The Tech Labs Initiative Webinar

Agenda

The Tech Labs Vision	**Erwin Gianchandani** Assistant Director of TIP
Engagement Targets	**Bridget Turaga** Strategic Advisor for Partnerships
Program Design & RFI	**Rebecca Chmiel** Associate Program Director
Q&A	

Q&A Guidance

Click the Q&A button to type and submit questions for response during the Q&A section of the webinar.

We recommend waiting to ask your question until after the presentation.

Tech Labs

Read the RFI on SAM.gov

The Tech Labs Initiative Webinar

NSF Directorate for Technology, Innovation and Partnerships

December 17, 2025

TechLabs@nsf.gov

Tech Labs

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TIP Strategic Priorities

The NSF Directorate for Technology, Innovation and Partnerships (NSF TIP) seeks to engage all Americans in accelerating critical and emerging technologies to advance U.S. competitiveness.

Accelerate critical and emerging technology

Expand the geography of American innovation

Build a competition-ready workforce

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Engagement Targets

The Tech Labs RFI is relevant for:

- **Teams** of research, development, and innovation experts
- Experienced **entrepreneurs** who know how to transform an idea into a product or service and take it to market
- **Funders**, such as federal agencies, state govts, industry, and philanthropies that can **partner directly** with NSF
- Academics, industry, and nonprofits with activities **synergistic** to potential Tech Labs
- **Tech industry** with insight into market need and barriers to commercialization
- **Venture capitalists** poised invest in tech de-risked by Tech Labs
- Thought leaders with **big ideas**

Strategic Objectives

Build Sector-Defining Platforms	Build tools and systems that can power innovation across multiple sectors
Outcomes Beyond Papers	Target tech adoption, start-up activity, and measurable impacts
De-risk Emerging Technologies	Fund promising ideas that are too early for private investment but have great potential
Address Market Needs	Ensure that solutions are positioned for adoption
Lead and Leverage Novel Partnerships	Encourage partnerships with industry, philanthropy, and other stakeholders

Summary

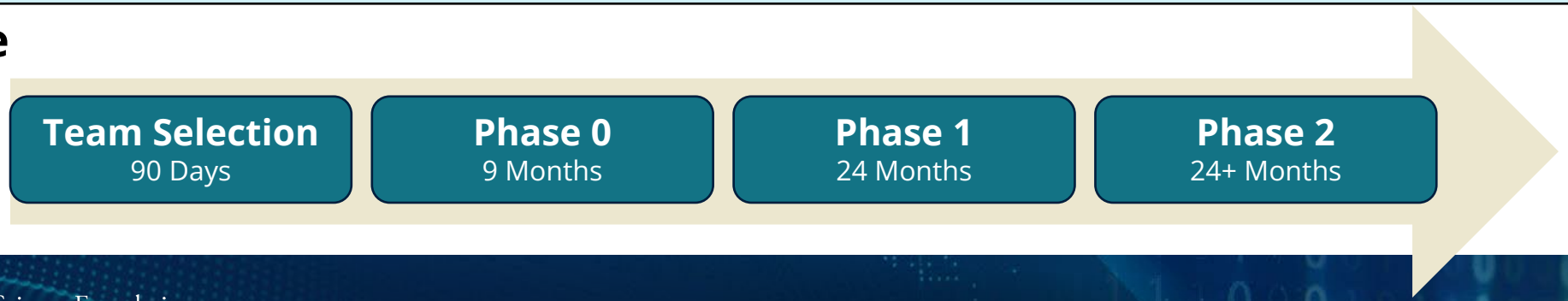
Outcome

Accelerate the translation of research into high-impact technologies that address national challenges

Key Features

- **Outcome-focused teams** with the ability to adapt quickly to evolving technology
- **Other Transaction (OT) contracts** with milestone-based funding
- **Operational and funding autonomy** – flexible use of funds and independent hiring
- **Cross-sector collaboration** across academia, industry, and non-profits

Structure



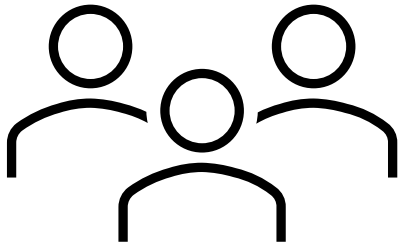
NSF Tech Labs will Bet on Teams

- Support for **full-time, independent teams** outside of traditional academic, start-up, or corporate settings
  - Teams will have operational autonomy and the flexibility to evolve
  - Teams are expected to operate as an **institutionally independent entity** by the end of Phase 0
  - Team members are expected to be full-time
- No need to apply with a complete team – teams can grow and adapt over the course of the Tech Labs program
- Teams must demonstrate a clear mission, leadership, and a willingness to take on risky ideas in creative new ways

NSF Tech Labs will Bet on Teams

Eligible teams may include, but are not limited to:

- Independent pre-formed teams
- Teams planning from within academia or industry that are ready to scale a technology or vision beyond their existing institutional structure(s)
- Teams currently part of an incubator program
- Recently formed leadership teams with a goal of scaling their team during Phase 0 and Phase 1
- Focused research organizations with or without current external support.



