



Agenda Item 2

Center for Maryland Advanced Ventures and USM Early Stage Investment Fund Update



BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION
INFORMATION OR DISCUSSION

TOPIC: Center for Maryland Advanced Ventures and USM Early Stage Investment Fund Update (information item)

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: September 8, 2016

SUMMARY: The University of Maryland Strategic Partnership Act of 2016 creates the Center for Maryland Advanced Ventures (CMAV), located on the UMB campus. The Committee will be briefed on the provisional goals and funding for CMAV as well as ongoing efforts to examine best practices around the country.

In addition, the Committee will be updated on investment details for the recently approved USM Early Stage Investment fund, including co-investment considerations. Finally, the Committee will be apprised of existing investments made through UM Ventures to early stage companies and the impact of these investments in terms of private co-investments and jobs.

ALTERNATIVE(S): This item is for information purposes.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR'S RECOMMENDATION: This item is for information purposes.

COMMITTEE RECOMMENDATION:

DATE:

BOARD ACTION:

DATE:

SUBMITTED BY: Tom Sadowski / Suresh Balakrishnan (301) 445-2783



Committee on Economic Development and Technology Commercialization

Center for Maryland Advanced
Ventures and Early Stage Investment
Fund Update

September 8, 2016



- Center for Maryland Advanced Ventures
- Early Stage Investment Fund

University of Maryland Strategic Partnership Act of 2016 creates the Center for Maryland Advanced Ventures (CMAV)

- Located on UMB campus
- Reports jointly to presidents of UMB and UMCP
- Funding: At least \$4 million per year beginning in FY18 (July 1, 2017)

The legislation also creates a separate University of Maryland Center for Economic and Entrepreneurship Development (UMCEED) at UMCP which receives funding of \$2 million in FY18, \$4 million in FY19, and \$6 million per year thereafter. UMCEED also reports jointly to presidents of UMB and UMCP.

Legislation: Funding/Goals

➤ \$3 million

1. Pursue grant funding for UMB & UMCP, including inter-disciplinary funding
2. Expand tech transfer at UMB & UMCP
3. Provide services to any public institution of higher education that requests the services. CMAV may charge a reasonable fee for services.

➤ \$1 million

4. Encourage the development and location of University created or sponsored technology companies in Baltimore City

Consulting with academic and business leaders and examining best practices around the country. Initial thoughts:

- Integrate into UM Ventures
- Allocate the majority of funding to flexible grant, loan, and investment programs, rather than fixed costs
- Launch in FY17

Initial thoughts

Goal 1: Pursue grant funding

- Focus on research collaborations with industry, particularly Maryland-based businesses

Goal 2: Tech transfer – focus on:

- Most promising inventions – top 10%
- Inter-disciplinary inventions across UMB and UMCP
 - Medical Devices
 - Health Informatics

Initial thoughts

Goal 3: Offer services to all public institutions of higher education

- Early Stage Investment Fund
- Work with Vice Chancellor for Economic Development to assess needs of other USM institutions

Goal 4: Develop and locate University created companies in Baltimore City

- Local jobs
- Innovation Districts in Baltimore City
- USM partnerships with Baltimore City businesses
- Similar initiative for College Park?

UM Ventures Investments



- \$400K investments/loans
- \$15 million in private co-investments
- 25 jobs

Early Stage Investment Fund

- Created by USM Board of Regents in June 2016
- \$10 million USM investment
 - \$2 million each in FY17 and FY18
 - \$3 million each in FY19 and FY20
- \$15 million in co-investments by private investors

Eligible companies

- ESIF will invest in companies:
 - Based on USM-owned intellectual property
 - Founded by USM faculty, students, or recent graduates
 - Located in USM incubators, research parks, or RISE Zones
- Consider investments from all 12 USM institutions
- All companies must be located in Maryland

Leadership/Management

- Internal Advisory Board
- External Investment Board
- Staffed by UM Ventures/Center for Maryland Advanced Ventures
- UMV/CMAV will provide on-going assistance to portfolio companies
 - Business assistance and research collaborations with USM institutions
 - Help in accessing State, Federal, and foundation resources
 - Connections with private companies, including equity investors

Seed Investments

- Approximately 10% of the fund will be allocated to Seed Investments in start-ups founded by students and recent graduates
- Individual investments will be between \$15,000 and \$50,000.
- The Dingman Center for Entrepreneurship will take the lead
 - Screen at least 20 pre-qualified USM companies per year
 - Give investment recommendations to External Investment Board
 - Preference given to companies that have participated in incubators, business competitions, ICORPS, or other programs

Venture Investments

- Approximately 90% of the fund investment will be allocated to investments in start-ups with experienced management.
- Individual investments will be between \$50,000 and \$500,000
- UMV/CMAV will hire at least two full-time investment managers
 - Screen at least 20 pre-qualified USM companies per year
 - Provide External Investment Board with investment recommendations
 - Manage investment portfolio

Co-investments

- UMV/CMAV will match the USM \$10 million investment with a minimum of \$15 million co-investments in ESIF portfolio companies
- Co-investors will include:
 - Venture Capital Funds
 - Angel Investors
 - Foundations
 - Maryland Tedco
- Dingman Center Angels
- Enable donors to USM to allocate donations to co-investing in the ESIF, with proceeds being re-invested in the ESIF.

