



Maryland Technology Development Corporation (TEDCO)

Annual Report

Fiscal Year 2007

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Introduction

Technology continues to be the driving force for the New Economy and is critical to Maryland's future. Maryland is richly endowed with technology assets – the largest concentration of federal laboratories of any State in the nation, nationally recognized research universities, a federal contractor base with a specialty in information/communications, and an emergent biotechnology cluster.

In order to maximize these technology assets, the Maryland Technology Development Corporation (TEDCO) was created by the State legislature in 1998 to “(1) assist in transferring to the private sector and commercializing the results and products of scientific research and development conducted by colleges and universities; (2) assist in the commercialization of technology developed in the private sector; and (3) foster the commercialization of research and development described in items (1) and (2) of this subsection to create and sustain businesses throughout all regions of the State.”

The Corporation, a “body politic and corporate and constituted as a public instrumentality of the State,” is governed by a 15 member Board of Directors, appointed by the Governor with the approval of the Senate and includes the Secretary of the Department of Business and Economic Development as an ex-officio member.

The Board of Directors of TEDCO has adopted a bold vision for the State:

That Maryland will become internationally recognized as one of the nation's premier 21st century locations for technology and technology-based economic development.

In considering the mission of the organization, TEDCO's Directors recognized that many factors influence the technology vitality of the State, including: the expertise and availability of a skilled workforce, sensitive environmental policy, balanced transportation goals, and quality educational institutions. The Board further recognized that in order for Maryland to progress, all communities, companies, and citizens must fully participate in the global economy. Accordingly, the Directors have stated that:

TEDCO's mission is to foster the development of a technology-driven economy that will create and sustain businesses throughout all regions of the State of Maryland.

Technology Transfer and Commercialization

Maryland Technology Transfer Fund

TEDCO's primary initiative in technology transfer and commercialization is the Maryland Technology Transfer Fund (MTTF). MTTF supports product development by early-stage companies often deemed too early in their development to gain the interest of traditional venture-capital investments. MTTF's investments of up to \$75,000 per company are intended to defray the cost of the additional research and development activities that would move a specific technology or technology package to the threshold of commercialization. Since MTTF companies must be collaborating with federal laboratories or universities, they are in a unique position to avail themselves of the expertise and infrastructure of those institutions which would otherwise be unavailable to them. Under certain circumstances, second rounds of funding may be available. This inherent capitalization aspect of the program, in conjunction with its focus on economically viable but underdeveloped projects, sets MTTF apart, for example, from DBED's Challenge and Enterprise programs and the University of Maryland's Maryland Industrial Partnership (MIPS) Program.

Table 1 lists the statistics for MTTF for FY2007. These numbers indicate that TEDCO continues to fill a need in the economic landscape of commercialization that has been traditionally overlooked.

Table 1: Maryland Technology Transfer Fund Statistics-FY2007

# of Submissions	# of Approvals	Funds Requested for Approved Proposals
52	27	\$ 2,123,951

TEDCO's primary metric of success has been the downstream funding that awardees have raised since the completion of their projects. MTTF awardees have attracted external downstream funding at a rate of **\$35.6 for every dollar of their MTTF award**. The external funding comes from a mixture of venture and angel investors, government Small Business Innovative Research grants (SBIR), Advanced Technology Program grants (ATP), and private placements. The capacity of MTTF firms to attract such attention from external investors is demonstrative of the benefit of the university/federal laboratory collaboration facilitated by MTTF.

Table 2 summarizes TEDCO’s total MTTF investments and MTTF awardees’ downstream financing.

Table 2: Outcome of MTTF Projects and Downstream Funding-FY2007

MTTF Projects Completed as of FY2007	78
MTTF Project Investment	\$4,578,380
Downstream Funding of awardees	\$162,824,981
Leverage of MTTF Funds	\$35.6 : \$1

An MTTF Success Story ...

