



One North Carolina Small Business Program Matching Grant Awardees, FY 2022:

Under the FY 2022 Matching Program solicitation, companies were eligible for Matching awards equal to 50% of the federal SBIR/STTR award, up to \$75,000.

- **410 Medical, Inc., of Durham:** \$25,000.00 to develop a compact, military-grade version of its LifeFlow® rapid infusion device for the rapid delivery of blood, blood components, and other resuscitative fluids to improve rates of resuscitation and patient outcomes. This SBIR project is sponsored by the United States Air Force, Department of Defense.
- **Accunovo Biotechnologies, Inc., of Chapel Hill:** \$75,000.00 to develop a diagnosis and therapy agent for improved prostate cancer management. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Adamas Nanotechnologies, Inc., of Raleigh:** \$75,000.00 to develop a nanodiamond-based bright fluorescent sensor device to advance detection of reactive oxygen species in humans and reduce the progression of certain diseases. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Advanced Materials Manufacturing, of Raleigh:** \$75,000.00 to improve existing small-scale nuclear microreactors used in electricity for greater reliability, safety, and protection against fire, impact, blast, ballistic, shock, and radiation. This SBIR project is sponsored by the Department of Energy.
- **AimMax Therapeutics, Inc., of Durham:** \$75,000.00 to develop a new class of antifungal peptides for treatment of evolving, drug-resistant fungal diseases. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Airilabs, Inc., of Durham:** \$75,000.00 to develop portable, computational microscopes for biomedical imaging to advance methods of pathological screening in patients. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Amissa, Inc., of Charlotte:** \$75,000.00 to develop a low-cost, artificial intelligence-driven platform using cloud-scale analytics to improve the care and safety of Alzheimer's Disease and Alzheimer's Disease-related dementia patients while reducing stress for caregivers and families. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.

- **archAIC, LLC, of Matthews:** \$75,000.00 to develop a novel, artificial-intelligence-enabled health monitoring system to provide non-intrusive support and monitoring for patients choosing 'age-at-home' healthcare. This STTR project is sponsored by the National Science Foundation.
- **Artiam Bio, Inc., of Morrisville:** \$70,708.50 to develop a pharmacological block for improved treatment of non-alcoholic and alcoholic liver diseases. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Assist Equipment Development, Inc., of Cary:** \$75,000.00 to develop a low-cost, easy-to-use fitness monitor of socket-suspension systems for amputees that improves the integration of residual limbs and prosthetic legs. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Avolynt, Inc., of Durham:** \$75,000.00 to develop a treatment for primary biliary cholangitis, a serious, chronic cholestatic liver disease. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **AxNano, LLC, of Greensboro:** \$75,000.00 to develop a fluorescent-based optical detection method for detecting per- and polyfluoroalkyl (PFAS) substances in drinking water. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Bedrock Therapeutics, of Raleigh:** \$75,000.00 to develop a method of controlling the human immune response to stem cell transplants to prevent vision-impacting symptoms from developing. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Blue Force Technologies, Inc., of Morrisville:** \$24,993.00 to develop cost-effective and rapid manufacturing technologies ideal for the efficient manufacturing of wings and other aerospace structural components. This SBIR project is sponsored by the United States Air Force, Department of Defense.
- **Boundless Science, LLC, of Chapel Hill:** \$75,000.00 to develop a safe, easy-to-use system to efficiently and rapidly cool and oxygenate lungs donated for transplant to improve recipient patient outcomes. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Claradele Pharmaceuticals, Inc., of Winterville:** \$75,000.00 to develop a novel, small molecule immunotherapeutic therapy to be used pre-treatment to make more effective the current treatment of melanoma. This STTR project from the National Institutes of Health, Department of Health and Human Services.

