





Innovation to Impact

Federal Research Funding to Drive Innovation, Job Creation and Economic Growth









About MNSBIR, Inc.

MNSBIR, Inc. is dedicated to advancing scientific excellence and technological innovation to bolster Minnesota's economy. We achieve this by securing federal research and development funding to stimulate the creation of new products, services, and solutions in the private sector. With decades of proven expertise and strong relationships across the 11 participating federal agencies, we specialize in guiding qualifying firms through the process, making it less daunting and more manageable.

Pat Dillon CDR, USN (Ret), MBA Founder, President & CEO





Brian BrockwayMSEE
Chairman of the Board

Leadership and Team

Led by Pat Dillon, a long-time advocate and expert in America's Seed Fund, our team has diverse backgrounds and experiences to help startups and small businesses navigate federal funding for technology commercialization. We engage independent contractors to provide specialized support and expertise, complementing our team's capabilities. This approach allows us to customize services, scale resources cost-effectively, and extend our impact across many firms and industry sectors.

Board of Directors

Brian Brockway, MSEE, President and CEO, VivaQuant, Chairman of the Board Michael Wright, Intercepting Horizons, Treasurer Patrice Kloss, JD, Fox Rothschild, Secretary John Hobday, MA, CEO, Healthcare Interactive, Inc. Jeff Liter, MBA, CEO, Luminary Therapeutics Diane Rucker, MS, MBA, Angel Investor

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America's Seed Fund: SBIR & STTR





Since 1982, America's Seed Fund has driven innovation, scientific advancement, and entrepreneurship with funding from the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs to help small businesses develop cutting-edge technologies and accelerate commercialization.

SBIR/STTR Participating Federal Agencies

Department of Defense
Department of Health and
Human Services
National Science Foundation

Department of Energy
Department of Agriculture
Dept. of Homeland Security

Environmental Protection Agency Department of Commerce Department of Education Department of Transportation

OUR MODEL: From Ideation to Commercialization

Supporting clients with expert knowledge and coaching















EDUCATION

Self-Paced

Interested individuals get to know MNSBIR, Inc., the SBIR/STTR programs and the Technology Commercialization Process

CATALYST

Years 1-4

Comprehensive support to firms who are ready to learn and apply for funding. Support is provided for all agencies and phases of funding.

TRANSITION

Years 4-5

Valley of Death Market Adoption Customer Acquisition Equity/Debt Capital

INSTITUTE

Year 6 & Beyond

Commercialization Federal Sole-Source Contracts

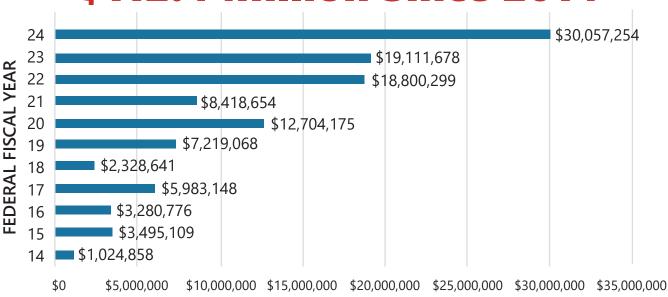
Each program offers free and confidential business and technical assistance. Firms and projects are evaluated on technical feasibility, market potential, commercialization strategy, innovation, and technical risk. We support firms across all SBIR/STTR phases, from feasibility to commercialization. Additionally, the Transition Program and Phase III Commercialization Institute provide follow-on support to help firms transition toward Phase III opportunities (sale of the product or service) with the federal government where appropriate.

MNSBIR, Inc. brings millions of dollars back to Minnesota annually

by securing federal funding to drive innovation, support small businesses, and advance commercialization efforts.



\$112.4 Million Since 2014



0,000 \$20,000,000 \$25,000,000 \$30,000,000 \$3! **FUNDING**

A \$5M biennium investment in MNSBIR, Inc. will be used to:

Expand MNSBIR, Inc. Catalyst Program

MNSBIR, Inc. will expand outreach, education, and coaching to help startups and small businesses apply for and secure SBIR/STTR funding for critical technological innovations that drive Minnesota's innovation economy. Increased funding will enhance our capacity to provide 1:1 expert guidance, empowering businesses statewide to successfully pursue federal funding opportunities.

Expand the Commercialization Institute

The Commercialization Institute will be expanded to provide essential support in transitioning R&D innovations into successful commercial products. The initiative will leverage a portfolio of over 271 SBIR/STTR funded projects.

Expand Support to Increase Federal Sole-Source Contracts

Per the Congressional legislation, federal sole-source contracting is a high priority to transition SBIR/STTR funded products and services into multi-million government contracts.

Unlock Federal Funding for Novel Technological Innovations Statewide

MNSBIR, Inc. will launch Innovation 100, a statewide initiative to identify 100 or more novel ideas, concepts, and projects from startups and small businesses across Minnesota. Over four years, it aims to secure over \$200 million in SBIR/STTR funding to drive commercialization. Open to small businesses statewide with fewer than 500 employees, the initiative expands access to federal innovation programs and funding opportunities.

Support Minnesota's National Security Ecosystem

MNSBIR, Inc. will collaborate with the University of Minnesota's National Security Research Institute to expand federal funding access, strengthen Minnesota's role in national security innovation, and support startups and small businesses in developing technologies.