Interaction Laboratories, Inc. (formerly, Powergrid Fitness), located in Beltsville, MD, has developed a Leg Joystick that is a practical locomotion (walking, running) interface for virtual reality simulations. The system uses the Company’s ISOCOR™ technology and features a unique low cost, high performance interface that allows individuals to walk, run and interact physically in virtual reality without the drawbacks of high price and complexity. Initial deployments have demonstrated training value beyond the use of joysticks and other non-physical interfaces for simulating locomotion. Since receiving an MTTF award in February of 2007, the company has raised a total of \$1.86M from venture capitalist and DBED among others. Additionally, the company's CEO, Greg Merrill, received the Ernst & Young Entrepreneur Of The Year® 2007 Award in the Emerging category in Maryland. The company is making great progress in expanding its product line in collaboration with another virtual reality company, marketing its product globally with customer leads in Israel and receiving a large purchase order from a major corporation in the U.S.

Johnson & Johnson Collaboration

In looking to establish innovative partnerships with industry leaders, TEDCO entered a collaborative venture with Johnson & Johnson’s Corporation Office of Science and Technology (COSAT). COSAT has made additional funding available to seed-stage companies in the health care sector that request follow-on funding from TEDCO. This commercial funding is intended both to improve the sustainability of MTTF companies with promising technologies that have exhausted their funds, and to help them attract downstream investments from other funding sources.

University Technology Development Fund

TEDCO manages a number of technology transfer and commercialization funds which support early-stage technology innovations originating within Maryland institutions of higher education. Despite the inherent risks of early stage investments, TEDCO's portfolio of university-based technologies have not only grown in value, they have matured to the point that the startup companies emerging from it are capable of independently attracting significant financial support from outside investors.

Now in its seventh year, the University Technology Development Fund (UTDF) facilitates commercialization of university technologies by providing early stage funding up to \$50,000 for the express purpose of helping university innovators increase the attractiveness of their research to outside companies that may be interested in licensing the technology at a later stage. The funds approved can be used by university researchers for activities such as additional experimentation, prototype development, and limited patent related activities.

Summary statistics of FY2007 fund activity appear in Table 3.

Table 4 lists the outcomes of all UTDF projects to date.

Table 3: FY2007 University Technology Development Fund Statistics

Category	Number of Proposals	Total Funds Requested
Proposals Received	10	\$510,000
Proposals Approved for Initial Funding	9	\$460,000

Table 4: Outcome of UTDF Projects to Date

Category	Number
Awards funded	76
Projects finished	59
Active projects	17
Technologies licensed or optioned	21
Technologies licensed or optioned to MD companies	16
Projects receiving follow-on MTF awards	8
Awards leading to startup companies	18

A UTDF Success Story...

A scientist at the University of Maryland-College Park has a technology to develop anti-inflammatory substances based on leukokines from immune cells. This technology led to a Maryland-based start-up company, LeukoSight, which seeks to develop solutions to arthritis and other anti-inflammatory diseases. This company has subsequently been granted a \$75,000 MTTF award and a \$100,000 Maryland Industrial Partnership Award to further develop its technology.

University Patent Support Program

The University Patent Support Program began in FY2003 as a three year pilot program to encourage first-patent application filings for technologies developed by Maryland universities. Patenting is the first step inventors take to protect and maintain ownership of their intellectual property as commercialization proceeds. In FY2007, the program was scaled back to support specialized per-request patent opportunities. TEDCO funds were distributed to institutions seeking financial patent application support according to criteria intended to reveal the value of the funding to the institution and the level of need.

Table 5 lists the patent application activity for FY2007.

Table 5: Patent Applications Supported by University Patent Support Program-FY2007

FY	Patents supported	Cost
FY2007	17	\$70,910*

*Universities have until October 31 to submit invoices

TechStart

Maryland universities are below the national average in spinning out new companies. TEDCO has been working closely with the various university technology licensing offices to identify barriers to new business formation and has identified specific needs, including sophisticated market analysis and business strategy development.

In FY2007, TEDCO developed a new program to increase the number of companies commercializing university-developed technologies. The TechStart Program provides funding to universities to evaluate whether selected technologies or technology packages would have sufficient scope and potential to be the basis of a start-up company formed to commercialize the technology. One company has been formed to date as a result of the TechStart program.

Table 6 lists the TechStart activity for FY2007.

Table 6: FY2007 TechStart Statistics

Category	Number of Proposals	Total Funds Requested
Proposals Received	6	\$90,000
Proposals Approved for Funding	6	\$90,000

Federal Laboratory Technology Transfer and Commercialization

Federal Laboratory Partnership Program

TEDCO initiated the Federal Laboratory Partnership Program (FLPP) to link Maryland's technology companies with federal laboratories. Since legislative restrictions and national security considerations prevent federal laboratories from freely generating economic spin-offs of newly developed technologies at a rate commensurate with their capabilities, TEDCO instituted this program to literally "showcase" federal technologies to local entrepreneurs, business leaders, angel and venture investors, and economic development professionals in order to encourage joint ventures which could facilitate the transfer of these federal laboratory-originating technologies to the market place.

