NSF Tech Accelerators

U.S. National Science Foundation

Informational Webinar for the NSF Tech Accelerators RFI

June 5, 2026

NSF Tech Accelerators Team

Agenda Overview

- Welcome & Housekeeping
- RFI Introduction
- Remarks: NSF TIP's Assistant Director
- NSF Tech Accelerators Overview
  - Program Model
- NSF Tech Accelerator Role
  - Qualifications and Performance Expectations
- Initial Set of NSF Tech Accelerators Deep-Tech Topics
  - AgTech
  - MaterialsTech
  - OceanTech
  - SciTech
- RFI Overview and Requirements
- Q&A

Questions?

Many questions will be answered throughout the webinar presentation.

After the webinar presentation, a 30-minute Q&A will be held.
Participants will have the opportunity to submit their questions using the Q&A feature.

NSF Tech Accelerators

U.S. National Science Foundation

Remarks: NSF TIP's Assistant Director

Erwin Gianchandani

Assistant Director, TIP Directorate

NSF Tech Accelerators Launch Team

Erwin Gianchandani
TIP Assistant Director

Douglas Maughan
NSF Tech Accelerators Section Head

Kevin Archibald
AAAS Fellow

Abbey Boyd
AAAS Fellow

Patrick Breen
Senior Procurement Executive

Rick Farnsworth
Program Director

Joan Geotzinger
Staff Associate

Jemin George
Program Director

Lisa Marik
Business Ops Manager

Ben Patterson
Contracting Officer

Michael Reksulak
Program Director

Chris Sanford
Program Director

Shelby Smith
Staff Associate

Brittany Sickler
Strategic Advisor

JD Swanson
Program Director

Floh Thiels
Program Director

Joda Thongnopnua
Special Advisor

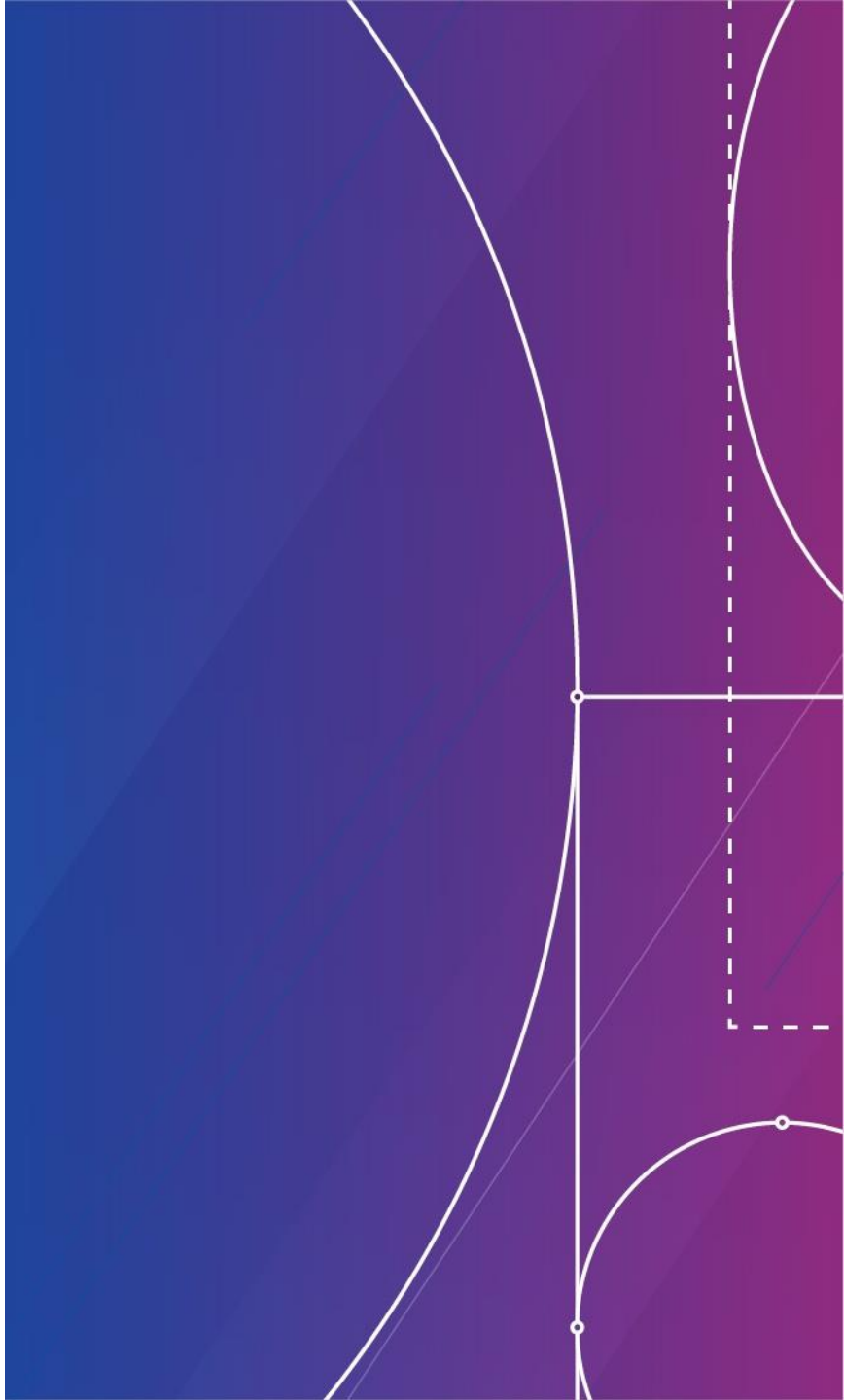
Bridget Turaga
Strategic Advisor

Alex Vadati
Program Director

David Waldner
Business Ops Analyst

Contractor Support

Aptive Resources
Fusion MasTech Inc.
ICF Next
ITech AG



NSF Tech Accelerators

NSF Tech Accelerators
Initiative Overview

Doug Maughan

Section Head, NSF Tech Accelerators

Filling a Critical Gap in the U.S. Innovation Enterprise

The Challenge

Slow innovation weakens U.S. competitiveness and national security.

- Often, traditional research experiences challenges traversing from the lab to market; the so-called "valley of death."
