

DETAILED AGENDA

7:00 am – 8:00 am	Registration, Continental Breakfast, and Networking	
8:00 am – 8:15 am	<p>Welcoming Remarks John Wasilisin, Acting President and Executive Director Maryland Technology Development Corporation (TEDCO)</p> <p>Kwasi Holman, President and Chief Executive Officer Prince George’s County Economic Development Corporation</p>	
8:15 am - 9:00 am	<p>Morning Keynote Address: <i>New Initiatives in Innovation and Entrepreneurship</i> Edsel Brown, Assistant Director Office of Technology U.S. Small Business Administration</p>	
9:00 am – 9:15 am	Break	
9:15 am – 10:30 am	Break Out Sessions	
	<p>Session I: Advanced</p> <p>Topic: “<i>The government will take you THIS far...</i>”: Support from the government beyond Phase II</p> <p>Moderator: James Poulos, J.D., Vice President, Technology Transfer and Commercialization, TEDCO</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Department of Defense (DoD) • David Beylin, Program Manager, SBIR Development Center, National Cancer Institute (NCI) • Dave Goodwin, Physical Scientist, Department of Energy (DoE) • Jenny Servo, Ph. D., President and Founder, DawnBreaker • Ruth Shuman, Ph. D., SBIR/STTR Program Director for IIP, National Science Foundation (NSF) 	<p>Session II - Beginner</p> <p>Topic: Developing your concept and identifying the resources needed to take an idea forward</p> <p>Moderator: Ralph Blakeney, Technology Industry Manager, MD Small Business Development Center</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Yuval Boger, CEO, General Manager, and Vice President, Sensics • Jonathan Cohen, President and CEO, 20/20 GeneSystems, Inc. • Jayfus Doswell, Ph. D, President and CEO, Juxtopia, LLC
10:30 am – 10:45 am	Break	

10:45 am – 12:00 pm	Break Out Sessions	
	<p>Session III</p> <p>Topic: Commercialization: Approaching the Market</p> <p>Moderator: Robbie Melton, Director, Entrepreneurial Innovation, TEDCO</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Gilmer Blakenship, Chairman of the Board of Directors, Techno-Sciences, Inc. • Steve Fujikawa, CEO and founder, IntelliTech Microsystems, Inc. • Cha-Mei Tang, Sc.D., Founder and President, Creatv Microtech, Inc. 	<p>Session IV</p> <p>Topic: What reviewers want: Avoiding the pitfalls that get you eliminated</p> <p>Moderator: Jacqueline Du Bois, MMRDI Program Manager, TEDCO</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Robert Berger, Ph. D., Robert Berger Consulting, LLC • Mehdi Khandani, Ph. D., President and Founder, Resensys, LLC
12:00 pm – 1:00 pm	Lunch	
1:00 pm – 1:30 pm	<p>Keynote Address: <i>What Do We Want to Be When We Grow Up?: Adventures in the SBIR Program</i> Joseph Schwartz, Ph. D, Chief Executive Officer Intelligent Automation, Inc.</p>	
1:30 pm – 1:45 pm	Break	
1:45 pm – 3:00 pm	<p>Break Out Session V: <i>One on One Meetings With Key Federal Agency SBIR Managers</i></p>	<p>Session VI: <i>SBIR Resource Center Training for the Economic Development Community</i>⁴</p> <p>Facilitator: John Davis, President, SBIR Resource Center</p>
3:00 pm	Adjourn	

⁴-This is a Special Session for pre-registered economic development professionals.

MMRDI PARTNERS



The MMRDI is partially funded by a grant from the U.S. Small Business Administration (SBA). SBA's funding should not be construed as an endorsement of any products, opinions, or services. All SBA-funding projects are extended to the public on a non-discriminatory basis.

TITLE:

“The government will take you THIS far ...”: Support from the government beyond Phase II

MODERATOR:

James Poulos, J.D.

Vice President, Technology Transfer and Commercialization

TEDCO

SUMMARY:

What government (public) provisions exist for Phase II and post-Phase II companies when it comes to funding, mentoring, and or business assistance for commercialization? Focus on commercialization assistance programs (CAP).

PANELISTS:

David Beylin

Program Director, SBIR Development Center

National Cancer Institute (NCI)

Dave Goodwin

Physical Scientist

Department of Energy (DoE)

Jenny Servo, Ph. D.

President and Founder

DawnBreaker

Ruth Shuman, Ph. D.

SBIR/STTR Program Director

for the Division of Industrial Innovation and Partnerships

National Science Foundation (NSF)

James “Jim” Poulos, J.D., Vice President, Technology Transfer and Commercialization

TEDCO

Mr. Poulos is a registered patent attorney. Prior to TEDCO, Mr. Poulos joined the University of Maryland’s Office of Technology Liaison (OTL) in March 1998 as the Associate Director for technology management. Mr. Poulos served as the Acting Executive Director of OTL from June 1999 to June 2000. After a national search, Mr. Poulos was named the Executive Director of the Office of Technology Commercialization at the University of Maryland, College Park in June of 2000. In that office, Mr. Poulos negotiated over 200 license agreements with commercial entities both within and without the state of Maryland. During his tenure over 30 University spin-off companies were created, including Quantum Photonics (College Park, MD), Little Optics (Columbia, MD) and RioRey, Inc. (Bethesda, Maryland). These three companies received over 85 million dollars in combined venture capital funding.