Since August 2000, TEDCO has organized 30 technology showcases. The five conducted this year each attracted outstanding press coverage and numerous attendees. More importantly, the showcases elicited numerous solicitations from local companies wanting to partner with federal labs on a number of different projects. The FLPP showcases also draw attention to TEDCO's other programs that encourage collaboration between federal laboratories and small businesses – specifically the Aberdeen Technology Transfer Initiative (ATTI), the Fort Detrick Technology Transfer Initiative (FDTTI) and the Maryland Technology Transfer Fund (MTTF). One of the highlights of the FLPP program this year was the receipt of the FDTTI-II contract with an award pool of \$750,000. Other highlights of the program this year include the announcement by NASA Goddard Space Flight Center that the October showcase led to 6 Patent License Agreements, and the overwhelming attendance of 359 energetic and excited participants at the June showcase featuring the new US Army Research, Development and Engineering Command elements moving to Maryland from Fort Monmouth N.J. under the Base Realignment and Closure (BRAC) initiative.

Aberdeen Technology Transfer Initiative

From May 2004 to September 2005 and again from December 2005 to October 2007, TEDCO successfully coordinated and managed two phases of Federal funding through the Aberdeen Technology Transfer Initiative (ATTI). This program has supported collaborative research and technology transfer between small businesses and the various U.S. Army laboratories and research directorates at Aberdeen Proving Ground (APG). With the support of the APG Science & Technology Board and the APG Business Development Office, TEDCO assisted and recommended the applications and projects of 25 small companies. The U.S. Army has confirmed each of these recommendations and has awarded a total of \$1,384,889 to the 25 projects. All ATTI award funds have been committed.

As APG prepares for dramatic growth as a result of the BRAC decisions of 2006, the ATTI project has provided a firm foundation for and strengthening of the TEDCO/APG collaboration in early-stage technology transfer. A clear example of this collaboration was demonstrated on

June 28, 2007, when TEDCO partnered with APG to put on an intense, full-day event, attended by over 250 people, that focused on the technologies that will be transferring from Ft. Monmouth in New Jersey to APG as part of BRAC. In the spirit of this collaboration, TEDCO will commit up to \$375,000 of FY2008 MTTF funding to BRAC-related technology projects involving Maryland companies and the growing military facilities in Maryland.

An ATTI Success Story...

CCL Biomedical has patented and developed antimicrobial fibers for soldier and health care worker protection. This Havre de Grace firm received an ATTI award of \$50,000 to test the biocidal qualities of its polymer compounds at the Edgewood Chemical and Biological Center at Aberdeen Proving Ground. Since the ATTI project, TEDCO has recommended and CCL Biomedical has received Phase II STTR funding of \$500,000 from the National Science Foundation to continue development, and has attracted the attention of a major U.S. textile manufacturer. Dr. Nina Lamba, founder and President of CCL Biomedical, serves as Treasurer of the Northeastern Maryland Technology Council and is a member of the recently-appointed Maryland Life Sciences Advisory Board.

Ft. Detrick Technology Transfer Initiative

In March 2005, TEDCO received \$799,697 from a Congressional appropriation for the Ft. Detrick Technology Transfer Initiative (FDTTI). FDTTI provides companies with up to \$50,000 to transfer medical technology originating from innovations of the U.S. Army Medical Research and Materiel Command (USAMRMC) to the public sector. Assisting with the implementation of this initiative are TEDCO's local partners, the Frederick County Office of Economic Development and the Ft. Detrick Business Development Office. Both spin-in projects that meet USAMRMC needs and spin-out projects that entertain the licensing and commercialization of Army inventions are eligible for funding consideration. Funds are used to defray the direct costs of developing early stage technologies. Eleven projects were awarded in FY2006, and work has been completed on 9 projects while two continue under schedule extensions. A second round of FDTTI funding in the amount of \$1,051,812 was received in June of 2007. This Congressional appropriation will provide funds for 15 more awards.

