



*TEDCO Seed Funding  
Programs for Technology  
Development*

TEDCO

December 2010 Funding Briefing

## *Technology Transfer Mission*

- Build the technology-based economy in Maryland
  - Outreach
  - Project development
- Assist companies, incubators, and labs to achieve their mutual objectives

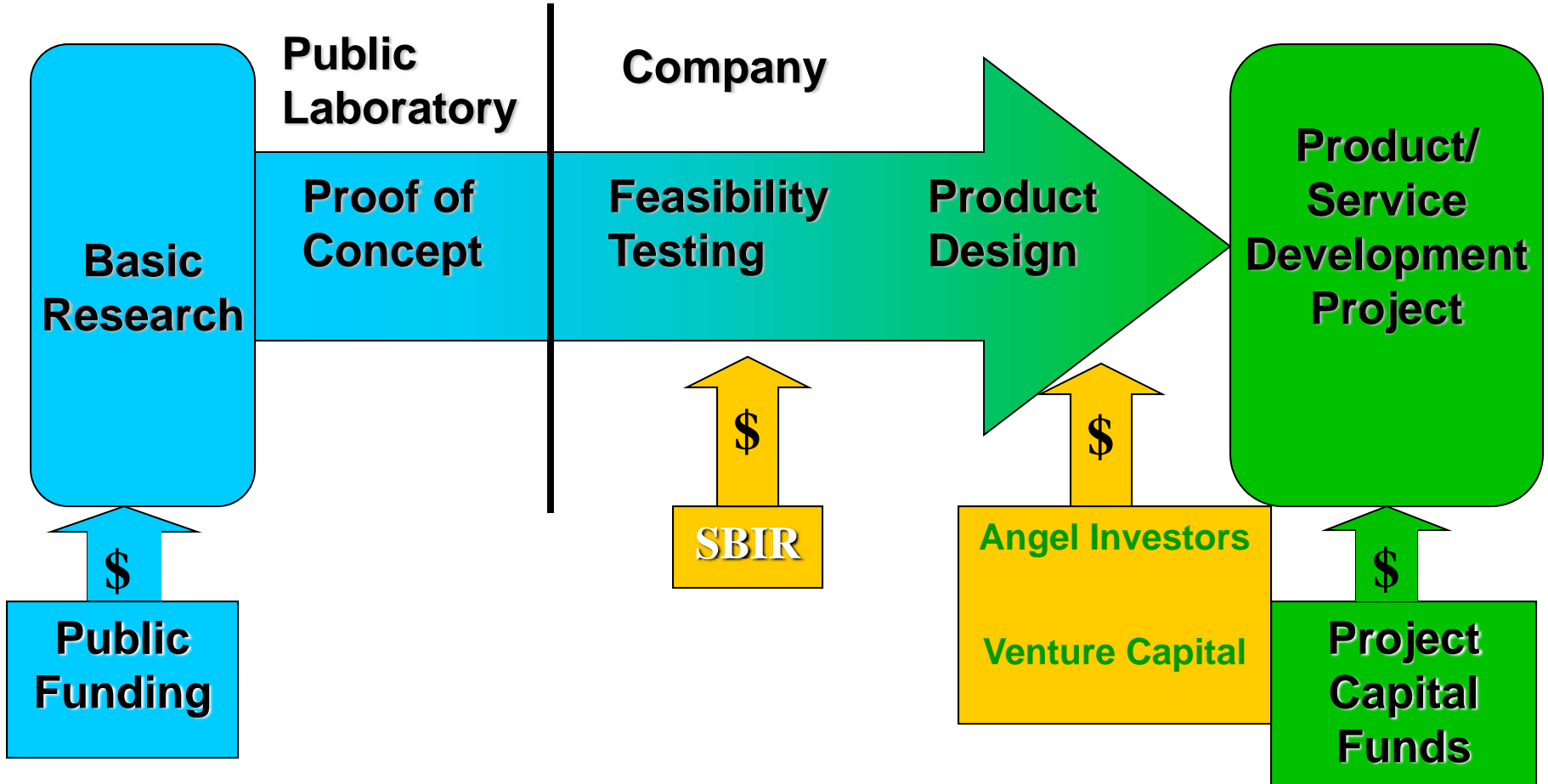
## *Technology Transfer Projects*

- Focused collaboration
  - technology development
  - public lab or incubator and a private company
- TEDCO program initiatives defray a portion of the development costs
- Allow company and its technology to mature and find continuation funding



