

Genesis Mission

Phase I Opportunity Webinar

August 5, 2026



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Key Program Staff

DOE Office of Technology Commercialization Program Managers

- Eileen Chant – SBIR/STTR Program Manager, DOE
- Felipe Barcia – PIA Program and Management Analyst, DOE

DOE Topic Area Managers

- Scaling the Biotechnology Revolution
 - Kari Perez, DOE
- Realizing Quantum Systems for Discovery: AI for Quantum Computing and Networking
 - David Rabson, DOE
- Designing Materials with Predictable Functionality
 - Adam Kinney, DOE
- Achieving AI-Driven Autonomous Laboratories
 - Adam Kinney, DOE

ConnectWerx Support

- Grayson Dorr – Program Manager, ConnectWerx
- Kelsey Hamilton – Sr. Project Manager, ConnectWerx



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Who is CWX and what do we do?



ConnectWerx (CWX), managed by Advanced Technology International (ATI) is a non-federal partnership intermediary that works on DOE's behalf under a formal legal agreement with the DOE Office of Technology Commercialization (OTC) called a Partnership Intermediary Agreement (PIA).



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The mission of ConnectWerx is to **Engage, Match, and Collaborate** across the US Industrial and Academic base to help the Department of Energy (DOE) address **energy, environmental** and **nuclear** challenges through transformative science and technology solutions.

Keep Connected:

Join the SBIR/STTR Mailing List: <https://sbir-sttr.connectwerx.org/stay-connected/>

Connect with us on LinkedIn : @Connectwerx

Email us at: sbir-sttr@connectwerx.org

Check out our other CWX opportunities: <https://www.connectwerx.org/>

Join us at the TechConnect 2026 SBIR/STTR Fall Innovation Conference:



September 22-24, 2026 | Washington, D.C.

Gaylord National Harbor Convention Center and Hotel

Booth #615

<https://techconnect.org/2026-sbir-sttr-fall-innovation-conference/>

Program Overview



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What are the Federal SBIR & STTR Programs?

Section 9 of the
Small Business Act
mandates:

SBIR (Small Business Innovation Research)
receives at least 3.2% of R&D budget

STTR (Small Business Technology Transfer)
receives at least 0.45% of R&D budget

SBIR/STTR awards grants in 3 phases:

Phase I

Awards are \$200K-\$300K

Phase II.2

Awards are \$1.1-\$2M

Phase III

- Not awarded with SBIR/STTR funds
- Non-competitive awards possible

SBIR-STTR is the **largest US government small business R&D program**

Goals ([Small Business Act \(15 U.S.C. § 638\)](#))

- Support small business R&D
- Enable technology commercialization
- Boost and strengthen the national economy
- Foster technology transfer (STTR)



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SBIR/STTR Across Agencies

FY24 Funding Range	Agencies	Budget (FY24)
Greater than \$1B	DoD	\$2.3 B
	HHS (including NIH)	\$1.2 B
Between \$100M and \$1B	DOE (including ARPA-E)	\$312 M
	NSF	\$174 M
	NASA	\$174 M
Less than \$100M	USDA	\$42 M
	DHS	\$18 M
	DOC	\$15M
	NOAA*	\$10 M
	ED	\$10 M
	DOT	\$9 M
	NIST*	\$5 M
	EPA	\$3.7 M

Program Office	FY24 (Awarded)
Nuclear Energy (NE)	\$27.6 M
Office of Electricity (OE)	\$5.30 M
Cybersecurity, Energy Security	\$3.10 M
EERE	\$99.1 M
Environment Management (EM)	\$2.30 M
NNSA	\$12.3 M
Fossil Energy (FE)	\$21.7 M
Total Applied Offices	\$172 M
ASCR	\$11.5 M
BES	\$41.0 M
BER	\$20.5 M
FES	\$13.7 M
HEP	\$16.2 M
NP	\$8.60 M
Total SC	\$111 M
ARPA-E	\$29M



Eligibility Requirements

In order to receive either a Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) award, the proposing organization must qualify as a Small Business Concern (SBC), defined by the Small Business Administration (SBA) as a company that is for-profit, with 500 or fewer employees.

