS)












Contact NIH Program Staff to discuss!





Funding Opportunities Announcements (FOAs)

a publicly available document by which a federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds.

2018 SBIR and STTR Omnibus/Parent Grant Solicitations for the NIH, CDC, and FDA, Clinical Trial Not Allowed and Clinical Trial Required	<ul style="list-style-type: none">SBIR Omnibus/Parent Clinical Trial Not Allowed Funding Opportunity Announcement (PA-18-574)STTR Omnibus/Parent Clinical Trial Not Allowed Funding Opportunity Announcement (PA-18-575)SBIR Omnibus/Parent Clinical Trial Required Funding Opportunity Announcement (PA-18-573)STTR Omnibus/Parent Clinical Trial Required Funding Opportunity Announcement (PA-18-576)2018 Program Descriptions and Research Topics Document  (2.1 MB)  (635 KB)2018 SBA approved topics list for budget waivers  (554 KB)  (72 KB) NIH SBIR/STTR Grant Forms	Standard Due Dates:  January 5  April 5  September 5
NIH SBIR Direct to Phase II Pilot Solicitation/s	The Congressional authority for SBIR Direct Phase II has expired.	Standard Due Dates:  January 5  April 5  September 5
Targeted SBIR/STTR Solicitations	See individual SBIR/STTR targeted solicitations	Due dates vary. See individual announcements for dates.

<https://sbir.nih.gov/funding>





Omnibus vs Targeted FOAs

	Omnibus	Targeted
Due Dates	Standard Due Dates	Standard or Customized Due Dates
Review	SBIR/STTR panels at CSR	SBIR/STTR panels at CSR <OR> SBIR/STTR panel at IC
Application Instructions	Follow SF424 R&R SBIR/STTR Application Guide & Annotated Form Set	Follow SF424 R&R SBIR/STTR Application Guide & Annotated Form Set <AND> any additional instructions in FOA

Read FOA very carefully!





NIH, CDC, FDA, & SBIR/STTR Grant Solicitation “Parent” FOAs:

Clinical Trial Not Allowed

SBIR: [PA-18-574](#) STTR: [PA-18-575](#)

Clinical Trial Required

SBIR: [PA-18-573](#) STTR: [PA-18-576](#)

Release: January 16, 2018

Standard Due Dates: **April 5th**, September 5th, January 5th





YOUR Ideas: Investigator-initiated R&D

- Research projects related to the NIH mission
- “Other” areas of research within the mission of an awarding component

Keyword Search the Solicitation
Ctrl + F





SBIR Contract Solicitation (NIH, CDC) - **CLOSED**

Closing Date: October 22, 2018 5:00PM EDT

Program Solicitation [PHS 2019-1](#) (SBIR Only)

R&D Contract Solicitation:
SBIR Phase I, Fast-Track Contract Solicitation, PHS 2019-1

Closing Date: October 22, 2018, 5:00PM EDT

- PHS 2019-1 (PDF - 1 MB)
- PHS 2019-1 (MS Word - 373 KB)
- Contract Proposal Forms

NIH Guide Notice: [NOT-OD-18-209](#)
[NIH Guide for Grants and Contracts](#)

Release: Weekly receipt dates specified in each FOA





Determine if Your Study is an NIH-defined Clinical Trial

Does your study...

1. Involve one or more **human participants**?
2. **Prospectively assign** human participant(s) to intervention(s)?
3. Intend to **evaluate the effect of an intervention** on human participants
4. Have a **health-related biomedical or behavioral outcome**?

If “yes” to ALL of these questions, your study is considered a clinical trial

Clinical Trial Interactive Decision Tree: <https://grants.nih.gov/ct-decision/index.htm>





Policy & Compliance

[NIH Grants Policy Statement](#)

[Notices of Policy Changes](#)

[Compliance & Oversight](#)

Select Policy Topics

[Animal Welfare](#)

[Application Submission Policies](#)

Clinical Trial Requirements

[Clinical Trial Definition](#)

[Why the Changes](#)

[Good Clinical Practice](#)

[Specific Funding Opportunities](#)

[New Form](#)

[Single IRB Policy](#)

[Protocol Template](#)

[Registration and Reporting](#)

