



**Board of Regents  
Committee on Economic Development and Technology Commercialization**

**June 9, 2022**

Virtual (public listen only access at 443-353-0686, Conference ID: 426 592 859)

Committee Members will be sent Zoom information

Materials can be found here: <https://www.usmd.edu/regents/agendas/>

Public Session Agenda

- (1) [Featured Startups: Silcs Bio and Early Charm’s Startup Studio Model, Featuring Other USM-Affiliated Startups](#) – Ken Malone, Founder and Chief Executive of Early Charm (Information Item)
- (2) [USM Early Capital Pilot: Fund Balance Allocation and Investment](#) – Lindsay Ryan, Interim Executive Director of Economic Development, USM (Action Item)
- (3) [USG 2.0: Economic Development and Job Performance](#) – Anne Khademian, Executive Director, Universities at Shady Grove (Information Item)



**BOARD OF REGENTS**

SUMMARY OF ITEM FOR  
INFORMATION

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**TOPIC:** Featured Startups: Silcs Bio and Early Charm’s Startup Studio Model, Featuring Other USM-Affiliated Startups

**COMMITTEE:** Economic Development and Technology Commercialization

**DATE OF COMMITTEE MEETING:** June 9, 2022

**SUMMARY:** Ken Malone of Early Charm will present information on Silcs Bio, which is a startup based on intellectual property from the University of Maryland, Baltimore. He will also describe how Early Charm operates under the model of a “startup studio”, which is facilitates the development of many startup companies in parallel. He will also provide information about several other USM-affiliated startups in the Early Charm portfolio.

**FISCAL IMPACT:** This item is for information purposes.

**CHANCELLOR’S RECOMMENDATION:** n/a

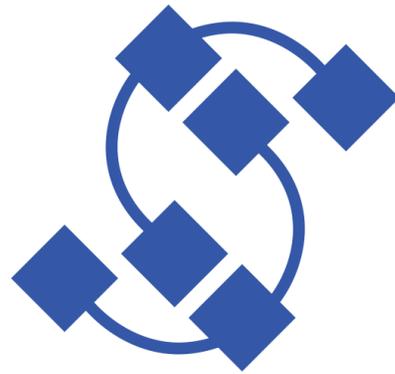
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COMMITTEE RECOMMENDATION: \_\_\_\_\_ DATE: \_\_\_\_\_

BOARD ACTION: \_\_\_\_\_ DATE: \_\_\_\_\_

SUBMITTED BY: Lindsay Ryan (410) 409-2236

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SILCSBIO

# USM Board of Regents

June 2022



# EarlyCharm

## Portfolio Companies Built on USM Licenses



## Portfolio Companies Funding Research at USM Institutions



Most institutional inventions sit on a shelf because of a false belief in a Valley of Death that must be crossed using venture capital.

We have forged a radical new path for commercializing science that avoids the Valley of Death and the need for venture capital.



The big challenge, often called the Valley of Death, is advancing university inventions into products in a capital efficient manner.



## Our model is far more capital efficient than traditional startups.

9 Business model is final and is scaling with growing recurring revenues that results in a profitable and sustainable business

8 Sales and metrics show business model holds and can scale

7 Product/Market fit and customers payment willingness shown

6 Full business model including pricing verified on customers

5 First version of revenue model including pricing hypotheses

4 First projections to show economic viability and market potential

3 Draft of business model in canvas

2 First possible business concept described

1 Hypothesizing on possible business concept

Venture  
Studio

  
**EarlyCharm**



# CREATE + OWN + OPERATE

ventures that convert science into profits



Drug Design

Science Team



Custom Materials

Science & Engineering Team



Blue Economy

Science & Tech Team



Eng. Products

Engineering & Tech Team

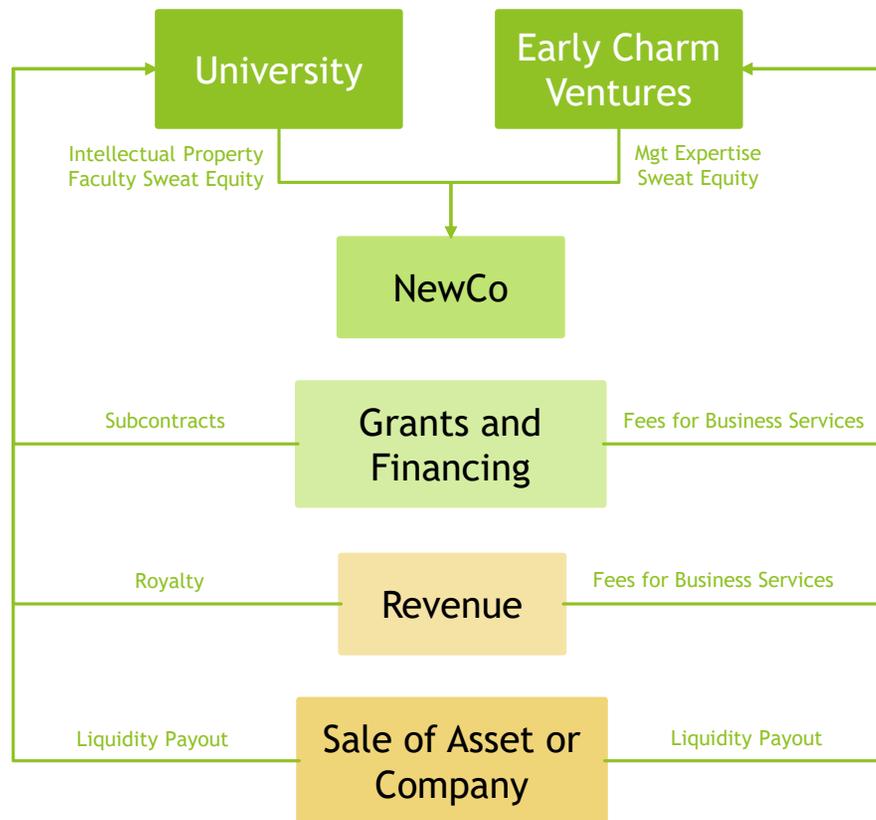


We are the management team, the operators and the entrepreneurs.

