SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM (STTR)

ANNUAL REPORT - FY 2001

Office of Technology
U.S. Small Business Administration

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Introduction

This is the eighth annual report presented by the U.S. Small Business Administration (SBA) pursuant to Public Law 102-564, the Small Business Research and Development Enhancement Act of 1992, as amended.

This report describes the operation and administration of the Small Business Technology Transfer program (STTR) for fiscal year 2001.

Summary of Legislation

Public Law 102-564, as amended

Title I of Public Law 102-564 amended the Small Business Act by reauthorizing the Small Business Innovation Research (SBIR) program. After extensive hearings by several committees and review of extensive testimony from numerous experts, Federal Government officials, participating small businesses, beneficiaries, and oversight groups including the General Accounting Office, Public Law 102-564 was passed by the Congress. At the time it was reauthorized, the SBIR program had been in effect for a decade, during which it achieved remarkable success in its program goals of helping small businesses develop important technology and helping keep the Nation at the forefront of technological innovation.

Seeking to further expand small business opportunities in the technical arena, Title II of the Act, established the STTR program.

The STTR program shares the underlying philosophy of the SBIR program. It targets federally funded research and development as a base for technological innovation that will contribute to the growth and strength of the Nation's economy. It differs from the SBIR program in that STTR awards are made to small businesses that pursue technological innovation *through cooperative research and development with Federal laboratories and non-profit scientific and educational institutions.*

Duration of the Program

In October 1992, Congress enacted Public Law 102-564 authorizing the STTR program for fiscal years 1994, 1995, and 1996. In September 1996, Public Law 104-208 reauthorized the STTR program through FY 1997. Public Law 105-135 expired September 30, 2001. In October 2001, Public Law 107-50 reauthorized the STTR program through FY 2009 and increased the program set-a-side from .15 to .30 beginning in FY 2004.

The Small Business Technology Transfer Program

Funding

Federal agencies that participate in the STTR program must have an extramural budget for research or research and development in excess of $1 billion. Program guidelines established the following percentages of funds an agency could expend with small businesses in connection with the STTR program:

- Not less than 0.05 percent of such budget in fiscal year 1994;
- Not less than 0.1 percent of such budget in fiscal year 1995; and
- Not less than 0.15 percent of such budget through fiscal year 2003.
- Not less than 0.3 percent of such budget in fiscal year 2004 and each fiscal year thereafter.

Federal Agencies Participating

The five Federal agencies that meet the funding threshold and participate in the program are:

- Department of Defense
- Department of Energy
- Department of Health and Human Services
- National Aeronautics and Space Administration
- National Science Foundation

The Three-Stage STTR Process

Public Law 102-564 structured the STTR program as a three-phase process designed to identify and nurture promising research and development interests within the small business community. These phases are:

Phase I: Awards are made to determine, to the extent possible, the scientific, technical, and commercial merit and the feasibility of ideas submitted. Phase I awards generally will not exceed $100,000 and are for a 1-year effort. Award amounts are set at the discretion of the participating agencies.

Phase II: In Phase II, Phase I projects with the most potential may be funded to further develop ideas to meet particular program goals. Phase II awards will generally not exceed $500,000 for a 2-year effort. Specific amounts awarded are at the discretion of the awarding agencies.

Phase III: No Federal STTR funds are expended during this phase. In Phase III, program participants pursue

commercial applications of the innovations developed in Phases I and II. However, in Phase III, program participants may receive additional non-STTR Federal funds to develop products and services for use by the Federal Government. They may also receive awards from non-STTR Federal funding sources for continuation of competitively selected research and research and development.

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Eligibility for Participation in STTR

The STTR program involves cooperative research and development performed jointly by a small business and a research institution. Thus, each STTR project involves at least two partners, each of which must meet eligibility criteria in order for the project to be funded.

To be eligible for an STTR award, a ***small business*** must have no more than 500 employees, be independently owned and operated, not be dominant in the field of operation in which it is proposing, have its principal place of business in the United States, be organized for profit, and be primarily owned by U.S. citizens.

To be eligible for participation in an STTR award, a ***research institution*** must be a non-profit institution as defined by the Stevenson-Wydler Technology Innovation Act of 1980, or a federally funded research and development center (FFRDC) as identified by the National Science Foundation in accordance with the Office of Federal Procurement Policy Act. Thus, most universities and colleges, non-profit research centers, and Federal Government-owned, company-operated laboratories are eligible.

Small businesses interested in participating in the STTR program are required to find a research institution meeting this definition and to develop a working agreement before proposing to compete for an STTR award.

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Distribution of Work

An STTR award is intended to be a true partnership venture for both the small business and the research institution. To ensure such a relationship, the program establishes minimum performance levels for each participant. Public Law 102-564, as amended, stipulates that under an STTR award, the small business must perform at least 40 percent of the work, and the research institution must perform at least 30 percent of the work.

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Management of STTR Projects

Although the conduct of the project is a cooperative research and development venture, the small business exercises overall management, control, and responsibility for the project.

Participating agencies are required to ensure that the small business manages and controls the funding agreement pursuant to a business plan that provides for the commercialization of the technology being funded.