Mr. Poulos is a member of the Association of University Technology Managers (AUTM) and the Licensing Executives Society (LES). Mr. Poulos is a member of the University of Maryland Alumni Association and serves as a board member of the business incubator facility at the University of Maryland, College Park.

David Beylin, Program Manager, SBIR Development Center

National Cancer Institute (NCI)

Mr. Beylin is a Program Manager with the SBIR Development Center at the National Cancer Institute, where he assists small businesses in the medical imaging field in securing government funding for innovative research and development projects with high commercial potential. David has over 10 years of experience in research, development and commercialization of scientific and medical instrumentation and molecular imaging agents. Previously, David was involved with X/Seed Capital Management, LLC, a seed-stage venture capital firm investing in breakthrough technologies. Prior to X/Seed, David worked for Naviscan PET Systems, Inc. in a variety of technical and management roles, including Vice President of Research, concentrating on the design, clinical validation, and regulatory clearance of high resolution Positron Emission Tomography devices and image-guided interventions. Mr. Beylin was trained in experimental nuclear physics at the Budker Institute of Nuclear Physics (Russia) and the KEK-High Energy Accelerator Research Organization (Japan). Mr. Beylin is certified in Nuclear Medicine Physics and Instrumentation by the American Board of Science in Nuclear Medicine.

David Goodwin, Ph.D., Physical Scientist

Department of Energy (DoE)

Dr. Goodwin, Ph. D, Physical Scientist, presently working for the following 3 U.S. Department of Energy (DOE) Offices: Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR), Fusion Energy Sciences, and Security. Since 1986, have also worked for the following four DOE Offices: High Energy Physics, Nuclear Physics, Scientific Computing, and Defense Programs. From 1976 to 1986, he worked for the USN. From 1972 to 1976, worked on 3 commercial nuclear power plants. From 1968 to 1971, on staff at the Ohio State University (OSU). Degrees from OSU in physics and engineering. Awards include a Thousand Points of Light award from First Lady Barbara Bush for volunteer construction work. Hobbies include adventure travel to 60 countries and U.S. travel to visit 21 grandkids.

Jenny Servo, Ph. D., President and Founder

DawnBreaker

Dr. Servo has more than 15 years experience in management of government contracts and in the design of programs for highly creative individuals (ranging from independent inventors to scientists with multiple advanced degrees from leading educational institutions). Change has been an on-going focus in her efforts with “transformational entrepreneurs”. Cognizant of both the objectives and budget constraints of each federal customer, Dr. Servo combines best practices from instructional design and change management to the development of unique programs to fill each customer’s objectives. Each program developed for Federal and state agencies are distinct and contain within them variations that address the heterogeneity of the companies participating in each program. Dr. Servo prescribes to the policy of “management by objectives” and has been responsible for ensuring that program process and outcome match agency expectations for all programs across multiple agencies (DOE, DoD, NSF, NASA, NIH, NIST, EPA). Dr. Servo is an avid writer and readily conveys best practices in innovation and entrepreneurship in books, articles, and magazines on these topics. She is highly sought after as both a trainer, as well as a consultant working with private clients. Dr. Servo has a proven record in business leadership, project management, providing effective contract control measures, and in developing superb working relationships with government and private sector representatives at all levels.

Ruth Shuman, Ph. D., SBIR/STTR Program Director

Division of Industrial Innovation and Partnerships

National Science Foundation (NSF)

Dr. Shuman joined the National Science Foundation in August 2009 and is currently serving as Program Director for Biotechnology and Chemical Technologies in the SBIR/STTR Program. Formerly, she was the founder, president and CEO of a successful venture-backed life science company, Gentra Systems, Inc., that developed, manufactured, and sold products for genetic testing and research for clinical and research laboratories worldwide. Following Gentra’s acquisition, she has held various consulting/advisory positions with start-up companies and was CEO-In-Residence for Life Science with the University of Minnesota’s Venture Center evaluating the business potential of University-developed technology. Ruth began her career as a faculty member at North Carolina State University and was a pioneer in the development of gene transfer and genetic engineering technology. She holds a Ph.D. from the University of Minnesota’s Department of Genetics and Cell Biology.

TITLE:

Developing your concept and identifying the resources needed to take an idea forward

MODERATOR:

Ralph Blakeney

Technology Industry Manager

Small Business Development Center, University of Maryland

SUMMARY:

Being awarded an SBIR doesn't mean you are in a position to bring your concept to market. This panel is geared towards helping you identify the steps and resources (personnel, strategic/business/research partners, lab space) needed to move from an R&D concept to an actual working business strategy.

PANELISTS:

Yuval Boger

Chief Executive Officer, General Manager, and Vice President

Sensics

Jonathan Cohen

President and Chief Executive Officer

20/20 GeneSystems, Inc.

Jayfus Doswell, Ph. D.

President and Chief Executive Officer

Juxtopia, LLC

Ralph Blakeney, Technology Industry Manager***Small Business Development Center, University of Maryland***

Mr. Blakeney is the Technology Industry Manager at the Maryland Small Business Development Center (SBDC) and the Technology Procurement Consultant at the Maryland Procurement Technical Assistance Center (PTAC). He specializes in providing Management and Technical Assistance to early stage advanced-technology firms as well as SBIR and other procurement and business development support to technology companies that offer their products and services to federal, state and local governments.

