



Is America's Seed Fund right for you?

April 27, 2023

A red square logo with the word "Hi" written in white, sans-serif font, centered within the square.

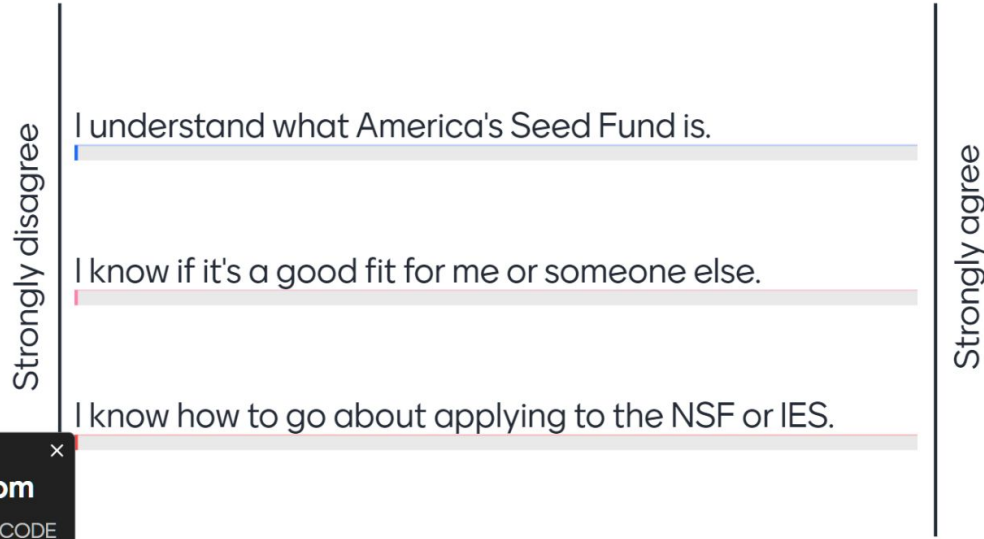
Hi



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 Mentimeter

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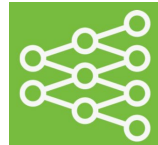


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Today's Takeaways



01

What is America's Seed Fund?

- Mission and Goals
- Structure
- Criteria

02

Why might it be a good fit for you?

- Innovation
- Team
- Commercialization
- Impact

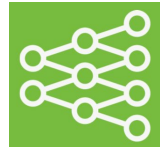
03

How do I apply?

- Unique Innovation
- Promising Team
- Authenticity and Perseverance

01. What is America's Seed Fund?

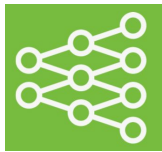
America's Seed Fund Mission



To support scientific excellence and technological innovation through the investment of federal research funds in critical American priorities to build a strong national economy.

The program's goals are to:

- Stimulate technological innovation;
- Meet federal research and development needs;
- Foster and encourage participation in innovation and entrepreneurship by women and socially or economically disadvantaged persons; and
- Increase private-sector commercialization of innovations derived from Federal research and development funding
- In addition, the STTR program aims to foster technology transfer through cooperative R&D between small businesses and research institutions.



Department of Agriculture (USDA)



- \$32 Million
- \$100,000
- \$600,000
- Grants
- SBIR**

Supports: Forests Resources, Plant and Animal Production and Protection, Conservation of Natural Resources, Food Science and Nutrition, Rural Development, Aquaculture, Biofuels and Biobased Products, Small and Mid-Size Farms

Department of Commerce (DOC)



- \$15 Million
- \$100,000
- \$400,000
- Grants
- SBIR**

Funds technologies in support of the missions of the National Oceanic and Atmospheric Administration (NOAA) and the National Institutes of Standards and Technology (NIST).

Department of Defense (DOD)



- \$1.9 Billion
- \$50,000 - \$250,000
- \$800,000 - \$1.83 Million
- Contracts
- SBIR/STTR**

Priority Areas include: 5G, AI/Autonomy, Biotechnology, Control and Communications, Cybersecurity, Directed Energy, Hypersonic, Microelectronics, Network Command, Nuclear, Quantum Sciences, Space, and more.

