Webinar:

Small business funding for learning technologies during and beyond COVID-19

Hosted by:

Peter Atherton

SBIR/STTR Program Director

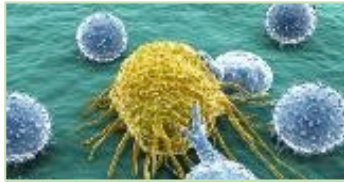**May 5, 2020**
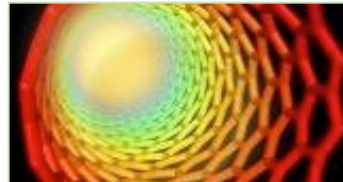
https://seedfund.nsf.gov/
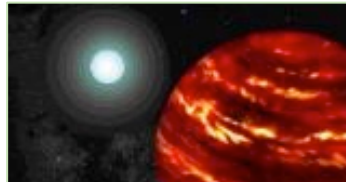
America's SEED FUND
NSF | SBIR.STTR

NSF supports all areas of science and engineering

Biological Sciences

Engineering

Mathematical & Physical Sciences

Computer & Information Science & Engineering

Geosciences (including Polar Programs)

Integrative Activities
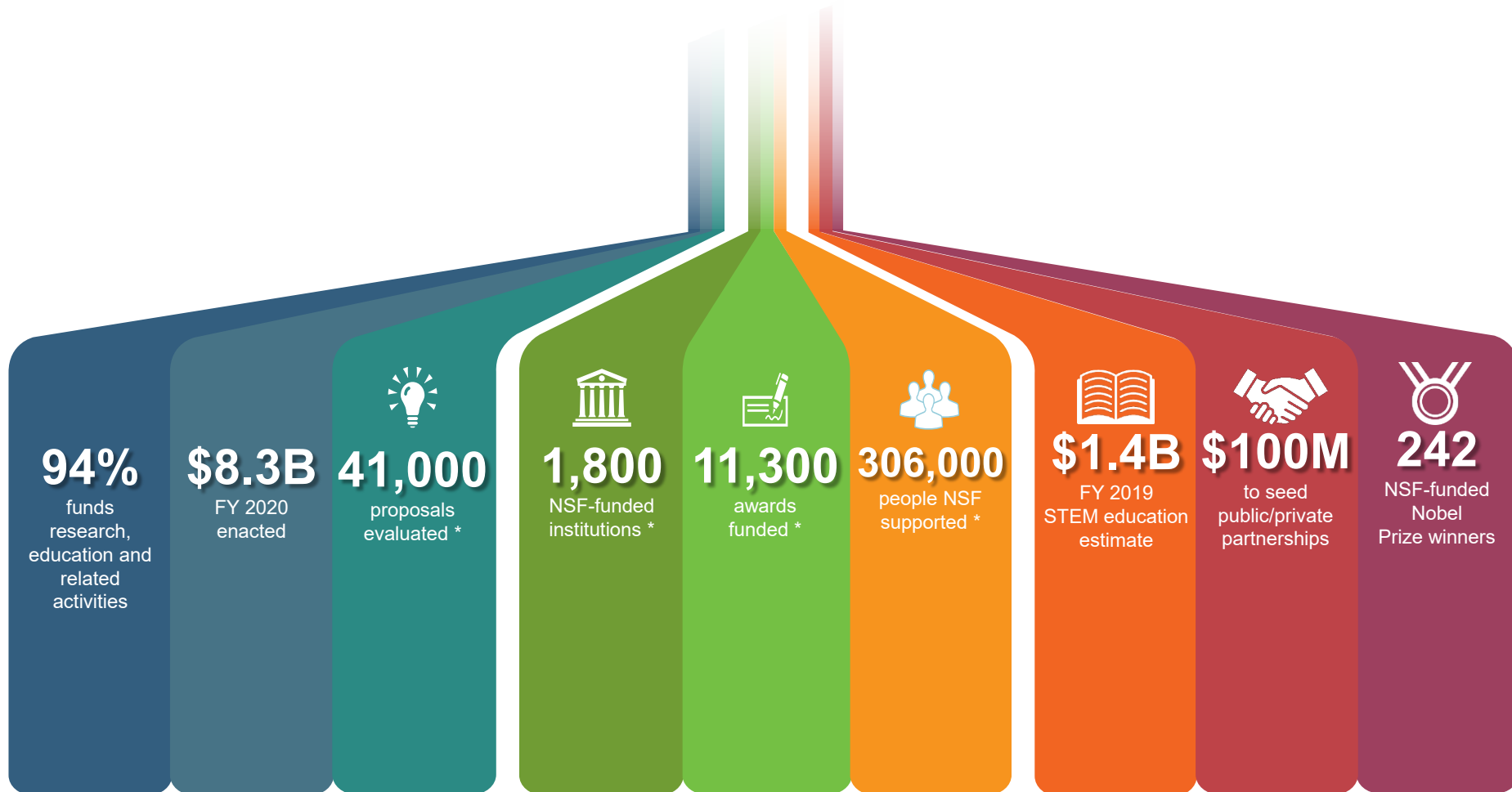
Education & Human Resources