- Promising ideas and technologies are too risky for private capital investment or are otherwise stranded before entering the market.
- Deep technology, key technology areas require expertise, support and investment to strengthen the U.S. economy and national security.

The Approach

NSF Tech Accelerators: A flexible, technology-first framework to accelerate novel technologies for the market.

- Invest in promising technologies that face market-entry challenges or are riskier investments with the goal of unleashing new technological advancements and creating new markets for them.
- By "taking multiple translational shots on goal," the initiative will strengthen U.S. competitiveness within specific emerging technology topics.
- Advance deep technology areas currently under-invested at the pre-seed, seed and Series A stage, and demonstrates "crowding in" investment from private sector investors.
- Remove commercialization barriers hindering advancement to the market.

NSF Tech Accelerators Mission & Goals

Mission

NSF Tech Accelerators, designed to transform basic research into scalable, market-ready technologies that strengthen the U.S. economy and national security.

The initiative seeks to speed the path from discovery through deployment to advance breakthrough technologies by:

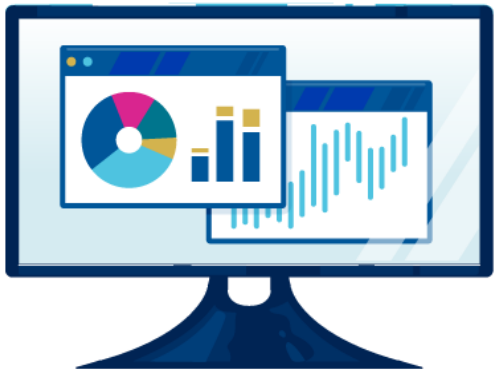
1. Designing, building and scaling novel technologies for the market.
2. Catalyzing partnerships across sectors, bringing together expertise and resources to advance market-driven technologies.
3. Increasing industry engagement earlier to generate "market demand/pull."
4. Eliminating ecosystem gaps and barriers that prevent technologies from advancing to the point of market adoption and uptake.

The Initiative's Framework is Built on Six Pillars

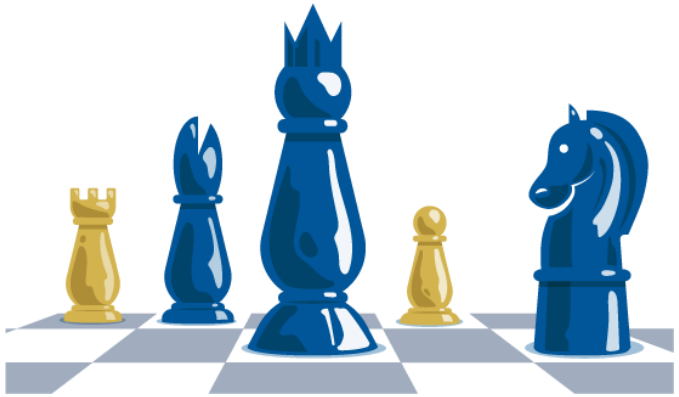
Lab-to-market acceleration

Advancing deep technologies

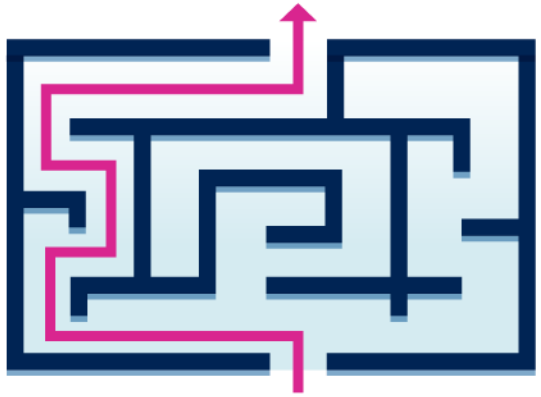
Innovation teams



Entrepreneurial resources



Strategic partnerships



Commercialization expertise

NSF Tech Accelerators Framework

NSF

- **Establish the program model**, including guidance and processes
- **Perform oversight** of each awarded NSF Tech Accelerator
- **Conduct program evaluation**