Department of Energy (DOE)



- \$315 Million
- \$200,000
- \$1.6 Million
- Grants
- SBIR/STTR**

Research areas include: Advanced Scientific Computing Research, Environmental Management, Fossil Energy, Biological and Environmental Research, Fusion Energy Science, Cybersecurity, Energy Security, Renewable Energy, and more.

Department of Education (ED)



- \$10 Million
- \$250,000
- \$1 Million
- Contracts
- SBIR**

Funds New Education Technology Products for Use by Students, or Educators, or those used by Infants, Toddlers, or Students With or At Risk for Disabilities, or Teachers in Early Intervention or Special Education Settings

Health and Human Services (HHS)



- \$1.2 Billion
- \$275,000
- \$1.83 Million
- Grants
- SBIR/STTR**

Funds health, life science, and biomedical discoveries that could impact the lives of patients and their families.

Department of Homeland Security (DHS)



- \$18 Million
- \$150,000
- \$1 Million
- Contracts
- SBIR**

Funds innovation supporting: Borders and Maritime Security, Chemical and Biological Defense, Critical Infrastructure and Resilience, Cybersecurity, Explosives Detection and Aviation Screening, First Responders, and more.

Department of Transportation (DOT)



- \$9 Million
- \$200,000
- \$1 Million
- Contracts
- SBIR**

Funds technologies in support of DOT Operating Administration: Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, and Pipeline and Hazardous Materials Safety Administration.

Environmental Protection Agency (EPA)



- \$5 Million
- \$100,000
- \$400,000
- Contracts
- SBIR**

Broadly funds technologies addressing Air Quality, Homeland Security, Sustainable Materials Management, Safe Chemicals, Land Revitalization, and Clean and Safe Water.

National Aeronautics and Space Administration (NASA)



- \$174 Million
- \$150,000
- \$1 Million
- Contracts
- SBIR/STTR**

Seventeen (17) technology areas, including: Propulsion Systems, Flight Computing and Avionics, Aerospace Power and Energy Storage, Robotic Systems, Communications, Navigation, and Orbital Debris Tracking/Characterization Systems.

National Science Foundation (NSF)



- \$215 Million
- \$275,000
- \$1 Million
- Grants
- SBIR/STTR**

Funds almost all areas of technology and market sectors (with the exception of clinical trials).

