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STATE OF NORTH CAROLINA DEPARTMENT OF COMMERCE

NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

March 24, 2008

FROM: John Hardin, Acting Executive Director, NC Board of Science and Technology

SUBJECT: ONE NORTH CAROLINA SMALL BUSINESS FUND REPORT TO THE JOINT

LEGISLATIVE COMMISSION ON GOVERNMENTAL OPERATIONS

AS REQUIRED BY §143B-437.83 OF THE NORTH CAROLINA GENERAL STATUTES

PROGRAM STATUS AS OF MARCH 18, 2008

BACKGROUND

The Federal Small Business Innovation Research (SBIR) and (STTR) Programs grant competitive awards to small businesses for both Phase I proof-of-principle research and development and Phase II early stage product development. The SBIR/STTR Programs were first enacted in 1982 as a part of the Small Business Innovation Development Act; under the programs, federal agencies with extramural R&D budgets in excess of \$100MM are required to allocate a 2.5% set-aside for small business. Last year the programs awarded ~\$1.8 Billion (compared to ~\$750MM in venture capital over the same period) to small business across the United States.

The One North Carolina Small Business Program entails two programs. The **SBIR/STTR Phase I Matching Funds Program** and the **SBIR/STTR Phase I Incentive Funds Program.** This report provides information for both programs.

MATCHING FUNDS PROGRAM SUMMARY

The North Carolina SBIR/STTR Phase I Matching Funds Program awards matching funds to North Carolina based small businesses that have received an SBIR or STTR Program Phase I award.

The North Carolina Board of Science and Technology, a division of the North Carolina Department of Commerce, administers the Program. Under the Program, awards can be made to eligible companies for up to 100% of a firm's Federal Phase I SBIR/STTR Program award, up to the maximum amount of \$100,000, until funds available for the Program have been exhausted. Applicants who receive Matching Awards receive 75% of the award amount upon receipt of an SBIR/STTR Phase I award, and receive the remaining 25% of the award if their Phase I report is accepted by the funding agency and they submit a related Phase II application to the funding agency. Phase II SBIR/STTR awards can exceed \$1Million.

PURPOSE

The purpose of the Matching Program is to foster job creation and economic development in North Carolina by increasing the competitive position of North Carolina small businesses in attracting SBIR and STTR grant funding, and to provide an incentive for Phase I award-winning firms to participate in the more substantial Phase II program. The goals of the Matching Program are to:

- 1. Increase the amount of Federal research dollars received by North Carolina small businesses;
- 2. Help North Carolina companies bridge the funding gap period between the final Phase I payment and the first Phase II payment in the Federal SBIR/STTR Program;
- 3. Increase the intensity of the research conducted under Phase I, making North Carolina small businesses more competitive in the competition for Phase II funds; and
- 4. Encourage the establishment and growth of high-quality, advanced technology firms in the State of North Carolina.

The North Carolina Board of Science and Technology North Carolina Department of Commerce 301 North Wilmington Street • 1326 Mail Service Center Raleigh, North Carolina 27699-1326



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

HISTORICAL INFORMATION

- Program created in 2005-2006 Budget Act.
 - o \$1,000,000 initially appropriated to fund in Q3 FY 2005-2006.
 - o Annual Program Solicitation released in late January 2006.
 - o First grant awards made in late March 2006.
 - o Grants totaling \$1,078,099.80 were made under the FY 2005-2006 program to a total of 25 North Carolina Small Businesses across the state (*Note: The Board approved \$78,099.80 in funding to come from the 2006-2007 appropriation*)
 - In 2005-2006, award levels were set at 50% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$50,000.
- \$5,000,000 appropriated to fund in 2006-2007 Budget Act (*Note: The Board approved \$78,099.80 in funding to come go to the 2005-2006 appropriation*).
 - o Annual Program Solicitation released in late October 2006.
 - o Grants totaling \$4,533,955.18 were made under the FY 2006-2007 program to a total of 51 North Carolina Small Businesses across the state.
 - o In 2006-2007, award levels were set at 100% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$100,000.
- \$4,830,000 appropriated to fund in 2007-2008 Budget Act.
 - o Annual Program Solicitation released in late July 2007.
 - o Grants totaling \$3,192,156.05 have been made thus far (as of March 18, 2008) under the FY 2007-2008 program to a total of 33 North Carolina Small Businesses across the state.
 - o In 2007-2008, award levels were set at 100% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$100,000.

For more information about the One North Carolina Small Business Fund and how to apply and qualify for the grants, please see the N.C. Board of Science and Technology's website at www.ncscienceandtechnology.com.