Social, Behavioral & Economic Sciences

International Science and Engineering

NSF by the Numbers

94% funds research, education and related activities

$8.3B FY 2020 enacted

41,000 proposals evaluated *

1,800 NSF-funded institutions *

11,300 awards funded *

306,000 people NSF supported *

$1.4B FY 2019 STEM education estimate

$100M to seed public/private partnerships

242 NSF-funded Nobel Prize winners

* Numbers shown are based on FY 2019 activities, the last full year of data.

NSF

Basic Research

$8 B

America's SEED FUND

SBIR.STTR

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

Research and Development funding for small businesses

$200 M

America's Seed Fund powered by the National Science Foundation (NSF) funds startups in the development of groundbreaking, high-impact, high-risk technology, transforming scientific discovery into products and services with commercial and societal potential. NSF funding goes toward research and development (R&D), helping companies like yours de-risk technology for commercial success.

Critical need to support commercialization of technologies to assist in the global response to COVID-19.

NSF supports basic research across all disciplines, SBIR/STTR focuses on translation of the research outcomes.
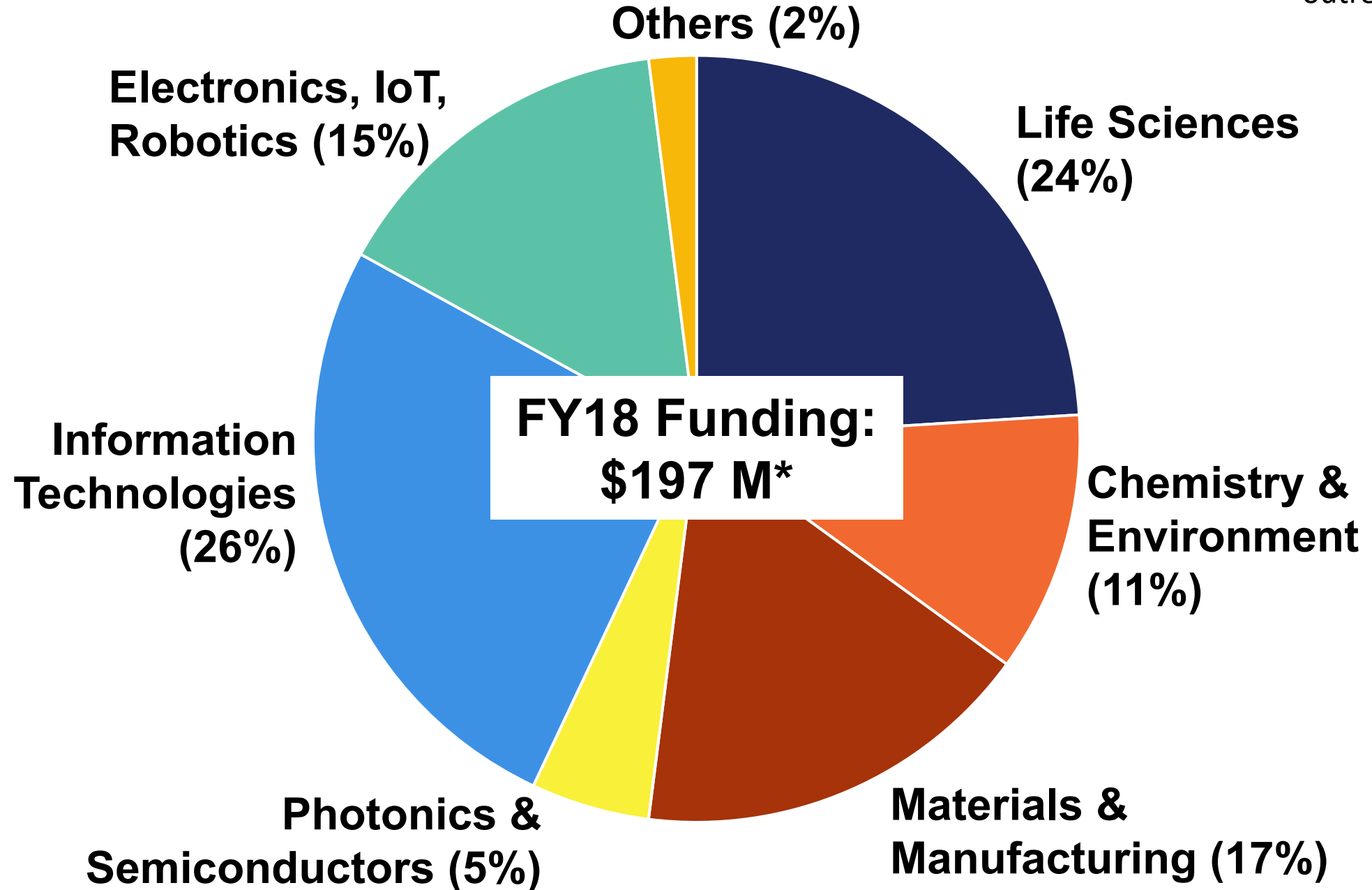
Our portfolio includes technologies that are transforming industry and society.