Business Team

- Back Office
- Grant Writing
- Sales
- Financing
- Network
- Market Research
- Facilities
- Tech Scouting
- Social Media/Web
- Management Systems
- Intellectual Property

# We don't write checks and just pop in for board meetings.



← Positive Operating Cash Flow for Early Charm prior to NewCo reaching revenue

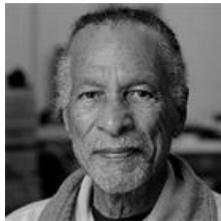
- Target:**
- Majority equity ownership
  - Governance control
  - Less than \$30k expenses before first third party money in
  - Recover costs in less than two years
  - After cost recovery, focus on maximizing portfolio equity value





**We show up to our labs, our production facilities and our offices every day to do all the heavy lifting in our portfolio companies.**

Ideally, we co-found ventures with the world's leading researchers who want to see their life's work transformed into products that impact people's lives.



**Dr. James West**  
Professor  
Electrical and Computer Engineering  
Johns Hopkins University



**Dr. Alex MacKerell**  
Professor  
Pharmacy  
U. of Maryland Baltimore



**Dr. Hadley Sikes**  
Assistant Professor  
Chemical Engineering  
Massachusetts Institute of Technology



**Dr. Erin Lavik**  
Professor  
Chemical, Biochemical and  
Environmental Engineering  
UMBC



**Dr. Robert Cammarata**  
Professor  
Materials Science  
Johns Hopkins University



**Dr. Yun-Hua Shih**  
Professor  
Physics  
UMBC



**Dr. Yu Chen**  
Associate Professor  
University of Massachusetts, Amherst



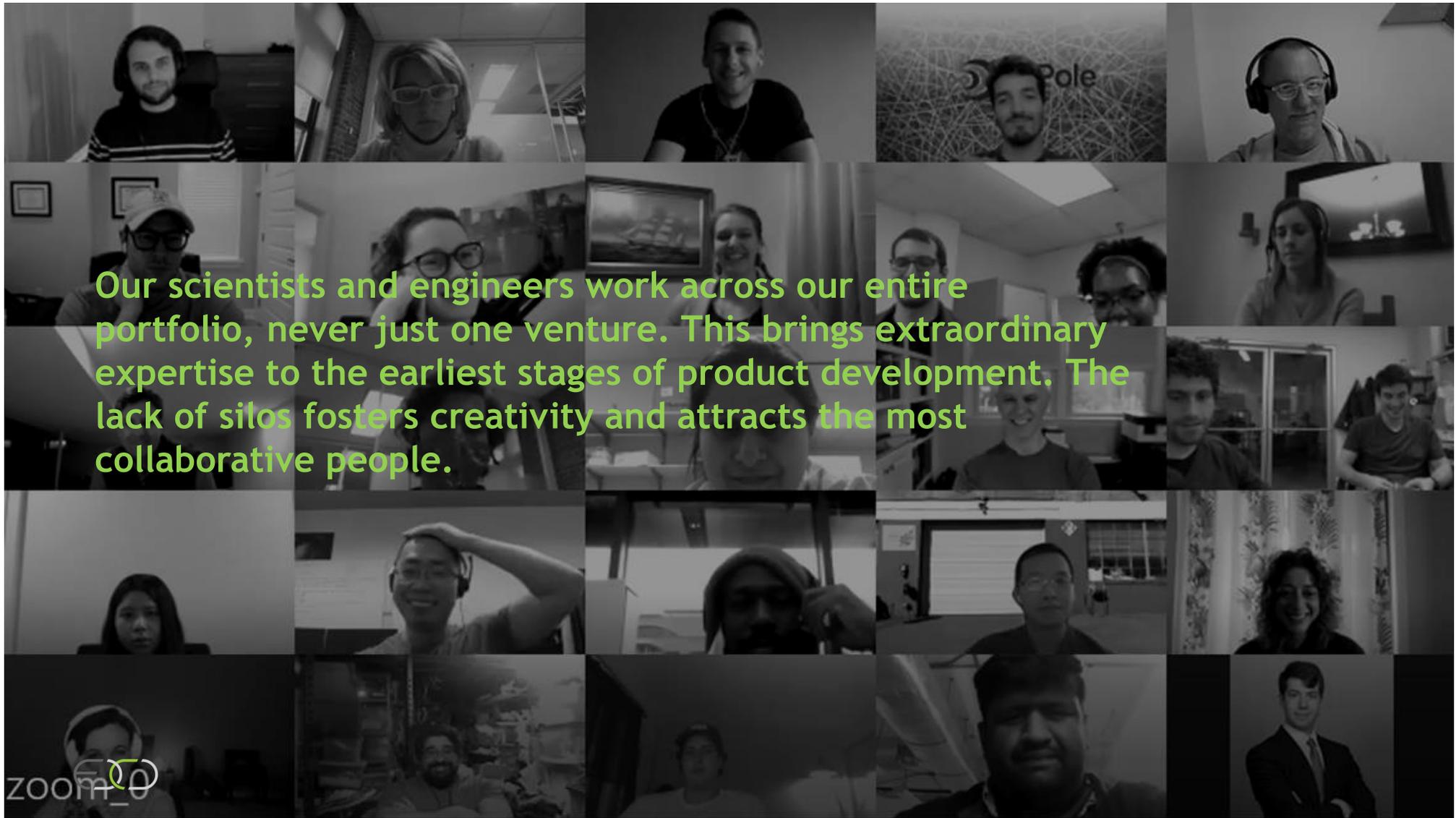
**Dr. Vikram Vakharia**  
Professor  
The Institute of Marine and  
Environmental Technology



**Dr. Anil D'Mello**  
Professor  
Pharmaceutical Sciences  
University of the Sciences in Philadelphia

Especially those researchers who want to continue their world class research, not run a company. All we ask of those researchers is to mentor our scientists in the specifics.