At the time of the award, the business must meet the following criteria:

- **For-Profit Status:** The business must be organized for-profit and have a place of business located in the United States. Non-profit organizations are not eligible to receive SBIR/STTR awards directly, though they can participate as sub-awardees or subcontractors.
- **Ownership and Control:** The business must be at least 51 percent directly owned and controlled by individuals who are citizens or permanent resident aliens of the United States, OR by another for-profit small business concern that is at least 51 percent owned and controlled by US citizens or permanent resident aliens.
- **Note on Venture Capital:** Some participating agencies permit awards to SBCs that are majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms, provided they meet specific registration requirements. While some federal agencies (such as the NIH or DoD) exercise the authority to make SBIR/STTR awards to small businesses majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms under 15 U.S.C. § 638(dd)(1), the DOE has opted not to participate in this provision.
- **Size Limitation:** The business, including all of its domestic and foreign affiliates, must have 500 or fewer employees. This calculation is based on the average number of full-time, part-time, or temporary employees over the preceding 12 calendar months.
- **Location of Work:** All research and development (R/R&D) work must be performed entirely within the United States.



SBIR Specific Requirements

In addition to the core SBC requirements, the SBIR program enforces specific rules regarding employment and the division of work:

- **Primary Employment of the Principal Investigator (PI):** The PI's primary employment must be with the small business at the time of the award and during the entire duration of the project. "Primary employment" means that the PI spends more than 50 percent of their total employment hours with the small business, which generally precludes full-time employment elsewhere (such as at a university or another firm).
- **Performance of Work (Minimum Level of Effort):**
 - Phase I: The proposing small business must perform a minimum of two-thirds of the research or analytical effort. Up to one-third of the work can be subcontracted.
 - Phase II: The proposing small business must perform a minimum of one-half of the research or analytical effort. Up to one-half can be subcontracted.
 - Partnering: Partnering with a university, federal laboratory, or other research institution is completely optional for SBIR

More information on eligibility criteria for all phases can be found here: [Eligibility Criteria - SBIR/STTR Application Hub](#)



STTR Specific Requirements

In addition to the core SBC requirements, the SBIR program enforces specific rules regarding employment and the division of work:

- **Mandatory Research Partner:** The small business must formally partner with a single, US-based, non-profit research institution. Eligible institutions include:
 - Non-profit colleges or universities.
 - Domestic non-profit scientific/research organizations.
 - Federally Funded Research and Development Centers (FFRDCs).
- **Performance of Work (Minimum Level of Effort):** Both the small business and the research institution must perform a statutory minimum amount of work:
 - The proposing small business must perform at least 40 percent of the R&D effort.
 - The partnering research institution must perform at least 30 percent of the R&D effort.
 - The remaining 30 percent of the work can be performed by either partner or outsourced to other subcontractors.

Primary Employment of the PI: For STTR, the PI's primary employment is not strictly restricted to the small business. The PI may be primarily employed by either the proposing small business OR the partnering non-profit research institution.

Intellectual Property (IP) Agreement: Before work begins, the small business and the research institution must establish a formal, written agreement detailing how intellectual property rights and follow-on licensing/commercialization rights will be allocated.

More information on eligibility criteria for all phases can be found here: [Eligibility Criteria - SBIR/STTR Application Hub](#)



Process Details

All applicants will be required to submit an initial Pitch application for review before they can have the opportunity to access the full application. Only successful Pitch applications will be invited to submit a full application.

How to Participate

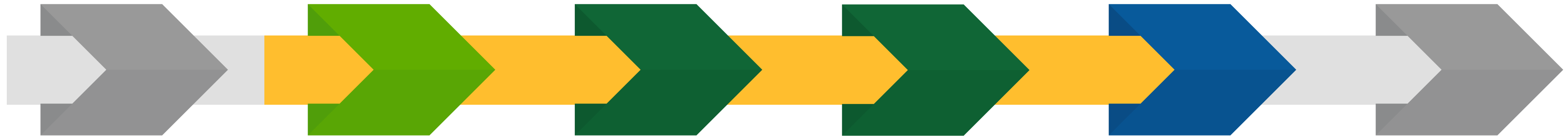
1. Review [FY26 Phase I - Genesis Mission Opportunity Page](#) for details on eligibility, evaluation criteria, and how to apply.
2. Download the Pitch Development Guide [template](#), answer the 4 questions paying mind to maximum word counts.
3. Gather Bibliography & References Cited (if applicable).
4. Complete the Submission Form in the AMP application portal ([request access](#), *application link coming soon*).
Submissions are due no later than **September 10, 2026 at 2:00 PM ET**.