Requirements

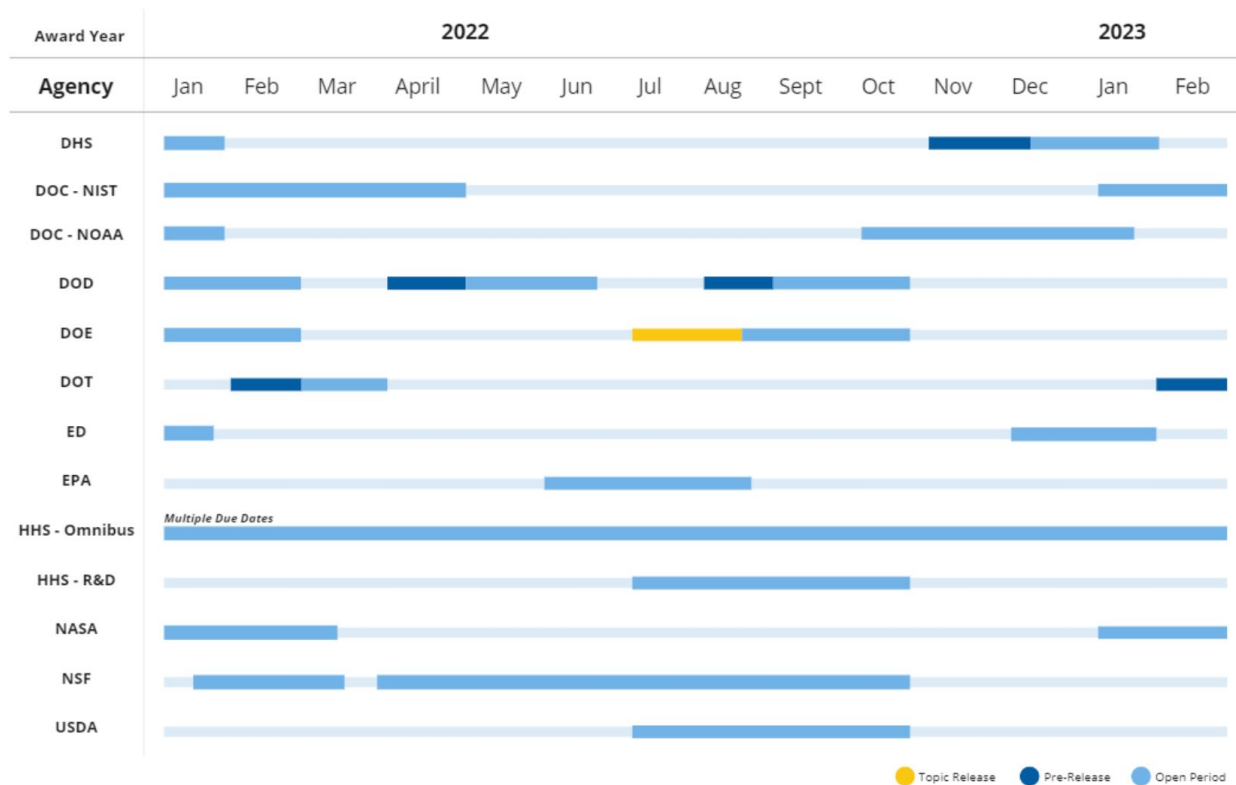
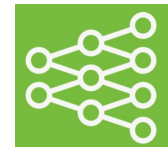


Company must be **for profit**, U.S. owned/operated, and under 500 people

Work must be **done in the U.S.**

Focus is on **performing R&D** – Not purchasing equipment, commercializing a technology that has already been developed, or one that has very low risk and only needs capital

Solicitation Calendar



Evaluation Criteria



- Intellectual Merit
 - Technical innovation
 - Team
- Commercial Viability
- Broader Impact

SBIR Award Rates 2019

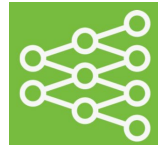


Chart 15: SBIR Phase I Proposal Selection Rates

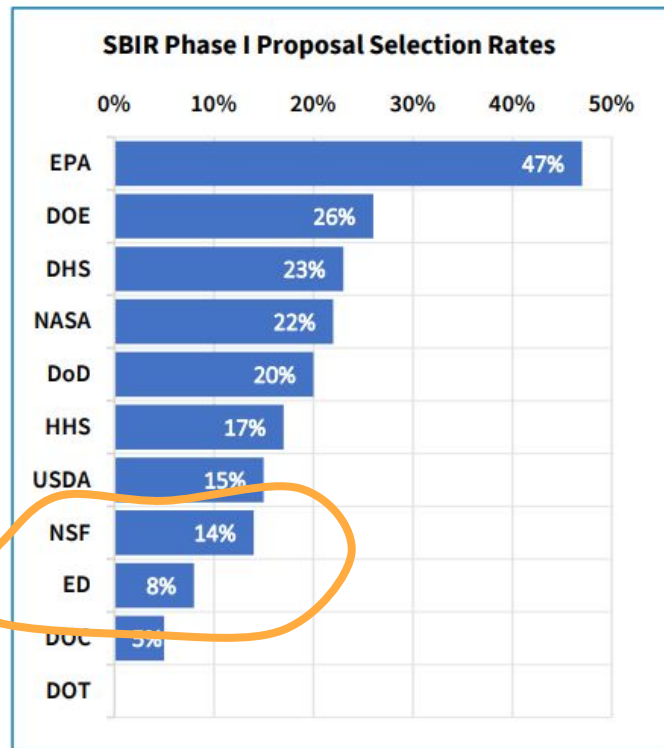
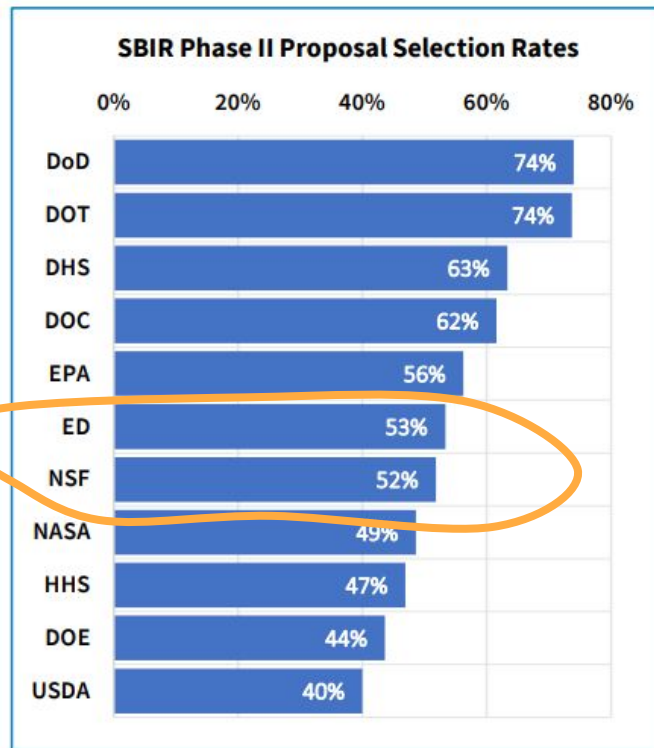