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Continued Use of Federal Government Property

STTR guidelines also direct Federal agencies to allow small businesses that use Federal Government equipment during the conduct of an STTR award to continue to do so for not less than 2 years after the beginning of Phase III.

Model Agreements

Public Law 102-564 directs SBA to establish guidelines for a model agreement to be used by all STTR participating agencies in allocating intellectual property rights and follow-on rights.
Representatives of each of the five participating agencies issued two model agreements: one published by the Departments of Energy and Health and Human Services, and the other published by the Department of Defense, the National Science Foundation, and the National Aeronautics and Space Administration. The SBA approved both model agreements.

Small businesses are required to negotiate agreements with research institutions, but they are not required to use the model agreements. Rather, they are free to formulate and execute their own agreements or to use the models in whole or in part.

Rights to Data

A major concern of small, innovative firms is that data generated while performing research and development for the Federal Government will be made public. Therefore, STTR legislation stipulates that the program provide for the small business to retain the rights to data it generates while performing in the STTR program. These retention rights remain effective for at least 4 years. The intent of this provision is to authorize the participating agency to protect technical data generated under the STTR funding agreement and to refrain from disclosing such data to competitors of the small business. The statute also stipulates that the agency cannot use the information to produce future technical procurement specifications, thus protecting the participating small business until it has a reasonable chance to seek patent protection, if appropriate.

Therefore, the Policy Directive mandates that, except for program evaluation, participating agencies must protect technical data for at least 4 years from the completion of the project that generated the data. The Federal Government, however, retains a royalty-free license for Federal Government use of any technical data delivered under an STTR funding agreement, whether patented or not.

Follow-On Funding Agreements

Following completion of Federal research and development contracts, it is not unusual for the agency involved to have further research and development interests that result in a continuation of work. There have been numerous instances in which, following the completion of Phase II of STTR, agencies had chosen to continue development of an innovation to produce a product or service developed under the STTR award. To ensure smooth continuation of this work, protect the commercial rights to the innovation, and continue to employ the expertise of the originating small business, agencies are directed, to the degree practicable, to award any non-STTR, follow-on contracts or grants to the originating small business. To make this process more efficient, participating agencies have been advised that the competition for an STTR award serves as meeting the requirements of the Competition in Contracting Act. This allows the agencies to award non-STTR, follow-on work to the small business without further competition.

Critical Technologies

STTR legislation calls for agencies to give special consideration to broad research topics and to topics that further one or more critical technologies. These technologies are identified by the National Critical Technologies Panel (or its successor). To assist the agencies, SBA requested a complete listing of critical technologies from the National Critical Technologies Panel and the Office of the Secretary of Defense. These listings were sent to each participating agency.

Authorities and Responsibilities of the Participants

Participating Agencies

As set forth in Public Law 102-564, the authorities and responsibilities of Federal agencies participating in the STTR program are to:

1. Unilaterally determine categories of projects to be included in its STTR program.

2. Issue STTR solicitations according to a schedule determined cooperatively with the SBA.

3. Unilaterally determine research topics within the agency's STTR solicitations, giving special consideration to broad research areas that further one or more critical technologies as identified by either the National Critical Technologies Panel or the Secretary of Defense.

4. Unilaterally receive and evaluate proposals resulting from STTR solicitations.

5. Unilaterally select awardees for its STTR funding agreements and inform each awardee, to the extent possible, of the allowable expenses under the funding agreement.

6. Administer its own STTR funding agreements.

7. Pay recipients on the basis of progress toward or completion of the STTR funding agreement requirements.

8. Submit an annual report on the STTR program to the SBA and the Office of Science and Technology Policy.

9. Develop a model agreement for approval by the SBA that allocates between small businesses and research institutions intellectual property rights and any rights to carry out follow-on research, development, or commercialization.

10. Develop procedures in consultation with the Office of Federal Procurement Policy and the Office of Federal Government Ethics to ensure that federally funded research and development centers that participate in STTR agreements:

    A) Are free from organizational conflicts of interest relative to the STTR program.

    B) Do not use privileged information gained through work performed for an STTR agency or private access to STTR agency personnel in the development of an STTR proposal.

    C) Use outside peer review, as appropriate.

11. Develop procedures for assessing the commercial merit and feasibility of STTR proposals.

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Small Business Administration

Public Law 102-564 designates the SBA as the lead Agency to implement the program, govern its policy, and monitor and analyze its performance. As lead Agency, the SBA's authorities and responsibilities are to:

1. Develop, coordinate, and issue a Policy Directive for the general conduct of the STTR programs.

2. Assist small businesses in obtaining Federal Government contracts for research and development.

3. Assist small businesses in obtaining benefits of research and development performed under Federal Government contracts or at Federal Government expense.

4. Develop and maintain a source file and an information program to help ensure each qualified and interested small business the opportunity to participate in technology transfer pilot programs involving Federal agencies.

5. Coordinate with participating agencies a schedule for release of STTR solicitations and prepare a master release schedule that maximizes small businesses' opportunities to respond to solicitations.