CONSOLIDATED FINANCIAL SITUATION [AS OF MARCH 18, 2008] FY 2005-06, 2006-07, 2007-08

Total Transfer to Board of Science & Tech. (transfer to 2534) \$10,830,000

FY 2005-2006 Encumbrances (\$1,078,099.80)

FY 2006-2007 Encumbrances (\$4,533,955.18)

FY 2007-2008 Encumbrances (\$3,192,156.05 – as of March 18, 2008)

Balance – Unobligated One NC Small Business Grant Funds \$2,025,788.97

NOTE: AT CURRENT GRANT RATES, WE ANTICIPATE ALL AVAILABLE PROGRAM FUNDS WILL BE ENCUMBERED BY END OF JUNE 2008.

ATTACHMENTS:

- 1. FY 2005-2006 PROGRAM ENCUMBRANCES
- 2. FY 2006-2007 PROGRAM ENCUMBRANCES
- 3. FY 2007-2008 PROGRAM ENCUMBRANCES (as of March 18, 2008)



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

FY 2005-2006 SBIR/STTR MATCHING FUNDS PROGRAM SUMMARY

- \$1,000,000 initially appropriated to fund in Q3 FY 2005-2006.
- Annual Program Solicitation released in late January 2006.
- First grant awards made in late March 2006.
- Grants totaling \$1,078,099.80 were made under the FY 2005-2006 program to a total of 25 North Carolina Small Businesses across the state
- The Board authorized by formal resolution and directed the Executive Director to allocate \$78,099.80 from the 2006-2007 Budget appropriation (\$5MM) to cover all eligible company grant applications in excess of the original \$1,000,000 allocation. This ensured that no eligible companies were denied funding in the 2005-2006 cycle.
- In 2005-2006, award levels were set at 50% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$50,000.
- Encumbered and Paid amounts differ due to the *two-stage nature* of grants made under the program. Companies are paid 75% of the encumbered grant amount upon award. The remaining 25% is paid after program performance/completion criteria are met.

FY 2005-2006	Grantee Organization	Encumbered	Paid
	3F, LLC	\$37,500.00	\$37,500.00
	ADVANCED LIQUID LOGIC, INC	\$34,782.00	\$34,782.00
	AFFINERGY, INC.	\$50,000.00	\$37,500.00
	ALDERON BIOSCIENCES, INC.	\$50,000.00	\$37,500.00
	ALGAEN CORPORATION	\$49,433.00	\$49,433.00
	COGNOSCI, INC.	\$50,000.00	\$50,000.00
	CRYOFACETS, INC.	\$49,997.50	\$37,498.13
	ENO RIVER LABS, LLC	\$26,151.38	\$26,151.38
	FIREBIRD ADVANCED MATERIALS, INC.	\$49,947.50	\$49,947.50
	FOARD SYSTEMS DESIGN, INC.	\$34,995.00	\$26,246.25
	GREATWALL SYSTEMS, INC.	\$38,735.50	\$29,051.63
	INTERNATIONAL ASSOCIATION OF VIRTUAL ORGANIZATIONS, INC.	\$34,973.50	\$26,230.13
	KYMA TECHNOLOGIES, INC.	\$50,000.00	\$50,000.00
	MICROPHASE COATINGS, INC.	\$34,987.10	\$26,240.33
	NANOTECHLABS INC.	\$49,990.39	\$49,990.39
	NEKTON RESEARCH, LLC	\$34,999.93	\$26,249.94
	OPSOURCE, INC.	\$49,949.00	\$49,949.00
	PHASE BIOSCIENCE, INC.	\$37,500.00	\$37,500.00
	RELIGENT, INC.	\$21,741.50	\$21,741.50
	RPATH, INC. SIGNAL INNOVATIONS GROUP	\$49,911.50 \$49,990.00	\$49,911.50 \$37,492.50
	SOUTHEAST TECHINVENTURES, INC.	\$49,172.00	\$49,172.00
	THERALOGICS, INC.	\$43,811.50	\$32,858.63
	VASCULAR PHARMACEUTICALS INC	\$50,000.00	\$37,500.00
	VORTANT TECHNOLOGIES, LLC	\$49,531.50	\$37,148.63
	VORTANT TEOTINOLOGIES, LEG	ψ 4 9,331.30	
	2005-2006 Program Totals	\$1,078,099.80	\$947,594.44
	Budget	\$1,000,000.00	
	Allocation from FY 2006-2007 Appropriation	\$78,099.80	
	Total Funds Available	\$,1078,099.80	
	Balance of Funds Remaining	\$0	