A FDTTI Success Story...

Akonni Biosystems received a \$50,000 FDTTI award to further develop their "TruArray" technology, a portable reader device and credit-card size disposable test onto which small blood, urine, or saliva samples may be placed. The reader then processes the sample with just a push of a button. The resulting printout provides clinical results in a fraction of the time of current tests and at a significantly reduced cost. Since the FDTTI award, Akonni has received nearly \$6M in follow-on funding, a research contract for more than \$100,000 from Northrop Grumman, and an investment of over \$4.5M from private investors and DBED.

Technology Business Incubation

TEDCO oversees a number of programs that help local economic development organizations secure the capital and resources they need to support startup tech firms' successful migration from the laboratory to the marketplace. To this end, TEDCO funds consultants to help government authorizing-agencies determine the value of starting technology incubators in their jurisdiction. Through a series of investment ventures, TEDCO also funds project proposals submitted by Maryland incubators that are situated in economically-distressed areas. These activities and others that fall under TEDCO's Business Incubation Program umbrella are described below.

Incubator Development Fund

On June 1, 2001, TEDCO's enabling legislation was modified to create the Incubator Development Fund (IDF). To date, capital appropriations for the fund have reached \$9,267,500.

The IDF summary is shown in Table 7.

Table 7: Incubator Development Fund Summary

Incubator	Approved in	Approved in	Overall	
	FY2007	FY2006	Funding	Sq. Ft.
techcenter@UMBC		\$225,000	\$1,000,000	101,000
Silver Spring Innovation Center			\$1,000,000	20,000
ETC@Johns Hopkins Eastern			\$1,000,000	45,000
Frederick Innovative Technology Center@Hood			\$425,000	10,000
Prince George's County Technology Assistance Center			\$230,000	15,000
Rockville Innovation Technology Center			\$1,000,000	26,000
White Oak Innovation Center		\$1,000,000	\$1,000,000	30,000
Frederick Innovative Technology Center@Monocacy	\$562,500		\$562,500	20,000
Hagerstown Technical Innovation Center	\$450,000		\$450,000	20,000
Germantown Life Sciences Center	\$600,000		\$600,000	33,000
University of Maryland-Baltimore	\$1,000,000		\$1,000,000	8,500
Eastern Shore Incubator (application pending)	\$1,000,000		\$1,000,000	TBD
Subtotals	\$3,612,500	\$1,225,000	\$9,267,500	328,500 sq.ft.

To date, eight completed projects have been funded at \$5.2 million, leveraging over \$15.74 million. In addition, four other facilities (Montgomery County’s White Oak Innovation Center, Montgomery County’s Germantown Life Sciences Incubator, Eastern Shore Incubator, and University of Maryland-Baltimore’s BioAccelerator) have received commitments totaling \$3.6M. TEDCO reprogrammed \$267,500 to complete the fund.

Incubator Feasibility Studies

In order to identify appropriate opportunities for the creation of new incubator facilities, in 2001 TEDCO initiated a formal program to sponsor independent, professional studies of the feasibility of potential incubator projects. Each study is sponsored by a local government, university, or non-profit corporation, and provides at least 1:1 cash match. Twenty studies have been commissioned to date. TEDCO investments of \$449,000 were matched by \$559,177.

There were three (3) feasibility studies completed in FY2007 to evaluate the potential of incubation sites within Maryland.

Table 8 represents TEDCO’s allocations for feasibility studies executed in FY2007.

Table 8: FY2007 Incubator Feasibility Studies

Incubator	Jurisdiction	Award Amount	Local Match
City of Bowie	Bowie	\$25,000	\$25,000
University of Maryland, Baltimore County	Baltimore County	\$25,000	\$25,000
East Baltimore Development, Inc.	Baltimore City	\$25,000	\$25,000
Award Total		\$75,000	\$75,000

Business Assistance Fund

In FY2007 TEDCO provided \$150,000 to 10 incubator programs to provide directed and targeted business assistance to their tenant and affiliate companies. The individual incubator grant amounts are pursuant to a formula developed in conjunction with the Maryland Business Incubation Association. To date, this funding helped to provide assistance to over 60 companies affiliated with or located in the 10 incubator programs.