MNSBIR, Inc. is transforming the future one small business at a time



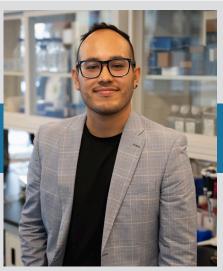
Cora Liebig, PhD Founder and CEO

Chromatic 3D Materials 15 Employees

Golden Valley

\$1.7M NSF SBIR Funding

- Advancing industrial-quality 3D printing with high-performance polyurethanes
- This innovative developer of is transforming industrialquality 3D printing by providing materials that offer superior flexibility, durability, and resilience compared to traditional thermoplastics.
- Designed to be flexed, stretched, twisted, and squeezed, these advanced polyurethanes enhance adaptability in additive manufacturing, making them ideal for rubbery and elastic material applications.
- One international office in Germany.



Alan Gonzalez Suarez, PhD Chief Scientific Officer

Sersense **5 Employees** Rochester

- \$3.8M NIH SBIR Funding
- Mayo Clinic Startup
- Innovating point-of-care diagnostics for neonatal and maternal health
- Located in One Discovery Square, this pioneering company is focused on researching and commercializing novel automated point-of-care solutions for blood testing in neonates and urine sample analysis for preclampsia detection.
- Positioned at the forefront of medical technology innovation, the company is set to transform neonatal and maternal health diagnostics with its breakthrough solutions.



Dan King, PhD Chief Technology Officer

Darcy Solutions 20 Employees Saint Paul

- \$3.2M NSF/DOE/USDA SBIR **Funding**
- University of Minnesota Startup
- Pioneering sustainable geothermal solutions
- They are at the forefront of groundwater-based geothermal systems, providing energy-efficient heating and cooling solutions for buildings of all types.
- Its groundbreaking geothermal technology is gaining traction across government sectors, collaborating with city, county, state, and federal agencies to support sustainability initiatives and drive energy-efficient infrastructure development.



Efrain Torres, PhD Co-Founder and CEO

Adialante 4 Employees Minneapolis

- \$1.5M NSF SBIR Funding
- University of Minnesota Startup
- Revolutionizing the MRI Industry with a portable, affordable MRI technology—10 times smaller and 200 times more costeffective than traditional MRI scanners, all while delivering high-resolution imaging quality comparable to conventional systems.
- The company is making MRI scanning more accessible, cost effective, and adaptable for a wide range of healthcare settings, including remote locations, emergency response, and under-served communities.



Marina Brockway, PhD and **Brian Brockway, MSEE, CEO** Founders

VivaQuant 140 Employees Arden Hills

- \$1.5M NIH SBIR Funding
- Transforming remote heart monitoring with innovative technology, this fast-growing medical technology company has developed a state-of-theart remote heart monitoring device that is less invasive, more accurate, and significantly more cost-effective than traditional solutions.
- Currently on track to achieve \$40 million in sales in 2025, the firm is keenly focused bringing its solution to Veterans through the Veteran's Administration.



Timothy Childs, PhD Founder and CEO

TLC Millimeter Wave, Inc. 12 Employees Minneapolis

- \$5.5M DOD/NASA/NSF **SBIR Funding**
- TLC Millimeter Wave, Inc. has launched Guardian School Security Systems, a new company dedicated to developing a life-saving school security solution that detects and alerts officials of impending active shooter incidents. With plans to manufacture in Shakopee they anticipate creating 300 new manufacturing jobs, driving economic growth while enhancing public safety nationwide.

FEDERAL AGENCY KEY:

- DOD: Department of Defense
- DOE: Department of Energy
- NASA: National Aeronautics & Space Administration USDA: United States Department of Agriculture
- NIH: National Institutes of Health
- NSF: National Science Foundation



Valuable step by step learning

"Optimal Mobility would not have been able to submit our \$1.5M SBIR Direct to Phase II without the support of the MNSBIR, Inc. The Catalyst Program provided valuable step by step learning and assistance to navigate the complicated steps for a federal grant submission. Thank you!" — Patricia McCracken, Founder and CEO, PT, DPT, MBA, COL, US Army, (Ret), Optimal Mobility

Turns a great idea into a fully realized, fundable proposal

"MNSBIR, Inc. was an invaluable resource in navigating the complexities of preparing a competitive \$305,000 SBIR Phase I proposal to the National Science Foundation. I highly recommend MNSBIR to any Minnesota innovator or small business pursuing SBIR funding. Their knowledge, dedication, and support can turn a great idea into a fully realized, fundable proposal."

— Jason Borden, Founder and CEO, Elanus Aerospace

The premier support organization for innovative startups

"MNSBIR is the premier support organization for innovative startups in Minnesota. The non-dilutive funding they help startups access is the foundation of the capital stack and an essential tool for de-risking early-stage technology. We leveraged their expertise to apply for a \$190,000 opportunity with NOAA."

— Brian Smoliak, PhD, Co-Founder and CEO, Weathervane Labs

Catalyst Program, 1:1 coaching so helpful

"Our team is extremely grateful to the MNSBIR team for their guidance, support, and insights throughout this process. As a first-time applicant for NIH funding, let alone for small business awards, the Catalyst Program was so helpful to understand the process and get 1:1 coaching to help improve our application materials."

— Hannah Bergom, PhD/MD Candidate, University of MN, Founder and CEO, EMRGNSE LLC

Critical support

"MNSBIR is the accessible resource to assist us to better understand the SBIR process, and their support was critical to our efforts to submit a \$2M competitive proposal to the US Army."

— Scott Tracy, CEO, SNYCRIS

Set us up for the greatest chance of success

Navigating my first \$400,000 SBIR application would have been so overwhelming without the support of the MNSBIR Catalyst program. The weekly calls kept our team on track and helped ensure we were setting up our grant for the greatest chance of success.

— Kelley Satoski, Co-Founder and CEO, Pelva Health