Clinical Trial Requirements for Grants and Contracts

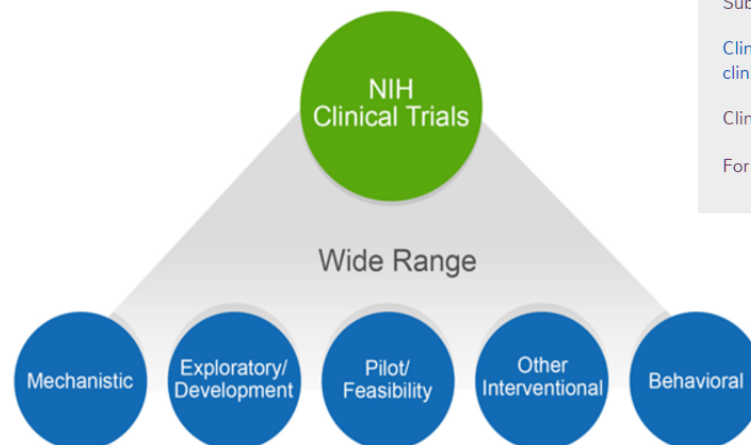
NIH is launching a series of initiatives that are rolling out in 2017-2018 to enhance the accountability and transparency of clinical research. These initiatives target key points along the whole clinical trial lifecycle from concept to results reporting. Learn more about these changes and how they will affect your research.

NIH Definition of a Clinical Trial

A research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes. [Learn more](#)

Your human subjects study may meet the NIH definition of a clinical trial.

[FIND OUT HERE](#)



Related

[FAQs](#)

[Training](#)

[Research Subjects](#)

[ClinRegs: clinical trial](#)

[Clinicaltrials.gov](#)

[For NIH S](#)



<https://grants.nih.gov/policy/clinical-trials.htm>



SBIR/STTR grant applications and SBIR contract proposals must be submitted electronically.

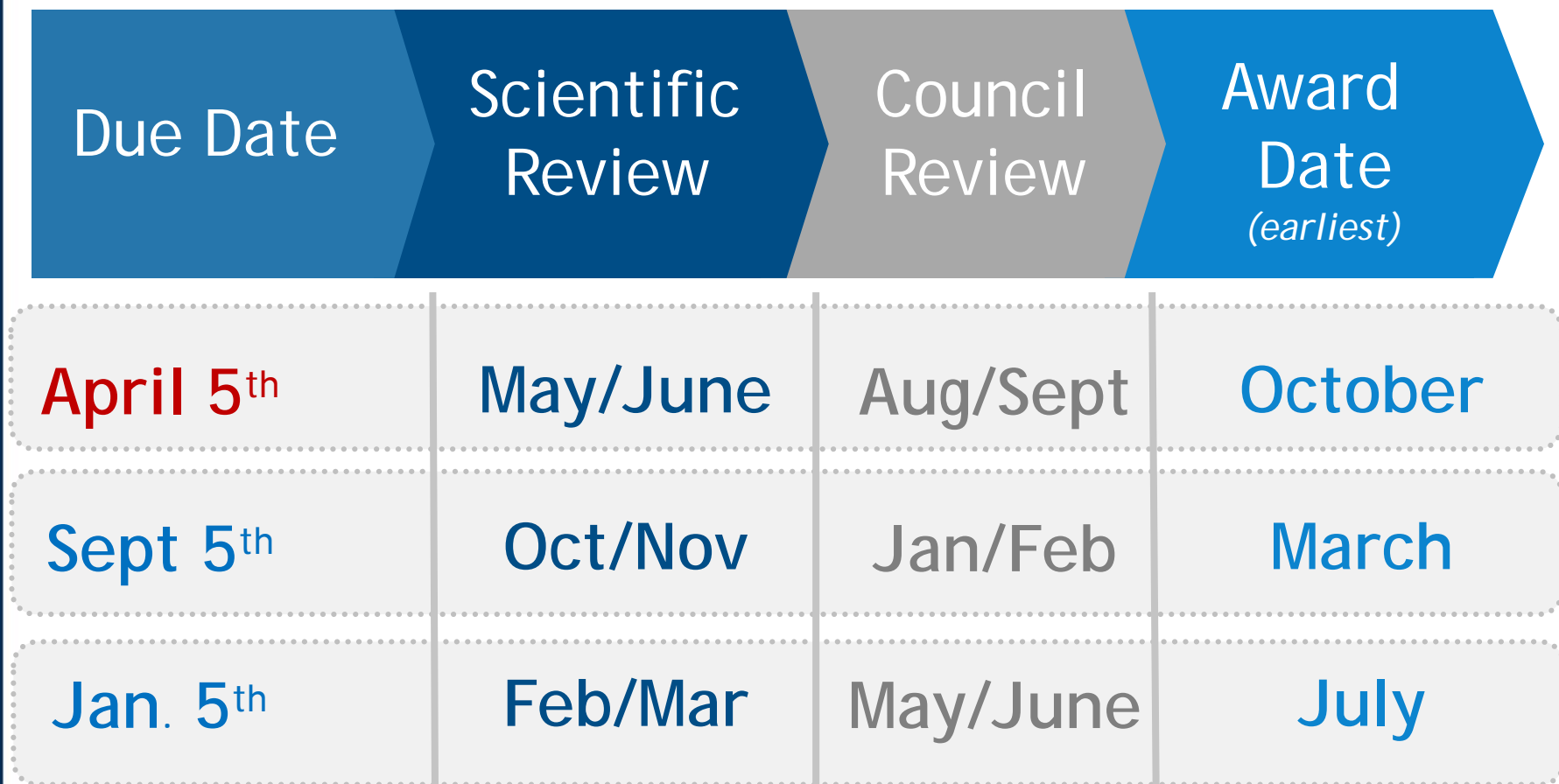
Registrations are required!!!