The funding was used for a variety of business assistance services that these incubators would not have been able to provide otherwise. This includes but is not limited to the following types of assistance:

- negotiating strategic investments or partnerships
- raising venture funding
- recruiting top management
- raising bridge funding
- reviewing business plans

- analyzing cash flow projections
- developing marketing strategies
- reviewing budget assumptions, cost structure and financial statements
- discussing potential public relations opportunities, researching media coverage
- attending workshops on government accounting and cost proposals

Working Capital Loan Fund

The Working Capital Loan Fund (WCLF) is in its third year of offering at- or below-market rate loans to incubation-stage technology-oriented companies located in Western Maryland, the Eastern Shore, and Baltimore City. Capitalized in FY2005 at \$500,000 through the collaborative efforts of the U.S. Department of Commerce’s Economic Development Administration and TEDCO, the fund received an additional \$500,000 from the State in FY2007 to expand the program to incubator-stage companies in other areas of Maryland. The fund is revolving, allowing loan repayments to be re-lent to other borrowers. Companies participating in the program must be affiliated with a Maryland incubator. The working capital loans distributed through this fund range in value from \$15,000 to \$50,000 and are serviced by HarVest Bank of Maryland.

A loan committee supports staff’s review of applications for the program. The following regional economic development agencies have representation on that committee:

- Baltimore Development Corporation
- Montgomery County Department of Economic Development
- Chesapeake Innovation Center
- Lower Shore Regional Council
- Maryland Department of Business and Economic Development
- Mid-Shore Regional Council
- Rural Maryland Council
- Tri-County Council of Western Maryland

TEDCO recruited two additional members for the loan committee in FY2007 to ensure that all regions of the State are represented.

A WCLF Success Story...

ADF Solutions, Inc. is a software development company that has created low cost, comprehensive triage and data information tools which perform digital forensic analysis on a suspect’s computer in three hours rather than four days. This company, with the loan from TEDCO’s working capital fund, was able to hire a support engineer to assist with product testing and evaluation of prospects for potential customers. The company has contracts with the US Secret Service, the Defense Cyber Crime Institute, the Internet Crimes Against Children Task Force and numerous international agencies and organizations. ADF Solutions started operations in July 2005 in the technology incubator in the Silver Spring Innovation Center, recently moving to Bethesda. They have seven full-time employees and expect to grow to 12 full-time employees by the end of 2007.

2007 Maryland Incubator Company of the Year

TEDCO continued the tradition of recognizing the achievements of incubator tenants and graduates by hosting the 7th annual Maryland Incubator Company of the Year Awards with co-sponsors Saul Ewing LLC, RSM McGladrey and the Maryland Department of Business and Economic Development, with additional support from the Maryland Business Incubation Association. The thirty-two member selection committee for the awards is comprised of both private venture capital and public investment managers. The review process has the unique aspect of granting newly-emerged technology startups the undivided attention of the investment community. Approximately forty companies submitted applications for review.

This year the awards were held on June 19, 2007 at the Center Club in Baltimore. Over one hundred and fifty guests were in attendance. The *Baltimore Business Journal* produced and circulated to attendees a supplement containing articles highlighting the winners and their accomplishments.

The 2007 winners are listed in Table 9.

Table 9: Incubator of the Year Awards (2007)

Award	Winner	Incubator/Location
New Incubator Company	Millennial Media, Inc.	Emerging Technology Center, Baltimore
Life Science	Lentigen Corp.	techcenter@UMBC, Baltimore
Information Technology	LiveHealthier	Maryland Technology Development Center, Montgomery County
Technology Service	Sycamore.US, Inc.	Garrett Information Enterprise Center, Garrett County
Technology Transfer	BioFortis, Inc.	Emerging Technology Center, Baltimore
Graduate	BD Metrics, Inc.	techcenter@UMBC, Baltimore
2007 Hall of Fame Inductee	Digene Corporation	Technology Advancement Program University of Maryland, College Park

Rural Business Initiatives and Entrepreneurial Development

Rural Business Incubation Initiative

Studies conducted by the United States Small Business Administration (SBA) have shown that high-tech companies based in rural areas are often impeded by the absence of infrastructure necessary to support technical commercial enterprises, and the inability to recruit critical masses of people with the appropriate education and skill-sets to fully staff such enterprises. However, the same studies show that when rural policy initiatives are enacted to provide small business assistance through non-profits and rural development centers, economic development in those areas is enhanced.

