



**NC DEPARTMENT
of COMMERCE**
SCIENCE, TECHNOLOGY
& INNOVATION

One North Carolina Small Business Program Matching Grant Awardees, FY 2023:

Under the FY 2023 Matching Program Solicitation, companies were eligible for Matching awards equal to 50% of the federal SBIR/STTR award, up to \$75,000.

- **Aegis Power Systems, Inc., of Murphy:** \$75,000 to develop a bidirectional converter that enables highly efficient electrical functions in military ground vehicles. This SBIR project is sponsored by the United States Army, Department of Defense.
- **Callahan-Young, LLC, of Raleigh:** \$75,000 to develop and test a reminiscence therapy tool that will improve mental well-being and slow cognitive decline in Alzheimer's disease patients. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Catalytic and Redox Solutions, LLC, of Cary:** \$44,982 to develop a salt-composite material capable of absorbing and storing waste heat from industrial processes for use as a supplementary energy supply. This STTR project is sponsored by the Department of Energy.
- **CLAIRigene, LLC, of Durham:** \$75,000 to develop epigenome editing tools that can reduce expression of the protein most associated with Alzheimer's disease progression. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Converter Source, LLC, of Asheville:** \$74,381 to complete design and evaluation of an efficient and adaptable cryocooler for CubeSat (or miniature satellite) missions. This SBIR project is sponsored by the National Aeronautics and Space Administration.
- **Digital Health Navigation Solutions, of Winston-Salem:** \$75,000 to adapt and scale a colorectal cancer screening web application for convenient home use. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Eldec Pharmaceuticals, Inc., of Chapel Hill:** \$62,657.50 to test a novel COVID-19 treatment that may also prove effective for smokers, who have increased susceptibility to infection. This STTR project is sponsored by the National Institutes Health, Department of Health and Human Services.

- **E-Sentience, LLC, of Durham:** \$74,878 to develop a wearable technology that measures, in human sweat, biomarkers of cognitive and physical performance, for use by active-duty military personnel. This SBIR project is sponsored by the United States Army, Department of Defense.
- **ExLattice, Inc., of Durham:** \$75,000 to develop an engineering simulation software that uses machine learning to rapidly predict potential failures in manufacturing processes, thus streamlining product design. This SBIR project is sponsored by the National Science Foundation.
- **GreenLifeTech Corp., of Banner Elk:** \$37,452 to implement technologies for the United States Air Force that extend the shelf life of fresh foods and reduce food waste by up to five times. This SBIR project is sponsored by the United States Air Force, Department of Defense.
- **LED Radiofluidics Corp., of Chapel Hill:** \$75,000 to develop an inexpensive LED-based technology that alters pharmaceutical compounds such that they are detectable in PET scans, enabling easier study of their efficacies via medical imaging. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **LiRA, Inc., of Chapel Hill:** \$75,000 to develop a video-to-voice software application that provides real-time communication assistance to voiceless people by way of lip-reading intended speech. This SBIR project is sponsored by the National Science Foundation.
- **Moires Instruments, LLC, of Elon:** \$75,000 to develop a simplified and effective instrument for identifying molecular compounds for improved measurements in chromatography and spectrometry. This SBIR project is sponsored by the National Science Foundation.
- **Mycologics, LLC, of Durham:** \$75,000 to develop a bacterium-based biocontrol agent that will combat and prevent infection of corn crops by a fungal toxin known to cause liver cancer, which results in more than \$1 billion in crop losses per year. This SBIR project is sponsored by the National Science Foundation.
- **NabGen, Inc., of Durham:** \$69,820 to study the efficacy of an originally developed protein that prevents neutralizing antibody blockage of virus-based treatments for rare neurological diseases. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **NeuroGT, Inc., of Chapel Hill:** \$75,000 to develop and commercialize a gene therapy product to treat a rare neurogenetic disease that often results in premature death before the age of 10 years. This STTR project is sponsored by the National Institutes, of Health, Department of Health and Human Services.