Chart 16: SBIR Phase II Proposal Selection Rates



2. Why might it be a good fit?



Department of Education (ED)



 \$10 Million

 \$250,000

 \$1 Million

 **Contracts**

SBIR

Funds New Education Technology Products for Use by Students, or Educators, or those used by Infants, Toddlers, or Students With or At Risk for Disabilities, or Teachers in Early Intervention or Special Education Settings

National Science Foundation (NSF)



 \$215 Million

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 **Grants**

SBIR/STTR

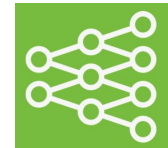
Funds almost all areas of technology and market sectors (with the exception of clinical trials).



Intellectual Merit		
Technical innovation	Risk	Research-based
Team	Small < Tech, Comm, Research < Larger	
Commercial Viability	Adoption Letters of support/MOU	
Broader Impact	Focus on end user, broader team and funding team	Alignment to solicitation priority



Drilling down into what the NSF wants



What is technical risk?

When you have an idea for a product or service that has a technical hurdle. NSF is there because the private sector doesn't want to take that risk and doesn't want to wait as long to work through the technical hurdle.

What's a good fit for NSF Seed Fund?

1. Product that you don't know how to make it work. No one has done it. Still unproven.
2. If it does end up working, it will be disruptive. Big value proposition.
3. You already have an idea of how to keep competitors from grabbing your market. (patent or something like that)

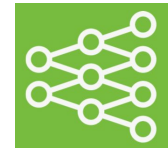
"If you know for sure that your product can be done, NSF is probably not the right fit."

They also look for things that are similar to private investors:

1. Committed teams, gritty.
2. Some sense of customer discovery and traction
3. Advisors



Drilling down into what the NSF can do for you



Every agency has a slightly different process. For NSF:

- Phase 1 275,000
- Phase 2 1M
- Phase 2B up to 500K, match 1M funding 50 cents on the dollar

Phase 1: process

- 2-page 1,000 word project pitch. Feedback within 2 weeks.
- Then invited to input full proposal. It take 5-6 months to get approval, because SMEs review proposals.