**Adam Van Dyke**  
Operations Officer



**Mark Juetten**  
Portfolio Development Officer



**Kristen Karlovich**  
Design



**Kelli Booth**  
Executive Officer



**Allie Stambaugh**  
Operations Manager



**Mary Beth Wickless**  
Planning Manager



**Ken Berlack**  
Marketing &  
Public Relations



**Tina Guvench**  
Budgeting



**Chris Ewing**  
Director of Sales and Marketing



**Colin Harmer**  
Sales



**Ken Malone**  
Executive Officer



**Elan Lowenstein**  
In-House Counsel



**Morgan Eichensehr**  
Financing Communications



**Kate Ossello**  
Sales

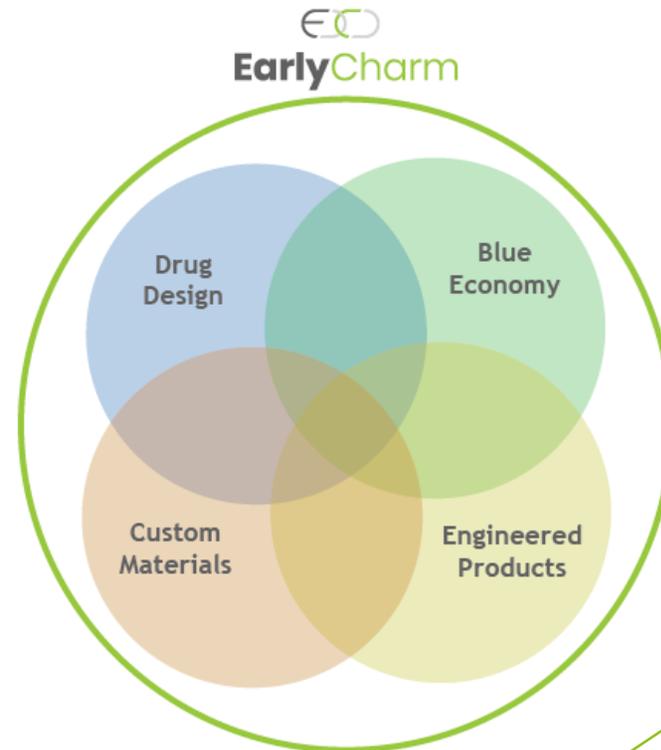
**Our sales & marketing team works across our portfolio enabling us to have the voice of customers heard early and often as we consider product development. Add in our experts in law, intellectual property, accounting, finance, licensing, purchasing and more to get the complete team to build a business.**



## Synergy with our existing portfolio companies is important to us.

Frequently our companies share common customers and common production tools and, most importantly, common human talent.

So, we look for opportunities that fit with our current capabilities in Drug Design, Blue Economy, Custom Materials and Engineered Products.

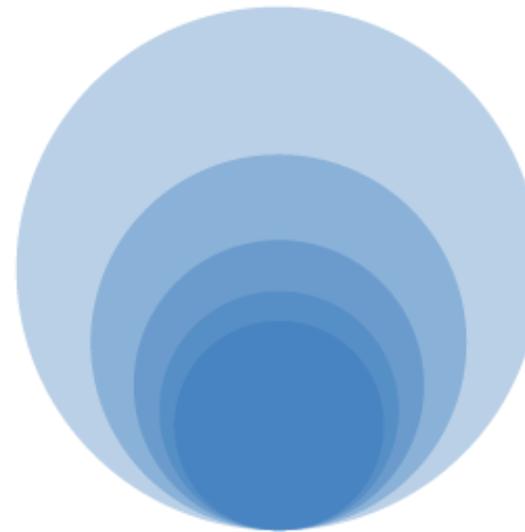


## The larger our team the faster we can grow.

Because synergy between our companies is so strong, the individual companies are seldom as valuable alone as they are a part of the whole.

Thus, we aren't focused on exit strategies and quick flips. We are focused on building sustainable businesses through profitable revenue and expanding opportunities by retaining our team.

While some organizations are focused on CapEx, we are focused on PeopleEx.



PeopleEx



# Products Overview

## ▶ Materials

- ▶ 3D printing materials
  - ▶ Net zero non-oxide ceramics
  - ▶ Oxide ceramics
  - ▶ Biologics
- ▶ Nanomaterials
  - ▶ Nanofibers
  - ▶ Nanowires
- ▶ Custom inks
  - ▶ Flame retardant
  - ▶ Conductive
  - ▶ Biologic
  - ▶ Cosmetics
- ▶ Control release
  - ▶ Insecticide
  - ▶ Drug
  - ▶ Enzyme
- ▶ Custom Mfg Services

## ▶ Drug Design

- ▶ Computational chemistry
  - ▶ Protein modeling
  - ▶ Small molecule design
  - ▶ Protein-protein interaction
  - ▶ Protein degradation
- ▶ DNA libraries
  - ▶ Synthetic biology
  - ▶ Antibodies
- ▶ Oncology drugs
  - ▶ Preclinical leads