Topics, Missions, and Outcomes

Topics

- Announced by NSF
- Focus areas where U.S. competitiveness is a priority
- Examples include artificial intelligence, critical materials, quantum technology, semiconductor manufacturing, biotechnology

Missions

- Proposed by teams
- Tackles a clear challenge with real-world relevance
- Proposed missions must be technically complex, economically significant, and best addressed by the proposing experts

Outcomes

- Proposed by teams
- Measurable, high-impact results aligned with the mission
- Examples include developing platform technologies, advancing emerging technologies across TRLs, and seeding new economic sectors.

Tech Labs Structure

Team Selection 90 Days	Phase 0 9 Months	Phase 1 24 Months	Phase 2 24+ Months
Exploration & Selection • ~3 Topics announced • Teams submit lightweight written proposal (5-8 pages) • Selected proposals will be invited to an oral pitch • Milestone based OT awarded to selected teams	**Planning & Validation** • 2-4 teams per Topic Key Activities • Evaluate Team's fit in tech landscape and potential for impact • Refine milestones and budget for Phase 1 and beyond • Recruitment • Technical progress	**Execution & Scaling** • 1-2 teams per Topic Key Activities • Execution of proposed mission • Technical progress • Scaling and recruitment • 10-50 team members	**Expansion & Transition** • 1-2 teams per Topic Key Activities • Re-evaluation of tech landscape needs • Transition away from NSF investment

Funding Mechanism: Other Transactions

- Other Transaction contracts (OT contracts) allow for greater flexibility, operational autonomy, and reduced administrative burden
  - Uniform Guidance (UG) does not apply to OT contracts
- Contracts will be **milestone-based**, with clear metrics for technical progress, industry readiness, and economic/societal impact
  - Phase 0 – Milestones will include:
    - Proposed technical innovation targets for Phase 1
    - IP Management Plan
    - Research Security Management Plan
    - Phase 1 budget
  - Phase 1 – Quantitative milestones will be proposed by teams. Should be outcome-oriented.

Funding Mechanism: Other Transactions

- Funding for Tech Labs beyond Phase 0 is expected to range from **$10-$50 million per team per year**.
  - Funding is expected to scale with the needs of each team.
- Key factors for funding include:
  - Team Size and Composition
  - Infrastructure and Materials
  - Strategic Growth Trajectory
- Complementary support from industry or philanthropic partners is encouraged

A Lightweight Selection Process

Step 1 NSF will release a **call for proposals**

- ~3 Topics will be announced

Step 2 Proposing Teams submit **lightweight written proposals** (5-8 pages) addressing:

- Team qualifications and structure
- Proposed Mission and Outcomes

Step 3 **Oral Presentations** of invited teams

Step 4 Milestone-Based **Other Transaction award** to selected teams to begin Phase 0

Historical Counterfactuals

5G

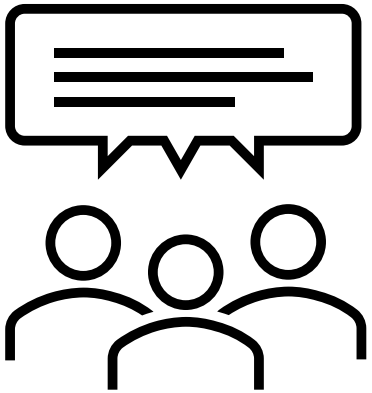
- 5G research was initiated by U.S. researchers, including through NSF funding.
- China quickly dominated global markets due to Huawei's rapid scaling, backed by aggressive government funding and coordinated ecosystem support.
- **A 5G-focused NSF Tech Labs in the early 2010s could have accelerated U.S. market entry, maintained leadership, and reduced China's competitive advantage.**

Lithium-Ion Batteries

- Despite the foundational work having been pioneered by U.S. researchers, the United States stands at a distant fourth in materials production to China, South Korea, and Japan.
- **A focused, cross-sector R&D team with federal support might have kept U.S. firms in the lead by mitigating high production costs and bridging the gap between early scientific breakthroughs and scalable consumer products.**

Help shape the Tech Labs Initiative

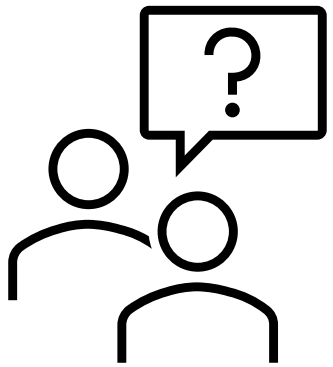
- Tech Labs are bold by design – your feedback can make the program stronger
- We're seeking constructive input on program design, team eligibility, IP structure, topic areas, and more
- Your insights will directly inform how we refine the program before launch
- Thinking of forming a Tech Labs Team? Tell us about it in your response
  - An RFI response is not required to submit a Tech Labs proposal in the future.



Share your ideas, concerns, and suggestions.
Respond to the RFI by
January 20, 2026 at 3 PM EST

Q&A Guidance

Click the Q&A button to type and submit questions for response during the webinar.



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