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

FY 2006-2007 SBIR/STTR MATCHING FUNDS PROGRAM PROGRAM SUMMARY

- \$5,000,000 appropriated to fund in FY 2006-2007 Budget Act; Annual Program Solicitation released in late October 2006.
- The Board authorized by formal resolution and directed the Executive Director to allocate \$78,099.80 in funding to come go to the 2005-2006 appropriation.
- Grants totaling \$4,533,955.18 were made under the FY 2006-2007 program to a total of 51 North Carolina Small Businesses across the state.
- In 2006-2007, award levels were set at 100% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$100,000.
- Encumbered and Paid amounts differ due to the *two-stage nature* of grants made under the program. Companies are paid 75% of the encumbered grant amount upon award. The remaining 25% is paid after program performance/completion criteria are met.

FY 2006-2007	Grantee Organization	Encumbered	Paid
	3-C INSTITUTE FOR SOCIAL DEVELOPMENT, INC.	\$99,488.00	\$99,488.00
	AFFINERGY, INC.	\$100,000.00	\$100,000.00
	AIR CONTROL TECHNIQUES, P.C.	\$97,190.00	\$72,892.50
	APPEALING PRODUCTS INC.	\$99,997.00	\$74,997.75
	APPLIED QUANTUM TECHNOLOGIES, INC.	\$55,000.00	\$55,000.00
	ARRAYXPRESS, INC.	\$99,949.00	\$74,961.75
	BIOLINK LIFE SCIENCES, INC.	\$79,590.00	\$59,692.50
	BIOMEDOMICS, INC.	\$99,960.00	\$74,970.00
	BIOPTIGEN, INC.	\$100,000.00	\$75,000.00
	CAROLINA UNMANNED VEHICLES, INC.	\$69,574.00	\$52,180.50
	CD NEURAL TECHNOLOGIES	\$100,000.00	\$75,000.00
	CLINICAL TOOLS, INC	\$100,000.00	\$100,000.00
	COGNOSCI, INC.	\$100,000.00	\$75,000.00
	CORVID TECHNOLOGIES	\$99,988.18	\$74,991.14
	CP DIAGNOSITICS, INC.	\$54,306.00	\$40,729.50
	DOT METRICS TECHNOLOGIES	\$99,998.00	\$74,998.50
	ENDACEA, INC.	\$100,000.00	\$75,000.00
	ENTERTAINMENT SCIENCE & VIRTUAL HEROES JOINT VENTURE	\$100,000.00	\$100,000.00
	ERCOLE BIOTECH	\$100,000.00	\$75,000.00
	FIREBIRD ADVANCED MATERIALS, INC.	\$100,000.00	\$100,000.00
	GTCALLISON, LLC	\$69,000.00	\$51,750.00
	HEALTH OUTCOMES, INC.	\$99,534.00	\$74,650.50
	HEPATOSYS, INC.	\$100,000.00	\$100,000.00
	INDEPENDENT LIVING RESOURCES, INC.	\$100,000.00	\$100,000.00
	INSITUTEC INC. INTERNATIONAL ASSOCIATION OF VIRTUAL ORGANIZATIONS, INC.	\$100,000.00	\$75,000.00
	KYMA TECHNOLOGIES, INC.	\$69,944.00 \$70,000.00	\$69,944.00 \$70,000.00
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	MANNINGRF, LLC MRPATH INC	\$96,538.00 \$99,998.00	\$72,403.50 \$74,998.50
	NANOLYTICS, INC.	\$100,000.00	\$75,000.00
	NANOTECHLABS INC.	\$95,150.00	\$71,362.50
	NEKTON RESEARCH, LLC	\$95,000.00	\$95,000.00
	NIRVANA PHARMACEUTICALS INC.	\$100,000.00	\$75,000.00
	NITRONEX CORPORATION	\$79,600.00	\$79,600.00
	OPTOPO, INC.	\$100,000.00	\$100,000.00
	ORBIT ENERGY, INC.	\$58,081.00	\$58,081.00
	PLUREON CORPORATION	\$100,000.00	\$75,000.00
	PREMITEC, INC.	\$100,000.00	\$75,000.00
	SCIENCE LEARNING RESOURCES, INC.	\$69,613.00	\$52,209.75
	SEMPRIUS, INC.	\$99,413.00	\$74,559.75
	SOLITRONICS LLC	\$59,887.50	\$59,887.50
	SOUTHEAST TECHINVENTURES, INC.	\$99,457.00	\$74,592.75
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NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