To this end, the SBA awarded TEDCO \$494,739 to address the needs of small business in the rural areas of Maryland, specifically its Lower Eastern Shore and Southern counties. TEDCO's partners in this program include the University of Maryland Eastern Shore and the College of Southern Maryland. Together, the three are working to enhance technology commercialization activities in these areas by providing technical and business assistance to incubator-stage companies and incubators in the targeted counties.

The project ended on April 28, 2007. Through the efforts of the partners, 24 companies on the Eastern Shore and 30 companies in Southern Maryland have received various forms of business assistance including:

- Marketing strategy development
- Contract analysis
- Funding source identification assistance
- Funding assistance to attend key industry meetings
- Funding for infrastructure development
- Funding for technical assistance
- Funding for product development

The program on the Lower Eastern Shore identified that a technology industry, albeit small, exists. Technology companies can flourish in rural areas with the right mentoring and strategic funding assistance. TEDCO continues to maintain a part-time representative in the region to continue to provide mentoring and assistance.

ACTiVATE Program: Achieving the Commercialization of Technology in Ventures through Applied Training for Entrepreneurs

ACTiVATE is the University of Maryland Baltimore County (UMBC) initiative that is training women entrepreneurs to create successful technology-based startup companies. In addition to increasing the numbers of active entrepreneurs working in Maryland, the program is intended to increase technology transfer rates by empowering professionals to develop their own startup companies through a systematic and focused approach to the study and, more importantly, the practice of commercializing technology. ACTiVATE is an interdepartmental program involving

cooperation between the Office of Technology Development, the Center for Women in Information Technology, the Alex Brown Center for Entrepreneurship, and techcenter@UMBC. UMBC has also partnered with six other Maryland universities and key state agencies including TEDCO. The program funding has come from a \$600,000 competitive National Science Foundation Partnership for Innovation grant awarded in the summer of 2004. TEDCO provided the required \$60,000 matching funds.

ACTiVATE's strength stems from its use of actual technologies, originating from federal laboratories and local universities, to help its students evaluate market strategies and pathways to commercialization. TEDCO's proximity to and collaborations with federal laboratories and universities puts it in the unique position to help UMBC select a set of invention disclosures available for commercialization that can be used by its students as test cases. Typically, students working in teams perform market analyses to determine the viability of the technologies in the market place. They also craft business plans for startup companies based on the technologies. As these are real technologies awaiting commercialization, the goal of the program is to launch approximately three startup companies at the conclusion of the two-semester course. December 2006 marked the end of the second year of the program. The class of 2006 generated five new companies: Encore Path, Syan BioSciences, Green Manor Group, T3 Innoventions and Purr-Fect Gourmet. Three of the companies have received funding from TEDCO through one of its programs.

The third session of ACTiVATE began in January 2007. Twenty-four women were selected from a pool of 104 applicants to participate in the program. TEDCO selected 32 new university- and federal lab-originating technologies to be analyzed during the scholastic year. The inventions selected include sensors, diagnostic therapies, electronics, software, and food related technologies.

In the first two years of ACTiVATE, nine companies have been formed exceeding the goal of six companies during the same period. An additional company was formed after the 2005 class ended, which was not related to the program. However, the founder of this company attributes her experience in ACTiVATE to starting her company. The ACTiVATE program has become so successful that UMBC will be offering the course for a fourth year and plans are underway to expand the program to other campuses.

An ACTiVATE Success Story...

Encore Path, Inc. is a new start-up company that emerged from the ACTiVATE program. The technology developed at the University of Maryland, Baltimore is a training device to help restore arm movement in stroke patients. Studies have proven this device regenerates neural pathways so that rehabilitation has lasting effects. Through the in-depth business and technical analysis that occurs during the ACTiVATE program, the student team recognized the commercial viability of the technology and formed a company. Encore Path won the 2007 Rockville Women's Business Plan Completion and has received funding from TEDCO's Maryland Technology Transfer Fund and DBED's Challenge Investment program.