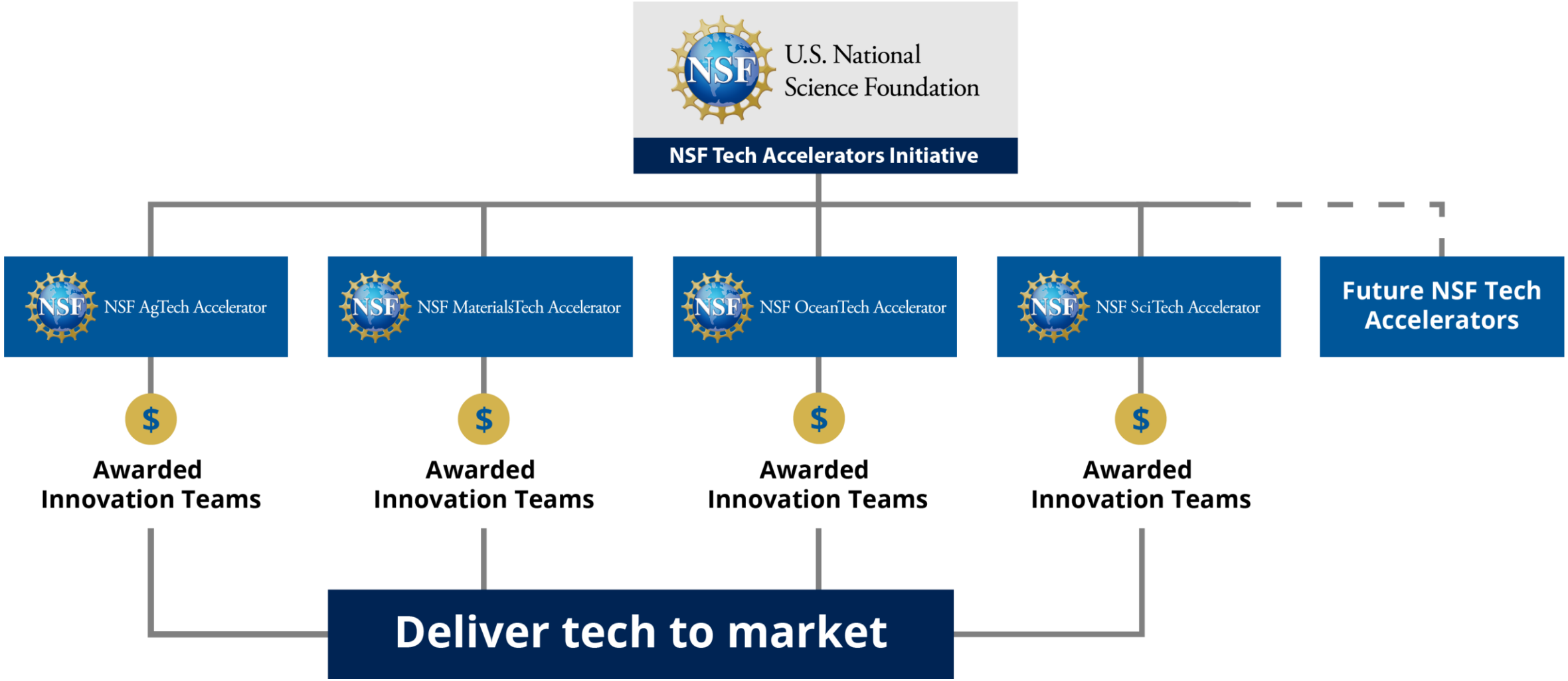
Awarded NSF Tech Accelerator

- **Serve as a central connector** between researchers, entrepreneurs and the private sector
- **Identify research topics** to unleash new technological advancements and create new markets
- **Identify and address commercialization barriers** and ecosystem gaps
- **Implement the flexible program model,** including issuing research funding opportunities and proposal review processing to invest in a portfolio of technology teams
- **Guide funded-innovation teams through the entire lab-to-market pathway**

Research & Innovation Teams

- **Apply to funding opportunities** issued by each NSF Tech Accelerator
- **Achieve required milestones and actionable outcomes** and impacts
- **Receive comprehensive guidance** and support, e.g., entrepreneurial services, mentorship
- **Deliver technologies that address U.S. needs** and are viable for market adoption, uptake and further investment

About NSF Tech Accelerators



NSF Tech Accelerators

NSF Tech Accelerators
Program Model

Doug Maughan

Section Head, NSF Tech Accelerators

NSF Tech Accelerators Program Model

Enables NSF Tech Accelerators to transform research into market-ready technologies.

Using the program model, each NSF Tech Accelerator **will assess the maturity of a given research topic** and align it to the appropriate program model stage.

