



Agenda Item 5

**Empowering the State's
Economy – USM
Partnering with the State
on an Investment Program**



BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION
INFORMATION OR DISCUSSION

TOPIC: Empowering the State's Economy -- USM Partnering with the State on an Investment Fund Program (information item)

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: September 10, 2015

SUMMARY: The USM and the State have recently partnered on several economic development and technology commercialization initiatives, including the Maryland Innovation Initiative, E-Innovation Initiative, and RISE Zone Program. The USM is now exploring the possibility of extending the partnership to a venture fund program. The Maryland Innovation Venture Capital fund would be a seed and early-stage venture capital fund with \$50 million (10 million annually over 5 years) to support and attract new high-growth businesses. The objective is to provide critical funding to promote the commercialization of new technologies, incentivize economic growth, and encourage job creation across Maryland, and generate financial returns that would enable it to be an evergreen fund. This program would complement and boost the impact of existing economic development and technology commercialization collaborations with the State.

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: Joseph F. Vivona (301) 445-2783

Committee on Economic Development and Technology Commercialization

Empowering the State's Economy USM Partnering with the State on an Investment Fund Program

Current Major Collaborations with the State of Maryland

Maryland Innovation Initiative (MII) -- since FY13, UMB, UMBC and UMCP and their start-ups have won 74 awards totaling \$7.4 million.

Maryland E-Innovation Initiative Fund -- provides \$8.5 million in matching funds annually to recruit entrepreneurial faculty. UMB and UMCP each were awarded \$2.1 million in the first round, totaling \$4.2 million for the USM.

RISE Zone -- UMB, UMBC, and UMCP have applied for RISE Zones to spur economic development near their universities. The RISE Zone program provides enhanced property and income tax credits and accelerated depreciation schedules.

Examples of Investment Programs at other States and Universities

New York

- \$50 million venture capital fund for seed and early stage funding
- Emphasis on strategic industries such as life sciences/biotechnology and information technology

Ohio

- The Ohio Capital Fund has obtained \$150 million of commitments from private resources for investment in qualified venture capital funds
- These venture capital funds have committed to invest at least half of the Ohio Capital Fund monies in Ohio-based companies

Wisconsin

- \$75 million seed and early stage capital fund
- \$25 million from the state to be matched on a two-to-one basis with funding from private sources

University of Illinois -- IllinoisVENTURES

- More than \$65 million in investments to date in 75 companies
- Funded by the University of Illinois
- Over \$600 million in third-party capital raised by IllinoisVENTURES-backed companies

University of California Ventures

- Started in September 2014
- \$250 million investment fund is seeded from the \$9 billion UC endowment
- Managed by an independent team of experienced investors

State of Maryland Innovation Venture Capital Fund

The Maryland Innovation Venture Capital fund would be a seed and early-stage venture capital fund with \$50 million (10 million annually over 5 years) to support and attract new high-growth businesses. The objective is to provide critical funding to promote the commercialization of new technologies, incentivize economic growth, encourage job creation across Maryland, and generate financial returns that would enable it to be an evergreen fund. This program would complement and boost the impact of existing economic development and technology commercialization collaborations with the State.

Maryland Venture Fund Highlights:

- The Maryland Fund would invest directly in seed and/or early-stage companies with an emphasis on strategic industries that align with the state's interests with investments ranging from \$100,000 to as much as \$5 million. All direct investments by the fund would require a match to be negotiated at the time of investment.
- The fund might also invest through a fund-of-funds structure in the commercialization of new technologies emerging from universities and research labs across Maryland with individual investments of up to \$100,000. All these technology commercialization investments by the fund would require a match at the time of investment.

Company Eligibility Requirements:

Seed and early-stage small businesses may be eligible for investment funds if they are:

- Located in, or agree in writing to be located in Maryland and have the potential to generate additional economic activity in the State, and,
- In technology fields that align with the state's interests and are achieving, or have the potential to achieve, technological advances and innovation.

Maryland Venture Fund's Industry Investment Areas:

Biotechnology, Medical Devices, Bio Informatics, Infectious Diseases and Vaccine Development, Healthcare Services, Cancer Immunomodulators, Energy Storage, Cyber Security, Autonomous System/UAS, Advanced Manufacturing, Nanotechnology, Quantum Computing, and Virtual Reality.