# TEDCO

Technology Development Corporation

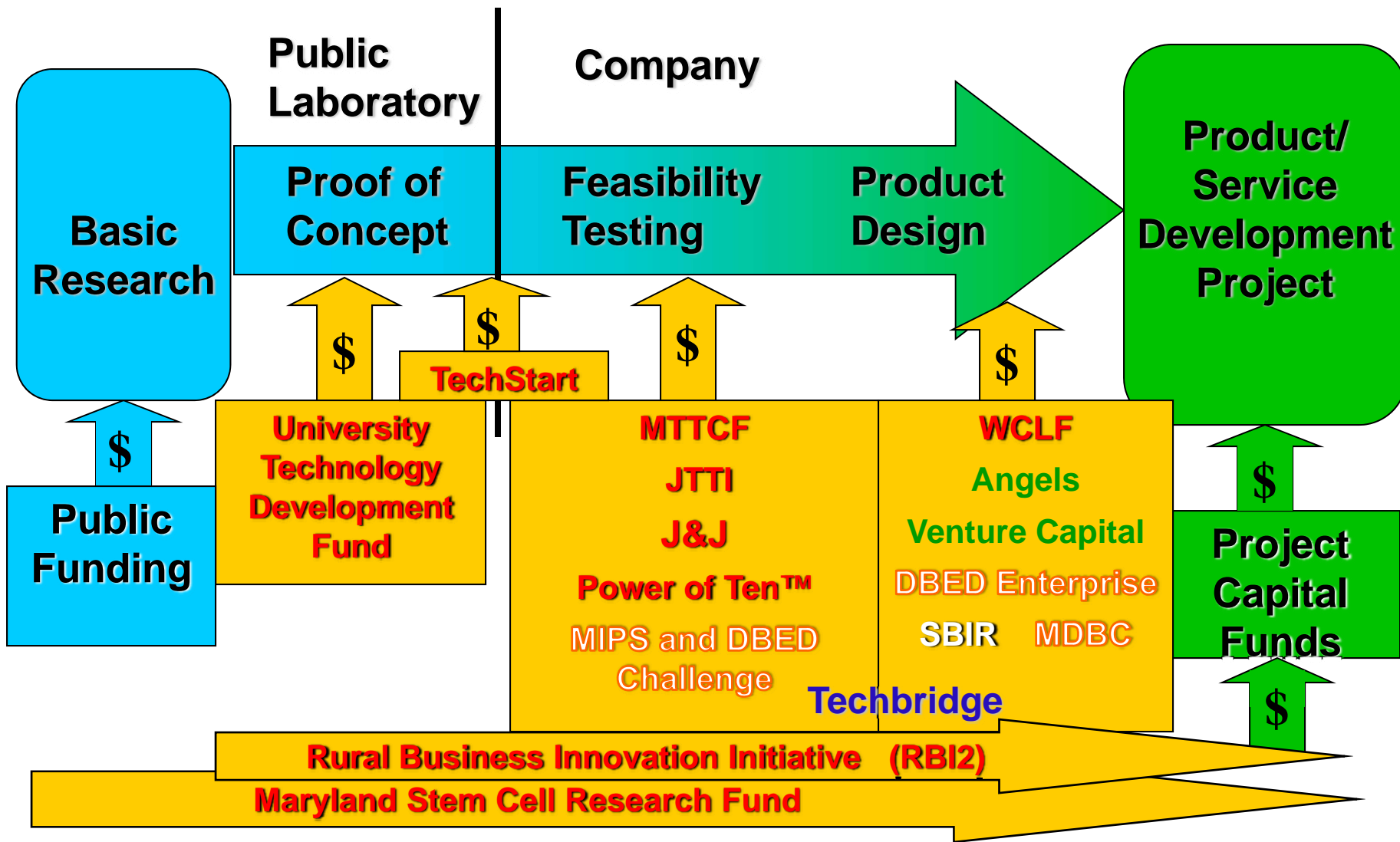


Funding Opportunities Outside Maryland

TEDCO's depiction of the Valley of Death

# Maryland **TEDCO**

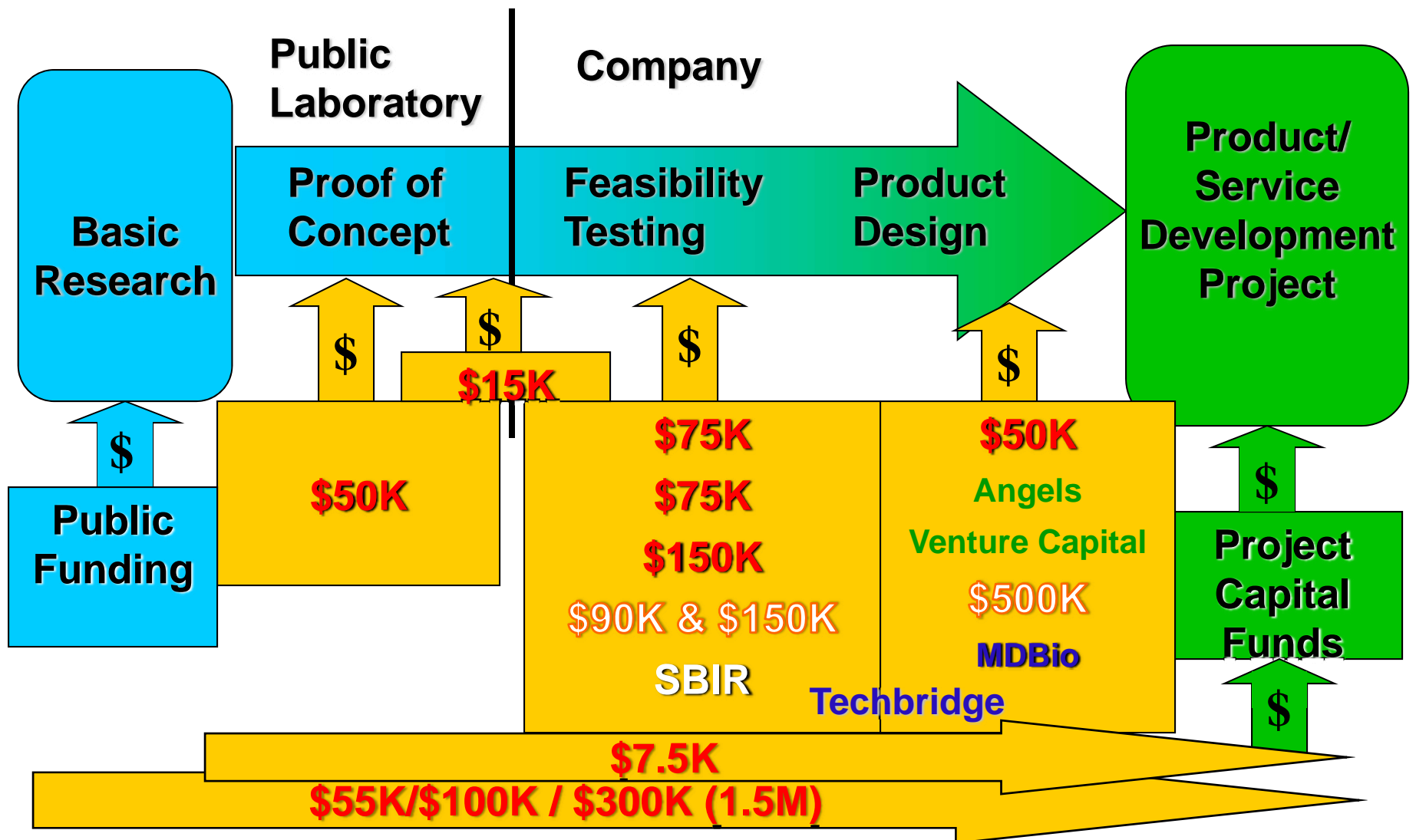
Technology > Development > Corporation





# TEDCO

Technology Development Corporation



## *Maryland Technology Transfer and Commercialization Fund (MTTCF)*

- Facilitate the transfer and commercialization of technology created at Maryland Academic Institutions, the Federal Laboratories and Maryland technology incubator companies
  - Project must involve significant collaboration
- Maximum award amount is \$75,000.
  - Reimbursable award
  - Requires a 50% company match

## *MTTCF Success Criteria*

- ❊ Achieving technical/budget/schedule milestones
- ❊ Finding continuation funding
  - ❑ 150 projects completed  
(as of 9/1/2010); 185 projects funded; 52% rate.
  - ❑ \$9.3M in TEDCO support
  - ❑ 394.8M in continuation funding
  - ❑ **\$42.4:1 leverage**
  - ❑ Funds were raised from Angel, VC, SBIR, ATP, State, Debt Capital, Fed Contracts, Strategic Partners, etc.