## ▶ Engineered Products

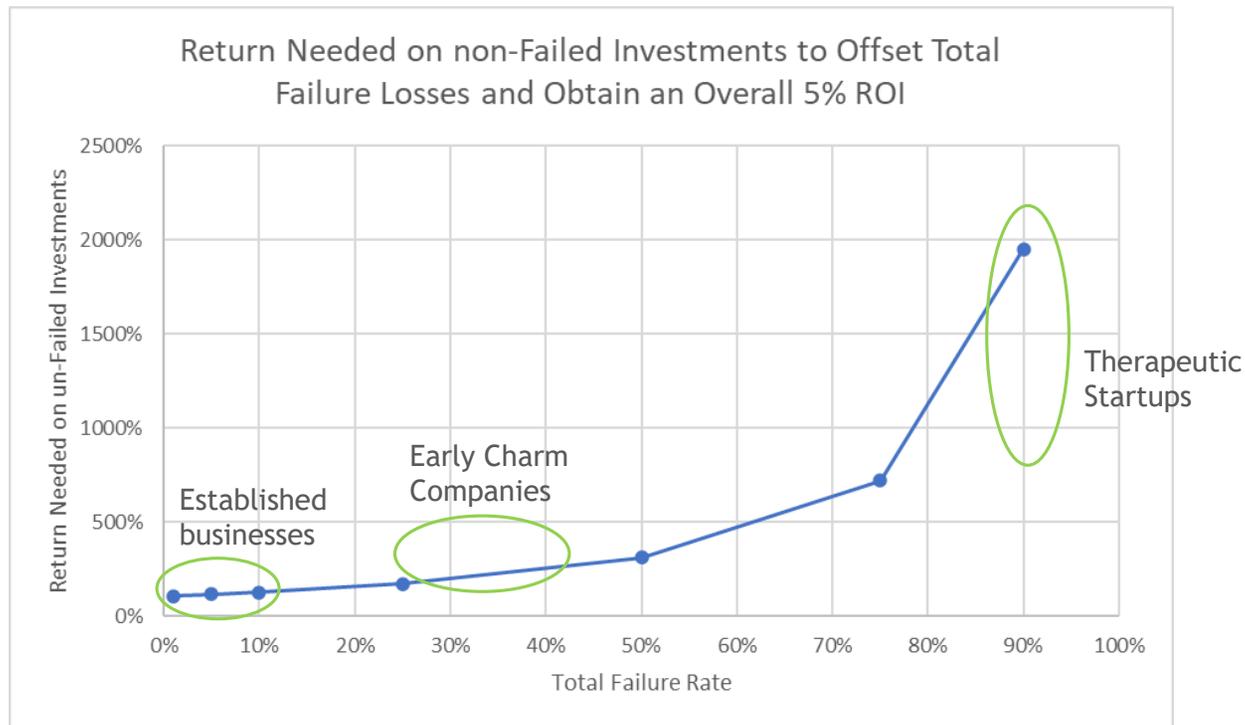
- ▶ Machine vision
  - ▶ Turbulence free imaging
  - ▶ Coating defect detection
  - ▶ Organ transplant viability
- ▶ Nursing assistance
  - ▶ Limb support
  - ▶ Fall protection
  - ▶ Wire guides

## ▶ Blue Economy

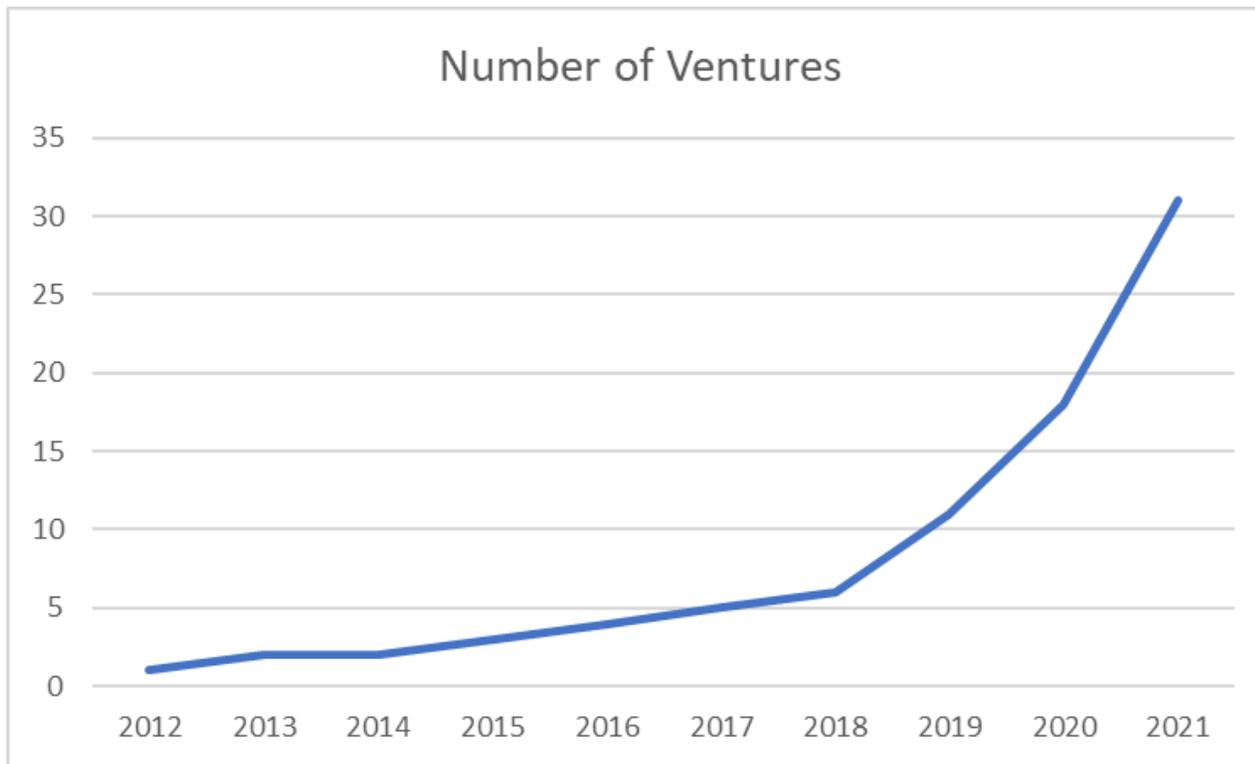
- ▶ Sonar
  - ▶ Shrimp biomass
  - ▶ Oyster beds
  - ▶ Finfish
- ▶ Oral vaccines
  - ▶ Shrimp
  - ▶ Branzino
- ▶ Aquaculture Diagnostics
  - ▶ Shrimp
  - ▶ Trout
- ▶ Oyster seeding
- ▶ Aquaculture services

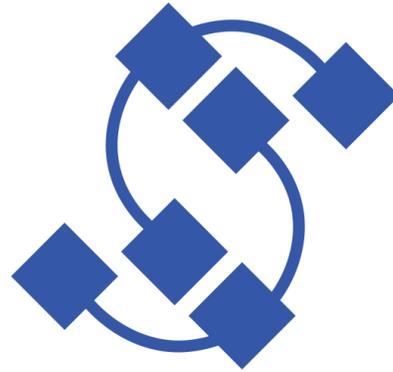


Our model also allows us to take on the overwhelming number of university inventions that are unlikely to be worth billions BUT do not have big risks.