- **Collaborations Pharmaceuticals, Inc., of Fuquay Varina:** \$75,000.00 to develop software using artificial intelligence to collect available data for building and validating machine learning models to improve detection of nerve agent poisoning. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **ColoWrap, LLC, of Durham:** \$75,000.00 to develop a novel clinical tool to reduce the need for manual, abdominal pressure for patients during colonoscopies. This SBIR project is sponsored by the National Science Foundation.
- **Construkts, Inc., of Winnabow:** \$75,000.00 to develop a mixed-reality learning platform to advance middle school mathematics education using a framework that supports both traditional and non-traditional learners. This SBIR project is sponsored by the National Science Foundation.
- **Coprata, Inc., of Durham:** \$75,000.00 to develop a smart sampling toilet system using artificial intelligence for the screening of inflammatory bowel disease to monitor disease progression and support patient tracking regimens. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Deep Creek Pharma, LLC, of Yadkinville:** \$75,000.00 to develop a new polymer technology utilizing nanoparticle designs in the chemotherapy treatment of colorectal cancers. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Drakeford, Scott, & Associates, LLC, of Durham:** \$75,000.00 to develop an integrated digital toolset, such as self-paced courses and live coaching, to foster greater success in workforce reentry by mature learners. This SBIR project is sponsored by the National Science Foundation.
- **Drive Therapeutics, LLC, of Research Triangle Park:** \$75,000.00 to develop a novel therapy for the treatment of retinal disease pathways to support a therapy that is more effective and has a longer duration of effect than existing therapies. This SBIR project is sponsored by the National Science Foundation.
- **Epigenos Biosciences, Inc., of Greenville:** \$69,982.00 to develop genetic therapies to be used in the treatment of colorectal cancer. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **EydisBio, Inc., of Durham:** \$75,000.00 to develop a small-molecule therapeutic to treat pulmonary hyperinflammation in patients with the coronavirus. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.

- **Geometric Data Analytics, of Chapel Hill:** \$75,000.00 to conduct a topological data analysis to identify topological features of novel electronic materials to advance uses of microscopy and spectroscopy in multiple applications across industries. This SBIR project is sponsored by the Department of Energy.
- **Glycan Therapeutics Corporation, of Raleigh:** \$75,000.00 to develop new heparan-sulfate-based therapeutics to treat inflammatory diseases such as sepsis. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Gradient Medical, of Cary:** \$75,000.00 to develop technology that will accelerate the development of gene therapies administered to specific cells to make the process simpler and safer. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **GreenLifeTech Corporation, of Banner Elk:** \$49,275.00 to develop a food storage system that keeps produce fresher up to five times longer without added chemicals and with lower power consumption than other systems. This SBIR project is sponsored by the Environmental Protection Agency.
- **Impulse Wellness, LLC, of Raleigh:** \$49,999.00 to develop a wearable device that will improve the daily lives of stroke survivors by providing real-time feedback on muscle engagement and enhance rehabilitative exercises. This SBIR project is sponsored by the Administration for Community Living, Department of Health and Human Services.
- **Insightfinder, Inc., of Raleigh:** \$75,000.00 to develop an artificial intelligence system for enterprise software incident management to improve efficiencies in information technology departments across all industries. This SBIR project is sponsored by the National Science Foundation.
- **inSoma Bio, Inc., of Durham:** \$75,000.00 to develop a new product that will improve the safety and quality of reconstructive surgery by using a patient's own tissue rather than synthetic implants and fillers that are less biocompatible. This SBIR project is sponsored by the National Science Foundation.
- **Isolere Bio, Inc., of Durham:** \$75,000.00 to develop new technology that will help accelerate the discovery and commercialization of cell and gene therapies to treat previously incurable diseases. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Lumedica, Inc., of Durham:** \$65,163.00 to develop a low-cost medical device for evaluating polyps during colonoscopies rather than removing them for laboratory testing at a later time. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.

- **METIS Health Analytics, LLC, of Chapel Hill:** \$75,000.00 to develop a tool, using machine learning methodologies, for monitoring the radiation dose and quality of computed tomography (CT) scans to ensure patients undergo the safest procedure possible for medical providers to obtain the needed image quality. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **MicroElastic Ultrasound Systems, Inc., of Durham:** \$75,000.00 to develop a medical device using ultrasound for the early-detection and monitoring of lymphedema, a condition that commonly affects cancer survivors, to better manage the disease and improve patient outcomes. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Mimetics, LLC, of Durham:** \$74,595.00 to develop a portable test kit for detecting pathogenic microbes in aquaculture systems that can be used onsite and give quicker results compared to current lab-based methods, and that only uses a small amount of water. This SBIR project is sponsored by the National Oceanic & Atmospheric Administration, Department of Commerce.
- **Minerva Lithium, LLC, of Greensboro:** \$75,000.00 to develop technology for extracting lithium from reserves in a manner that is more efficient, faster, and more cost-effective than traditional extraction operations. This SBIR project is sponsored by the National Science Foundation.
- **OncoTrap, Inc., of Chapel Hill:** \$75,000.00 to develop a tool for identifying the most effective therapeutics in the treatment of cytokine release syndrome (CRS), a major cause of death for COVID-19 patients and those infected by similar viruses. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Oncurie, Inc., of Raleigh:** \$75,000.00 to develop a more targeted therapy for treating metastatic cancer that has fewer side effects and improves patient outcomes. This STTR project is sponsored by the National Science Foundation.
- **Optera, LLP, of Greensboro:** \$75,000.00 to develop a technique for predicting honeybee colony disease and pest resistance, which will lead to reduced beekeeper costs and healthier honeybees. This STTR project is sponsored by the National Science Foundation.
- **Oxford Defense North Carolina, LLC, of Durham:** \$56,164.00 to improve the safety of power beaming, or the wireless transmission of electrical energy, which allows power to be sent to remote locations that lack access to electrical utility infrastructure. This STTR project is sponsored by the Defense Advanced Research Projects Agency, Department of Defense.