Stage 1: Design

- **12-month** planning effort
- **Up to $500,000 per team** of nondilutive funding
- Funded teams create strong multidisciplinary collaborations with deep expertise in:
  - The technical topic area
  - Conducting customer discovery
  - Forming partnerships
  - Developing initial prototypes
- **Up to 10 teams** are anticipated to be awarded per Design topic

Stage 2: Build

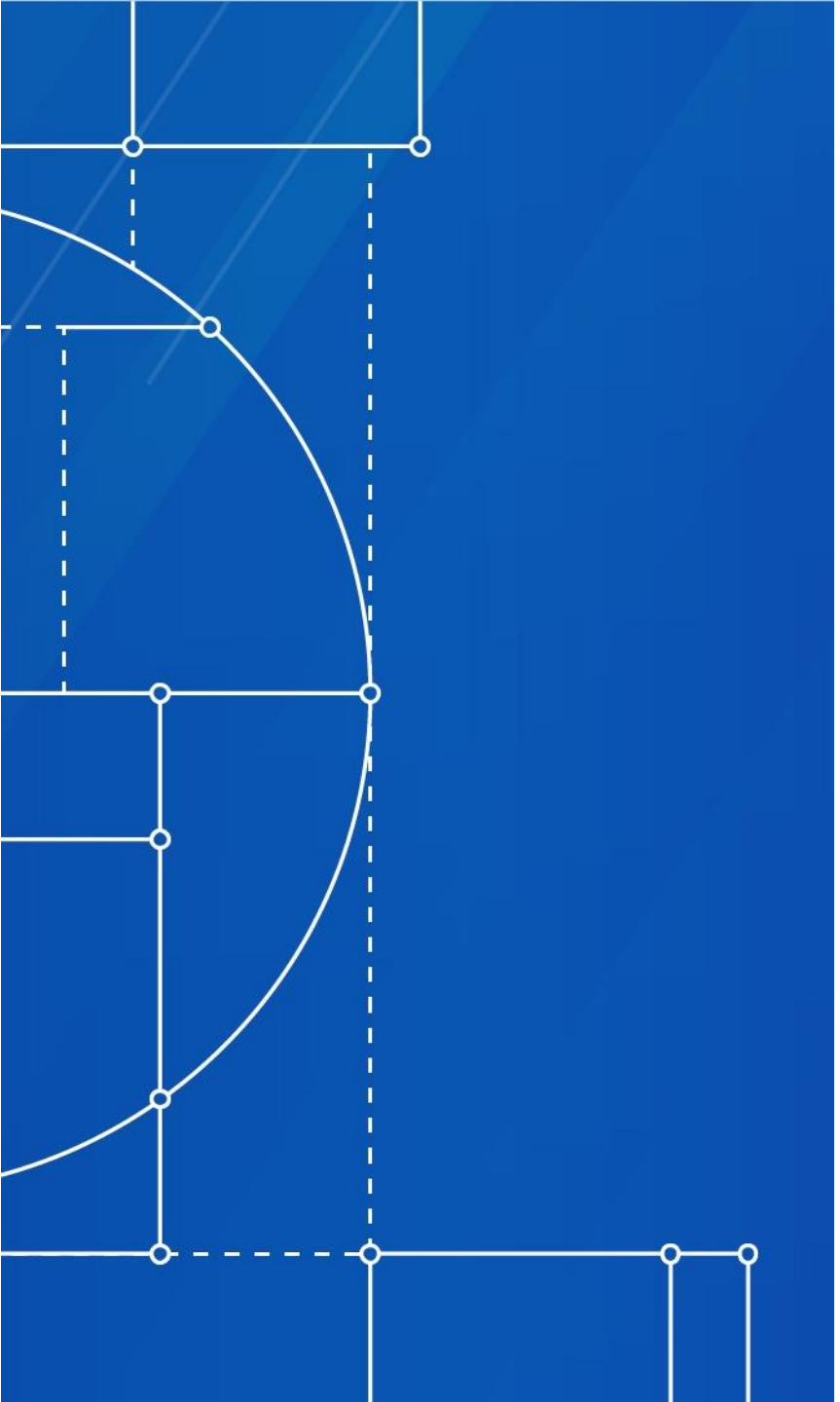
- **24-month** growth phase
- **Up to $5M per team** of nondilutive funding
- Funded teams **advance from early proofs-of-concept to minimum viable products** and the development of market ready commercialization strategies
- Individual teams:
  - Validate market opportunities
  - Develop essentials for successful technology transition
- **Up to five teams** are anticipated to be awarded per Build topic

Stage 3: Scale

- **36-month** translation effort
- **Up to $10M per team** of nondilutive funding
- Funded teams accelerate operational scalability by:
  - Strengthening long-term commercialization strategies
  - Expanding strategic partnerships
  - Building operational capacity necessary for broad market adoption
- NSF Tech Accelerator to secure a **significant amount of cost-share investment** (non-federal entities) for funded teams
- **Up to three teams** are anticipated to be awarded per Scale topic

Outcomes

- **Funded teams are expected to specify clear milestones and deliver actionable outcomes and impact.**
  - Examples: Patents, licenses, entity formation, partnerships with industry and customers, pilots, demos and other scaling methods.
  - These outcomes replace traditional research outputs such as publications and conference proceedings.
  - Ensuring breakthrough technologies move swiftly to the marketplace and reach Americans faster.
- **Strengthen the technology ecosystem, U.S. economy and national security.**
  - Increasing private sector engagement to support cost-share and market driven outcomes (e.g., adoption, further investment).
  - Eliminate ecosystem and commercialization gaps and barriers preventing technologies from advancing to the market.