- **Olfax, LLC, of Asheville:** \$75,000 to develop and test a nasal spray therapeutic that will rapidly and effectively treat migraine headaches, without side effects. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Om Bharti, LLC, of Wilmington:** \$69,898 to create a machine-learning software product that will integrate and analyze large sets of biological data to provide actionable outputs that expedite research, development, industrialization, and optimization. This STTR project is sponsored by the Department of Energy.
- **PolyPV, LLC, of Cary:** \$75,000 to integrate organic solar cells into greenhouses to reduce their energy demand and improve their economic and environmental benefits. This STTR project is sponsored by the National Science Foundation.
- **Raglan, LLC, of Wilmington:** \$24,985.50 to integrate its battery optimization technology to improve performance of electric vehicles and convert vehicles from internal combustion engine use. This STTR project is sponsored by the United States Air Force, Department of Defense.
- **Regenova, Inc., of Durham:** \$75,000 for a collaborative effort to improve the efficacy of Alzheimer's disease therapeutics using an original anti-inflammatory compound. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Smart Material Solutions, Inc., of Raleigh:** \$75,000 to apply its effectively demonstrated light-trapping and self-cleaning nanopatterned coatings to improve the performance of thin-film solar panels. This SBIR project is sponsored by the United States Army, Department of Defense.
- **United Protective Technologies, LLC, of Locust:** \$69,929 to develop a new material for thermal protection systems in hypersonic vehicle components that experience extreme temperatures. This SBIR project is sponsored by the United States Navy, Department of Defense.
- **Vigilant Cyber Systems, Inc., of Mount Airy:** \$73,470.50 to develop a software development approach that leverages modernized resources and is efficient, repeatable, and streamlined to meet Development, Security and Operations (DevSecOps) mission goals. This SBIR project is sponsored by the Missile Defense Agency, Department of Defense.
- **Wisely, Inc., of Raleigh:** \$49,955 to develop a smart food storage system that will reduce household food waste by tracking the time and conditions under which perishable items have been stored. This SBIR project is sponsored by the Environmental Protection Agency.

One North Carolina Small Business Program Incentive Grant Awardees, FY 2023:

Under the FY 2023 Incentive Program Solicitation, companies were eligible for Incentive awards equal to 50% or 75% of expenses incurred in composing their SBIR/STTR applications, up to \$12,000.

- **Advanced Materials Manufacturing, of Raleigh:** \$10,728.85
- **Aegis Power Systems, Inc., of Murphy:** \$12,000
- **AKALAKA, of Durham:** \$12,000
- **Amissa, LLC of Charlotte:** \$9,390.74
- **Applied Research Transformation, PLLC, of Durham:** \$3,000
- **Atlantic Fish Co., of Washington, DC:** \$2,843.64
- **AxNano, LLC, of Greensboro:** \$8,220.59
- **Brighton Development, LLC, of Cary:** \$10,001.25
- **Cervu, of Cary:** \$4,500
- **Coprata, Inc., of Durham:** \$12,000
- **Cosmic Eats, Inc., of Cary:** \$4,557.79
- **Daheco Engines & Energy, of Valdese:** \$12,000
- **Daimler Devices, of Raleigh:** \$9,481.06
- **Dignify Therapeutics, LLC, of RTP:** \$4,561.06
- **Drakeford, Scott, & Associates, LLC, of Durham:** \$6,433.33
- **Elemance, of Winston-Salem:** \$4,195.15
- **F&I Enterprises, LLC, of Clemmons:** \$9,000
- **ForesightCares, Inc., of Matthews:** \$8,808.33
- **Freescale, LLC, of Cary:** \$4,243.69
- **Glycan Therapeutics Corporation, of Raleigh:** \$12,000
- **Goldfinch Sensor Technologies and Analytics, LLC, of Cary:** \$7,297.31
- **GreenLifeTech Corporation, of Banner Elk:** \$3,465
- **iEdapts, LLC, of Charlotte:** \$3,045
- **Impulse Wellness, LLC of Raleigh:** \$12,000
- **Innatrix, of Durham:** \$3,877.44
- **Innovative Viral Solutions, LLC, of Leland:** \$275
- **Kyma Tehcnologies, Inc., of Raleigh:** \$7,519.28
- **Lloyd Technologies, Inc., of Fayetteville:** \$2,692.52
- **Mucommune, LLC, of Durham:** \$11,022.16
- **NextPower360 Co., of Asheville:** \$12,000
- **Noor Brands Company, LLC, of High Point:** \$1,031.25
- **Plakous Therapeutics, Inc., of Winston-Salem:** \$3,213.75

- **Practical Scientific Solutions, Inc., of Fuquay Varina:** \$7,552.23
- **Protochips, Inc., of Morrisville:** \$4,617.19
- **Pro-Up, of Concord:** \$6,000
- **Raglan, LLC, of Wilmington:** \$4,885
- **Regennova, Inc., of Durham:** \$12,000
- **Reselute, Inc., of Durham:** \$2,355.50
- **Resolved Analytics, PLLC, of Pittsboro:** \$7,000.84
- **Setter Research, Inc., of Greensboro:** \$3,658.43
- **Smart Material Solutions, Inc., of Raleigh:** \$3,356.17
- **Social Cascade, LLC of Raleigh:** \$6,722.96
- **Soelect, Inc., of Greensboro:** \$12,000
- **Triangle Environmental Health Initiative, of Durham:** \$12,000
- **United Protective Technologies, LLC, of Locust:** \$12,000
- **Vidterra, LLC, of Wilmington:** \$12,000
- **Vigilant Cyber Systems, Inc., of Mount Airy:** \$8,011.51
- **Wisely, Inc., of Raleigh:** \$3,998.20