Ralph was formerly the Executive Manager of Service Operations for Digital Equipment Corporation's Federal Government Computer and Information Technology Services. He also spent 9 years as an entrepreneur - founder and CEO of Peak Performance Technologies - a management consulting and training firm to small and midsized technology companies. He holds an Advanced Certificate in Electronic Technology, a BSc. in Business Administration, a MSc. in Management, is a graduate of Harvard Business School's Management of Service Operations executive program and a graduate of the Pacific Institute of Business and Management Development.

Yuval Boger, CEO, General Manager, and Vice President***Sensics***

Yuval Boger is CEO of Sensics, a leading manufacturer of lightweight, panoramic, high-definition virtual reality goggles. Prior to Sensics, Yuval served as CEO, General Manager, and Vice President of four emerging high-tech companies over fifteen years, critically impacting their formation, growth, and success. As CEO of Oblicore, provider of service delivery management software, he transformed the company from a struggling start-up into a market leader, achieving triple-digit revenue growth, raising substantial venture capital and building a strong management infrastructure. As Founder and CEO of Unwired Express, a provider of context-sensitive wireless data applications for the enterprise, he formed important customer, industry and investor partnerships and co-invented the company's patent-pending technology. As General Manager and Vice President at RADCOM [NASDAQ: RDCM], he led the development and marketing of the company's flagship product that generated over \$100M in sales and helped grow this 15-person start-up into a \$30M public company. As co-founder of Talia Technology, an innovative medical diagnostic company with global presence, Yuval helped bootstrap the company, and led the software development and early sales and marketing activities. Prior to his commercial activities, he had a distinguished 8-year military career. Yuval received a Master's of Physics degree at Tel-Aviv University and an MBA from the J.L. Kellogg Graduate School of Management at Northwestern University.

Yuval's blog on virtual reality can be read at vrguy.blogspot.com

Jonathan Cohen, President and Chief Executive Officer

20/20 GeneSystems, Inc.

Mr. Cohen is founder, President, and CEO of 20/20 GeneSystems, Inc. based in Rockville, MD. The company has a biodefense business unit that developed and commercializes a kit for screening suspicious powders that is used by over 500 first responder organizations worldwide. That product was developed with a small amount of DOD funding (non-SBIR). 20/20 also has a cancer diagnostics business that has been supported by about \$1 million in NIH SBIR grants, corporate partnerships (including Ortho Clinical Diagnostics), and nearly \$4 million in private equity investments. A major focus of the company is the development of a blood test for the early detection of lung cancer.

Jayfus Doswell, Ph. D., President and Chief Executive Officer,

Juxtopia, LLC

Dr. Doswell is founder, president, and CEO of Juxtopia, LLC, a privately held biomedical and information technology (BIO-IT) company. He is an innovative leader in the field of human performance monitoring products and services. Juxtopia's innovative products are designed to integrate into a human's daily routine, services that improve human health and learning for a lifetime. Dr. Doswell has invented patent pending technologies and written SBIR/STTRs for the Department of Defense, National Institutes of Health, National Science Foundation, and Department of Homeland Security. He has won over \$700,000 in SBIR/STTR funding for one product that is now being prepared for commercialization. Additionally, Dr. Doswell has university partnerships with several Maryland Universities with which he collaborates on innovative research in information and biomedical technology.

Dr. Doswell has lead research on fetal surveillance, telemedicine / telehealth, nano biotechnology, and nanotechnology ethics. He co-organized the American Public Health Association's first Health Informatics and Information Technology (HIIT) group and co-organized the first business meeting at APHA that discussed Nanotechnology for public health. Dr. Doswell also initiated and is leading an effort to engage minority serving institutions for health and learning technology research, which was endorsed by several members of the United States congress. Dr. Doswell has served in leadership roles as consultant and/or trainer at several companies, organizations, and federal agencies including Maryland Medical Systems, CompuServe, Lockheed Martin, BearingPoint, Scientific Applications International Corporation (SAIC). He is the founder and board chairperson of the Juxtopia Group, Inc., a 501 c (3) non-profit organization established in 2000 to develop and evaluates learning technology tools for informal learning environments

TITLE:

Commercialization: Approaching the market

MODERATOR:

Robbie Melton, Director of Entrepreneurial Innovation, TEDCO

SUMMARY:

You have completed SBIR Phases 1 and 2. How do you move into Phase III commercialization? SBIR companies will discuss their unique experiences moving products from the bench, through manufacturing, and into customers' hands.

PANELISTS:

Gilmer Blakenship
Chairman of the Board of Directors
Techno-Sciences, Inc.

Steve Fujikawa
Chief Executive Officer and Founder
IntelliTech Microsystems, Inc.

**At Mr. Fujikawa's request, these slides are not provided electronically.*

Cha-Mei Tang, Sc.D.
Founder and President
Creatv Microtech, Inc.