6. Independently survey and monitor the operation of STTR programs within participating Federal agencies.

7. Report not less than annually to the Congress on the STTR programs of the Federal agencies.

8. Consult, cooperate, perform studies, and make recommendations to Federal Government agencies.

9. Consult with representatives of small business to assist and encourage such firms to undertake joint programs for research and development.

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The STTR Program Policy Directive

Public Law 102-564 authorized the SBA to issue a Policy Directive to conduct the STTR Pilot Program within the Federal Government. Before issuing this Policy Directive, the SBA consulted with the heads of the two Federal agencies participating in the formulation of the program: the Commissioner of Patents and Trademarks and the Administrator of the Office of Federal Procurement Policy.

The SBA met with the representatives of each of these organizations, and after significant discussion and modifications, finalized the Policy Directive effective October 1, 1993.

The Policy Directive guides participating agencies in the operation of the STTR programs. It provides simplified, standardized, and timely solicitations and funding processes. It also directs the participating agencies to reduce regulatory burdens associated with participation in STTR programs. In addition, the directive also provides guidelines for a model agreement to be used by all agencies for allocating intellectual property and other rights between small businesses and research institutions. It also provides procedures to ensure that recipients of STTR awards meet eligibility requirements as small businesses and that they manage and control the performance of the STTR funding agreement.

Finally, the directive instructs the participating agencies to develop procedures to ensure follow-on, non-STTR funding agreements with the small business when appropriate.

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Surveying, Monitoring, and Reporting

Pursuant to the legislation, the SBA is required to independently survey and monitor the operation of STTR programs within participating Federal agencies. The law directs SBA to report not less than annually to the Committee on Small Business of the Senate and the House of Representatives and to the Committee on Science of the House of Representatives on the STTR programs of the Federal agencies.

STTR—The Program's 8th Year - FY 2001

Public Law 102-564, as amended, provides both general guidance and specific instructions concerning the implementation of the STTR program. To ensure a successful implementation, the law specifically directed several important actions and established completion dates. All mandated actions were implemented in a timely manner.

Solicitation Schedule

STTR policy directs each Federal agency participating in the program to issue STTR solicitations in accordance with a schedule determined cooperatively with the SBA. After approval of SBA's master schedule, these agencies issued solicitations early in fiscal 2001 to invite small business to propose STTR projects.

After approval of its solicitation schedule, each participating agency provided SBA with information necessary to publish a pre-solicitation announcement. The announcements provided interested small businesses with information on forthcoming opportunities in the STTR program, as well as basic information on program requirements, opening and closing dates of solicitations, and agency contact points for further information.

In fiscal year 2001, the participating agencies had the following solicitation periods:

- Department of Defense - January 2, 2001, through April 11, 2001
- Department of Energy – November 29, 2000, through February 20, 2001
- Department of Health and Human Services - January 2001 with closings April 1, August 1 and December 1, 2001
- National Aeronautics and Space Administration - March 28, 2001, through June 6, 2001
- National Science Foundation – March 1, 2001, through June 8, 2001

Award Obligation Requirements

Program policy required participating agencies to expend on STTR awards not less than 0.15 percent of their fiscal year 2001 development. In fiscal year 2001, $71,943,274 should have been obligated program-wide to meet this requirement; however, actual obligations were $78,311,783 exceeding the requirement by 1.08 percent.

Small-Business Participation

During FY 2001, small businesses submitted 1,190 proposals under the STTR program, including 1,007 Phase I

proposals and 183 Phase II proposals. A total of 337 awards were made, including 224 Phase I awards and 113 Phase II awards. Awards were made to 288 small businesses. In FY 2001, total STTR program obligations were $78,311,783. Small business received $44,862,627 or 57 percent of total funding. Research institutions received $30,449,046 or 39 percent.

Minority and Disadvantaged Firms

Of the 288 firms that successfully competed for STTR awards, 33 or 11.4 percent were firms owned by minority or disadvantaged persons. They received $8,057,197 or10 percent of the $78,311,783 total obligated.

Research Institutions

Small businesses interested in participating in the STTR program must find a research institution that meets the program's definition and develop a working agreement before proposing to compete for an STTR award.

The statistics available at the end of the fiscal year indicate that 288 firms collaborated with 108 research institutions. Of contracts and grants awarded during the year, 307 were made to universities and colleges, 18 to federally funded research and development centers, and 43 to other non-profit research institutions. The research institutions were located in 43 states, the District of Columbia and Puerto Rico.

Alabama

University	University of Alabama (5)
University	University of South Alabama

Arizona

University	Northern Arizona University
University	University of Arizona (3)

California

FFRDC	Jet Propulsion Laboratory (2)
FFRDC	Lawrence Berkeley Laboratory
FFRDC	SRI International
FFRDC	Sandia National Laboratory
Other	City of Hope National Medical Center
Other	Human Biomolecular Research Institute
Other	Lawrence Berkeley National Laboratory
Other	The Burnham Institute
Other	USRA/RIACS
University	California Institute of Technology
University	Keck Graduate Institute
University	Naval Postgraduate School
University	Scripps Institution of Oceanography
University	Stanford University (5)
University	Tufts University
University	University of California (9)
University	University of Southern California (6)

Colorado

Other	National Renewable Energy Laboratory
University	Colorado School of Mines
University	University of Colorado (6)