- DUNS Number (Company)
 - System for Award Management (SAM)
 - Grants.gov (Company)
 - eRA Commons (Company and all PD/PIs)
 - SBA Company Registry at SBIR.gov
- Helpful [NIH Grants Registration Infographic](#)
 - For contracts, submit proposals with [electronic Contract Proposal Submission](#) (eCPS) website





Timeline: New Applications



Overall Impact Score:

Scored Review Criteria (score 1-9)

- Significance (Real Problem/Commercial Potential)
- Investigators (PI and team)
- Innovation (New or Improved?)
- Approach (Research Design, Feasible)
- Environment (Facilities/Resources)

Additional Review Criteria (not scored individually)

- Protection of Human Subjects
- Inclusion of Women, Minorities & Children
- Vertebrate Animals
- Biohazards



Administrative Supplements to Promote Diversity in Research and Development Small Businesses-SBIR/STTR

NIH will now offer funding for SBIR/STTR awardees to recruit and compensate **students, postdoctorates, and eligible investigators from underrepresented groups** to participate in SBIR research projects.

Institutes/Centers Currently Participating

National Cancer Institute (NCI)
National Eye Institute (NEI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute on Drug Abuse (NIDA)
National Institute of General Medical Sciences (NIGMS)
National Institute of Neurological Disorders and Stroke (NINDS)

National Institute of Nursing Research (NINR)
National Institute on Minority Health and Health Disparities (NIMHD)
National Center for Complementary and Integrative Health (NCCIH)
National Center for Advancing Translational Sciences (NCATS)
National Heart, Lung, and Blood Institute (NHLBI)



Lift Labs

- Develops new technologies to provide proactive care for people with essential tremor and Parkinson's Disease
- Acquired by Google in September 2014



Anupam Pathak, Ph.D.
Founder & CEO
NINDS SBIR Awardee



<http://www.liftlabsdesign.com/>

SenesTech

- Limits rodent fertility in a non-lethal and environmentally-friendly way
- Works with NYC Subway System, and Chicago Transit Authority



Loretta Mayer, Ph.D.
Founder & CSO
NIEHS SBIR Awardee



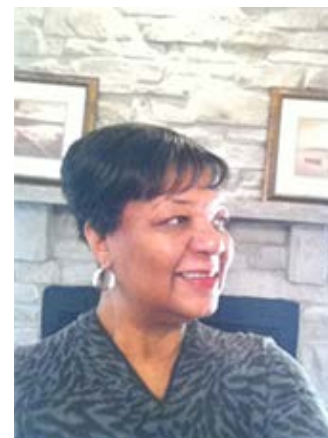
<http://senestech.com/>



Be Prepared to Resubmit!



“[SBIR] has been a long, trying, but worthwhile journey...from multiple submissions that were not discussed...to applications that scored below the funding levels...to concurrent applications (one Phase II and a Phase I) emerging from the rigorous peer review process with impact scores in the “Excellent” range.”