University of Maryland Strategic Partnership Act of 2016

Center for Maryland Advanced Ventures

- (A) (1) THERE IS A CENTER FOR MARYLAND ADVANCED VENTURES AT THE UNIVERSITY OF MARYLAND.

(2) THE CENTER SHALL BE LOCATED ON THE UNIVERSITY OF MARYLAND, BALTIMORE CAMPUS IN BALTIMORE CITY.
- (B) THE CENTER SHALL:
 - (1) PURSUE GRANT FUNDING FOR THE UNIVERSITY OF MARYLAND, INCLUDING INTERDISCIPLINARY GRANT FUNDING;
 - (2) (I) DEVELOP AND IMPLEMENT GUIDELINES FOR THE TRANSFER OF TECHNOLOGY DEVELOPED BY THE UNIVERSITY OF MARYLAND TO THE PRIVATE SECTOR; AND

(II) INCLUDE IN THE GUIDELINES A PROCESS TO IDENTIFY RESEARCH PROJECTS OCCURRING AT THE UNIVERSITY OF MARYLAND THAT MAY BE VIABLE FOR COMMERCIALIZATION; AND
 - (3) FACILITATE THE TRANSFER OF TECHNOLOGY FROM THE UNIVERSITY OF MARYLAND TO COMMERCIAL INDUSTRIES BY:
 - (I) ASSESSING THE VIABILITY AND VALUE OF THE TECHNOLOGY;
 - (II) DEFINING AND EXPLOITING POTENTIAL MARKETS FOR THE TECHNOLOGY;
 - (III) IDENTIFYING FUNDING SOURCES TO SUPPORT THE DEVELOPMENT OF THE TECHNOLOGY;
 - (IV) DEVELOPING COMMERCIALIZATION STRATEGIES; AND
 - (V) ASSESSING INTELLECTUAL PROPERTY ISSUES, INCLUDING LICENSING AND PATENTS.
- (C) (1) THE CENTER ALSO SHALL PROVIDE THE SERVICES IDENTIFIED UNDER SUBSECTION (B) OF THIS SECTION TO ANY PUBLIC INSTITUTION OF HIGHER EDUCATION THAT REQUESTS THE SERVICES.

(2) SUBJECT TO THE APPROVAL OF THE PRESIDENTS, THE CENTER MAY ASSESS A REASONABLE FEE FOR PROVIDING SERVICES TO ANY PUBLIC INSTITUTION OF HIGHER EDUCATION OTHER THAN THE UNIVERSITY OF MARYLAND.
- (D) (1) THE PRESIDENTS SHALL APPOINT AN EXECUTIVE DIRECTOR OF THE CENTER.

(2) THE EXECUTIVE DIRECTOR SHALL:
 - (I) ENSURE THAT THE PROVISIONS OF THIS SECTION ARE CARRIED OUT;

(II) DEVELOP A PLAN TO APPROPRIATELY STAFF THE CENTER IN ORDER TO EFFECTIVELY CARRY OUT THE DUTIES OF THE CENTER;

(III) DEVELOP A WORKING RELATIONSHIP WITH THE SECRETARY OF COMMERCE AND THE EXECUTIVE DIRECTOR OF THE MARYLAND TECHNOLOGY DEVELOPMENT CORPORATION; AND

(IV) ANNUALLY REPORT TO THE PRESIDENTS:

1. THE NUMBER OF TECHNOLOGY TRANSFER TRANSACTIONS OR PROJECTS FOR WHICH THE CENTER HAS PROVIDED ASSISTANCE;

2. THE AMOUNT AND SOURCE OF FUNDS THE CENTER HAS IDENTIFIED TO ASSIST IN THE DEVELOPMENT OF TECHNOLOGIES;

3. THE PUBLIC INSTITUTIONS OF HIGHER EDUCATION FOR WHICH THE CENTER HAS PROVIDED ASSISTANCE;

4. THE COMMERCIAL VALUE OF TECHNOLOGY THAT WAS TRANSFERRED TO THE COMMERCIAL INDUSTRY;

5. THE ESTIMATED NUMBER OF NEW JOBS CREATED AS A RESULT OF THE CENTER; AND

6. ANY RECOMMENDATIONS FOR IMPROVING THE OVERALL EFFECTIVENESS OF TRANSFERRING TECHNOLOGY THAT IS DEVELOPED BY THE UNIVERSITY OF MARYLAND.

(E) THE MARYLAND TECHNOLOGY DEVELOPMENT CORPORATION MAY ADVISE THE EXECUTIVE DIRECTOR OF THE CENTER ON THE DEVELOPMENT OF THE CENTER.

(F) (1) FOR EACH OF FISCAL YEARS 2018 THROUGH 2022 BEGINNING IN FISCAL YEAR 2018 AND IN EACH FISCAL YEAR THEREAFTER, THE GOVERNOR SHALL APPROPRIATE AT LEAST \$3,000,000 IN GENERAL FUNDS TO THE CENTER.

(2) FOR EACH OF FISCAL YEARS 2018 THROUGH 2022 BEGINNING IN FISCAL YEAR 2018 AND IN EACH FISCAL YEAR THEREAFTER, THE GOVERNOR SHALL APPROPRIATE AT LEAST \$1,000,000 IN GENERAL FUNDS TO THE CENTER TO BE USED TO ENCOURAGE THE DEVELOPMENT AND LOCATION OF UNIVERSITY CREATED OR SPONSORED TECHNOLOGY COMPANIES IN BALTIMORE CITY.