Connecticut

University	Rutgers University
University	University of Connecticut (3)
University	Yale University (2)

Delaware

University	University of Delaware

District of Columbia

FFRDC	Naval Research Laboratory
Other	American Institutes for Research
University	George Washington University
University	Georgetown University (3)

Florida

Other	Foundation for Scientific Inquiry (2)
University	Florida Institute of Technology
University	Florida State University (2)
University	University of Central Florida
University	University of Florida (6)
University	University of Miami (3)
University	University of Michigan
University	University of South Florida (3)

Georgia

University	Emory University (2)
University	Georgia Institute of Technology (3)
University	University of Georgia

Hawaii

University	University of Hawaii (2)

Illinois

FFRDC	Argonne National Laboratory (6)
Other	IIT Research Institute
University	Center for Quantum Devices
University	Illinois Institute of Technology
University	Loyola University
University	Loyola University Medical Center
University	Northern Illinois University (2)
University	Northwestern University
University	University of Illinois (6)

FY 2001 STTR Research Institutions

ndiana	
University	Purdue Research Foundation
University	Purdue University (2)
owa	
University	Iowa State University
:entucky	
University	University of Kentucky (4)
:ouisiana	
University	Louisiana State University (3)
University	Tulane University
Maine	
University	Duke University
Maryland	
University	Johns Hopkins University (2)
University	Uniformed Services University
University	University of Maryland (7)
Massachusetts	
Other	Beth Israel Deaconess Medical Center
Other	E K Shriver Center
Other	Institute for Lasers, Photonics
Other	Massachusetts Mental Health Research
Other	McLean Hospital (2)
University	Boston University (5)
University	Harvard Medical School
University	Massachusets Institute of Technology
University	Massachusetts Institute of Technology
University	Tufts University
University	University of Massachusetts (3)
Michigan	
Other	Michigan Molecular Institute
University	Eastern Michigan University (2)
University	Michigan State University
Michigan	
University	University of Michigan (5)
University	Wayne State University
Minnesota	
University	University of Minnesota (3)
Mississippi	
University	University of Mississippi
Missouri	
Other	Midwest Research Institute
University	University of Missouri (2)
University	Washington University
Montana	
University	Montana State University
University	Montana Tech
University	University of Montana
Nebraska	
University	University of Nebraska
New Hampshire	
Other	Autonomous Undersea Systems Institute
University	Dartmouth College
University	Trustees of Dartmouth College
University	University of New Hampshire
New Jersey	
Other	The Sapient's Institute
University	Rutgers University (2)
University	University of Delaware (3)
New Mexico	
FFRDC	Sandia National Loboratories
University	University of New Mexico (4)

New York

Other	Central New York Research Corporation
Other	New York Eye & Ear Infirmary
Other	St. Luke's Roosevelt Hospital Center
University	Binghamton University
University	Cornell University (2)
University	Institute for Lasers, Photonics
University	New York University
University	North Shore University
University	Rensselaer Polytechnic Institute (3)
University	Rutgers University
University	State University of New York (2)
University	Syracuse University

North Carolina

University	Duke University
University	North Carolina State University
University	University of North Carolina (3)

North Dakota

University	University of North Dakota (2)

Ohio

Other	Tzagournis Medical Research
University	Case Western Reserve
University	Case Western Reserve University (2)
University	Kent State University
University	Ohio State University (2)
University	Ohio University
University	University of Akron
University	University of Cincinnati (4)
University	University of Dayton (2)
University	University of Dayton Research

Oklahoma

Other	Oklahoma Medical Research Foundation
University	Oklahoma State University (2)
University	University of Oklahoma

Oregon

University	Oregon State University (2)

Pennsylvania

Other	Childern's Hospital of Pittsburgh
Other	Concurrent Technologies Corp
University	Applied Research Laboratory
University	MCP Hanamann University
University	Pennsylvania State University (3)
University	Pennsylvannia State University
University	Temple University (2)
University	Texas Engineering Experiment Station
University	Thomas Jefferson University (2)
University	University of Pennsylvania
University	University of Pittsburgh (3)

Puerto Rico

University	University of Puerto Rico

Rhode Island

University	Brown University (2)

South Carolina

University	Clemson University (2)
University	South Carolina Research Institute (2)
University	University of South Carolina

Tennessee

FFRDC	Oak Ridge National Laboratory (3)
University	University of Tennessee
University	Vanderbilt University (3)

Texas

Other	M.D. Anderson Cancer Center (2)
University	Baylor College
University	Southern Methodist University
University	Texas A & M University
University	Texas Agricultural Experiment Station
University	Texas Engineering Experiment Station

FY 2001 STTR Research Institutions

Texas	
University	University of Houston
University	University of Texas (6)
Utah	
University	University of Utah (5)
Vermont	
University	University of Vermont
Virginia	
Other	Jefferson Laboratory
University	George Mason University (4)
University	University of North Carolina
University	University of Virginia (3)
University	University of Virginia/University of
University	Virginia Commonwealth University
University	Virginia Polytechnic Institue
University	Virginia Polytechnic Institute (10)
University	Virginia Polytechnic institute
University	Virginia Tech
Washington	
University	University of Washington
Wisconsin	
University	University of Wisconsin (4)
Wyoming	
University	University of Wyoming (3)

Alabama

Birmingham
Vectorlogics, Inc.