Gaps and Barriers

- Deep-tech areas have **unique technical and commercialization gaps and barriers.**
- Awarded NSF Tech Accelerators will **leverage deep-tech expertise** to identify additional gaps and barriers unique to their topic.
- **Examples** of potential gaps and barriers
  - Adoption or implementation gaps, such as unclear end-user needs or capacities, and talent shortages.
  - Long research and development (R&D) cycles and capital-intensive technology, creating difficulty for market entry.
  - Integrating new technology with legacy systems can cause compatibility issues leading to slow adoption, bottlenecks and data silos.
  - Private investor risk-aversion to “hard tech” due to longer feedback loops and little to no short-term return on investment (ROI).

NSF Tech Accelerators

NSF Tech Accelerators
Request for Information: Introduction

Doug Maughan

Section Head, NSF Tech Accelerators

RFI Introduction

Purpose

- **Seek input:** Potential NSF Tech Accelerator applicants and others are encouraged to provide feedback to the NSF Tech Accelerators' framework: program model, organizational structure (NSF Tech Accelerator role) and deep-tech areas, including the proposed topics:
  - Agriculture technology (AgTech)
  - Advanced materials (MaterialsTech)
  - Ocean technology (OceanTech)
  - Scientific instrumentation (SciTech)
- **Establish NSF Tech Accelerators:** Using a competitive, multi-step Other Transaction (OT) contract formation process, NSF intends to select four organizations, one for each NSF Tech Accelerator topic.
  - NSF Tech Accelerator role
  - Required capabilities and expertise
  - NSF Tech Accelerator performance expectations, deliverables
- **RFI Response Requirements:** Including the contract formation process, eligibility and response submission information.

NSF Tech Accelerators

NSF Tech Accelerators

NSF Tech Accelerator Role: Qualifications and Performance Expectations

Shelby Smith

RFI Lead, NSF Tech Accelerators

NSF Tech Accelerator Role

Responsibilities include:

- **Serve as a central connector:** Bridge researchers, entrepreneurs and the private sector to accelerate advancement within the deep-tech area, including identifying high-impact, long-term alliances that drive the NSF Tech Accelerator's expertise and growth.
- **Identify high-impact research topics:** Assess the technology landscape to determine research areas that unlock new technological advancements and create new markets.
- **Advance the deep-tech ecosystem:** Strengthen the technology ecosystem by addressing commercialization barriers and ecosystem gaps that hinder market advancement.
- **Implement the flexible program model:** Issue research funding opportunities and manage proposal review processes to strategically invest in a portfolio of technology teams.
- **Manage the lab-to-market journey for funded teams:**
  - Oversee project deliverables, milestones and payment schedules of awarded teams.
  - Provide entrepreneurial services such as mentorship, user-discovery, pitching, market readiness planning, IP advisement and commercialization support.
  - De-risk technologies to enable market uptake, attract further investment and drive impact.

NSF Tech Accelerator Capabilities and Expertise

- **Willingness to serve as a strategic NSF collaborator.**
  - Adapt and grow competencies to drive impactful change.
- **Domain and commercial expertise in an NSF Tech Accelerator topic area, with:**
  - Ability to identify and address barriers impeding technological and commercial advancement.
  - Proven tech scouting, de-risking technology to position it as market-ready.
- **Robust business management capabilities, including:**
  - Organizational and leadership skills for managing a productive team environment.
  - Ability to issue/manage sub-contracts.
  - Evaluation competencies to drive evidence-based decisions.