Robbie Melton, Director of Entrepreneurial Innovation

TEDCO

Ms. Melton has over 18 years experience in technology transfer and project management. She has extensive experience working with technology start-up companies in providing resources to grow successful enterprises. Prior to joining TEDCO, Ms. Melton was the Assistant Director of the Investment Financing Group of Maryland DBED, funding early stage technology companies. She was the Federal Lab Technology Coordinator for Prince George's County, facilitating technology out of federal laboratories into county businesses. Ms. Melton has managed university-industry partnership projects and international research collaborations at the University of Maryland and the University of Hawaii, respectively. Ms. Melton was Operations Manager at the Children's National Medical Center, Center for Cancer and Transplantation Biology. Ms. Melton is Chairman and President Emeritus of Women In Bio, an organization dedicated to women entrepreneurs, executives and scientists in the life sciences industry; and is a member of the MIT Enterprise Forum Board.

Ms. Melton holds a Masters Degree in Science Technology and Public Policy from The George Washington University and a Bachelor of Arts degree in Economics from Drake University.

Gilmer Blankenship, Chairman of the Board of Directors

Techno-Sciences, Inc.

Dr. Blankenship is the Chairman of the Board of Directors of Techno-Sciences, Inc., a Maryland high technology firm specializing in advanced systems research, design, engineering, and integration. TSi is a leading supplier of ground station equipment for the international SARSAT with life saving systems in 18 countries. TSi is also a leading supplier of coastal station and command center technology for enhanced Maritime Domain Awareness. In 2008 Dr. Blankenship was selected as an international business leader in the State of Maryland for his work at Techno-Sciences. In 2009 TSi was recognized as one of the fastest growing technology companies in the US. He is also the founder and Chairman of the Board of Directors of TRX Systems, a company specializing in advanced electronics for personnel location and tracking in GPS denied areas. The TRX Sentinel System is the best available technology for locating, tracking, and monitoring first responders, military personnel, and others inside buildings and other structures during hazardous missions.

Dr. Blankenship is a Professor and Associate Chairman for External Affairs in the Department of Electrical and Computer Engineering, University of Maryland, College Park. He is a member of the Applied Mathematics Faculty. He has held visiting positions with New York University, the University of Illinois, the University of Maryland, the US Department of Energy, and with Erasmus University, Rotterdam. His first academic position was with the Department of Systems Engineering, Case Western Reserve University in Cleveland Ohio. Dr. Blankenship is a Fellow of the IEEE. Gilmer Blankenship received the S.B., S.M., and Ph.D. degrees from the Massachusetts Institute of Technology, Cambridge, Mass.

Steve Fujikawa, Chief Executive Officer and Founder

IntelliTech Microsystems, Inc.

Mr. Fujikawa holds a BS in Mechanical and Aerospace Engineering from Cornell University and an MS in Applied Mechanics from Stanford University. He has more than 30 years experience in the Aerospace industry specializing in Guidance and Control of Spacecraft, Missiles, Rockets and Aircraft. Mr. Fujikawa has worked with or consulted for many of the largest Aerospace companies in the world including Lockheed-Martin, Boeing, Raytheon, Hughes, Aerospatiale (France), and the Korean Aerospace Research Institute. He has also worked with NASA and the DoD including the US Army, US Navy, US Air Force and DARPA. In 2002 he founded Maryland based IntelliTech Microsystems, Inc., a leading supplier of software and hardware for microsatellites, where he currently serves as President and CEO.

Cha-Mei Tang, Sc.D., Founder and President

Creatv Microtech, Inc.

Dr. Tang, Founder and President of Creatv MicroTech, Inc., received her B.S., M.S. and Sc.D. degrees from the Electrical Engineering and Computer Science Department of Massachusetts Institute of Technology. Dr. Tang worked for 18 years at the Naval Research Laboratory. She was elected a Fellow of the American Physical Society in 1990 and was named the 1992 most outstanding woman scientist in the Federal Government by Women in Science and Engineering. Creatv conducts research and development and provides products for in vitro diagnostic tests; analytical tools; and reagents for medical, food, water, environmental, and pharmaceutical industries. Creatv also conducts research and development and provides services for micro- and nanofabrication of high aspect ratio structures. Her microfabrication product received an R&D 100 Award in 2006.

TITLE:

What reviewers want: Avoiding the pitfalls that get you eliminated

MODERATOR:

Jacqueline Du Bois, **Manager, Minority Programs**
TEDCO

SUMMARY:

What does and does not work when it comes across a reviewers' desk? What are the errors that first time SBIR applicants often make and how do you avoid them? What makes a proposed concept innovative, and how do you convey that innovation in your SBIR application in a way that 1) differentiates you from your competition and 2) wins over your reviewers?

PANELISTS:

Robert Berger, Ph. D.

Robert Berger Consulting, LLC

Mehdi Khandani, Ph. D.

President and Founder

Rensensys, LLC

**There is only one slide for this Session. Presenters created the slides collectively.*

Jacqueline Du Bois, Manager, Minority Programs

TEDCO

Ms. Du Bois serves as the Program Manager of the Maryland Minority Research & Development Initiative, a program that seeks to increase the participation of minority, woman-owned, and veteran-disabled small businesses in the federal Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) grant programs. Prior to joining TEDCO, Miss Du Bois worked as a combustion scientist providing computational aerothermal design support and conducting fire-dynamics simulations for a small Maryland R&D consulting firm. She managed the firm's National Institute on Deafness and other Communication Disorders (NIH/NIDCD) SBIR project and leveraged its groundbreaking conclusions to mandate changes in the Life Safety and Fire Alarm specifications of the National Fire Codes. This led to the drafting of new policies governing fire safety standards for multiple occupancy residences inhabited by deaf and hard of hearing people in the state of Maryland. Miss Du Bois also provided technical support on a number of the firm's other SBIR projects. Her experiences have prepared her well to guide others through the SBIR solicitation process.