Huntsville
Alabama Cryogenic Engineering
Information Systems Labs
Time Domain Corporation

Tuscaloosa
Neurorecovery, Inc.

Arizona

Scottsdale
Three Rivers Holdings, LLC

Tucson
Advanced Ceramics Research (2)
Alamx, LLC
Lite Cycles, Inc.
Materials & Electrochemical Re
Ventana Research
Vitron, Inc.

Arkansas

Fayetteville
Space Photonics, Inc.

California

Anaheim
RST Scientific Research, Inc.

Carlsbad
ISIS Pharmaceuticals

Del Mar
Tumorex, Inc.

Fountain Valley
Hybrid Plastics

Irvine
Eergc Corporation

Lake Forest
Moset Corporation

Los Angeles
AMPAC BIOTechnology
Pivotal Biosciences

Marina Del Rey
Fetch Technologies

Mountain View
CSA Engineering, Inc.

Northridge
Chemat Technology, Inc. (2)

Orangevale
Expert MicroSystems, Inc.

Pacific Palisades
Level Set Systems

Pasadena
Epicenter Software
G-Ceptor Sciences
Mathematical Sys & Solutions

FY 2001 STTR Phase I Awardees

San Diego
Energy Science Laboratories
Genomatica
Irisys Research and Dev.
Neurocrine Biosciences, Inc.
Orincon Corporation
Sequoia Sciences

San Leandro
Alameda Applied Sciences Corp.

San Marino
Intragene Sciences, Inc.

San Mateo
Biomimesys, Inc.
Carta Proteomics

Santa Cruz
DigitalSpace Corporation

Sherman Oaks
Arete Associates

Sun Valley
Powdermet, Inc.

Sunnyvale
Layton BioScience, Inc.

Thousand Oaks
Monopole Research

Torrance
Intelligent Optical Systems
Opto-Knowledge Systems, Inc.

Westlake Village
Metacomp Technologies, Inc.

Colorado

Arvada
Barber-Nichols, Inc.

Boulder
Knowledge Analysis Tech.
Software Solutions, Inc.

Wheat Ridge
TDA Research, Inc.

Connecticut

East Hartford
Advanced Fuel Research, Inc.

New Haven
Protometrix

Wethersfield
Qualtech Systems, Inc.

District of Columbia

Washington
Solus Biodefense

Florida

Alachua
Nanocoat Technologies

Boca Raton
Adept Systems, Inc.

Clearwater
CCEL Bio-Therapies, Inc.

Gainesville
New Era Technologies, Inc.

Jacksonville
Analysis, Design & Diagnostics

Largo
Constellation Technology Corp.

Palm Bay
Advanced Magnet Lab, Inc.

Stuart
Florida Laser Systems

Temple Terrace
Saneron Therapeutics, Inc.

Georgia

Atlanta
Cermet, Inc.

Decatur
Virtually Better, Inc.

Dunwoody
Transfusion & Transplantation

Tucker
Pharmasset, Inc.

Hawaii

Honolulu
Oceanit Laboratories, Inc.

Illinois

Bolingbrook
Smart Pixel, Inc.

Champaign
Npl Associates, Inc.

Chicago
Integrated Genomics, Inc.

De Kalb
Psytec Corporation

Evanston
Containerless Research, Inc.

Mt. Prospect
Vertec Biosolvents LLC

Naperville
I.C. Gomes Consulting & Invest

Indiana

Indianapolis
Comchem Technologies, Inc.

West Lafayette
Advanced Process Combinatorics

Iowa

FY 2001 STTR Phase I Awardees

Ames
Molecular Express, Inc.

Kentucky

Lexington
Orcca Technology, Inc.
Tigen Pharmaceuticals

Louisiana

New Orleans
St. Charles Pharmaceuticals

Maine

Wiscasset
Technology Systems, Inc.

Maryland

Baltimore
Protein Research, Inc.

Bethesda
PEM Technologies, Inc.

College Park
Claragen, Inc.

Gaithersburg
Immersion Medical, Inc.

Millersville
Ceramic Composites, Inc.

Silver Spring
Ralph B. Fiorito Company (2)

Massachusetts

Bedford
Eukarion, Inc.

Belmont
Natural Pharmacia Int'l. (2)
Praxis, Inc. (2)

Boston
Exhale Therapeutics, Inc.

Cambridge
Biostream Therapeutics, Inc. (2)
Satcon Technology Corporation
Sleep-Wake Systems, Inc. (SWS)

Chelmsford
Scientific Solutions, Inc.
Triton Systems, Inc.

East Falmouth
Webb Research Corporation
Webbb Research Corporation

Lawrence
Flight Landata, Inc.

Lexington
GrowTech, Inc.

Newton
Shenasa Medical

North Falmouth
Benthos, Inc.

Norwood
EIC Laboratories, Inc.

Waltham
Foster-Miller, Inc. (2)
Viatronix

Wareham
Phoenix Innovation, Inc.