Timeline:

- **Wednesday, 7/22:** Program announced, opportunity and resources posted, applicants can request access to the Acquisition Management Portal (AMP)
- **Wednesday, 8/5 at 3 PM ET:** Virtual [Office Hours Part I](#) with DOE and CWX representatives
- **Wednesday, 8/12 at 3 PM ET:** Virtual [Office Hours Part II](#) with DOE and CWX representatives
- **Mid August:** AMP Applications Open
- **Thursday, 9/10 at 2 PM ET:** Application Closes



CORE PROGRAM



APPLY

PHASE I

6-12 MONTHS

- Early Concept Validation.
- Feasibility & Proof of Concept.
- Awards up to \$250,000 for this solicitation.

PHASE II AND PHASE II.2

1-2 YEARS (EACH)

- Prototyping and Demonstration
- Awards up to \$2M.
- Teams may receive multiple sequential Phase II awards to continue developing projects.
- Matching funds may be encouraged for a Phase II.2 award.

STRATEGIC BREAKTHROUGH AWARD

1-2 YEARS

- Optional award for projects that are strategically aligned with DOE's mission objectives and have high commercialization potential.
- Requires matching funds.

PHASE III

- Commercialization
- Non-SBIR/STTR Funding.
- Work that derives from, extends, or completes the effort of prior Phase I and II awards.



Pitch Stage Questions

The Pitch application form will include a set of short eligibility questions, an optional bibliography upload and the following 4 questions:

1. **Summary, Topic, and Mission Alignment (100 words or less):** Provide a brief layperson overview of the project. Describe how your project aligns with your chosen topic area as well as U.S. Department of Energy's mission and priorities.
2. **Technical Promise (200 words or less):** Provide an overview of the scientific and technical foundation of your project. Briefly address its **Significance** – the importance and urgency of the challenge being addressed, **Innovation** – the novelty of the proposed solution to help provide a viable product or service, and **Feasibility** – the ability to successfully prove the concept within the proposed timeline and budget. Please avoid deep technical jargon and focus on what matters to non-technical evaluators.
3. **Commercialization Potential (200 words or less):** Describe how your technology addresses a market need and outline your pathway to customers and revenue. Briefly address your **Value Proposition** – the technology's ability to meet identified customer needs, **Competitive Advantage** – a realistic assessment of the competitive landscape, and your **Go-to-Market Strategy** – the pathway to market, including supply chain planning, target customers, and sales channels.
4. **Team Qualifications (200 words or less):** Outline how your team possesses the technical expertise, commercialization experience, and strategic partnerships necessary to successfully execute the project. Briefly address your **Company** – the relevant experience of the team, **Partnerships** – the strength and relevance of external partners (or plans to secure partners) who will enhance the likelihood of the project's success, and **Financials** – a credible plan for securing follow-on funding.



Evaluation Criteria

Pitch Stage

Reviewers will consider the following when reviewing pitches and making decisions about which ones to invite to the next application stage: **Topic and Mission Alignment, Technical Promise, Commercialization Potential, and Team Qualifications.**

Only invited pitches will be able to submit a full application.



Program Policy Factors may also be considered in both stages.

Full Application Stage

Applications materials will be evaluated across three equally weighted core areas:

1. Technical Promise, evidenced by:

- *Significance*: the importance and urgency of the scientific and technical foundation of your project.
- *Innovation*: the novelty of the proposed solution to help provide a viable product or service.
- *Feasibility*: the ability to successfully prove the concept within the proposed timeline and budget.

2. Commercialization Potential, evidenced by:

- *Value Proposition*: the technology's ability to meet identified customer needs.
- *Competitive Advantage*: a realistic assessment of the competitive landscape, including how the proposed solution compares to direct competitors, incumbent technologies, and alternative approaches.
- *Go-to-Market Strategy*: the pathway to market, including supply chain planning, target customers, and sales channels. Acknowledge key hurdles and describe plans to overcome them.