Supporting Affiliate Organizations

The All Hazards Consortium

The All Hazards Consortium (AHC) is an educational forum and clearinghouse for government officials, first responders, private industry representatives, and academic institutions from throughout the Mid-Atlantic states that promotes networking, cooperation, collaboration, and information sharing in emergency management and homeland security issues and critical needs. In 2004, the Maryland Governor's Office of Homeland Security asked TEDCO to assist in the creation and coordination of the AHC. TEDCO was instrumental in helping the AHC write a winning proposal for a \$200,000 grant from the National Capital Region – Urban Areas Security Initiative (NCR-UASI) in FY06. These funds, managed and dispersed by TEDCO on behalf of the AHC, have supported the creation and coordination of both the nonprofit 501(c)3 AHC and its programs and the October 2006 All Hazards Forum Conference and Exhibition in Baltimore, which drew an audience of over 1200 people.

Having successfully managed and completed the NCR-UASI in May 2007, TEDCO has recommended that the next round of Federal funding flow through Virginia in an effort to strengthen the regional nature of the AHC. TEDCO continues to serve as an interim administrative agent and advisor to the AHC, and will continue to promote first responder/warfighter technology transfer projects that will be of interest to the All Hazards community.

The Larta Institute-TEDCO Relationship

The Los Angeles-based Larta Institute entered into a cooperative agreement with TEDCO in order to extend its network of business development contacts into Maryland's federal laboratory/defense sector and its bioscience sector. Larta is establishing its presence in Maryland's bioscience industry through its management of the National Institutes of Health-Commercialization Assistance Program (NIH-CAP). The NIH-CAP is a 10 month program designed to help the nation's most promising life science startup companies launch their technologies and establish successful commercial businesses by providing pointed training workshops, mentoring, and consulting. Companies that have received Phase II NIH Small Business Innovative Research (SBIR) awards for a particular technology are eligible to compete for placement in the program. Many of TEDCO's portfolio companies have gone on to receive Phase II NIH SBIR awards or have received SBIR awards before seeking additional financial assistance through TEDCO funding. Larta's partnering with TEDCO may have the affect of funneling NIH-CAP awardees into TEDCO's portfolio, and/or connecting current TEDCO companies with Larta's extensive network of investors. TEDCO will act as a sub-contractor and advise both Larta and the CAP companies on financial strategies that address the particular nuances of the State's biotechnology industry.

Two TEDCO staff served as Principal Advisors in the program, mentoring six companies. Staff provided support and advice to help the companies move their SBIR Phase II technology into commercialization and to prepare them for the NIH-CAP Venture Forum. Staff participated in

the training workshop held October 24, 2006 which provided in-depth sessions on the components of commercializing their products. The Outcomes Workshop held March 26-30, 2007 gave the companies an opportunity to give their pitch to a panel of experts to help them prepare for the Venture Forum. Only the best presentations were selected to present at the NIH-CAP Venture Forum on May 1-2, 2007 in San Francisco. Four of the six companies TEDCO mentored were selected to present at the Forum.

Maryland Stem Cell Research Fund

On April 6, 2006 the Maryland Stem Cell Research Act of 2006 was signed into law. The Maryland Technology Development Corporation (TEDCO) was designated the Administrator of the Fund. The Maryland Stem Cell Research Commission was established and operates within TEDCO.

Members of the Commission were appointed in July 2006 and held their first meeting in the same month. From then through November 2006, the Commission and TEDCO drafted and promulgated regulations implementing the Stem Cell Act, developed a conceptual framework for the grant programs to administer the funding under the Act, drafted and released detailed Requests For Applications (RFAs) for these grants, and launched the first grant application cycle. Throughout 2006, the Commission dealt with key policy issues, such as requirements for grant recipients to make available to other parties any new cell lines created with State funds, and requirements for grants recipients to present the results of their State-funded work at annual in-State symposia open to the public. The Commission and TEDCO also devised a scientific peer review process for the evaluation and selection of grants, which is modeled on the National Institutes of Health process but tailored to the goals and requirements of the Maryland Stem Cell Research Act (for example, by expressly taking account of translation plans and the potential impact on biotechnology in Maryland in the grant applications), and put this peer review process into effect in February 2007.

The Commission and TEDCO received 85 applications for funding, requesting a total amount of nearly \$81 million. This number of applications clearly indicated a very strong turnout for the first year of a new program operating on a condensed timetable. From this pool of applications, the Commission recommended for funding and the TEDCO Board of Directors approved 7 Investigator-Initiated grants and 17 Exploratory grants. These grant agreements have been executed and the research has begun.