Woburn
Antigenics, Inc.
Kazak Composites, Inc. (2)
Scientific Systems Company (3)

Michigan

Ann Arbor
Advent Engineering Services
Emag Technologies, Inc.
MC-Three, Inc.
Mers, LLC

Bloomfield Hills
Starfire Electronic Dev.

Midland
Oxazagen, Inc.

Minnesota

Arden Hills
Audiology, Inc.

Eden Prairie
SVT Associates, Inc. (2)

Minneapolis
Healthcare Interactive, Inc.

Missouri

Columbia
Paternity Testing Corporation

Creve Coeur
Eagle Adjustable Lens

St. Louis
Computerized Medical Systems
Production Products Manufact.

Montana

Belgrade
Transwesttech

Townsend
PFM Manufacturing, Inc.

Nebraska

Lincoln
Bionebraska, Inc.

New Hampshire

Hanover
Creare, Inc.
Glycofi

FY 2001 STTR Phase I Awardees

Nashua
Scientific Solutions, Inc.

New Jersey

Berkeley Heights
RJM Semiconductor, LLC

Bordentown
Carbozyme, Inc. NJ Ecocomplex

Livingston
Utility Development Corp.

Mercerville
Laser Energetics, Inc.

Monmouth Junction
Princeton Scientific Inst.

New Brunswick
Layered Manufacturing, Inc.

Piscataway
Nanopowder Enterprises, Inc.

Ramsey
Natural Drug Science, LLC

Somerset
Nian-Cra, Inc.
Synergy Pharmaceuticals, Inc. (2)

New Mexico

Albuquerque
Adherent Technologies, Inc.
Dominca

New Mexico

Albuquerque
Intellite
Mamangement Sciences, Inc.
Picodyne, Inc.

New York

Amherst
Hybrid Technologies (2)

Harford
Clear Science Corporation

Huntington Station
Product Remanufacturing Center

Latham
Crystal IS, Inc.
Sensor Electronic Technology
Sensor Electronic Technology,

Manhasset
Tissue Genesis, Inc.

New York
Opticology, Inc.
Weidlinger Associates, Inc.

North Carolina

Raleigh
Hexatech
Hydrosize Technologies, Inc.

Ohio

Clayton
Faraday Technology, Inc.

Beavercreek
Materials Research Institute
Taitech, Inc. (2)

Cincinnati
Celsus Laboratories, Inc.

Cleveland
North Coast Crystals, Inc.

Columbus
Metss Corporation
Oncoimmune, LTD (2)

Dayton
Aps Material, Inc.
IAP Research, Inc.

Fremont
Sierra Lobo, Inc.

Kent
Psychological Systems & Resch.

Oklahoma

Oklahoma City
JK Autoimmunity, Inc.

Stillwater
CMS Technetronics, Inc.
Nomadics, Inc.

Oregon

Fairview
Blue Road Research

Pennsylvania

Blue Bell
Inkine Pharmaceutical Company

Fort Washington
Materials Sciences Corporation

Landisville
Electron Entergy Corporation

Media
Oncovax, LLC

University Park
Fluent Cardiovascular Solution

South Carolina

Edgefield
Newtec Remediation Services

Hilton Head
Kigre, Inc.

Tennessee

Chattanooga
Accurate Automation Corp.

FY 2001 STTR Phase I Awardees

Germantown
James R. Johnson and Assocs.

Memphis
Molecular Design International

Nashville
Generx+, Inc. (2)
TK TX Company

Oak Ridge
Americam Magnetics, Inc.

Texas

Austin
Agave Biosystems, Inc.

Bellaire
Visigen BioTechnologies, Inc.

Bryan
Accelerator Technology Corp.

Houston
Indus Instruments
Introgen Therapeutics, Inc.
Millar Instruments, Inc.

San Antonio
Genetex, Inc.

Smithville
Dermigen, Inc.

Utah

Salt Lake City
ZARS, Inc.

Vermont

Burlington
Healthsim, Inc.

Virginia

Arlington
Information Extraction & Trans

Blacksburg
Foresters Incorporated
Luna Innovations Inc.
Luna Innovations, Inc. (4)
Prime Photonics, Inc.
Technology in Blacksburg, Inc.

Charlottesville
Terahertz Device Corporation

Christiansburg
NanoSonic, Inc. (2)

Dulles
Edenspace Systems Corporation

Fairfax
Fulcrum Corporation
Microwave Technologies, Inc. (2)

Falls Church
Cortana Corporation

Vienna
WXW INFO, Inc.

Washington

Richland
Yahsgs LLC

Seattle
Stirling Dynamics, Inc.

Wisconsin

Madison
Eragen Biosciences, Inc. (2)

Middleton
Gammex, Inc.

Wyoming

Sheridan
Big Horn Valve, Inc.

Laramie
CC Technology, Inc. (2)

FY 2001 STTR Phase II Awardees

Alabama

Birmingham
Vaxin, Inc.

Huntsville
CFD Research Corp.
CFD Research Corporation

Arizona

Scottsdale
Zona Technology, Inc.

California

Carlsbad
Opotek, Inc.