Miss Du Bois holds a B.S. in Mechanical Engineering from Princeton University and an M.S. in Mechanical Engineering with a focus on thermal sciences from the University of California at Berkeley. This summer, Miss Du Bois earned a second Master's degree in Economic Policy Analysis from the University of Maryland-Baltimore County and was inducted into the Omicron Delta Kappa National Leadership Honors Society.

Robert Berger, Ph. D.

Robert Berger Consulting, LLC

Dr. Berger is uniquely qualified to advise companies on how to prepare winning proposals in the SBIR and STTR programs. For the last six years, he has presented proposal preparation workshops throughout the U.S. and Puerto Rico, and has rigorously critiqued hundreds of proposals. From 1995 until 2003, he was the SBIR/STTR Program Manger at the U.S. Department of Energy. In this capacity, Dr. Berger was responsible for designing and running annual SBIR and STTR competitions, with final responsibility for the selection of all awards.

Dr. Berger's experience with SBIR and STTR go back even further. For 10 years, he was the Director of the Technology and Innovation Division at the U.S. Small Business Administration, with government-wide oversight responsibilities for technical and commercialization aspects of SBIR and STTR programs. He has also demonstrated an ability to communicate, evidenced by teaching masters-degree-level courses to adult students in Technology Management, between 1987 and 1994, as an Adjunct Associate Professor at the University of Maryland. Finally, Dr. Berger has experience with research processes, having conducted engineering research and technology assessment at the National Institute for Standards and Technology and the Office of Naval Research.

Dr. Berger received a Ph.D. in Mechanics and Materials Sciences from The Johns Hopkins University and was a post-doctoral Research Associate of the National Research Council.

Mehdi Khandani, Ph. D., President and Founder
Resensys, LLC

Dr. Khandani has more than 15 years of experience in industrial instrumentation, high frequency circuit design, low power wireless communication, and wireless networks. Dr. Khandani is the founder of Resensys LLC, a company that is developing low power sensors for structural health monitoring of civil infrastructure systems. Prior to founding Resensys, Dr. Khandani founded MacroPhage Networks in 2004 (the company was registered in the State of Maryland under the name NetImmune, Inc.). MacroPhage Networks, based on Dr. Khandani's patents, offers superior performance in protecting the Internet infrastructure against harmful Distributed Denial of Service (DDoS) attacks. Dr. Khandani developed the Beta prototype of MacroPhage Internet security platform, and as a result, the company received \$5.0 Million in VC investment. After investment, the company was renamed RioRey Inc., which is a leading provider of DDoS security in the Internet. Dr. Khandani received his Ph. D in 2005 in Electrical and Computer Engineering from the University of Maryland. He has more than 20 publications in the field of low power communication, security, and sensors networks.

DEPARTMENT OF ENERGY (DOE)

David Goodwin, Physical Scientist
DoE SBIR/STTR Office

Name of the Program:

The Department of Energy (DOE) Small Business Innovation Research Program (SBIR) and Small Business Technology Transfer Program (STTR)

General Research Areas or Technical Topic interests:

2010 Technical Topics Areas include: Energy Efficiency and Renewable Energy; Basic Energy Science; Fossil Energy; Biological and Environmental Research; Advanced Scientific Computing Research; Nuclear Physics; Environmental Management; Defense Nuclear Nonproliferation; Nuclear Energy, Science and Technology; Electricity Delivery and Energy Reliability; High Energy Physics; and Fusion Energy Sciences. Grant applications submitted by small businesses must respond to a specific topic and subtopic during an open solicitation.

Call Schedule for Solicitations:

FY 2010 SBIR/STTR SOLICITATION - Posted in September 2009 are open for approximately 60 days through November 2009. Proposals are accepted through the last open day until 8:00 p.m. (EST). DOE SBIR/STTR grant proposals are only accepted electronically via www.Grants.gov. At DOE, only Phase I awardees may compete for Phase II.

Gap Funding or Commercialization Assistance Programs:

Yes. DOE provides a limited number of supplemental Phase II one-year grants for up to \$250,000 each. Applicants must receive a formal invitation from their DOE Project Officer prior to submitting a request for such funds, and applicants must have satisfactorily completed at least one year of their Phase II research project.

Point of Contact:

SBIR/STTR Program: (301) 903-1414; Proposal & Application Process: (301) 903-5707
General E-mail inquiries: SBIR-STTR@science.doe.gov.
Program Manager: Larry James

Helpful URLs or Mailing List Information:

Technical Topic Links and contact information for topic authors:

<http://www.science.doe.gov/sbir>.

Mailing list subscription information: <http://www.science.doe.gov/sbir/mailform.asp>.

Additional Comments:

The FY 2010 Solicitation provides the contact information for Technical Topic Program Managers for the 68 topics. These managers may be contacted for clarifications on the FY 2010 Solicitation and to suggest subtopics for future Solicitations.