SBIR/STTR DCL clarifies COVID-19 funding objectives

SBIR/STTR Funding by Topic Area

*excludes admin & outreach funding

Others (2%)

Electronics, IoT, Robotics (15%)

Life Sciences (24%)

Information Technologies (26%)

FY18 Funding: $197 M*

Chemistry & Environment (11%)

Photonics & Semiconductors (5%)

Materials & Manufacturing (17%)

Phase I
Feasibility Research
6-12 Months
$256,000

Phase II
Research Toward
Prototype
24 Months
$1,000,000

Phase IIB
Third-Party Investment Plus
1:2 NSF Match
(up to $500,000)

Development of learning technologies to address issues related to COVID-19 and beyond

For eligible US-based, US-owned
small businesses

- COVID-19 Impact on Education: 1,268,164,088 affected learners; 72.4% of total enrolled learners; 177 country-wide closures – *UNESCO, 5-5-2020*[1]

- Estimated 43.9 million school students were enrolled in at least 95,000 public or private schools that are closed now, are scheduled to close or were closed and reopened – *Politico, 3-19-2020*[2]

- At least 1,102 colleges and universities in the U.S. have closed their campuses due to coronavirus, choosing to move classes online, impacting over 14 million students – *CNBC, 3-26-2020*[3]

- The likely result is a generation of students forced to play catch-up, perhaps for years to come. Most vulnerable are those who are always the most vulnerable: homeless children, those living in deep poverty and students with disabilities. – *WP, 4-13-2020*[1]

- Testing is being postponed or scrapped entirely as schools rush instead to gear up for remote learning and figure out how to distribute school meals. – *Politico, 3-19-2020*[2]

- Online learning currently isn't an option for many students - e.g. in Arkansas 23% of households lack internet service. Alternatives include classes via local TV and physical mail. – *NBC, 4-19-2020*[3]

- Harness technology to build more robust, accessible learning systems

- Enable or enhance the delivery, practice and/or assessment of distance learning

- Fund innovations that will have impact at scale and help solve problems created or revealed by COVID-19

Examples of innovation areas:

- Distance learning, including online learning

- Cyberlearning

- Learning engineering – use of data sciences to extract actionable evidence-based insights about learning

- Efficient delivery methods that account for socioeconomic and technology disparities

- Solutions may draw on technical tools from IT, AI, AR/VR, HCI, social or technical networking platforms, communications technologies, etc.

How to get started

NSF 20-065

Dear Colleague Letter: Request for SBIR/STTR Phase I Proposals Addressing COVID-19

https://www.nsf.gov/pubs/2020/nsf20065/nsf20065.jsp

New funding process for expedited Phase I SBIR/STTR proposals:

- NSF 20-065 Request for SBIR/STTR Phase I Proposals Addressing COVID-19

- Proposals must directly focus on an urgent requirement related to the COVID-19 crisis

- Requires a Project Pitch to be submitted first

- Requires registrations (SAM.gov) in order to submit a proposal – get started ASAP!

- Funding available as soon as possible

NSF | America's SEED FUND SBIR.STTR

The Technology Innovation

The Technical Objectives and Challenges

The Market Opportunity

The Company and Team

Submit your Project Pitch:
https://seedfund.nsf.gov/apply/

Questions to consider:

- What is the impact of your project for the current pandemic?

