

SBIR Newsletter

August 2006

Changes to the SBIR program on the way?

Courtesy of the *SBIR Insider* newsletter, we have learned of several changes that could be in the works. Please refer to the link below to read the article titled "SBE Committee Mark up Suggests Interesting and Important Changes to SBIR/STTR."

<http://www.zyn.com/sbir/insider/sb-insider07-28-06.htm#one>

GOV. EASLEY ANNOUNCES 2006-07 ONE N.C. SMALL BUSINESS APPLICATION PROCESS

\$5 Million Fund Supports Cutting Edge Research and Technology Development Grants

RALEIGH – Gov. Mike Easley has announced that the state is accepting applications for One North Carolina Small Business Fund matching grants for fiscal year 2006-07. These grants help small businesses with money to conduct innovative research and develop technology in an effort to bring new, cutting-edge products to the marketplace.

"These grants enable North Carolina's small businesses to conduct the research and technology development that will generate the kinds of innovation critical to the future growth of our state's economy," Easley said. "The One North Carolina Small Business Fund helps further North Carolina's position as the nation's top entrepreneurial state and as a leader in the global marketplace. This program is just one more reason that our state is ranked No.1 for business climate."

The One North Carolina Small Business Fund was proposed by Easley and approved by the General Assembly last year with \$1 million for the first round of grants to help provide companies with needed resources to pursue original, pioneering ideas. Twenty-four North Carolina companies received grants from the fund. This year on the Governor's recommendation, the General Assembly approved an additional \$5 million for the program.

For a business to be considered for a One North Carolina Small Business Fund grant, it must already have qualified for a federal Small Business Innovation Research or a Small Business Technology Transfer award. Under the One North Carolina Small Business Fund program's guidelines, the state matches the federal money, with a \$100,000 maximum per grant.

Detailed information on applying for the grants, requests for grant proposals and guidelines are posted on the Board of Science and Technology's Website <http://www.ncscienceandtechnology.com>. New this year is web-based electronic submission for program applications.

ZyCare *An NC SBIR Success Story*

In January 2005, ZyCare completed formal clinical trials of its CoagCare ® system at 3 locations with 100 patients. The study was supported by an SBIR grant to ZyCare from the NHLBI as well as by the International Technidyne Corporation.

ZyCare has developed an innovative approach utilizing expert systems and the Internet to automate much of the routine decision making involved in remotely managing patients with chronic conditions. ZyCare's systems directly involve the patient in information gathering that drives automated treatment recommendations, while giving physicians a vehicle to closely monitor their patients' progress without random and time-consuming telephone calls and faxes. This approach allows the healthcare system to cost-effectively take advantage of the new home monitoring devices that are being developed and marketed for chronic conditions. The company believes that its approach gives patients more control over their own condition, and allows medical personnel to focus on those patients needing their attention. ZyCare has chosen to introduce its system approach by addressing a very specific area, the facilitation of physician-supervised patient self-testing (PST) of oral anticoagulation therapy with warfarin (Coumadin®). While warfarin therapy is relatively inexpensive and well tolerated, its potency as an anticoagulant depends up what foods and medications a patient is using. Therefore, it is not easy for the physician to get the dosage just right. If a patient is too anticoagulated he can suffer from dangerous bleeding, while too little anticoagulation can leave the patient at risk for blood clots and strokes. Consequently, most patients on warfarin must visit their doctor once or twice a month to have their blood tested and their warfarin dosages adjusted. Frequent communication between visits is often required. This is inconvenient for the patients, and very costly for the managing physicians. To solve this problem, ZyCare has created the CoagCare system. CoagCare is an Internet-enabled expert system. Both patients and healthcare providers can access the system through a browser from any location.

While the Coagcare grant is their most recent, ZyCare has a long history with the SBIR program. Having been started in the 80's ZyCare was one of the first companies to receive an SBIR grant. Since then they have received a number of SBIR grants from different branches of the NIH. They have found the SBIR program to be especially helpful as a proof of concept which opens up corporate sponsorship and partnerships. Specifically ZyCare has been able to take advantage of the SBIR FastTrack program which promises a phase II grant if all of the Phase I benchmarks are met. This has allowed them to reach the commercialization of a product much faster than having to re-apply. Currently ZyCare's main goal is to streamline the process of patient-doctor interaction.