SOYMEDS, INC. STOVALL LIFE SCIENCE, INC. SUN DANCE GENETICS LLC THERALOGICS, INC. TRIANGLE POLYMER TECHNOLOGIES, INC VALENCELL, INC. VORTANT TECHNOLOGIES, LLC ZELLCOMP, INC. ZEN-BIO, INC	\$100,000.00 \$50,990.00 \$100,000.00 \$99,503.00 \$44,271.50 \$74,761.00 \$100,000.00 \$48,174.00 \$100,000.00	\$75,000.00 \$38,242.50 \$75,000.00 \$74,627.25 \$44,271.50 \$56,070.75 \$75,000.00 \$36,130.50 \$75,000.00
2006-2007 Program Totals	\$4,533,955.18	\$3,733,284.39
Budget Allocation to FY 2005-2006 Appropriation Total Funds Available	\$5,000,000.00 (\$78,099.80) \$4,921,900.20	
Balance of Funds Remaining	\$387,945.02	



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

FY 2007-2008 SBIR/STTR MATCHING FUNDS PROGRAM PROGRAM SUMMARY

- \$4,830,000 appropriated to fund in 2007-2008 Budget Act.
- Annual Program Solicitation released in late July 2007.
- Grants totaling \$3,192,156.05 have been made thus far (as of March 18, 2008) under the FY 2007-2008 program to a total of 33 North Carolina Small Businesses across the state.
- In 2007-2008, award levels were set at 100% of a firm's Federal SBIR/STTR Program award, up to the maximum amount of \$100,000.
- Encumbered and Paid amounts differ due to the *two-stage nature* of grants made under the program. Companies are paid 75% of the encumbered grant amount upon award. The remaining 25% is paid after program performance/completion criteria are met. Payment for some grants is pending.

FY 2007-2008	Grantee Organization	Encumbered	Paid
	3-C INSTITUTE FOR SOCIAL DEVELOPMENT, INC.	\$100,000.00	\$75,000.00
	3F, LLC	\$100,000.00	\$75,000.00
	ADVANCED LIQUID LOGIC, INC	\$100,000.00	\$75,000.00
	AFFINERGY, INC.	\$100,000.00	\$75,000.00
	ALDITRI TECHNOLOGIES, INC.	\$100,000.00	\$0.00
	APPLIED QUANTUM TECHNOLOGIES, INC.	\$98,950.00	\$0.00
	AUGER COMMUNICATIONS, INC.	\$100,000.00	\$0.00
	CLINICAL TOOLS, INC	\$100,000.00	\$75,000.00
	COGNOSCI, INC.	\$100,000.00	\$75,000.00
	CYTEX THERAPEUTICS, INC.	\$100,000.00	\$75,000.00
	DOT METRICS TECHNOLOGIES	\$99,887.00	\$74,915.25
	ENDLS OPTICS	\$100,000.00	\$0.00
	ENTERTAINMENT SCIENCE & VIRTUAL HEROES JOINT VENTURE	\$100,000.00	\$75,000.00
	HEALTH OUTCOMES, INC.	\$99,811.00	\$74,858.25
	INSITUTEC INC.	\$100,000.00	\$75,000.00
	INTERNATIONAL ASSOCIATION OF VIRTUAL ORGANIZATIONS, INC.	\$54,900.00	\$41,175.00
	KYMA TECHNOLOGIES, INC.	\$99,992.00	\$0.00
	LIQUIDIA TECHNOLOGIES, INC.	\$100,000.00	\$75,000.00
	MATERIALS INNOVATION TECHNOLOGIES	\$99,978.55	\$74,983.91
	MERCURY SCIENCE, INC.	\$95,000.00	\$71,250.00
	MORPHORMICS, INC	\$100,000.00	\$75,000.00
	NITRONEX CORPORATION	\$99,784.00	\$0.00
	PRECISION BIOSCIENCES	\$100,000.00	\$0.00
	PRECISION HUMAN BIOLABORATORY INC.	\$99,632.00	\$74,724.00
	PREMITEC, INC.	\$87,680.00	\$65,760.00
	SCRIBNER ASSOCIATES, INC.	\$99,953.00	\$0.00
	SOUTHEAST TECHINVENTURES, INC.	\$100,000.00	\$75,000.00
	TRIANGLE POLYMER TECHNOLOGIES, INC	\$99,957.50	\$74,968.13
	VADUM INC	\$69,901.00	\$52,425.75
	VALENCELL, INC.	\$100,000.00	\$75,000.00
	VASCULAR BIOSCIENCES	\$100,000.00	\$0.00
	ZEN-BIO, INC	\$86,730.00	\$65,047.50
	ZUMATEK, INC.	\$100,000.00	\$75,000.00
	2007-2008 Program Totals (To Date)	\$3,192,156.05	\$1,720,107.79
	Budget	\$4,830,000.00	
	Total Funds Available	\$4,830,000.00	
	Balance of Funds Remaining	\$1,637,843.95	