- What is the advantage vs. the state of the art or what is available on market?

- What will enable your team to move fast?

- Is there meaningful research or development required? (There will be more flexibility in considering projects that are closer to scale up and implementation than for regular NSF SBIR/STTR proposals.)

- We are looking for a diversity of companies and approaches to offer solutions to problems resulting from COVID-19.

- Processing time: Five business days ~~three weeks max~~.

- Limits: Still limited to 1 Project Pitch under review at a time. If your Project Pitches are declined, you are NOT limited to just two COVID-19 Pitches per submission window.

- Select "COVID-19" as the SBIR/STTR topic area on the Project Pitch form.

- Reference the word "COVID-19" and this Dear Colleague Letter (NSF 20-065) in the "Describe the Technology/Innovation" field.

What about the normal rules that prohibit a new Project Pitch if my company already has an invited Pitch or proposal under review?

- These rules will be waived for new Pitches aimed at the COVID-19 issue.
- If you are a current awardee, we strongly suggest consulting your PD before proceeding with a new Pitch/proposal.

Given the urgency of the COVID-19 situation, will the SBIR/STTR program consider projects that are closer to commercial reality (or involve relatively more development, and less research) than is normal for the program?

- All SBIR/STTR projects, including those issued under this opportunity, must be performed by eligible small businesses and all funds must go toward research and development.
- Your Program Director will use your Project Pitch to gauge appropriateness for this opportunity.

What happens after you submit your Project Pitch?

Good fit =

- You'll be INVITED to submit a full proposal.

- Please follow Phase I submission requirements

- MUST HAVE "COVID-19" in proposal title

- Registrations are STILL required
    - System for Award Management (SAM) – "financial assistance"
    - Research.gov
    - SBIR.gov

Not a good fit =

- Immediate feedback, but you'll have to go back to the drawing board.

- If you are not invited, you can submit another Project Pitch (COVID-19 projects are not limited to 2 Project Pitches per submission window).

Full Proposal preparation

- Consider the submission of a briefer-than-normal Project Description

- Prioritize fast submission if supporting documents (budget supporting documentation, letters of support) are not at hand

- Don't sweat the small stuff!

Review Criteria for Full Proposals

- Intellectual Merit

- Commercial Potential

- Broader Impacts

- *Magnitude and speed of impact on COVID-19 response*

Full review criteria: https://seedfund.nsf.gov/resources/review/peer-review/

- We expect invited proposals to be submitted quickly: <6 weeks

- DCL is not permanent

- Post-DCL, will still be able to submit COVID-19 proposals to regular SBIR/STTR topics – mark proposal as COVID-19

NSF's Coronavirus Updates & Community Guidance
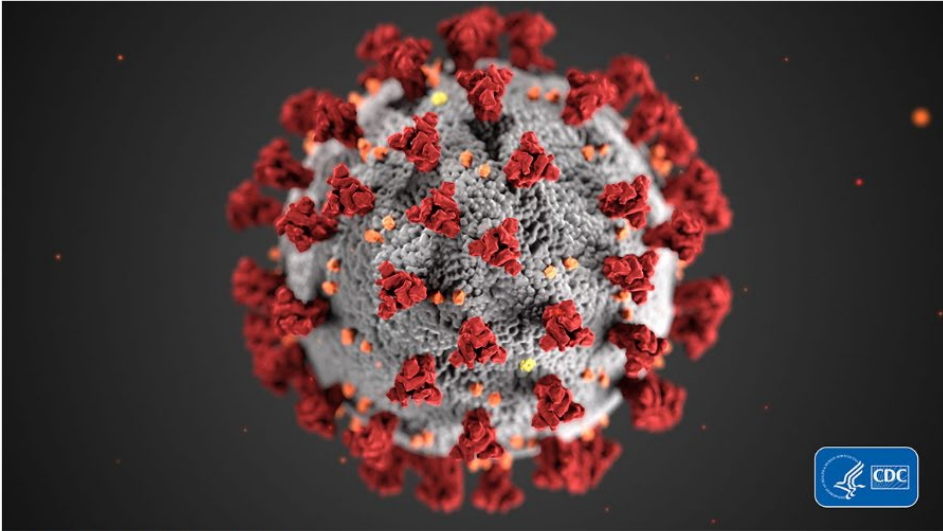
https://www.nsf.gov/news/special_reports/coronavirus/

Questions?

Peter Atherton: patherto@nsf.gov

sbir@nsf.gov

@NSFSBIR