## We are accelerating our growth





SILCSBIO

**Our start in the Charm City!**



[SOFTWARE](#)

[SERVICES](#)

[PLATFORM TECHNOLOGY](#)

[INTERACTIVE DEMO](#)

[TEAM](#)

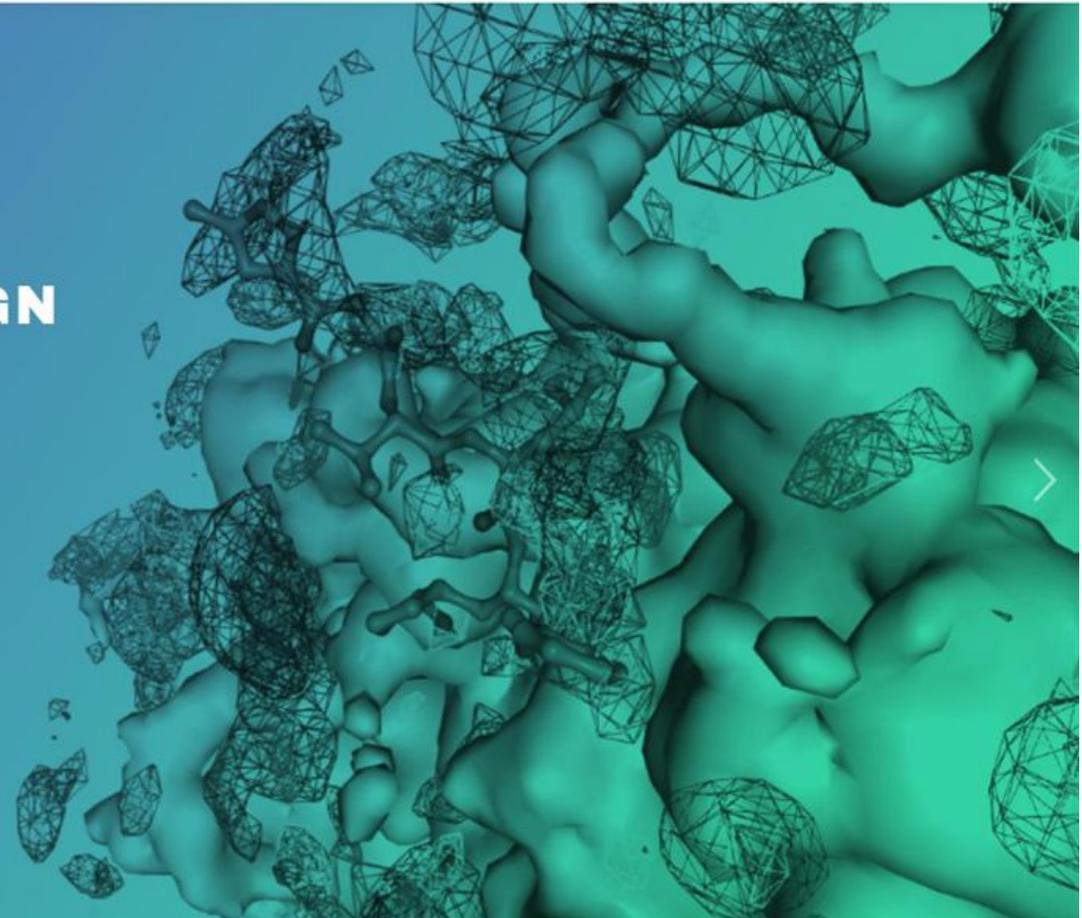
[NEWS](#)

[CONTACT US](#)

## VISUALIZE DRUG DESIGN IN A WHOLE NEW WAY

SilcsBio provides computer-aided drug design solutions that dramatically accelerate and improve small molecule and biologic drug discovery pipelines..

[LEARN MORE](#)

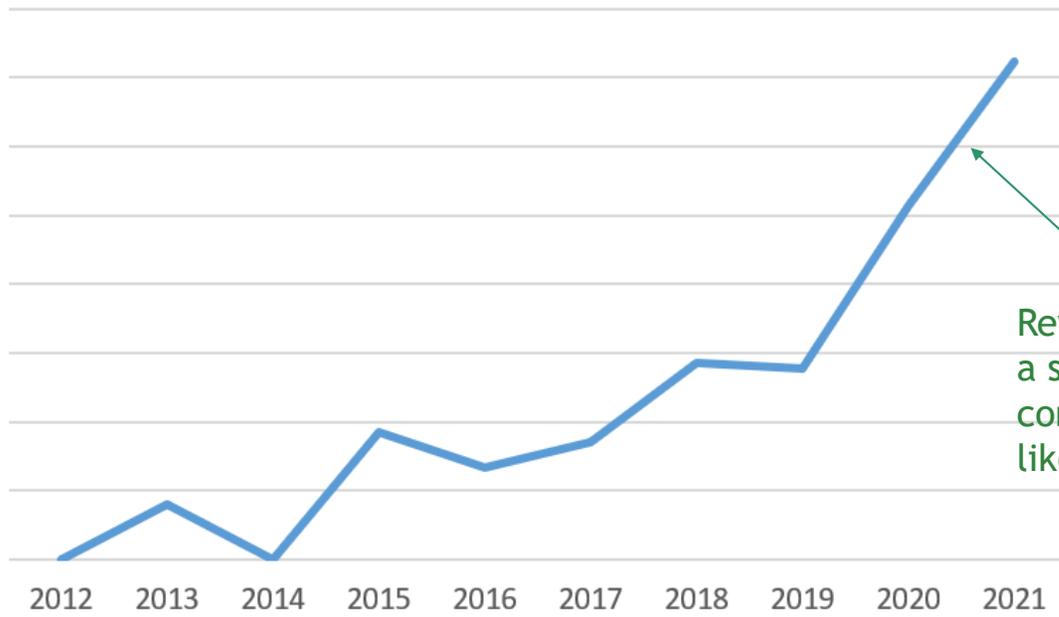


## Quick Facts

- ▶ UMB License 2012
- ▶ Sales to every large pharma company around the world
- ▶ TEDCO MII and NIH SBIR funded
- ▶ **\$182k Royalties and License Fees to UMB Paid by SilcsBio**
  - ▶ additional \$310k of patent expenses paid to or on behalf of
- ▶ **\$861k Funded Research at UMB Paid by SilcsBio**



