

Maryland Technology Development Corporation (TEDCO)

Annual Report and Financial Report

Fiscal Year 2009

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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 science, security and communications, and an emergent biotechnology cluster.

The Maryland Technology Development Corporation (TEDCO) was created by the General Assembly to "assist in transferring to the private sector and commercializing the results and products of scientific research and development conducted by colleges and universities; assist in the commercialization of technology developed in the private sector; and foster the commercialization of research and development to create and sustain businesses throughout all regions of the State." TEDCO administers the Maryland Technology Incubator Program, which promotes entrepreneurship and the creation of jobs in technology-related industry by establishing and operating effective incubators throughout the State that provide adequate programs and physical space designed and intended to increase or accelerate business success in the field of technology.

TEDCO, 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.

Mission

To facilitate the creation and foster the growth of businesses throughout all regions of the State through the commercialization of technology. To be Maryland's leading source of funding for technology transfer and development programs and entrepreneurial business assistance.

Vision

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

Technology Transfer and Commercialization

Maryland Technology Transfer and Commercialization Fund

TEDCO's primary initiative in technology transfer and commercialization is the Maryland Technology Transfer and Commercialization Fund (MTTCF). MTTCF supports technology and product development by start-up companies often deemed too early in their development to gain the interest of traditional venture capital investments. MTTCF's investments of up to \$75,000 per project 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 MTTCF companies must be collaborating with federal laboratories or universities, be tenants of Maryland's technology incubator system or be participants in TEDCO's Rural Business Innovation Initiative to be eligible for this fund, 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 MTTCF apart, for example, from DBED's Challenge and Enterprise programs and the University of Maryland's Maryland Industrial Partnership (MIPS) Program.

FY2009 MTTCF Statistics

- # of proposals-58
- # of awards-30
- \$ awarded-\$2,250,000
- Total funding awarded for projects completed since program inception-\$7.9M
- Total downstream funding of completed projects since program inception-\$297.6M
- Leverage ratio-\$37.7:\$1

These numbers indicate that TEDCO continues to fill a need in the economic landscape of commercialization that has been traditionally overlooked.

TEDCO's primary metric of success has been the downstream funding that awardees have raised since the completion of their projects. MTTCF awardees have attracted external downstream funding at a rate of over \$37 for every dollar of their MTTCF award. The external funding originates, for example, from a mixture of venture and angel investors, government Small Business Innovative Research grants (SBIR), private placements and other investments. The capacity of MTTCF firms to attract such investment from external investors is demonstrative of the benefit of the networking facilitated by TEDCO.

University Technology Development Fund

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. This fund can also be used for proof of concept studies and to broaden patent claims.

FY2009 UTDF Statistics

- # of proposals-17
- # of awards-5
- \$ awarded-\$250,000
- Total licensees since program inception-32 (24 in Maryland)
- Total Maryland start-up companies created since program inception-18

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.

The TechStart program was developed to increase the number of companies commercializing university-developed technologies. TechStart 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.

FY2009 TechStart Statistics

- # of proposals-22
- # of awards-11
- \$ awarded-\$165,000
- Total Maryland start-up companies created since program inception-10

Coordinating Emerging Nanobiotechnology Research in Maryland Fund

The General Assembly passed HB1409/SB735 during its 2008 legislative session creating the Coordinating Emerging Nanobiotechnology Research in Maryland Fund. This program has never received an appropriation, and as such there is no program activity to report.

Federal Laboratory Technology Initiatives

Ft. Detrick Technology Transfer Initiative

TEDCO was awarded a congressional earmark to implement the Ft. Detrick Technology Transfer Initiative (FDTTI). FDTTI provided companies with up to \$50,000 to transfer medical technology from innovative high-tech small businesses into the U.S. Army Medical Research and Materiel Command (USAMRMC) to meet Army needs and technology originating from innovations of the USAMRMC to the public sector. Assisting with the implementation of this initiative were 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 were considered for funding. Funds were used to defray some of the direct costs of developing early-stage technologies. A total of 26 awards are anticipated to be awarded to companies under this program.

Applied Research Development Project

TEDCO was awarded a congressional earmark to implement the Applied Research Development Project (ADRP). The ARDP is an agreement with the Maryland Research and Applied Sciences Consortium (MRASC) and the USAMRMC at Ft. Detrick. The MRASC is comprised Maryland's Historically Black Colleges and Universities (Bowie State University, Coppin State University, Morgan State University, Sojourner-Douglass College, and the University of Maryland Eastern Shore). The ARDP awards funding to increase institutional research capacity by meeting the biotechnological needs of the U.S. Army while providing collaborate opportunities for Maryland minority-owned businesses.