NSF Tech Accelerator Capabilities and Expertise

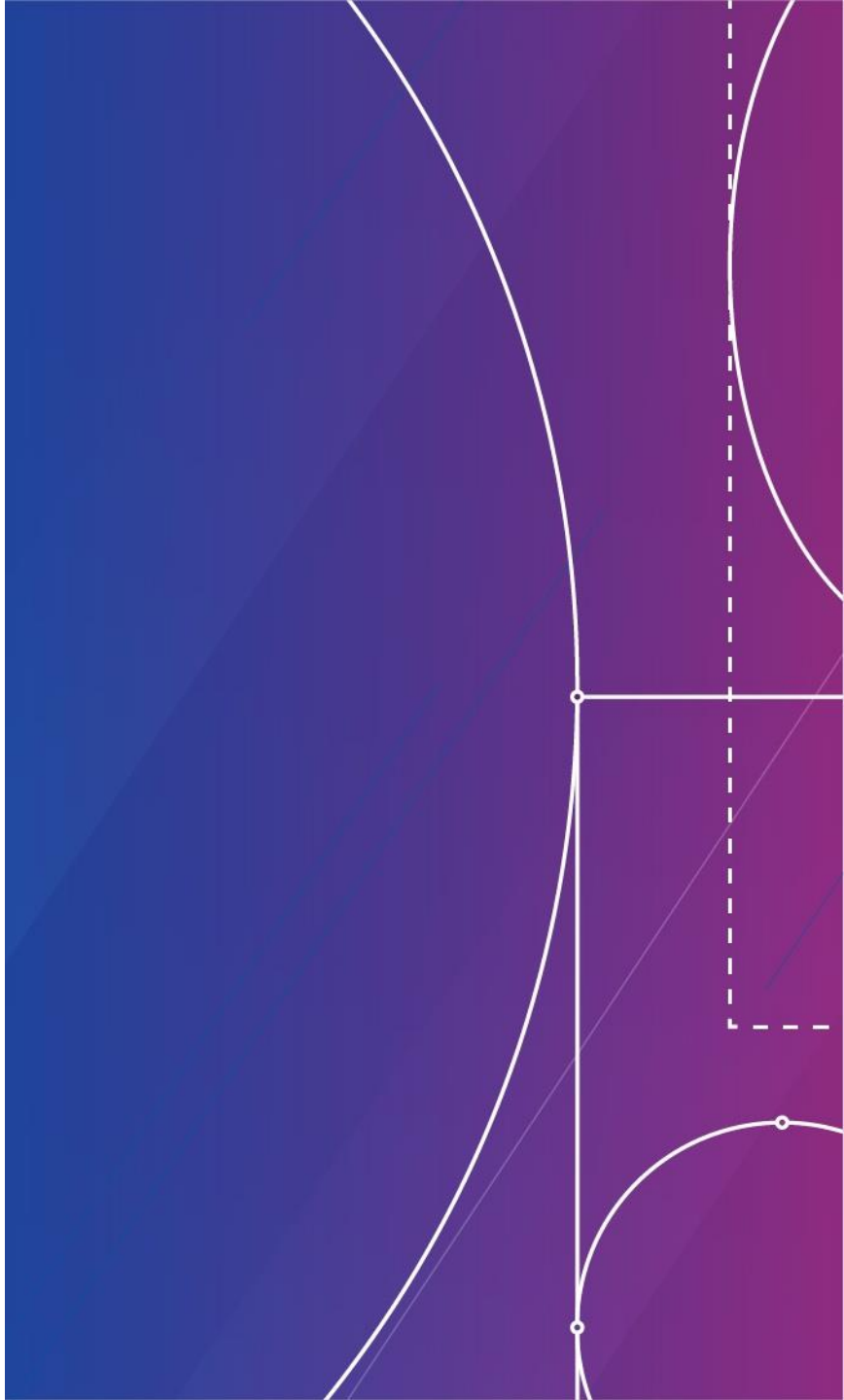
- **Strong communication, marketing and outreach expertise, including:**
  - Creative capabilities to develop engagement strategies and compelling products.
  - Ability to grow NSF Tech Accelerator audiences and applications.
- **Ability to identify and manage strategic partnerships.**
  - Drive expertise and growth through high-impact alliances.
  - Secure a significant cost share investment for funded teams (Stage 3: Scale).
- **Robust entrepreneurial expertise and services**.
  - Equip teams with the critical skills to spark innovation and position technologies for impact.
  - Guide funded teams through coaching and mentorship each stage of the program.
  - Examples: Customer discovery, IP management, strategic networking, etc.

Partnership with NSF

- **Strategic NSF partner:** NSF aims for a collaborative relationship between the NSF TIP program team and NSF Tech Accelerators.
- **NSF investment:** NSF funds the NSF Tech Accelerator operational costs and provides the R&D investment to the research awards issued and managed by the NSF Tech Accelerator.
- **Implementation support:** NSF provides NSF Tech Accelerators with programmatic guidance, templates and tools for implementing the program model and ensuring consistency across NSF Tech Accelerators.
- **Cross-accelerator synergies:** NSF Tech Accelerators are expected to share best practices and collaborate with one another to support program goals and priorities.

NSF Tech Accelerator Performance Expectations

- The NSF Tech Accelerators will be required to produce and deliver a range of performance deliverables to NSF to demonstrate progress.
- Deliverable Examples:
  - Project Execution Plan (PEP)
  - Staffing management plan
  - Technology roadmap plan
  - Intellectual property management plan
  - Impact report
  - Monthly reports



NSF Tech Accelerators

Initial Set of NSF Tech Accelerators:

AgTech, MaterialsTech, OceanTech and SciTech

Abbey Boyd
AgTech, NSF Tech Accelerators

Chris Sanford
OceanTech, NSF Tech Accelerators

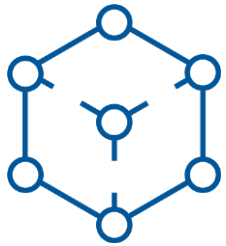
Alex Vadati
MaterialsTech, NSF Tech Accelerators

Floh Thiels
SciTech, NSF Tech Accelerators

Initial Set of NSF Tech Accelerators

AgTech

Transforming farming through innovative technology



MaterialsTech

Accelerating breakthroughs in advanced materials and next generation manufacturing