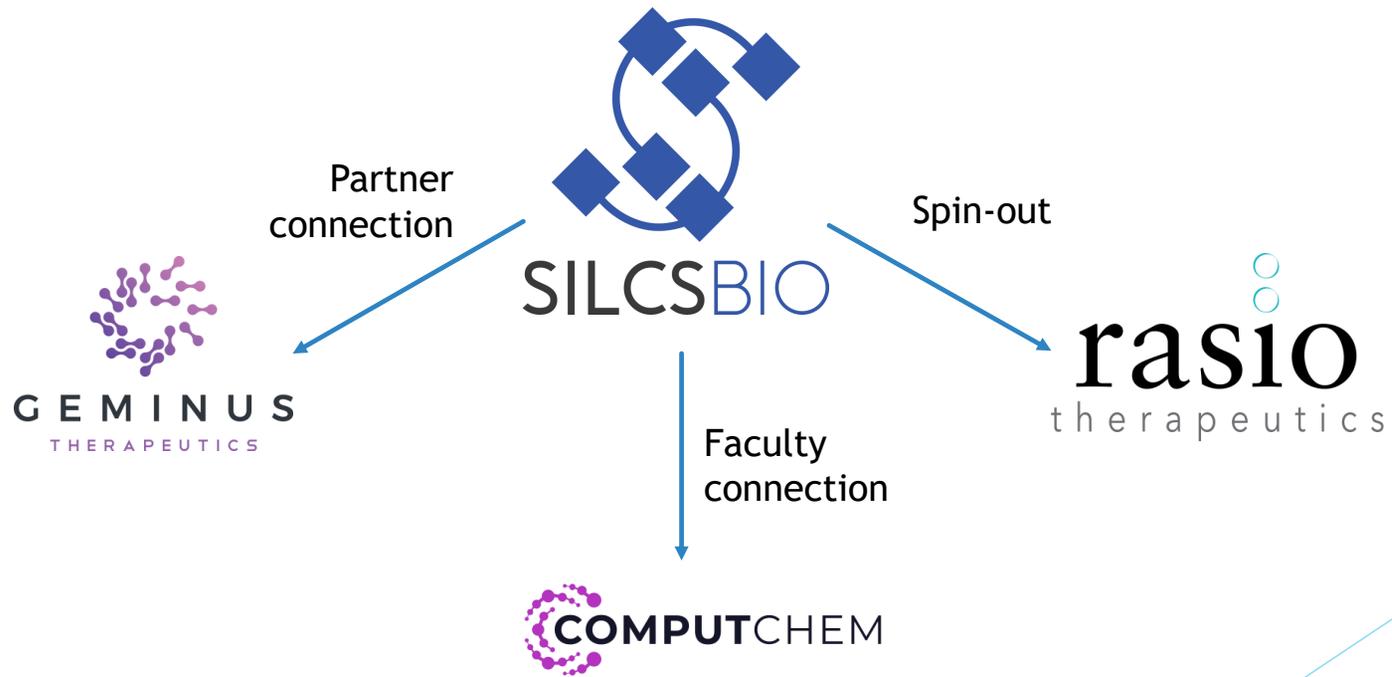
### SilcsBio Sales by Year



Revenue at which a stand-alone company would likely break even



# From One...



## SilcsBio Exemplifies the Venture Studio

- ▶ Survived multiple cash flow problems
  - ▶ Retained key people on other companies
- ▶ Long customer acquisition times
  - ▶ Synergy with other portfolio companies eases the pain
- ▶ Market too small for equity investors
  - ▶ Cash efficient operations
- ▶ Operating cash flow positive
  - ▶ Focus on revenue not fund raising
- ▶ 3 other UMB related company formations
  - ▶ People and network





**BOARD OF REGENTS**

SUMMARY OF ITEM FOR ACTION,  
INFORMATION OR DISCUSSION

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**TOPIC:** USM Early Capital Pilot: Fund Balance Allocation and Investment

**COMMITTEE:** Economic Development and Technology Commercialization

**DATE OF COMMITTEE MEETING:** June 9, 2022

**SUMMARY:** The USM seeks to invest up to \$600,000 over 3 years in the USM Early Capital Pilot. A USM Early Capital Pilot would enable relatively small amounts of capital (under \$75,000) to be deployed to USM-affiliated entrepreneurs and ventures in order to demonstrate the generation of economic development activity.

By way of background, last fall the Economic Development and Technology Commercialization Committee (EDTC) encouraged the leadership and staff to explore how to: 1) support entrepreneurial success, earlier than the Momentum Fund; and 2) equitably support a diversity of entrepreneurs and ventures broadly across USM.

The USM Office of Economic Development facilitated discussion and outreach to more than 100 internal and external stakeholders. At its April meeting, the EDTC Committee reviewed the findings, which included overarching recommendations to: 1) work collaboratively with non-USM partners; and 2) leverage existing resources, when possible, instead of creating new ones. A specific recommendation was to enable flexible, non-prescriptive early capital to be deployed alongside resources and accountability, and a potential pilot design was presented.