## *MTTCF Eligibility*

- Recipient must be Maryland business
  - Fewer than 16 employees OR
  - Academic/Fed lab spin-out less than 5 years prior to proposal
- Recipient must be early stage
  - No revenue OR
    - Revenue = commercial product sales/services
  - No venture investment

## *Eligible Collaborators*

- ✚ Any research university or college in Maryland
- ✚ Federal research labs covered by TEDCO agreements
- ✚ All NASA Centers
- ✚ All qualified incubators in the state

## *Application Process*

- Proposal submitted to “TEDCO FUNDS”
  - Proposal guidelines (New)
  - Request a New User account for company Authorized Official
  - Submission deadline 1<sup>st</sup> of each month
- Review process requires two months
- A formal closing (within 90 days)



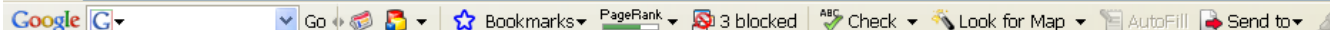
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Maryland Technology Development Corporation (TEDCO) - Microsoft Internet Explorer

File Edit View Favorites Tools Help



Address http://www.marylandtedco.org/



Site Map | Directions | Keep in Touch with TEDCO

TEDCO Programs

Funding Opportunities

- Rural & Entrepreneurial Business Assistance
- Federal Lab Opportunities
- Business Incubation

Calendar of Events

Press Room

Technology Resources

Publications & Studies

Broadband in Rural Maryland

About TEDCO

- Who is TEDCO
- Board of Directors
- Staff

Contact Us



paving: The Future

What's New

TEDCO HAS MOVED! New Address: 5565 Sterrett Place Suite 214, Columbia, MD 21044

John M. Wasilisin Chosen as TEDCO Deputy Executive Director

TEDCO Announces First Companies to Benefit from J&J Partnership

Maryland Stem Cell Info

SEARCH: [input] GO

TEDCO... Bringing Innovation to Maryland.

Maryland tops the nation in research and development spending and is improving in commercializing research and development breakthroughs. Entrepreneur Magazine ranked TEDCO #1 nationally for the largest number of investments in start-up/seed or early stage companies for the third consecutive year. TEDCO is bringing innovations from universities and federal labs into the State's economy by facilitating the transfer of technology to the private sector and by providing emerging technology companies and university researchers with vital seed funding and specialized technical assistance.

QUICK Links

- TEDCO Funds - Apply Now!
- TEDCO Project Portfolio
- SBIR Winners in Maryland

ALL HAZARDS CONSORTIUM

www.marylandtedco.org

## *Proposal Outline*

- ⊕ Narrative pages
- ⊕ Commercialization plan
- ⊕ Project technical proposal
- ⊕ Downstream funding plan
- ⊕ Explanation of the collaboration
- ⊕ Company staff and financial information
- ⊕ Project Budget

## *Narrative Pages*

- ⊕ Application Program Information
- ⊕ Referral Source
- ⊕ Patents
- ⊕ Technology to be Developed
- ⊕ Collaborative Relationship
- ⊕ Statement of Economic Impact
- ⊕ Project Description
- ⊕ Full Proposal, Mark **Company Proprietary!**

## *Commercialization Plan*

- Overview from current technology to marketable products/services
- Target market
  - Products/services to be developed for market
  - Who will buy the product/service
  - How you will capture a % of this market
  - Anticipated price
  - Analysis of competition
  - Development plan for products/services



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## Competitive Comparison

	New Co	BlueCool (Webasto)	Kubota (Carrier)	NITE (Bergstrom)
Technology Type	Solid Absorption	Therma Gel	Generator	Battery
Price per unit	\$4,000	\$5,000	\$7-9,000	\$5,472
BTU/Hr	8,000	1,700	10,000	3,000
Hours of Continuous Operation	40 hrs	10 hrs	nonstop	12 hrs
Weight in lbs	275	326	460	372
HFC Free	✓	X	X	X
Environmental Friendly, Renewable Energy Based Technology	✓	X	X	X
No Compressor = Low Warranty	✓	X	X	X

## *Project Technical Plan*

- ❁ Technical explanation of product/service
- ❁ Project details
  - ❑ If possible, a drawing or diagram
  - ❑ Description of work to be done
  - ❑ Specific milestones and success criteria
  - ❑ Staffing and budget with justification
  - ❑ Enough detail to conduct a technical review