DEPARTMENT OF HOMELAND SECURITY (DHS)

Francis Barros, SBIR Program Analyst
Homeland Security Advanced Research Project Agency

Two research and development organizations with the Department of Homeland Security (DHS) participate in the SBIR Program: the Science and Technology Directorate (S&T)¹ and the Domestic Nuclear Detection Office (DNDO)².

General Research Areas or Technical Topic Interests:

Typically, the SBIR topic areas are drawn from the high priority areas developed by a formalized and structured process which aligns investments to the Agency's highest priority requirements. DHS high-priority technology needs can be found at <http://bit.ly/techpriorities>.

Call Schedule for Solicitations:

The S&T SBIR Program holds two competitions during the fiscal year; the solicitations are issued in November and May. For FY09, the S&T Directorate's SBIR Program budget was \$13.8 million; forty-seven Phase I projects were selected for funding (in two competitions).

The DNDO SBIR Program holds one competition each year, generally in the Spring timeframe. For FY09, the DNDO SBIR Program budget was \$6.7M; four Phase I projects were selected for funding.

Gap funding or Commercialization Assistance Programs:

For Phase I projects, the DHS SBIR Program has a feature called 'JumpStart' whereby promising Phase I projects may be invited to submit Phase II proposals after the fourth month of the Phase I time period. For Phase II projects, the DHS SBIR Program has a feature called 'Cost Match' where additional funds may be obtained from the DHS SBIR Program for modified Phase II projects. The DHS SBIR Program does not have a dedicated Commercialization Assistance Program.

Points of contact:

S&T Directorate: Elissa Sobolewski, SBIR
Director
Elissa.sobolewski@dhs.gov
202-254-6768

DNDO: Namdoo Moon
Namdoo.moon@dhs.gov
202-254-7627

Helpful URLs or Mailing List Information:

<https://www.sbir.dhs.gov>

<https://dndosbir.dhs.gov>

Additional Comments:

Since the DHS SBIR Program inception in 2004, 148 Maryland companies submitted Phase I proposals for funding. Twenty-two (22) received funding. Of these, seven (7) received Phase II funding.

¹The Science and Technology Directorate's (S&T) mission is to accelerate delivery of enhanced technological capabilities to meet requirements and fill capability gaps to support DHS Agencies and first responders in accomplishing their missions.

²The Domestic Nuclear Detection Office's (DNDO) mission is to improve the Nation's capability to detect and report unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the Nation, and to further enhance this capability over time.

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
GODDARD SPACE FLIGHT CENTER**

Ted Mecum, Technology Engineer

Name of the Program:

The National Aeronautics and Space Administration (NASA) Small Business Innovation Research Program (SBIR) and Small Business Technology Transfer Program (STTR)

General Research Areas or Technical Topic interests:

2009 Technical Topics Areas relate to the four NASA Mission Directorates - Aeronautics Research, Exploration Systems, Science, and Space Operations. Grant applications submitted by small businesses must respond to a specific topic and subtopic during an open solicitation.

Call Schedule for Solicitations:

Each year NASA issues its annual NASA SBIR/STTR Phase I Program Solicitations, which provide all information and forms needed to submit proposals. The Solicitation is the authoritative statement of the NASA SBIR requirements for the procurement it describes. All proposals are due by a specified date approximately ten weeks after the release of the Solicitations.

Gap Funding or Commercialization Assistance Programs:

NASA has been participating in the annual Navy Opportunity Conference with a NASA focused area. Select SBIR-III companies are invited to display their technology at this event attended by large government prime contractors, investors, and other technology professionals.

Point of Contact:

For additional assistance please contact the NASA SBIR/STTR support office:

REI Systems, Inc.
NASA SBIR/STTR Support Office
4041 Powder Mill Road, Suite 311
Calverton, MD 20705
Phone: 301-937-0888
Fax: 301-937-0204
E-mail: sbir@reisys.com

Helpful URLs or Mailing List Information:

Technical Topic Links and contact information: http://sbir.gsfc.nasa.gov/SBIR/solicit_topic.htm

Mailing list subscription information: <http://sbir.gsfc.nasa.gov/SBIR/solicit.htm>

Due to the easy public accessibility of the NASA SBIR/STTR Homepage and the regular annual release of the SBIR/STTR Solicitation, we do not maintain a mailing/distribution list.

Additional Comments:

Potential bidders are strongly encouraged to review the following web site often.

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

NATIONAL CANCER INSTITUTE (NCI)

Michael Weingarten, Director
SBIR and STTR Small Business Programs

David Beylin, Program Director
SBIR Development Center

Name of the Program:

National Cancer Institute (NCI) SBIR & STTR Programs

General Research Areas or Technical Topic interests:

- Cancer Therapeutics (Biologics, Small Molecules, Nanotechnology-based therapeutics)
- Devices for Cancer Therapy (Surgical Interventions, ablative technologies)
- Cancer Diagnostics (Imaging, Image-Guided Intervention, radiopharmaceuticals, nanotechnology-based contrast agents, in vitro diagnostics, biosensors, etc)
- Cancer Research Tools
- Cancer Control and Epidemiology (Bioinformatics tools, educational tools, eHealth)
- Other innovative technologies for diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients.