**Laverne Morrow
Carter, Ph.D.**

Founder & President, REESSI
NIMHD SBIR Awardee

<http://www.reessi.com>



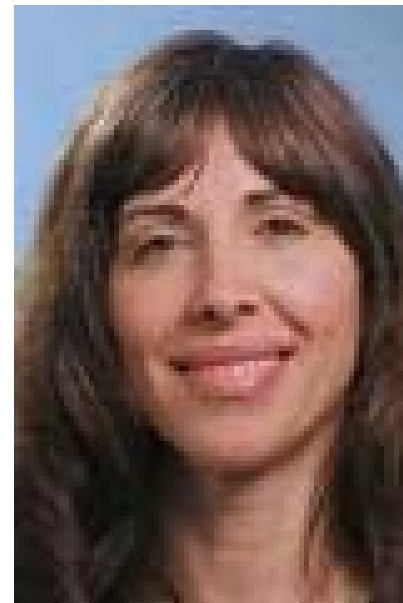


Small Business Innovation Research (SBIR)
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continued . . .



“As a native Spanish-speaking curriculum designer with a background in literary and performing arts, I work as a principal investigator on a number of NIH-funded projects. The SBIR and STTR programs allow me to translate evidence-based practices into web-based multimedia programs that offer skill-building tools for improving health and educational outcomes among Latino audiences.”



Jessie Marquez

Instructional Designer at
IRIS Educational Media

<http://www.irised.com/>





Most Important Piece of Advice

“Talk to a HHS Program Officer at least 6-8 weeks before a deadline for application specific advice.”

← → ↻ <https://sbir.nih.gov/engage/ic-contacts> ★

REVIEW

POLICY

TECHNICAL ASSISTANCE

RESOURCES

STATISTICS AND SUCCESS

ENGAGE AND CONNECT

New to SBIR/STTR

SBIR/STTR Home > IC Program Contacts

Contact

- Contact SBIR/STTR
- IC Program Contacts
- eRA Service submission Qs
- Connect

Engage

- Twitter
- Listserv
- News
- Webinar
- Events

Financial/Grants Mgmt Contact

Ms. Linda Whipp
Phone: 301-496-1472
Fax: 301-402-3672
Email: Linda.Whipp@nih.gov

Ms. Judy Fox
Phone: 301-443-4704
Fax: 301-443-3891
Email: Judy.Fox@nih.gov

Ms. Vandhana Khurana, MBA
Phone: 240-669-2966
Fax: 301-493-0597
Email: khuranav@niaid.nih.gov

Jason Lundgren
Phone: 240-669-2973
Fax: 301-493-0597
Email: Jason.Lundgren@nih.gov

National Institute on Alcohol Abuse and Alcoholism
<http://www.niaaa.nih.gov>

Megan Ryan, M.B.A.
Phone: 301-443-4225
Email: mryan1@mail.nih.gov

National Institute of Allergy and Infectious Diseases
<http://www.niaid.nih.gov>

Dr. Natalia Kruchinin
Phone: 240-669-2919
Fax: 240-627-3162
Email: kruchinn@niaid.nih.gov

questions? Use the NIH PDF Version

[Click here for the list of HHS SBIR Program Managers](#)

Not sure who to contact? Email sbir@od.nih.gov





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

HAMPTON
UNIVERSITY

SAVE THE DATE!

21st Annual HHS SBIR/STTR Conference




October 28 – October 30, 2019
Virginia Beach, VA

Stay connected for updates!
@NIHsbir | <https://sbir.nih.gov/>





Get Connected!

- Subscribe to the SBIR/STTR Listserv:
 - Email LISTSERV@LIST.NIH.GOV with the following text in the message body: **subscribe SBIR-STTR your name**
- [NIH Guide for Grants and Contracts](#) (weekly notification)
-  Follow us on Twitter: [@NIHsbir](https://twitter.com/NIHsbir)
- Read our [NIH SBIR/STTR Success Stories](#)
- [Connect with Us](#)
- Email: sbir@od.nih.gov





For More Information



Matthew Portnoy, PhD

NIH SBIR/STTR Program Coordinator

Phone: 301-435-2688

Email: mportnoy@mail.nih.gov



Robert Vinson

SBIR/STTR Program Manager

Phone: 301-435-2713

Email: robert.vinson@nih.gov



JP Kim, JD, MBA, MSc

SBIR/STTR Program Manager

Phone: 301-435-0189

Email: jpkim@nih.gov



Julie Beaver, MD, MS

SBIR/STTR Statistician

Phone: 301-496-8807

Email: julie.beaver@nih.gov



Patricia Swayne

*SBIR/STTR Communications
Specialist*

Phone: 301-402-1632

Email: patricia.swayne@nih.gov