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

INCENTIVE FUNDS PROGRAM SUMMARY

The North Carolina SBIR/STTR Phase I Incentive Funds Program reimburses qualified North Carolina businesses for a portion of the costs incurred in preparing and submitting Phase I proposals for the U.S. Government's SBIR STTR Programs. Under the Incentive Funds Program, the State issues qualified applicants a grant in the amount equal to 50% of their approved Phase I Proposal preparation costs, up to \$3,000. These grants are awarded to qualified applicants on a first-come, first-served basis, up to the limits of available funding. The North Carolina Board of Science and Technology, a division of the North Carolina Department of Commerce, administers the Program.

PURPOSE

The purpose of the Incentive Program, as with the Matching Program, is to foster job creation and economic development in North Carolina by increasing the competitive position of North Carolina small businesses in attracting SBIR and STTR grant funding, and to provide an incentive for Phase I award-winning firms to participate in the more substantial Phase II program. The goals of the Matching Program are to:

- 1. Increase the amount of Federal research dollars received by North Carolina small businesses;
- 2. Help North Carolina companies bridge the funding gap period between the final Phase I payment and the first Phase II payment in the Federal SBIR/STTR Program;
- 3. Increase the intensity of the research conducted under Phase I, making North Carolina small businesses more competitive in the competition for Phase II funds; and
- 4. Encourage the establishment and growth of high-quality, advanced technology firms in the State of North Carolina.

HISTORICAL INFORMATION AND FY 2007-2008 FUNDING SUMMARY

- Program created in 2005-2006 Budget Act.
 - No funding allocated to Incentive Fund Program in FY 2005-2006 or FY 2006-2007. All One NC Small Business Funds were allocated to the Matching Fund Program.
 - o Grants totaling \$59,357.08 have been made thus far (as of March 18, 2008) under the FY 2007-2008 program to a total of 20 North Carolina Small Businesses across the state.
 - \$387,945.02 is funding for the Incentive Funds Program was carried forward and transferred from previous years' Matching Fund Programs.
 - Payment for some grants is pending.



NORTH CAROLINA BOARD OF SCIENCE AND TECHNOLOGY

FY 2007-2008	Grantee Organization	Encumbered	Paid
	3-C INSTITUTE FOR SOCIAL DEVELOPMENT. INC.	\$3,000.00	\$0.00
	3F, LLC	\$3,000.00	\$3,000.00
	AFFINERGY, INC.	\$3,000.00	\$3,000.00
	ASKLEPIOS BIOPHARMACEUTICAL, INC.	\$3,000.00	\$0.00
	COMMUNICATING FOR EFFECT, LLC	\$3,000.00	\$0.00
	CORVID TECHNOLOGIES	\$3,000.00	\$3,000.00
	EDUCATIONAL CONSULTATION AND DEVELOPMENT INC.	+ - /	\$3,000.00
	HYDROSIZE TECHNOLOGIES	\$2,995.00	\$2,995.00
	INDEPENDENT LIVING RESOURCES, INC.	\$2,981.00	\$2,981.00
	JENKEN BIOSCIENCES, INC.	\$2,878.08	\$0.00
	MATERIALS INNOVATION TECHNOLOGIES	\$3,000.00	\$3,000.00
	NEUROCOG TRIALS, INC.	\$3,000.00	\$3,000.00
	PHARMASYS, INC.	\$2,503.00	\$2,503.00
	PROTOCHIPS, INC.	\$3,000.00	\$3,000.00
	PROVAGEN, INC	\$3,000.00	\$0.00
	SOUTHEAST TECHINVENTURES, INC.	\$3,000.00	\$3,000.00
	TECHNICAL DESIGNS INC.	\$3,000.00	\$0.00
	TEOTTEN DIAGNOSTICS	\$3,000.00	\$3,000.00
	TRIANGLE POLYMER TECHNOLOGIES, INC TRIBOFILM RESEARCH, INC.	\$3,000.00 \$3.000.00	\$3,000.00 \$3,000.00
	TRIBOFILIVI RESEARCH, INC.	+ - /	\$3,000.00
	2007-2008 Program Totals (To Date)	\$59,357.08	\$41,479.00
	Budget (balance carried forward and transferred from previous years' Matching Fund Programs)	\$387,945.02	
	Total Funds Available	\$387,945.02	
	Balance of Funds Remaining	\$328,587,94	