Goleta
Frontier Technology, Inc.

Hawthorne
Systems Technology, Inc.

Hayward
Kinetic Ceramics, Inc.

Irvine
Eergc Corporation
Energy & Environmental Res.

Redding
Mallard Medical Company, Inc.

Redwood City

Santa Barbara
Mission Research Corporation
NanoDevices, Inc.

Colorado

Boulder
CMD Optics, Inc.
Droplet Measurement Tech.

Littleton
ITN Energy Systems Inc.

Wheat Ridge
TDA Research Inc.

Florida

Alachua
Ixion Biotechnology, Inc.

Boca Raton
GeoSyntec Consultants

Miami
Apostain, Inc.
General Oceanics Inc.
Intelligent Hearing Systems
New Span Opto-Technology, Inc.

Palm Bay
Advanced Magnet Lab Inc.

Titusville
Analex Corporation

Winter Park
Florida Maxima Corporation

Illinois

Chicago
Integrated Genomics, Inc.

De Kalb
Psytec Corporation

Evanston
Applied Thin Films

Wilmette
MP Technologies, LLC

Kansas

Lawrence
Kinedyne Corporation

Kentucky

Lexington
Tigen Pharmaceuticals

Maryland

Beltsville
ATEC, Inc.

Columbia
Conducting Materials Corp.

Massachusetts

Belmont
Natural Pharmacia Int'l.

Boston
Boston Micromachines Corp.
Simpres, Inc.

Burlington
Alphatech, Inc. (2)

Holliston
Harvard Bioscience, Inc.

Newton
Ulex Corporation

Somerville
Science Research Laboratory (2)

Woburn
Aptima, Inc.

Michigan

Ann Arbor
Koester Performance Research
Thromgen, Inc.

New Jersey

Cherry Hill
AMT, Inc.

Monmouth Junction
Nucycle Therapy, Inc.

FY 2001 STTR Phase II Awardees

New Brunswick
Ceramare Corporation

Princeton
Palatin Technologies, Inc.

New Mexico

Albuquerque
Adherent Technologies, Inc.
Applied Research Associates

New York

Albany
Mohawk Innovative Technology

Elmsford
Hypres, Inc. (2)

Latham
Crystal IS, Inc.
Sensor Electronic Technology

Troy
Applied Biophysics, Inc.

North Carolina

Raleigh
NITRONEX Corporation

Ohio

Blacklick
Environmental Energy, Inc.

Columbus
Neurostructural Analysis, LTD

Kent
Kent Displays, Inc.

Miamisburg
Inorganic Specialists

Rocky River
Sensor Development Corporation

Oklahoma

Stillwater
Nomadics, Inc.

Pennsylvania

Fort Washington
Materials Sciences Corporation

Pittsburgh
Agentase LLC

Puerto Rico

Mayaguez
A/C & Mechanical Services Corp

South Carolina

Hilton Head
Kigre, Inc.

Tennessee

Franklin
Dynamic Structure & Materials

Texas

Austin
Radiant Research, Inc.

College Station
Lynntech, Inc.

Houston
Agennix, Inc.

San Antonio
Biomedical Development Corp.

Utah

Salt Lake City
Idaho Technology (2)
Materials & Systems Research
Spectrotek, LC

Virginia

Arlington
Information Extraction & Trans

Blacksburg
Luna Innovations, Inc.

Christiansburg
NanoSonic Inc.

Fairfax
Materials Modification, Inc.
Trident Systems, Inc.

Manassas
Airak, Inc.

Newport News
Amac International, Inc.

Sterling
Sterling Semiconductor

Washington

Bellevue
Northwest Radiography, P.S.

Seattle
Behavioral Technology

Wyoming

Laramie
CC Technology, Inc.

STTR Program Data - Fiscal Year 2001

AGENCY OBLIGATIONS	DOD	NSF	DOE	NASA	HHS	TOTAL
AGENCY EXTRAMURAL BUDGET	20,734,957,210	2,890,000,000	3,520,929,000	4,186,700,000	16,423,000,000	47,755,586,210
AGENCY STTR BUDGET	31,433,774	4,330,000	5,265,000	6,280,000	24,634,500	71,943,274
DOLLARS OBLIGATED	32,914,624	8,200,542	5,266,074	6,401,108	25,529,435	78,311,783
% OF EXTRAMURAL BUDGET	0.16%	0.28%	0.15%	0.15%	0.16%	0.16%
DEFICIT/SURPLUS	1,480,850	3,870,542	1,074	121,108	894,935	6,368,509
STTR AWARD PROFILE - COMMITMENTS						
TOTAL PHASE I AWARDS	82	13	18	19	92	224
MINORITY DISAD. PHASE I AWARDS	8	1	3	3	5	20
TOTAL PHASE II AWARDS	55	14	5	8	31	113
MINORITY/DISAD. PHASE II AWARDS	5	3	1	1	1	11
TOTAL PHASE I DOLLARS AWARDED	7,246,794	1,296,597	1,788,119	1,895,316	12,006,036	24,232,862
MIN/DISAD. PHASE I DOLLARS AWARDED	1,254,339	100,000	299,985	299,450	619,084	2,572,858
TOTAL PHASE II DOLLARS AWARDED	25,667,830	6,903,945	3,477,955	4,505,792	12,693,054	53,248,576
MIN/DISAD. PHASE II DOLLARS AWARDED	2,499,362	1,485,615	500,000	499,362	500,000	5,484,339
TOTAL PHASE I & II AWARDED	32,914,624	8,200,542	5,266,074	6,401,108	24,699,090	78,311,783
AVERAGE AMOUNT PHASE I AWARDS ($)	88,376	99,738	99,340	99,753	130,500	108,182
STTR SOLICITATION PROFILE						
NO. OF SOLICITATIONS RELEASED	1	1	1	1	1	5
NO. OF RESEARCH TOPICS	44	4	45	4	90	187
NO. PHASE I PROPOSALS RECEIVED	349	85	158	97	318	1,007
NO. PHASE II PROPOSALS RECEIVED	69	23	13	14	64	183
RESEARCH INSTITUTION PROFILE						
NUMBER OF FFRDCS	5	1	8	4	0	18
NUMBER OF UNIVERSITIES	119	26	11	23	128	307
NUMBER OF OTHER NON-PROFIT	14	0	4	0	25	43