3. Team Qualifications, evidenced by:

- *Company*: the qualifications and relevant experience of the principal investigator (PI), company staff, and management; the adequacy of equipment and facilities.
- *Partnerships*: the strength and relevance of external partnerships, advisors, subcontractors, or other collaborators that enhance the likelihood of the project's success.
- *Financials*: a realistic yet promising revenue model and growth projections, and a sound proposal for using the award funds



Combating Fraud

What types of fraud are found in the SBIR Program?

- Application Process
 - submitting a plagiarized proposal
 - providing false information regarding the company, the Principal Investigator (PI), or work to be performed
 - seeking funding for work that has already been completed
- During Award
 - using award funds for personal use or for any use other than the proposed activities
 - submitting plagiarized reports or reports falsely claiming work has been completed
 - claiming results for an award that were funded by a different source



Know the Rules

Which SBIR rules should you be particularly familiar with?

- Duplicate or overlapping proposals may not be submitted to multiple agencies without full disclosure to all agencies.
- The company must meet SBA's requirements for a small business, including being majority American owned and have 500 employees or fewer.
- For SBIR: The PI's primary employment must be with the company during the grant period. The PI may not be employed full time elsewhere.
- For SBIR: For Phase I, a minimum of two thirds of the research effort must be performed by the grantee company; for Phase II, a minimum of one-half of the research effort must be performed by the grantee company. Work performed by a university research lab is NOT work completed by the grantee company.
- University employees participating on an SBIR award should disclose their involvement to the university as well as their use of university facilities.
- R&D must be performed in the United States.



Consequences

What happens if you break the rules?

- If you commit fraud or other wrongdoing in applying for or carrying out an SBIR award, DOE will investigate to determine the severity and details of the action.
- We refer violations of civil or criminal law to the Department of Justice (DOJ). If DOJ prosecutes you for fraud or false statements, you may be sentenced to prison and required to pay full restitution. If DOJ pursues a civil action under the False Claims Act, you may have to pay treble damages and \$11,000 for each false claim. In addition, DOE may terminate your awards and debar you from receiving grants or contracts from any federal agency.



Recent Prosecution

Friday, September 11, 2015

Scientists Sentenced To Prison For Defrauding The Small Business Innovation Research Program

Tampa, Florida – U.S. District Judge Virginia Hernandez Covington has sentenced Mahmoud Aldissi (a/k/a Matt) and Anastassia Bogomolova (a/k/a Anastasia) for conspiracy to commit wire fraud, wire fraud, aggravated identity theft, and falsification of records. Aldissi was sentenced to 15 years in federal prison and Bogomolova was sentenced to a term of 13 years. As part of their sentences, the court entered a money judgment in the amount of \$10.6 million, representing the proceeds of the crime, and ordered them to pay \$10.6 million in restitution. Aldissi and Bogomolova were found guilty on March 20, 2015.

According to testimony and evidence presented during the month-long trial, through their two companies, Fractal Systems, Inc., and Smart Polymers Research Corp., Aldissi and Bogomolova fraudulently obtained approximately \$10.5 million of small business research awards from the federal government. In order to be awarded contracts, they submitted proposals using the stolen identities of real people to create false endorsements of and for their proposed contracts. In the proposals, they also lied about their facilities, costs, the principal investigator on some of the contracts, and certifications in the proposals.



Genesis Mission Topics



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The Genesis Mission

The [Genesis Mission](#) is a historic national effort to catalyze new industries, create high-skill jobs, and usher a new golden era of American discovery by fully embracing AI and the ongoing computing revolution.

The Genesis Mission's American Science and Security Platform will connect the world's best supercomputers, AI systems, and next-generation quantum computers with the most exquisite scientific instruments in the nation, and its intelligence layer will be trained with the singular scientific datasets and expertise housed in the National Laboratories. Through the [Genesis Mission's National Science and Technology Challenges](#), the scientific community will develop and deploy the technologies necessary to demonstrate true AI advantage for science and energy.

Through the SBIR/STTR Genesis Mission opportunity, DOE intends to make approximately 40 awards totaling in \$10,000,000, representing up to \$44M of cumulative SBIR/STTR funding over the projects' lifecycles. Please note that total funding to be requested by a Small Business Concern in their full application should not exceed \$250,000 (or \$256,500 if the proposal includes a request for TABA).

This Genesis Mission opportunity introduces a more streamlined, applicant-focused approach to the Phase I program. A broader Phase I funding opportunity covering additional technology topics will follow later this summer.