50% of pitches are typically invited to submit a proposal

10–15% of proposals are typically phase 1 funded



Drilling down into what the IES wants



- Priority 1: Education technology products used by students or teachers (or other instructional personnel) in authentic education settings.
- Priority 2: Education technology products for infants, toddlers, or students with disabilities. Also, teachers (or other instructional personnel, related service providers, or family members) in early intervention or unique education settings.
- Priority 3: Education technology products used by school administrators. Or technologies designed for use in early intervention or special education settings



Drilling down into what the IES can do for you



- Phase 1A is for brand new technologies (\$250K)
<https://sam.gov/opp/f8ad312618394d778107c26c1e82264f/view>
- Phase 1B is for a new component to existing technology (\$250K)
<https://sam.gov/opp/5b70c44da715456a84d3172d8b05e6d5/view>
- Phase 2 is for evidence-backed, research-vetted, academically-supported projects (\$1M)
<https://sam.gov/opp/a80c20d86b4c443295ed5387974eec49/view>

3. How do I apply?

Gather your special sauce

- Unique Innovation
- Promising Team
- Authenticity and Perseverance

Uniqueness of your innovation



Research Foundation

Competitive Scan

Evidence of Impact

Sustainable business model

“Riskiness”

Promising Team



Competency

Network

Connection to broader impact goals

Authenticity and Perseverance



Tap into your passion

Tap into your grit

Be methodical

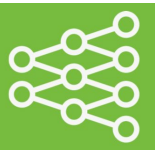
Pay attention to
the details

IES

NSF



NSF Applicant journey map



Applicant finds out about NSF through word of mouth, [TIP outreach](#)
 Applicant has a technical innovation, impact idea or business aspiration
 Applicant learns about selection criteria through [website](#) or [webinar](#)
 Applicant searches for [awards made in the past](#)
 Applicant meets the [eligibility requirements](#)
 Applicant writes pitch, including Technology Innovation; Technical Objectives and Challenges; Market Opportunity; Company and Team

Applicant [creates account](#)
 Applicant [submits pitch](#)
 Program Director reviews pitch
 Applicant receives notification within 1 month: can be yes, no or required clarifications

Applicant selects a submission window
 Applicants gets more info by:
 reading the [application](#)
 Attending a [webinar](#)
 Contacting a [program director](#)
 Contacting the [general help email](#)
 Using the Help Line 703-292-9060

Applicant ensure that they meet [eligibility requirements](#)
 Applicant selects STTR or SBIR
 Applicant creates [SAM.gov Unique Entity ID \(UEI\)](#)
 Applicant creates [research.gov login](#)
 Set up [SBIR Business Concern Control ID](#)

***** CO-DESIGN *****

Applicant identifies application writing team
 Applicant identifies project team
 Applicant identifies SME
 Applicant gathers research for proposal to support technical innovation, social impact and commercial viability

***** END CO-DESIGN *****

Applicant creates outline for proposal
 Applicant writes proposal
 Applicant secure IRB protocol
 Applicant gets 2 support letters for proposal

Applicant submits proposal through research.gov template

Program director [identifies panel reviewers](#)
 Panel reviewers [approve & responses](#) each
 Panel reviewers enter reviews in research.gov
 Panel reviewers attend a [half-day review panel](#)

Program director condenses report for applicants
 Program director contacts applicant
 Applicant receives Yes, No or requests for clarification
 Applicant who receive a request for clarification write response

Applicants who got rejected can pitch for another project.

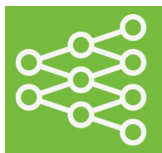
Grantee provides a monthly report
 Grantee has a monthly call with Program Director
 Grantee go through ICORPS
 Grantee is assigned a ICORPS commercialization mentor
 Grantee attends bootcamp
 Grantee presents to wider cohort of grantees
 Grantee interviews 100 users
 Grantee develops MVP
 Grantee secures letters of commitment for Phase 2

Applicant creates [SAM.gov Unique Entity ID \(UEI\)](#)


Applicant identifies application writing team

Applicant identifies project team

Applicant secure IRB protocol



DoE/IES solicitation Inbox x _Harvard x ↕ 🖨 📧

 **Juliette Adams** <juliettheadams@gmail.com> Feb 22, 2023, 6:21PM ☆ ↶ ⋮
to phillip_green, David ▾

Hi Phillip,

Looking forward to meeting you and digging into how the iLAB can better leverage America's Seed Fund opportunities.