STTR Program Data - Fiscal Year 2001

COOPERATIVE RESEARCH PROFILE	DOD	NSF	DOE	NASA	HHS	TOTAL
TOTAL DOLLARS OF AWARDS	32,914,624	8,200,542	5,266,074	6,401,108	24,699,090	78,311,783
DOLLARS TO SMALL BUSINESS	20,164,444	5,024,796	3,006,780	3,675,810	12,990,797	44,862,627
DOLLARS TO RESEARCH INSTITUTION	11,512,194	3,175,746	1,281,339	2,199,942	12,279,825	30,449,046
NO. OF AWARDS TO UNIVERSITIES	119	26	11	23	128	307
DOLLARS TO UNIVERSITIES	9,566,553	3,115,746	579,119	2,070,013	10,275,811	25,607,242
NO. OF AWARDS TO FFRDCS	5	1	8	4	0	18
DOLLARS TO FFRDCS	269,072	59,720	527,187	129,929	0	1,164,574
NO. OF AWARDS TO OTHER NON-PROFITS	14	0	4	0	25	43
DOLLARS TO OTHER NON-PROFITS	1,676,569	0	175,033	0	2,004,014	3,855,616
PHASE I						
NUMBER OF FFRDC AWARDS	4	1	6	4	0	15
NUMBER OF UNIVERSITY AWARDS	74	12	9	15	79	189
NO. OF OTHER NON-PROFIT AWARDS	5	0	3	0	19	27
TOTAL DOLLARS OF AWARDS	7,246,794	1,296,597	1,788,119	1,895,316	12,006,036	24,232,862
DOLLARS TO SMALL BUSINESS	4,444,990	703,991	1,150,506	1,138,815	6,205,222	13,643,524
DOLLARS TO RESEARCH INSTITUTIONS	2,696,633	592,606	637,613	756,501	5,819,165	10,502,518
NO. OF AWARDS TO UNIVERSITIES	74	12	9	15	79	189
DOLLARS TO UNIVERSITIES	2,377,850	532,606	302,375	626,572	4,471,605	8,311,008
NO. OF AWARDS TO FFRDCS	4	1	6	4	0	15
DOLLARS TO FFRDCS	119,169	59,720	210,205	129,929	0	519,023

STTR Program Data - Fiscal Year 2001

	DOD	NSF	DOE	NASA	HHS	TOTAL
NO. OF AWARDS TO OTHER NON-PROFITS	5	0	3	0	19	27
DOLLARS TO OTHER NON-PROFITS	199,614	0	125,033	0	1,347,560	1,672,207
PHASE II						
NUMBER OF FFRDCS	1	0	2	0	0	3
NUMBER OF UNIVERSITIES	45	14	2	8	49	118
NUMBER OF OTHER NON-PROFIT	9	0	1	0	6	16
TOTAL DOLLARS OF AWARDS	25,667,830	6,903,945	3,477,955	4,505,792	12,693,054	53,248,576
DOLLARS TO SMALL BUSINESS	15,719,454	4,320,805	3,984,735	2,536,995	6,785,575	33,347,567
DOLLARS TO RESEARCH INSTITUTIONS	8,815,561	2,583,140	643,726	1,443,441	6,460,660	19,946,528
NO. OF AWARDS TO UNIVERSITIES	45	14	2	8	49	118
DOLLARS TO UNIVERSITIES	7,188,703	2,583,140	276,744	1,443,441	5,804,206	17,296,234
NO. OF AWARDS TO FFRDCS	1	0	2	0	0	3
DOLLARS TO FFRDCS	149,903	0	316,982	0	0	466,885
NO. OF AWARDS TO OTHER NON-PROFITS	9	0	1	0	6	16
DOLLARS TO OTHER NON-PROFITS	1,476,955	0	50,000	0	656,454	2,183,409

FY 2001 dollars obligated include modifications to previous year's awards for DOD ($4,033,477K) and HHS ($830,345K). HHS' total dollars include $258,813 to others