OceanTech

Propelling the future of the ocean economy

SciTech

Deploying tools that revolutionize America's scientific enterprise

AgTech Accelerator

Transforming farming through innovative technology

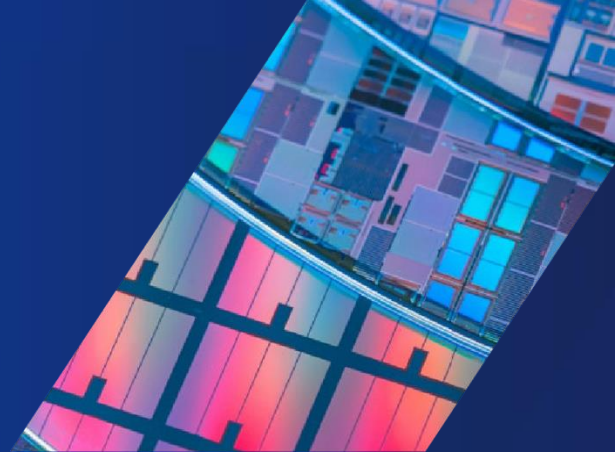
- Harness expertise across agricultural and technological disciplines to commercialize deep technologies that bolster a resilient food system essential for health, security, and prosperity of the U.S.
- Leverage advances in biotechnology, AI, robotics and other domains to enhance productivity and yield, optimize nutritional content, and strengthen domestic agricultural supply chains to expand high-value export markets.
- Fill the gap due to stalled venture capital funding by capitalizing on Administration investments in key technology areas, de-risking technologies, and prioritizing implementation and adoption across the entire food and agriculture system.

AgTech Accelerator

Historical Counterfactuals

- Many aspects of **digital and precision agriculture** have been adopted across the American food system, but barriers and bottlenecks remain in enabling sweeping adoption of these techniques. Those include limited access to rural broadband, slim profit margins and high startup costs, and challenges integrating hardware and software systems.
- **The NSF Tech Accelerators initiative could have applied a comprehensive approach in the development and integration of digital and precision agriculture tools to speed up adoption and deliver more impactful results for American farmers.**

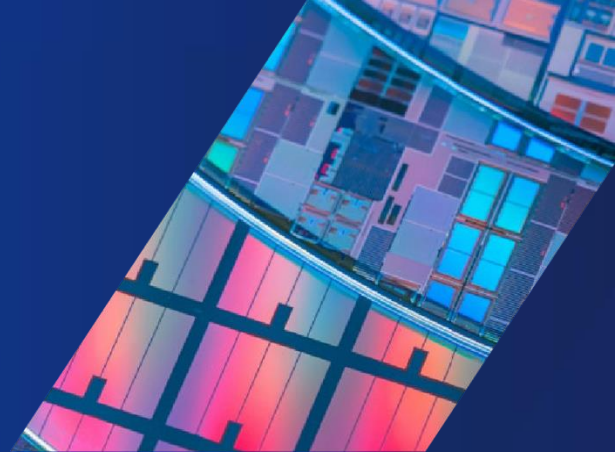
MaterialsTech Accelerator



Accelerating breakthroughs in advanced materials and next generation manufacturing

- Focus on reducing time to market for advanced materials with tailored properties beyond conventional options.
- Create entirely new materials using physics-aware, domain-informed AI and digital twins to unlock new performance capabilities.
- Accelerate innovation-to-application in materials for quantum technologies, AI, microelectronics, nuclear energy, biotechnology, and defense technologies.

MaterialsTech Accelerator



Historical Counterfactuals

- **Graphene**, a single-atom thick, two-dimensional sheet of carbon atoms arranged in a hexagonal lattice, has a number of desirable properties, such as tensile strength, electrical conductivity and transparency. Over the last 2 decades, its development and application have been slowed by persistent bottlenecks and scale-up barriers.
- **The NSF Tech Accelerators model, bolstered with coaching resources and industry engagement, could have accelerated industry buy-in and commercial adoption.**

OceanTech Accelerator

Propelling the future of the ocean economy

- Focus on the development of novel technologies that advance key ocean operations in the U.S. Exclusive Economic Zone and the Great Lakes that create opportunities to strengthen U.S. global leadership in the development and export of marine resources.
- De-risk technologies and advance multi-use solutions for ocean exploration, deep-sea mapping, and shipbuilding to support data-informed decision-making.
- Bolster national security by enabling threat detection and marine intelligence, safeguarding food security, and empowering local preparedness against ocean-based hazards.

OceanTech Accelerator

Historical Counterfactuals

- The **Argo Float Program** is a global network of floating **ocean robots** that provide ocean data in near-real-time. While the program has had significant impacts on the field of oceanography over the last 30 years, its design and deployment has been driven by scientific needs, rather than market needs.
- **The NSF Tech Accelerators' market-informed approach could have created a global ocean sensor network optimized to tackle both economic, scientific and national security challenges, facilitating the development of technologies with an eye on maximizing market impact and advancing national competitiveness.**

SciTech Accelerator

Deploying tools that revolutionize America's scientific enterprise

- Accelerate the commercialization of novel scientific instruments, tools and technologies that enable breakthrough discoveries and strengthen U.S. scientific leadership.
- Advance cutting-edge scientific instrumentation through open standards, modular architectures, shared toolchains and updated data analytics—including algorithms and AI—to overcome limitations in resolution, speed, precision, reliability and interoperability.
- Address fragmentation across proprietary, incompatible systems and support interconnectedness of modern scientific inquiry by lowering access barriers, improving interoperability, enabling cross disciplinary use, and accelerating emergence of autonomous laboratories.