NASA 2006 SBIR/STTR Phase 1 Solicitations Now Open

The National Aeronautics and Space Administration (NASA) 2006 SBIR and STTR phase 1 program solicitations opened on July 7, 2006. The solicitation documents are combined, however, the review, selection and award processes will be conducted separately for each program. The solicitation package is available in HTML, WORD (doc and rtf), PDF, and TXT file formats at <http://sbir.nasa.gov/SBIR/sbirsttr2006/solicitation/index.html>. The deadline for submitting proposals is September 7, 2006.

It is expected that NASA will select approximately 250 SBIR proposals and approximately 30 STTR proposals for negotiation of Phase 1 contracts of up to \$100,000. Following contract negotiations and awards, Phase 1 contractors will have up to 12 months to carry out their programs, prepare their final reports, and submit Phase 2 proposals. NASA anticipates that approximately 40 percent of the successfully completed Phase 1 projects will be selected for Phase 2 fixed-price contracts up to \$600,000.

The SBIR Program Solicitation topics and subtopics are developed by the NASA Mission Directorates and Centers in coordination with the NASA SBIR/STTR programs. The four NASA Mission Directorates (MDs) and the number of research topics available for each are listed below:

Aeronautics Research (4 topics and 21 total subtopics) Exploration Systems (14 topics and 33 total subtopics) Science (8 topics and 32 total subtopics) Space Operations (2 topics and 14 total subtopics)

For the STTR solicitation, each topic corresponds to nine specific NASA Centers. Two subtopics per topic reflect the current highest priority technology thrusts of that Center.

To participate in the NASA SBIR program, firms must have Internet access and an e-mail address. Paper copies of the solicitation will not be distributed. Information relating to the formulation of proposals is available via the following web sites:

NASA 2006 Strategic Plan: <http://www.nasa.gov/about/budget/index.html>

NASA Mission Directorates: <http://www.nasa.gov/centers/hq/organization/index.html>

NASA Innovative Partnerships Program: <http://www.ipp.nasa.gov/>

NASA SBIR/STTR Programs: <http://sbir.nasa.gov>

For additional information regarding the NASA SBIR program, contact the SBIR/STTR Support Office at REI Systems, Inc., Phone (301) 937-0888, Fax (301) 937-0204, Email sbir@reisys.com

Courtesy: SBIR Alerting Service (<http://www.pnl.gov/edo/sbir>)

Sixteen N.C. Firms Receive Nearly \$700,000 in First Round of New State Grants

Courtesy: Local Tech Wire

RALEIGH, N.C. – Sixteen emerging companies in North Carolina, including 12 from in and around the Research Triangle, are the first recipients of grants from the State of North Carolina's new innovation grant program.

The companies all had already received government funds in order to receive a match from the state as inaugurated under the One North Carolina Small Business Fund. Many of the grants are for military-related research.

Governor Mike Easley announced the grants, which total almost \$700,000, on Monday. Under the first year of the program as approved by the state's General Assembly, \$1 million in grants was available.

Easley is seeking \$5 million for the program in the next fiscal year budget now being debated at the General Assembly.

"This is great news," said Jim Rapp, director of communications for the North Carolina Technology Association, which has been a strong advocate for the grants program. "Many of our members are small companies, and this program will definitely help them succeed in growing their companies in North Carolina."

The One North Carolina Small Business Fund is an attempt to make more funding available for emerging companies. A shortage of venture capital for startups and early-stage companies has been cited in the past by entrepreneurial groups as a limiting factor on the numbers and the growth of new firms.

The grants were awarded through the governor's office for Science and Technology. The funds are to be used for research and development.

"These grants enable North Carolina's small businesses to conduct the research and technology development that will generate the kinds of innovation critical to the future growth of our state's economy," Easley said in a statement. "The One North Carolina Small Business Fund helps further position North Carolina as the nation's top entrepreneurial state and as a leader in the global marketplace. This program is just one more reason that our state is ranked No.1 for business climate."

To be eligible for a state grant, a company must have already received a Small Business Innovation Research or a Small Business Technology Transfer award from the federal government. The state can match up to half of a federal grant to a maximum of \$50,000.