Call schedule for Solicitations:

SBIR/STTR Grants: proposals due three times a year: April, August, December
(Proposals must be submitted electronically via www.Grants.gov) SBIR/STTR Contracts:
proposals are due in early November (paper submissions)
Information about funding opportunities: <http://sbir.cancer.gov/funding/>

Phase II+ or Commercialization Assistance Programs: Yes

SBIR Phase II Bridge Program: <http://sbir.cancer.gov/funding/phase2bridgeaward.asp>

NCI Regulatory Assistance Program

Point of contact:

NCI SBIR & STTR Program:
Michael Weingarten, SBIR Development Center Director
Phone: 301-496-4413
Email: weingartenm@mail.nih.gov

Helpful URLs or Mailing List Information:

Home Page: <http://sbir.cancer.gov>
Sign up to receive NCI SBIR&STTR Program Updates: <http://sbir.cancer.gov>
Funding Opportunities: <http://sbir.cancer.gov/funding/>
Omnibus Solicitation: <http://sbir.cancer.gov/funding/omnibus/>
Contract Topics: <http://sbir.cancer.gov/funding/contracts/>

NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY (NIST)

Mary Clague, SBIR Program Coordinator

Name of the Program:

The Department of Commerce (DoC) National Institute of Standards and Technology (NIST) Small Business Innovation Research (SBIR) Program

General Research Areas or Technical Topic interests:

2010 Technical Topics Areas include:

Advanced Biological and Chemical Sensing
Analytical Methods
Healthcare and Medical Physics
Homeland Security
Information Technology
Intelligent Control
Manufacturing System Integration
Materials Characterization
Micro- and Nano-fabrication Micromachining
Microelectronics Manufacturing
Nanofabrication
Optics and Optical Technology
Technologies to Enhance Fire Safety
X-ray System Technologies

Proposals submitted by small businesses must respond to a specific topic and subtopic during the open solicitation.

Call Schedule for Solicitations:

FY 2010 SBIR SOLICITATION – Currently open until January 22, 2010. See link at http://tsapps.nist.gov/ts_sbir/ for full solicitation.

Gap Funding or Commercialization Assistance Programs:

No gap funding. Commercialization assistance is sometimes offered as funds are available.

Point of Contact:

SBIR Program: (301) 975-3085 sbir@nist.gov

Program Manager: Clara Asmail clara.asmail@nist.gov

Program Administrator: Mary Clague mary.clague@nist.gov

Helpful URLs:

NIST SBIR website:

<http://www.nist.gov/sbir>

Public Q&A during open solicitation period:

http://tsapps.nist.gov/ts_sbir/SBIR/expert.aspx

NATIONAL SCIENCE FOUNDATION (NSF)

Ruth Shuman, Ph. D., Program Director, SBIR/STTR
Division of Industrial Innovation and Partnerships

Name of the Program: The National Science Foundation's Small Business Innovation Research Program (SBIR) and Small Business Technology Transfer (STTR) Program

SBIR/STTR Technical Topic Areas of Interest:

The NSF SBIR/STTR Program solicits proposals in the following areas:

- Biotechnology and Chemical Technologies
- Education Applications
- Information and Communication Technologies
- Nanotechnology, Advanced Materials, and Manufacturing

Within this framework, the following critical technology areas are emphasized:

- Applied Molecular Biology
- Distributed Computing and Telecommunication
- Integrated, Flexible Manufacturing
- Materials Synthesis and Processing
- Microelectronics and Optoelectronics
- Pollution Minimization and Remediation
- Software
- Transportation

Call Schedule for Solicitations:

NSF solicitations are posted twice a year. The next submission deadline is December 3, 2009; another submission deadline is anticipated in May. Proposals must be submitted electronically at <https://www.fastlane.nsf.gov/fastlane.jsp>.

Helpful URLs

Home page for NSF SBIR/STTR Program: <http://www.nsf.gov/eng/iip/sbir/index.jsp>
Current SBIR solicitation: <http://www.nsf.gov/pubs/2009/nsf09609/nsf09609.htm>

Additional comments:

The NSF SBIR/STTR program is designed to support high-risk, high-payback technology innovation and favors companies that demonstrate strategic partnerships with research collaborators, commercial partners, customers, and equity investors.

UNITED STATES ARMY EDGEWOOD CHEMICAL BIOLOGICAL CENTER (ECBC)

Martha Weeks, Technology Transfer Specialist

TRSG, Inc.

The US Army Edgewood Chemical Biological Center (ECBC) administers both the Army SBIR program for ECBC, and the entire Chemical Biological Defense (CBD) SBIR program. ECBC also participates in the Army STTR program.

General Research Areas or Technical Topic Interests:

2010 Technical Topic Interests include Metal Nano-Coating of Graphite Microfibers, Explosively Disseminating Bi-Spectral Obscurant Materials, Detection and Identification with Raman Spectroscopy Fiber Optics Array, Filter-Free Concentration of Pathogens from Water Supplies, Inexpensive Simulant for testing of Biological Standoff Sensors, MEMS Lamellar Based Interferometer for the detection of Toxic Chemicals, High surface-area, mesoporous oxide adsorbent sampling system, Passive Infrared Detection of Aerosolized Bacterial Spores, Infrared Optical Properties of Liquids on Surfaces, Monolithic tunable diode laser absorption spectrometer, Topological Data Analysis and Wide Area Detection of Chemical and Biological Contamination, Cooperative Deployment of Next Generation Chemical Standoff Sensors, Focal Plane Array Technology for Passive Hyperspectral Standoff Detection, Narrowband microbolometer infrared detectors for chemical and biological sensing, Residual Life Indicator for Adsorptive and Reactive Single-Pass Filtration Systems, and DIPAIN based assay for the T-2 Toxin.