SciTech Accelerator

Historical Counterfactuals

- As long as scientific research has been conducted, the introduction of new equipment, tools, workflows, and data types, while pivotal for advancing scientific discovery, has created challenges in **laboratory integration**. This can include compatibility issues between hardware and software, bottlenecks and automation gaps, data management challenges and more, keeping research and development environments from operating at their full potential.
- **The NSF Tech Accelerators initiative could have avoided barriers to the development of cutting-edge, interoperable tools and technologies and their integration into existing workflows and laboratory infrastructure, thereby accelerating the pace of breakthrough scientific discoveries.**

NSF Tech Accelerators

NSF Tech Accelerators
RFI Overview and Requirements

Shelby Smith

Staff Associate, NSF Tech Accelerators

NSF Tech Accelerators: Funding Mechanism, Approach

Funding Mechanism: Other Transaction (OT)

Approach: Multi-step OT contract process

Step	Action
Step 1: RFI Response **Submissions Due:** **4:00 p.m. ET on July 14, 2026**	• NSF invites organizations (e.g., incubators, accelerators, ventures) to submit a response to the Request for Information (RFI). • RFI responses assist NSF in understanding prospective NSF Tech Accelerator capabilities, qualifications and expertise to shape the initiative and role of the NSF Tech Accelerator. • Organizations that do not submit a response to the RFI will not be eligible to submit a proposal.
Step 2: Invite NSF Tech Accelerator Proposal	• Based on NSF's assessment of respondent capabilities and qualifications, including relevant domain expertise, NSF will invite selected organizations that responded to the RFI to submit a formal proposal. • Invited applicants must be registered in SAM.gov prior to submitting a formal proposal. • NSF will review responses and may invite proposers for an oral pitch.
Step 3: Negotiate OT Contract	• NSF provides an OT Agreement to the most preferred organizations (ranked highest) to begin negotiations.
Step 4: Award NSF Tech Accelerators	• NSF will officially award and launch each NSF Tech Accelerator after a completed negotiated contract.

Potential NSF Tech Accelerator Organization Eligibility

Eligibility

- Any responsible source (excluding foreign entities) may submit to the RFI for consideration.
- An NSF Tech Accelerator can involve multiple organizations, but the RFI response and invited proposal must be submitted by a lead organization with sub-contracts to other participating organizations.
- The applicant is not required to have sub-contracts in place at the RFI submission time.
- The lead organization must be able to provide more than 51% of the required capabilities, expertise and services.

NSF Tech Accelerators Period of Performance (POP)

- Base period: Up to 6 years
- Option periods: At the discretion of NSF and contingent upon satisfactory performance, the specific technology topic being addressed, need for continued support of this topic and availability of funds.

Potential Conflicts of Interest

NSF Tech Accelerator applicants must be aware of potential conflicts of interest:

- Organizations may serve as an NSF Tech Accelerator (including sub-awards and partners) **or** participate as a research team, **but not both.**
  - Each NSF Tech Accelerator is expected to operate independently of the research teams they support and will not be permitted to apply for or hold an interest in any research awards issued through any NSF Tech Accelerators.
- An awarded NSF Tech Accelerator (including sub-awards and partners) **cannot apply for or receive research funding from another NSF Tech Accelerator**.
- An awarded NSF Tech Accelerator is expected to **maintain a strict separation between their NSF Tech Accelerator operations and their other investment activities.** The awardee, including sub-awardees and partners, may not use NSF funds, NSF-funded personnel time, or any other resources provided under the OT agreement to fund capitalize, guarantee or otherwise support investment activities conducted for the benefit of the awardee's or any affiliated entity's proprietary investment portfolio.

NSF Tech Accelerators RFI Response

All individuals and organizations are invited to respond to the below questions using the RFI response form.

Prospective NSF Tech Accelerator

- Organizations interested in becoming an NSF Tech Accelerator should respond to all sections.
- Maximum one response per lead organization applicant to the RFI.

Providing feedback

- Organizations only interested in providing feedback on the NSF Tech Accelerators initiative are encouraged to respond to Sections 1, 2, 3, 4 and 6.

RFI Response Form Guidance

- The RFI response form consists of questions to **help NSF understand potential lead organization's expertise, capabilities and qualifications and improvements to the NSF Tech Accelerators framework**.
- A response per question is highly encouraged and must be concise with a **range of 1–4 sentences with a maximum of 400 characters** without spaces.
- When developing responses to the RFI response form questions, **refer to the information in the RFI.**
- **Do not include hyperlinks** in your responses, except for providing your company website in the RFI response form.
- RFI responses, using the RFI response form, must be submitted via the Other Transaction submission system at **nsfgov.my.site.com/ot/s/, no later than 4 p.m. ET on July 14, 2026**.

THANK YOU

new.nsf.gov/funding/initiatives/tech-accelerators

tech-accelerators@nsf.gov

QUESTIONS?