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1. Scaling the Biotechnology Revolution

This topic area calls for proposals to leverage advanced AI for biotechnology, including for biochemicals and bioproducts applications. Areas of interest include AI tools to support biomolecular design, establish genotype phenotype relationship, support predictive microbiome engineering and microbiome gene expression, accelerate bioreactor design and biomanufacturing, and otherwise enhance genome engineering



2. Realizing Quantum Systems for Discovery: AI for Quantum Computing and Networking

This topic seeks proposals that leverage AI to characterize and mitigate decoherence in qubits; develop and implement effective quantum error correction codes; control quantum processing units and quantum network systems; automate and optimize quantum resource estimation tools focusing on scalability and interoperability for multiple quantum computing architectures; develop computationally efficient and scalable tools for quantum computing performance verification and validation; develop tools to translate high-level problem descriptions into executable quantum programs; develop tools to manage computational workflows that integrate classical high-performance computing, AI, and quantum resources; and ensure the scalability of quantum processors and network systems.



3. Designing Materials with Predictable Functionality

This topic area seeks proposals that leverage advanced AI frameworks to facilitate easier materials design. Successful proposals should accelerate the discovery and deployment of advanced materials that are essential for American competitiveness in energy, manufacturing, and technology by enabling “inverse design,” where materials are engineered to meet specific property requirements.



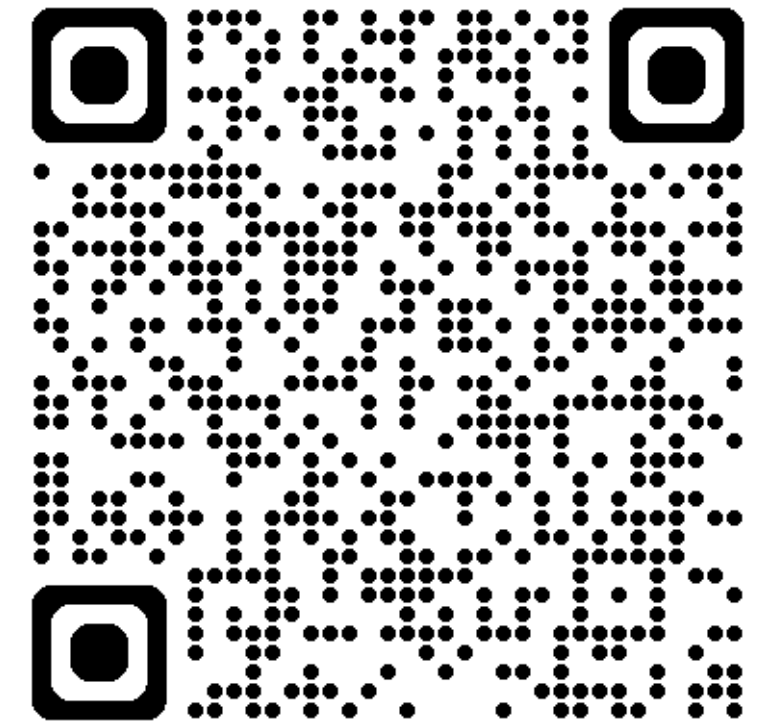
4. Achieving AI-Driven Autonomous Laboratories

This topic area seeks proposals that seek to integrate AI directly into experimental workflows to accelerate discovery, improve repeatability, and generate richer datasets. Areas of interest include advanced robotics, AI for Network Operations, diagnostics, remote handling, and neuromorphic computing circuit primitives.



National Energy Research Scientific Computing Center (NERSC)

Please note for application planning purposes that DOE SBIR/STTR grant projects requiring high performance computing support are eligible to apply to use DOE NERSC resources. NERSC is the primary scientific computing facility for the DOE. Its systems are reliable, secure, and provide a state-of-the-art scientific development environment with the tools needed by its diverse community of users. If selected for an award, you can apply [here](#).



Please fill out our survey!

For the FY26 Phase I - Genesis Mission Opportunity, each company may submit up to three pitches total, across any combination of topic areas.

Please answer the survey to give us a sense for how many pitches you plan to submit, and for which topics.

Thank you!





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Q&A

Please visit:

Resources - SBIR/STTR Application Hub*

for FAQs & other helpful resources!

*<https://sbir-sttr.connectwerx.org/resources/>





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