The first grants, with company and project descriptions provided by the Governor's office, went to:

- **3F of Apex:** \$50,000 to develop a small, lightweight device that would help parachutists extricate themselves from their harness during an emergency. The project is sponsored by the U.S. Air Force.
- **Advanced Liquid Logic Inc. of Research Triangle Park:** \$34,782 to develop a digital microfluidic lab-on-a-microchip to perform a broad spectrum of automated diagnostic tests on minute-sized samples. The project is sponsored by NASA.
- **Alderon Biosciences of Durham:** \$50,000 to develop inexpensive sensors and instruments for use in poor regions of the world to provide better and low-cost ways to determine HIV viral load, which is an important indicator of the severity of infection and helps in determining the therapies for HIV-infected persons. The project is sponsored by the National Institutes for Health.
- **CryoFacets of Raleigh:** \$49,998 for a program to develop a system to collect single cell types for a variety of clinical applications, such as transfusion medicine, vaccine development, tissue culture, and pathogen detection, in a single processing step. The project is sponsored by the National Institutes of Health.
- **Eno River Labs of Durham:** \$34,868 to develop an on-site testing kit for land that may be contaminated by dioxins, which would allow for more cost-effective cleanup strategies. The project is sponsored by the U.S. Environmental Protection Agency.
- **Firebird Advanced Materials of Raleigh:** \$49,947 for a project sponsored by the U.S. Air Force on methods of recycling carbon fiber reinforced plastic, a strong, light and very expensive composite material that has many uses in the aerospace and automotive industries. The project is sponsored by the U.S. Air Force.
- **Foard Systems Design, Inc. of Durham:** \$34,995 to develop an automated system to isolate equipment during maintenance to enhance the safety of personnel, equipment and ships. The project is sponsored by the U.S. Navy.
- **Kyma Technologies of Raleigh:** \$50,000 to develop improved components for the new generation of X-band radar. The project is sponsored by the federal Missile Defense Agency.
- **MicroPhase Coatings Inc. of Garner:** \$34,987 to develop an improved, more efficient fuel bladder for satellite and space vehicles. The project is sponsored by NASA.
- **NanotechLabs of Yadkinville:** \$49,990 to incorporate carbon nanotubes into the next generation of Electromagnetic interference (EMI) shielded electronic enclosures. The project is sponsored by the U.S. Air Force.
- **Nekton Research of Durham:** \$34,999 for a program involving underwater robotic technology for the Department of Defense and other customers. The project is sponsored by the U.S. Navy.
- **OpSource of Charlotte:** \$49,949 to develop a new stress-resistant machining technology. The project is sponsored by the U.S. Air Force.

- **Phase Bioscience of Durham:** \$50,000 for a program using biosynthetic methods to enable the development of new medicines more rapidly and at significantly lower cost. The project is sponsored by the National Institutes for Health.
- **Religent of Morrisville:** \$21,742 to produce standards-based Web service tools for making clinical decisions more available and more usable to improve patient care, reduce medical errors and lower healthcare costs. The program is in collaboration with Duke University.
- **Vascular Pharmaceuticals of Burlington:** \$50,000 to develop a drug to treat atherosclerosis in patients with diabetes. The program is in collaboration with the University of North Carolina.
- **Vortant Technologies of Weaverville:** \$49,531 to develop a cost-effective, unobtrusive “point and click” telephone system for individuals with disabilities that prevent them from using a standard computer keyboard and mouse. The program is sponsored by the National Institutes for Health.

For more information about the One North Carolina Small Business Fund, how to apply and qualify for the grants, see: <http://www.ncscienceandtechnology.com>

NC IDEA Grant Program

Registration opens on August 21st for NC IDEA's Fall 2006 grant program. Selected projects will be given small grants to fund “proof-of-concept” business activities that validate potential markets, reduce business risks, and advance projects to the point at which they are suitable for private equity investment. Selected projects will be awarded up to \$50,000.

Applications for NC IDEA grants can be submitted online. More information on the program as well as instructions on how to submit an application for the Fall 2006 solicitation can be found at: <http://www.ncidea.org/programd.htm>