Examples of Opportunities:

- FlexEI – a UMCP start-up developing custom battery solutions that is growing to 50 jobs in College Park.
- Gliknik – a UMB start-up developing drugs to treat autoimmune diseases and cancer. Gliknik has received an upfront payment of \$25 million from Pfizer to develop one of its drug candidates.

- Harpoon Medical – a UMB start-up that is conducting clinical trials on a surgical device.
- Techno-Sciences – a UMCP start-up that is a leading maker of satellite ground stations, emergency response center systems, and coastal surveillance tools was acquired by the McMurdo Group in 2014.

Existing USM Investment Infrastructure:

- USM Investment Policy -- enables USM institutions to directly invest in their start-up companies that locate in Maryland. In FY15, UMB invested \$200,000 in two of its startups in Baltimore City, helping them to raise an additional \$5.2 million. UMCP loaned \$200,000 to three of its startups in College Park.
- Commercial Ventures Advisory Board (CVAB) -- serves as the external advisory board, required under the USM Investment Policy, to perform due diligence necessary for requested investments, and to make the selection of appropriate investments. The board members assigned to a specific investment will be chosen based on their expertise. As examples, some of the experts on the CVAB include:

Louis Cantolupo has worked in the biotechnology industry for 20 years as a founder of a contract research organization and in business development for GenVec, Omnia Biologics, Crucell Holland, and Valneva.

Darryl Carter, MD, co-founder and Vice President of Research of Nora Therapeutics, a drug development company.

Harry Geller has started, owned, and managed fourteen multi-million dollar businesses. Four of his companies have been named to the INC 500 list of fastest growing companies.

Rahul Singhvi, SCD, Chief Operating Officer, Takeda Vaccines, Inc and former President and CEO of Novavax, Inc.

Robert Storey, Executive in Residence for VIC Technology Venture Development and former President and CEO of Vapotherm and executive at Exxon.

- Due Diligence Process -- The CVAB due diligence review involves assessing several factors, including the management team, the business plan, market analysis and product profile, external validation of the underlying technology, and others.

Policy No: VIII - 14.00

Policy on Investments and Loans to Maryland-based Businesses That License University Intellectual Property

(Approved by the USM Board of Regents on February 14, 2014)

General

Section 12-113 of the Education Article of Maryland allows the Board of Regents "to establish, invest in, finance, and operate business entities when the Board finds that doing so would further one or more goals of the University and is related to the mission of the University." That Section also refers to Section 15-107 of the Education Article which encourages the promotion of economic development of the State through commercial application of institution-owned intellectual property.

1. In order to better protect and administer University intellectual property and to enhance its commercialization, an institution may adopt a program to invest in or loan funds to businesses located in Maryland that are dependent on licensing the institution's technology. Investments will be used to acquire equity in the businesses. Loans may be convertible to equity.
2. Each institution must develop guidelines for making investments and loans, which shall be approved by the institution's President and provided to the USM Office. The institution's guidelines shall specify how income from the investments and loan repayments shall be applied and provide for the formation of a standing external advisory committee, consisting of non-USM members, to perform due diligence necessary for requested investments, and to make the selection of appropriate investments. The institution's guidelines shall take into consideration the requirements of the State Ethics law, Title 15 of the State Government Article.
3. The fund source for investments and loans must be approved by the Board of Regents, based on the recommendations of Committee on Economic Development and Technology Commercialization, the Chancellor, and the institution's President. Investments exceeding \$1 million must be approved by the Chancellor or the Chancellor's designee. In addition, investment income and loan repayments under the program shall not be considered as revenue from licenses of intellectual property.
4. The President of each institution making such investments or loans shall provide to the Chancellor an annual report on the guidelines, investments, loans, progress of technology commercialization by supported Maryland businesses, income from investments, and use of that income. The Chancellor shall report that information to the Board of Regents at least annually.
5. The annual report shall be in a format that will facilitate the annual reporting to the Governor and General Assembly required under Education Article section 12-113(d).