- **People Designs, Inc., of Durham:** \$75,000.00 to design and test a web-based platform that educates patients to help them navigate healthcare-related financial and legal situations. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Perfusio Corporation, of Greenville:** \$75,000.00 to develop a non-contact medical imaging device for collecting vital signs that improves clinical visit safety and improves patient care. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Perotech, Inc., of Chapel Hill:** \$75,000.00 to develop X-ray imaging technology that is safer and produces sharper images. This SBIR project is sponsored by the Defense Advanced Research Projects Agency, Department of Defense.
- **Phase, Inc., of Cornelius:** \$75,000.00 to develop new 3D printing technology and demonstrate its ability to create a device that represents the blood-brain barrier, enabling improved testing of new medicines which may lead to more rapid development of treatments for diseases such as brain cancer. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Phaxtec, Inc., of Wake Forest:** \$75,000.00 to develop a process for converting renewable biogas (carbon dioxide and methane) to a biodegradable paper coating that would enable water-resistant packaging to be recycled or composted. This SBIR project is sponsored by the National Science Foundation.
- **Predictive, LLC, of Raleigh:** \$73,851.00 to design and test a software product that can accurately evaluate the safety of chemical, cosmetic, and pharmaceutical products. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Prevention Strategies, LLC, of Greensboro:** \$75,000.00 to develop a video-game-based drug abuse prevention program designed to engage young people and teach decision-making, problem-solving, and social skills. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Proximal, LLC, of Raleigh:** \$75,000.00 to develop a toolkit that will enable instructors in K-12 and higher education to create virtual reality educational experiences quickly and easily. This SBIR project is sponsored by the National Science Foundation.
- **Quantworks, Inc., of Carrboro:** \$75,000.00 to develop an intelligent drone service that reduces emergency response times and improves patient outcomes for out-of-hospital cardiac arrest. This SBIR project is sponsored by the National Science Foundation.

- **Resolute, Inc., of Durham:** \$75,000.00 to develop a better treatment for infections following joint replacement and to improve the standard of care for patients by reducing the number of subsequent procedures and hospital stays. This SBIR project is sponsored by the National Science Foundation.
- **Secmation, LLC, of Raleigh:** \$59,181.03 to design secure software that enables the next generation of army vehicles to be protected from cybersecurity threats. This STTR project is sponsored by the United States Army, Department of Defense.
- **Selsym Biotech, Inc., of Cary:** \$56,575.50 to develop synthetic platelets to stop bleeding of traumatic injuries that can be made on-demand and have a longer shelf life than conventionally isolated platelets. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Smart Girls HQ, of Charlotte:** \$75,000.00 to develop a game-based education platform that inspires elementary-aged girls to explore STEM career opportunities and gives them the opportunity to apply the skills they learn offline. This SBIR project is sponsored by the Department of Education.
- **Susteon, Inc., of Cary:** \$75,000.00 to develop a cleaner and less costly process to produce silicon carbide, a key component in ceramics, steel, and semiconductors. This SBIR project is sponsored by the National Science Foundation.
- **Tellus Therapeutics, of Hillsborough:** \$75,000.00 to develop an innovative approach for delivering medications that can improve neurological health outcomes of premature newborns. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Theia Imaging, of Durham:** \$75,000.00 to develop eye imaging systems that are more suitable and comfortable for infants and young children to better diagnose and manage retinal diseases. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Third Floor Materials, Inc., of Durham:** \$37,414.57 to develop infrared imaging technology, which allows one to visualize the heat emitted by objects, that is smaller, lighter, and more energy efficient. This STTR project is sponsored by the United States Army, Department of Defense.
- **Triangle Environmental Health Initiative, of Durham:** \$50,000.00 to develop a compact system that can recycle household greywater onsite so it can be reused for applications that do not require drinking water, like flushing toilets or watering the lawn. This SBIR project is sponsored by the Environmental Protection Agency.