This recommendation is to provide an allocation of up to \$200,000 per year, over 3 years, from the USM fund balance for a pilot. The capital would be deployed to USM-affiliated entrepreneurs and ventures to equitably support a diversity of entrepreneurs and ventures broadly across USM toward the ultimate goal of economic development. A minimum of \$100,000 in matching funding must be secured in order for USM's first year of fund balance contribution to be accessed. The overall goal is at least a 1:1 match of external to USM fund balance allocation.

In April, the Board of Regents voted to authorize the investment of up to an additional \$6 million (over 3 years) in the USM Momentum Fund from USM Office unrestricted fund balances. Any funding dedicated toward the USM Early Capital Pilot would be offset by a reduction to the Momentum Fund allocation, such that the overall total allotment does not exceed \$2 million per year.

This item will also be presented to the Finance Committee on June 9 for its consideration and action.

**ALTERNATIVE(S):** The Economic Development and Technology Commercialization Committee could elect to not recommend an allocation for this initiative or request a smaller allocation.

**FISCAL IMPACT:** The USM would invest up to \$600,000 over 3 years in the USM Early Capital Pilot. The fund source is USM Office unrestricted fund balances.

**CHANCELLOR’S RECOMMENDATION:** That the Economic Development and Technology Commercialization recommend that the Board of Regents approve this proposal to allocate up to \$600,000 over 3 years in the USM Early Capital Pilot, as described above.

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COMMITTEE RECOMMENDATION: \_\_\_\_\_ DATE: \_\_\_\_\_

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BOARD ACTION: \_\_\_\_\_ DATE: \_\_\_\_\_

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SUBMITTED BY: Lindsay Ryan (410) 409-2236

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# USM Early-Stage Entrepreneurship Capital Pilot

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*Briefing for the Regents Committee on Economic  
Development and Technology Commercialization*

June 9, 2022





## Early-Stage Resource Study and Recommendations

- **September 2021** – EDTC charges USM to study how to better support entrepreneurial success, earlier than the Momentum Fund; and equitably support a **diversity** of entrepreneurs and ventures broadly across USM.
  
- **September 2021 - March 2021** – More than 100 internal and external stakeholders engaged.
  
- **April 13, 2022** – EDTC reviewed findings to work collaboratively with non-USM partners and leverage existing resources, with additional specific recommendations:
  - 1. Connect** – More effectively coordinate and communicate entrepreneurial resources
  - 2. Enhance** – Angel investment; Professional services; Facilities/equipment; MIPS
  - 3. Capitalize** – In the context of above, enable flexible, non-prescriptive early capital to be deployed alongside resources and accountability



## Why an Early Capital Pilot? Why USM?

**Thesis:** Small amounts of capital responsibly deployed to entrepreneurs can provide demonstrable economic development impacts.

### **USM is Uniquely Positioned:**

- Diversity and critical mass of ventures, entrepreneurs
- Expertise and familiarity for improved due diligence
- Accompanying non-capital support
- Administrative efficiencies

**Vision:** A platform to responsibly invest in very early-stage entrepreneurs toward the goal of benefitting Maryland's economy.

# Proposed 3-Year Capital Pilot

Track	Goal/Use	Amount and Process	Demand and Sources	USM Contribution Over 3 Years*	External Raise Goal Over 3 Years*
<b>Groundwork and Gas Money</b> <i>Students, Faculty, Employees ONLY</i>	Exposure-to-idea opportunities  Addressing access issues	Grants up to \$1k, determined by each institution	Demand will far outstrip supply, but a small amount can go a long way. E.g. <a href="#">UMCP's Dingman E-Fund</a> ; <a href="#">UMBC's Entrepreneurship Undergraduate Research Awards</a>	\$150k  (\$50k annually)	\$150k
<b>Liftoff</b> <i>Students, Faculty, Employees, Alum, Community</i>	Get started in the right direction  Proof of concept funding	Grants up to \$25k, determined collectively across USM institutions	USM invests \$500k, with demand outstripping supply.  3 institutions not currently accessing significant capital.	\$150k  (\$50k annually)	\$150k
<b>Boost</b> <i>Students, Faculty, Employees, Alum, Community</i>	Continue in the right direction	Up to \$75k in grants, convertible notes, or other financial vehicles, determined collectively across USM institutions	Not much of this type of capital.  Bill proposed \$500k annually through <a href="#">TEDCO's RBII</a> ; \$140k through supplemental instead.	\$300k  (\$100k annually)	\$300k

\*Breakdown among tracks is approximate, may adjust

**GOAL: Leverage \$.6M USM seed funding to establish a multi-stakeholder \$1.2M pilot to demonstrate value in providing capital support for early-stage entrepreneurs**

**\$.6M + \$.6M**

**Values:** Diversity, Equity, and Inclusion | Valuable to All Applicants Value to Institutions | Transparency



## Additional Considerations

**Demand Estimates** – Likely underestimate

**Institutional Balance** – An active, not a passive goal

**Outcomes Monitoring** – Conventional metrics, secondary benefits, perhaps more innovative metrics

### **Fundraising Strategy**

- Will not compete with institutional fundraising efforts!
- Philanthropic, corporate to start.
- Working with USM Foundation on potential sources, fundraising assistance.
- Leverage early results to pursue federal.



# Key Factors

## Eligibility

- Eligibility may follow the **Momentum Fund eligibility**, based in Maryland AND founder, intellectual property, or location-based affiliation (*see Appendix*)
- Can add **Baltimore Fund eligibility** of “entities that have a significant and vital collaborative relationship” with USM institutions.
- Non-USM fund balance funding may widen eligibility; to be discussed/determined.

## Relationship to USM Momentum Fund

- BOR recently authorized an additional \$6 million over 3 years for USM Momentum Fund.
- Fund balance for the USM Early Capital Pilot would be offset by a reduction to the Momentum Fund such that overall total allotment does not exceed \$2 million per year.

## Capital Pilot Funding Recommendation

An allocation of up to \$200,000 per year over 3 years is recommended from the USM fund balance for a pilot to deploy capital to USM-affiliated entrepreneurs and ventures to equitably support a diversity of entrepreneurs and ventures broadly across USM toward the ultimate goal of economic development.