## *Downstream Funding Plan*

- Alternative sources for continuation funding
  - SBIR, MIPS, DBED Challenge/Enterprise, Angel/Venture Investors, Strategic Partners, Customers, ...
- Linked to key goal of seeding future development

## *Explanation of Collaboration*

- ❖ Specify the public laboratory or incubator
  - ❑ Must have a significant role in project
    - Transfer of lab technology
    - Collaborative development
    - Product testing
    - Business support
- ❖ Collaboration must be formalized in a written agreement

## *Staff and Financial Information*

- Qualifications of key staff
  - Include qualifications of key public lab staff
- Financial information
  - Historical financials if applicable
  - 3-5 year pro forma statement
  - List of key assumptions

## *Projected Financials*

Projected Financials	Year 1 2011	Year 2 2012	Year 3 2013	Year 5 2016	Year 10 2021
Volumes ('000)	0.0	1.0 *	4.5	12.0	48.8
Sales (\$ '000)	4	3,000	13,500	36,000	146,484
Gross Margin (%)	50%	27%	36%	37%	37%
EBITDA (\$ '000)	(1,591)	(469)	3,025	9,407	38,277

\* Only assumes US Volumes for COMPANY, does not include Canada, Mexico, Europe and Australia.

## *Budget Page*

- Description must contain details (e.g.: rates used to calculate salary, specific materials being purchased, etc.)
- Minimum of 80% of total amount requesting has to be towards R&D
- Company match: must be minimum of 50% of total amount requested

## *Proposal Review*

- ❖ Outside commercialization review  
(with NDA)
- ❖ Outside technical review  
(with NDA)
- ❖ Site Visit
- ❖ Advisory Review Team

## *Proposal Review Issues*

- ⊕ Issues identified during initial review will be communicated to applicant
- ⊕ Responses will be taken into account to develop a final recommendation

## *Award Process*

- TEDCO President makes final decision
- Company key documents for closing review
  - Bylaws, Corporate Resolution and Financial Statement, rent agreement with incubator
  - Collaborative agreement finalized
  - Attachments to agreement
  - SDAT Registration

## *Investment Agreement Terms*

- Reimbursement of expenses
  - Monthly with project report and invoice
  - Final payment requires final project report and Closeout Site Visit
- Annual reporting of economic impact
- Corporate covenants
  - Section 11 of agreement
  - Covenants and revenue reporting expire with the end of the repayment obligation

## *Reporting Requirements*

- Project status reports
  - Monthly during project
  - Final Project Report / Site Visit / Final Payment
- Quarterly Revenue Reports (MTTCF)
  - Calendar quarters beginning with closing
  - Annual Financial in April
  - Financial reporting ends when payback is complete (MTTCF)
- Annual Economic Impact Reports

## *MTTCF Repayment Obligation*

- ⊕ Repayment begins 12 months from completion of project
- ⊕ Maximum repayment amount is 2x total award
- ⊕ Quarterly repayment obligations the lesser of
  - ▣ 3% of gross revenue
  - ▣ Repayment cap/year of 40% of total award
  - ▣ Early repayment options

## *Repayment Term*

- ⊕ Beginning one year after project, repayment continues for five years unless
  - ⊕ Awardee buys down the obligation at a reduced multiple before the end of the repayment period

## *Early Repayment*

- At any point, early payoff may be made by paying the current multiple of the award amount
- Multiple is 1.0 for two years after project completion
- Multiple increases each year thereafter

## *Johnson & Johnson Joint Investment Program*

- ⊕ Transformational medical technology
- ⊕ Interests of *J&J*
- ⊕ Maximum award is \$150,000
  - ▣ MTTCF process
  - ▣ Reimbursable award, TEDCO Agreement



*For further MTTCF information  
contact*

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## *Joint Technology Transfer*

### *Initiative (JTII)*

- ⊕ Technology Transfer or Transition to meet the needs of DHS and USAMRMC
- ⊕ Maximum award is \$75,000
  - ⊞ Executive Panel Decision
  - ⊞ Grant, TEDCO Agreement



*For further JTTI information contact*

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## *University Technology*

## *Development Fund (UTDF)*

- Supports pre-commercial research on university technology for commercialization
- All institutions of higher education in Maryland are eligible
- University faculty or staff apply in cooperation with the technology licensing office
- Maximum award: \$50,000

## *TechStart Program*

- Increase the number of university start-up companies
- All university labs in the State are eligible
- Team - experienced entrepreneur, the inventor, and a technology transfer manager
- Funding up to \$15,000 for commercialization analysis
  - (IP, market, competition, business model)