Technology Incubator Program

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 total \$8,267,500. No projects were funded in FY2009.

The IDF summary is shown below:

Incubator	Funding Awarded
techcenter@UMBC	\$1,000,000
Silver Spring Innovation Center	\$1,000,000
ETC@Johns Hopkins Eastern	\$1,000,000
Frederick Innovative Technology Center@Hood	\$425,000
Prince George's County Technology Assistance Center	\$230,000
Rockville Innovation Technology Center	\$1,000,000
Frederick Innovative Technology Center@Monocacy	\$562,500
Hagerstown Technical Innovation Center	\$450,000
University of Maryland-Baltimore	\$1,000,000
Germantown Innovation Center	\$600,000
Eastern Shore*	\$1,000,000
Subtotals	\$8,267,500

^{*}Reserved

Incubator Feasibility Studies

In order to identify appropriate opportunities for the creation of new or expanded incubator facilities, TEDCO will partner to sponsor independent, professional studies of the feasibility of potential incubator projects. Each study is sponsored by a local government, college, university, or non-profit corporation, and provides at least a 1:1 cash match.

Two feasibility studies were performed in FY2009. The first was for the University of Baltimore. The recommendation was that a technology incubator could not be supported at this time. The second study was performed for the Frederick Innovative Technology Center, Inc., which resulted in a recommendation to merge the two Frederick County incubators into one site.

Business Assistance Fund

To support the incubator network in Maryland, TEDCO provides business assistance funding 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.

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

- negotiating strategic investments or partnerships
- raising venture funding
- recruiting top management
- reviewing business plans
- analyzing cash flow projections
- developing marketing strategies
- reviewing budget assumptions, cost structure and financial statements
- discussing potential public relations opportunities and researching media coverage
- identifying business opportunities with the federal government

Working Capital Loan Fund

The Working Capital Loan Fund (WCLF) was created to offer 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 submit a letter of support from either a Maryland incubator, an SBDC representative, an economic development official or a professional consultant. 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.

2009 Maryland Incubator Company of the Year

TEDCO continued the tradition of recognizing the achievements of incubator tenants and graduates by hosting the eleventh 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-five 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.

This year the awards were held on June 16, 2009 at the Center Club in Baltimore. Over 125 guests were in attendance.

2009 Incubator Company of the Year Awards

- Gliknik, Inc., Best New Incubator Company
- Envisionier Medical Technologies, Best Life Sciences Company
- Oculis Labs, Inc., Best Information Technology
- Lurn, Inc., Best Technology Service
- Encore Path., Best Technology Transfer Company
- WGS Systems, Inc., Best Homeland Security Company
- A&G Pharmaceutical, Inc., Best Graduate Company
- Ann Lansinger, Robert A. Spar Hall of Fame Inductee

Rural Business Initiative and Entrepreneurial Programs

Rural Business 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 Maryland Congressional delegation supported a federal SBA award to TEDCO to address the needs of small businesses in the rural areas of Maryland (Western MD, Southern MD, Northeastern MD, Upper Eastern Shore and Lower Eastern Shore) through the Rural Business Innovation Initiative (RBI). This funding was augmented by TEDCO funds to ensure a complete reach of the rural parts of the State. TEDCO brought on Business Mentors from the local areas to enhance technology commercialization activities by providing technical and business assistance to incubator-stage companies and incubators in the targeted counties.

The RBI program has been well-received by the rural businesses and elected officials and has been successful in providing technical assistance to the entrepreneurs in the rural areas. The hands-on involvement of the Business Mentors and the technical assistance of third-party consultants have been key factors in furthering the growth of these start-up companies.

In FY2009, Business Mentors have actively supported, with on-going mentoring, 22 companies resulting in 200 hours of mentoring, and 4 companies have received third-party technical assistance awards.

Examples of business assistance included:

- Marketing strategy development
- Contract analysis
- Funding source identification assistance
- Funding for infrastructure development
- Funding for technical assistance
- Funding for product development

Maryland Stem Cell Research Fund

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

In FY2009 the Commission received 147 applications in response to its three Requests for Applications. Following the scientific peer review and the recommendations by the Commission, the TEDCO Board of Directors approved 6 Investigator-Initiated grants, 32 Exploratory grants and 21 Fellowship grants. All grant agreements were executed in FY2009 and the research has begun.

A more detailed report regarding the project summary and financial support will be provided in the 2009 Stem Cell Annual Report to the Governor as indicated in section § 5-2B-09 of the 2006 Stem Cell Research Act.