Call Schedule for Solicitations:

ECBC participates in two Phase I SBIR solicitations a year, one for the Army program and one for the CBD program. Solicitation internet release for both programs is mid-November, proposal acceptance begins mid-December and ends mid-January, and contracts are awarded mid-May. Phase II proposals are submitted by invitation only.

FY10 STTR solicitation topics are released on the internet in mid-January, proposals are accepted from mid-February to mid-March, and contracts are awarded by July

Gap funding or Commercialization Assistance Programs:

- Fast Track: Phase I projects attracting certain outside investment for Phase II may receive interim funding of \$30,000-\$50,000 and expedited evaluation for Phase II
- Phase II Enhancement: Phase II projects obtaining non-SBIR investment may qualify for an extension and additional funds matching up to \$500,000 of the non-SBIR investment
- Commercialization Pilot Program: Phase II programs with potential for rapid transition to Phase III and meeting high priority Army requirements may qualify for additional funds to begin commercializing their technologies

Points of Contact:

Edgewood Chemical Biological Center
Office of Research and Technology Applications (ORTA)
E-mail: technical.outreach@apega.army.mil
(410) 436-4438

Helpful URLs or Mailing List Information:

<http://www.acq.osd.mil/osbp/sbir/>
http://www.armysbir.com/sbir/cpp_desc.htm

UNITED STATES NAVY (USN)

Peter Majumdar, Ph. D., Deputy Navy SBIR Program Manager
Office of Naval Research

Name of Program:

Department of the Navy (DoN) Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

SBIR/STTR Technical Topic Areas of Interest:

The DoN topics span essentially all areas of physical science and related technologies:

• <u>Science Areas</u>	• <u>Technology Areas</u>
Atmospheric and Space Sciences	Aerospace Vehicles
Biology and Medicine	Battlespace Environment
Chemistry	Aerospace Propulsion and Power
Cognitive and Neural Sciences	Chemical and Biological Defense
Computer Sciences	Clothing, Textiles and Food
Electronics	Command, Control and Communication
Environmental Sciences	Computers and Software
Manufacturing Sciences	Conventional Weapons
Materials	Electronic Devices
Mathematics	Electronic Warfare
Mechanics	Environmental Quality and Engineering
Ocean Sciences	Human-System Interface
Physics	Manpower, Personnel and Training
Terrestrial Sciences	Manufacturing Technology
	Materials and Structures
	Medical
	Modeling and Simulation
	Sensors
	Surface/Undersurface/Ground Vehicles

Department of Defense (DoD) SBIR and STTR Topics, for the current solicitation as well as solicitations dating back to 1983, can be viewed on

<http://www.acq.osd.mil/osbp/sbir/solicitations/index.htm>

The DoN Topics can be viewed on the link for “Navy Topics.”

Call schedule for Solicitations:

The DoD issues three SBIR solicitations per year; the DoN participates in all three. Small businesses are invited to submit proposals targeted at one or more of the technical topics listed in the solicitation. The STTR program works in the same manner, but has two solicitations per year.

Gap Funding or Commercialization Assistance Programs:

Details on the Commercialization Pilot Program (CPP) are attached.

Point of Contact: DoN SBIR/STTR Points of Contact (POCs) can be found on <http://www.navysbir.com/pm-poc.htm>

Helpful URLs

SBIR/STTR Phase II: If the Navy or a Systems Command (SYSCOM) determines the Phase I project to be successful, the small business may be invited to submit a Phase II proposal. Due to the complexity of the Phase II program, each SYSCOM has its own unique set of rules and instructions. The following are links to each SYSCOM's phase II instructions. These instructions are updated periodically.

Naval Air Systems Command (NAVAIR):

<http://www.navair.navy.mil/sbirpublic/general/phaseII.cfm>

Naval Sea Systems Command (NAVSEA):

http://www.navysbir.com/NAVSEA_Phase_II_Proposal_Instructions_090506.pdf

Marine Corps Systems Command (MARCOR):

http://www.navysbir.com/Instructions_Marcor-PII.pdf

Space and Naval Warfare Systems Command (SPAWAR):

http://www.navysbir.com/Docs/SPAWAR_Guidelines_for_Phase_II_Preparation2.pdf

Office of Naval Research (ONR):

http://www.navysbir.com/ONR_Phase_II_Proposal%20Guidelines15-May-2006.pdf

Specific to STTR, some additional links are provided below:

http://www.navysbir.com/Navy_STTR_Transition_Plan_for_Phase_II_Update-12-08b.pdf

http://www.navysbir.com/STTR_TTA_Template.doc

http://www.navysbir.com/STTR_TTP_Template.doc

Additional Comments:

See the DoN COMMERCIALIZATION PILOT PROGRAM (CPP) handout