Heads up that DoE/IES currently has open solicitations. Applications are due March 13. This could be relevant to projects that you know could put together a proposal in 3 weeks time.

I think new IES solicitations usually come every 6 months.

- Phase 1A is for brand new technologies: <https://sam.gov/opp/f8ad312618394d778107c26c1e82264f/view>
- Phase 1B is for a new component to existing technology: <https://sam.gov/opp/5b70c44da715456a84d3172d8b05e6d5/view>
- Phase 2 is for evidence-back, research vetted, academically supported projects. <https://sam.gov/opp/a80c20d86b4c443295ed5387974eec49/view>

If you know anyone who'd want to pursue any of the above, they need to jump through a few hoops first:
The first order of business for you is to register your company in [SAM.GOV](https://sam.gov). This will take some time to go through.

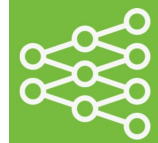
Create a Login.Gov account: <https://login.gov/create-an-account/>
Log into [SAM.GOV](https://sam.gov) with your [LOGIN.GOV](https://login.gov) account
Then you'll need to register your entity in [SAM.GOV](https://sam.gov) (Under "Get Started")
That process is straightforward as long as you are careful to enter all the right info (e.g. remember to add LLC after the name of your company if you are an LLC!).
Remember that the taxpayer name is you company name, not yours!
You'll get approved first by the IRS, then by the DLA which will assign a CAGE code.
Once you have that, your company is registered in [SAM.GOV](https://sam.gov) and you can go ahead and apply for government grants.
Once you get your UEI from SAM, you'll also need to register in <https://www.sbir.gov/registration> for IES grants.

Talk next week!

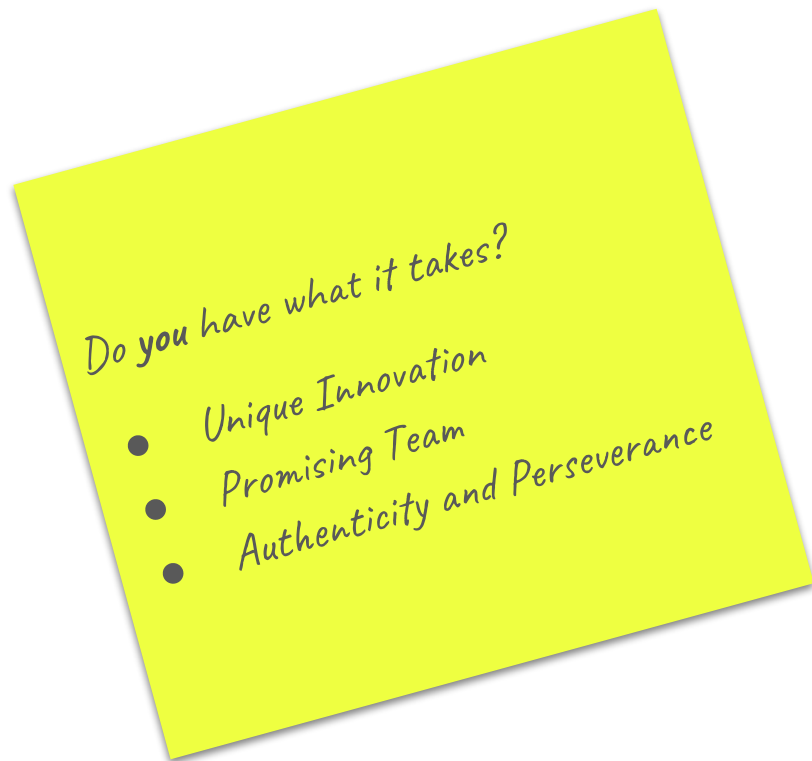


Volunteers?

Evaluation Criteria



- Intellectual Merit
 - Technical innovation
 - Team
- Commercial Viability
- Broader Impact



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How do you feel now?

Strongly disagree

I understand what America's Seed Fund is.

I know if it's a good fit for me or someone else.

I know how to go about applying to the NSF or IES.

Strongly agree

I would recommend this session to others.



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