- **United Protective Technologies, LLC, of Locust:** \$69,913.00 to design and develop windows that can protect infrared sensors during the aggressive conditions of hypersonic flight, during which temperatures can reach 3,000° F. This SBIR project is sponsored by the United States Navy, Department of Defense.
- **Versametrics, LLC, of Durham:** \$75,000.00 to help accelerate the development of devices used to study biomolecules that are less bulky, less expensive, and more accurate than current methods. This STTR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Vidterra, LLC, of Wilmington:** \$24,813.50 to develop software that allows ISR (Intelligence, Surveillance, and Reconnaissance) video to be transmitted globally with reduced cost and improved quality. This SBIR project is sponsored by the United States Air Force, Department of Defense.
- **Vigilant Cyber Systems, Inc., of Mount Airy:** \$75,000.00 to develop technology that will help prevent worker exposure to hazardous conditions by integrating data from wearable and area sensor systems. This SBIR project is sponsored by the United States Army, Department of Defense.
- **Vizma Life Sciences, of Durham:** \$75,000.00 to develop medical imaging technology for monitoring brain function that will improve our understanding of neurologic and psychiatric conditions. This SBIR project is sponsored by the National Institutes of Health, Department of Health and Human Services.
- **Voxel Innovations, of Raleigh:** \$52,461.00 to improve the finish and durability of hard-to-reach interior surfaces of metal parts, such as fuel injectors and heat exchangers, machined using additive manufacturing. This STTR project is sponsored by the United States Air Force, Department of Defense.
- **Zymeron Corporation, of Durham:** \$75,000.00 to develop a new generation of antimicrobials, for use in both civilian and military care settings, which treat infections caused by one of the main bacteria responsible for injury infection and sepsis. This SBIR project is sponsored by the United States Army, Department of Defense.

One North Carolina Small Business Program Incentive Grant Awardees, FY 2022:

Company	City
3-C Institute for Social Development, Inc.	Durham
3F, LLC	Hickory
8EIGHT8SIX2NINE	Raleigh
Adamas Nanotechnologies, Inc	Raleigh
Advanced Materials Manufacturing	Raleigh
Archimedes Analytical, LLC	Hickory
Artiam Bio, Inc.	Morrisville
Atom Bioworks, Inc.	Cary
BioKier, Inc.	Chapel Hill
BioMojo, LLC	Cary
Branelie Health, Inc.	Chapel Hill
Callahan-Young, LLC	Raleigh
Coprata, Inc.	Durham
Cosmic Eats, Inc.	Cary
Daimler Devices	Raleigh
Dignify Therapeutics, LLC	Research Triangle Park
EydisBio, Inc.	Durham
Glycan Therapeutics Corporation	Raleigh
GreenLifeTech Corporation	Banner Elk
Health Outcomes, Inc.	Chapel Hill
iEdapts, LLC	Charlotte
Impulse Wellness, LLC	Raleigh
Innovation Therapies	Hope Mills
Intermodal Logistics Consulting, Inc.	Winston-Salem
Kyma Technologies, Inc.	Raleigh
Lumedica, Inc.	Durham
Markeyia Tech, LLC	Clayton
MSI Software Solutions, LLC	Raleigh
Mucommune, LLC	Durham
Mycologics, LLC	Durham
Olfax, LLC	Asheville
PestStop, LLC	Pembroke
Praetego, Inc.	Research Triangle Park
Prohuman Technologies	Concord
Redbud Labs, Inc.	Research Triangle Park
Resolved Analytics, PLLC	Durham
Smart Girls HQ, LLC	Charlotte
Social Cascade, LLC	Raleigh
SonoVascular, Inc.	Chapel Hill
Stratus Technology Group, LLC	Spencer

Telli Technologies	Charlotte
Third Floor Materials, Inc.	Durham
Triangle Environmental Health Initiative	Durham
Triangle Precision Diagnostics, Inc.	Research Triangle Park
United Protective Technologies, LLC	Locust
Venti, LLC	New Bern
VetOncoDx, LLC	Raleigh
Vidterra, LLC	Wilmington
Vigilant Cyber Systems, Inc.	Mount Airy
Zymeron Corporation	Durham