*For further UTDF or Tech Start  
information contact*

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## *Rural Business Innovation Initiative (RBI<sup>2</sup>)*

- To assist small technology oriented companies in obtaining critical assistance to move their companies to the next stage at no cost to the company
- Create economic development by strengthening existing and emerging companies in rural regions of Maryland
- To build a technology entrepreneurial community in the rural areas

## *RBI<sup>2</sup> Assistance*

- Business assistance (examples)
  - business model or strategy
  - market strategy/analysis and competitive analysis
  - Funding opportunities and introductions
  - financial analysis
  - Business plan and grant review
- Technology assistance (examples)
  - intellectual property
  - prototype development
  - manufacturing problem solving
  - green assessments, etc.
- Amount of assistance per company is up to \$7,500

## *RBI<sup>2</sup> Criteria*

- Companies must be involved in developing new technologies or utilizing technology to create new businesses
- Companies must have less than 12 employees
- Annual revenues of less than \$1 million/year
- Age of company not a factor



**Maryland TEDCO**  
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## *Working Capital Loan Fund*

- Working capital loans - \$15,000-\$50,000
- Terms typically 3 - 5 years, no less than 6 months
- Interest rates at or below market rate
- Targets is incubation stage companies
- Eligible companies
  - located in Maryland
  - early stage
  - technology related
  - beyond development

## *Working Capital Loan Fund*

- ⊕ Applications received by the 1<sup>st</sup>
- ⊕ Due diligence by staff
- ⊕ Site visit
- ⊕ Review completed within 30 days
- ⊕ Applications at [www.marylandtedco.org](http://www.marylandtedco.org)



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## *Maryland Stem Cell Research Fund*

- The Maryland Stem Cell Research Fund was established by the Maryland General Assembly under the Maryland Stem Cell Research Act of 2006 to promote state-funded human stem cell research and medical treatments through grants to public and private entities in the state.
- There are three types of grants:
  - Investigator-Initiated Grant up to \$600k/project-up to three years
  - Exploratory Grant up to \$100K/year for two years
  - Funding up to \$55K/yr for post-doctoral fellows who wish to conduct basic and/or translational research on human stem cells in the State of Maryland.
- Information on a Pilot Program for collaborative research with California is now available online.

## *Maryland Stem Cell Research Fund*

- The fifth round of funding from the Maryland Stem Cell Research Fund, \$10.4 million in FY 2011
- To date over \$68.4 million and 180 research grants have been funded
- Mandatory Letter of intent: will be on November 15, 2010
- Collaboration with industry is preferred
- Application submission: will be January 13, 2011
- For up to date information: [www.mscref.org](http://www.mscref.org)



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Research Fund information contact*

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## *Entrepreneurial Assistance*

- Achieving The Commercialization of Technology in Ventures Through Applied Training for Entrepreneurs (ACTiVATE)
- The Maryland Rural Business Innovation Initiative (RBI)
- The New Markets Growth Fund (NMGF)
- Maryland Biotechnology Center
- TEDCO Portfolio Workshops

## *Benefits of TEDCO Funding*

- Access to business and technical assistance
- Access to Venture Capital, angels, and strategic partners (e.g. *Johnson & Johnson, Boeing, Power of Ten™ events*)
- Publicity through TEDCO press releases
- Recognition and reputation of state programs
- Workshops for TEDCO funded companies only
  - Meet one on one with experts
  - Network with other companies

**BIOENTREPRENEUR & BIOTECHNOLOGY  
DEVELOPMENT PROGRAMS**

**Helping Maryland's entrepreneurial talent develop competitive business strategies**

- Access to informational resources at Center's Baltimore and Rockville offices:
  - ✓ Business plan development
  - ✓ Capital formation strategy
  - ✓ Market & competitor intelligence
  - ✓ Science & industry trends
  - ✓ IP & trademark protection
  - ✓ Facilities & incubator space
  - ✓ Public programs of assistance
  - ✓ Translational Research & Technology Commercialization Grants
- Resources currently available include ***Datamonitor, MedTRACK, and MedTRACK Venture Finance, Hoovers, LexisNexis*** (free of charge at Center's Resource Room)
- Under consideration and review: Frost & Sullivan, Deloitte's Recap, and Discovery Logic's Synapse with ScienceWire





Thanks

[www.marylandtedco.org](http://www.marylandtedco.org)