A minimum of \$100,000 in matching funding must be secured in order for USM's first year of fund balance contribution to be accessed. The overall goal is at least a 1:1 match of external to USM fund balance allocation.

# APPENDIX

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## USM Momentum Fund Eligibility

- An entity must have a substantial portion of its manufacturing, service, research and development, or office space located in Maryland. And in some other way provide positive economic impact to Maryland **AND**
- Have a founder/inventor (a substantial equity holder on par with the other founders) who is a USM employee, graduate, or current student (as defined by affiliated university) from one of the twelve USM institutions; **OR**
- Based on USM intellectual property (IP) from one of the 12 USM institutions; **OR**
- Based in a USM research park, incubator or RISE zone.

# Design Recommendations/Guidelines

## Key Facets

1. Grants and other forms of early capital
2. Maximize impact: quick to obtain, smartly deployed
3. Address access barriers (e.g., students, smaller institutions) head-on, not reactively
4. Sustainable business model

## Other Details to Optimize Impact and Accessibility

- Potential multiple submission formats (e.g., written, pitch) and/or submission help
- Uses stage-gating and standardized terms for upfront/milestone payment
- The process itself adds value for rejected applicants
- Leverages diligence via other programs
- Ideally, a mix of funding vehicles – grants, convertible notes, and others

## Rationale *Track: Gas Money and Groundwork*

**Necessary Activities:** Engaging in entrepreneurial activities that incur costs such as travel to a competition, registering a business, etc. OR seeking exposure to entrepreneurial activities.

**Current (Insufficient) Sources:** For students: 2 UMD-only mini-grant programs; For faculty: professional development budgets may be tapped but also may compete with other priorities more closely linked to tenure, etc.

### Examples of How Entrepreneurs Have Leveraged Similar Capital

- CSU technical student team travelled to DC for AAAS event and to Pittsburgh for DOE-sponsored competition, where won a prize.
- TU startup Let's Tap In [recently won \\$10k in a national competition](#) in MN

### Potential Future Examples of How Entrepreneurs Could Leverage This Capital

- UMB student incorporates their business in order to be eligible for other funding opportunities
- UMBC faculty member attends the TEDCO expo and brings 3 students



## Rationale *Track: Liftoff*

**Necessary Activities:** Setting up e-commerce, legal assistance, early prototyping

**Current (Insufficient) Sources:** On-campus business plan competitions (BSU, SU, TU, UB, UMB, UMBC, UMCP), Shore Hatchery (SU-hosted and open to all); fellowships (UMCES); technical proof of concept funding (several projects per year at UMBC, UMB, UMCP before the TEDCO MII stage)

### Examples of How Entrepreneurs Have Leveraged Similar Capital

- UMCES' Minnowtech used seed funding from the [Ratcliffe Environmental Entrepreneur Fellow Program](#) to obtain their first data, which they rolled into SBIR, MIPS, MMF, and product launch
- TU helped Jojo's Outstanding JoJoba Oil secure a \$5k grant; they will be launching this fall

### Potential Future Examples of How Entrepreneurs Could Leverage This Capital

- BSU faculty research proof-of-concept funding helps secure later translational funding
- CSU students emerging from [Entrepreneurship and Innovation Certificate](#) obtain launch funding
- UMES students/faculty purchase special prototyping supplies to use at UMES makerspace



## Rationale *Track: Boost*

**Necessary Activities:** Marketing, developing minimum viable product, intellectual property protection, placing first production order, testing and certification, etc.

**Current (Insufficient) Sources:** On-campus accelerators (UMCP, BSU), Towson StarUp Accelerator, external accelerators, TEDCO's RBII, MII Company Investment, Baltimore Fund, Discovery Fund

### Examples of How Entrepreneurs Have Leveraged Similar Capital

- UB's Robin Holmes of [Dedde's Donuts](#) used \$3k Attman prize to purchase an indoor fryer, quickly achieved positive cash-flow, purchased second food truck, moved into the new Lexington Market.
- SU Shore Hatchery winner [Mobtown Fermentation](#) (UMCP & UMBC grad founders) used \$45k to go from early sales of kombucha to a brewery to a >\$1M business. Also leveraged Baltimore Fund.

### Potential Future Examples of How Entrepreneurs Could Leverage This Capital

- New FSU research park startup with a long sales cycle leverages student/faculty who help them quickly iterate on a minimum viable product before a critical big sales event opportunity.
- UMCP faculty spinout company federal SBIR grant recipient covers legal costs that cannot be covered by its R&D-focused grant.



## Early Capital Pilot Timeline

### Summer 2022

- Finalize institutional and community representatives
- Fundraising outreach
- Set up application and tracking system, produce marketing materials

### Fall 2022

- Secure minimum of \$100k in external funding
- Market the resource and begin deploying capital

### Spring 2023

- Progress report to EDTC, make adjustments to tracks, marketing strategy, etc., as needed
- Continue fundraising; enable option for institutions to raise additional set-aside funds
- Enable handoffs to follow-on sources of capital for portfolio
- Deploy alternative forms of capital as needed, such as revenue share, reimbursable grants

**FY2024** – Continue fundraising, add co-investors and follow-on partners; explore other partnerships

**FY2025** – Leverage outcomes data to reach different, additional sources of funding



## Innovating With Capital

**Start simple.** Meet demand/opportunity and provide time for economic development returns to emerge. Use conventional structures (grants, convertible notes).

**Leverage others innovating in early-stage finance.** Co-invest and/or model capital innovators. A few examples below:

- [Ignite Capital](#) uses [creative debt structures](#) and could be co-investment partners in Baltimore
- TEDCO's one-time \$5M [RUBRIC](#) program deployed reimbursable grants of up to \$100k to "45 companies within 12 Maryland counties, 36% of which were rural-based, while 80% of the entrepreneurs identified as socially or economically disadvantaged." TEDCO MII also has [reimbursable grants](#).
- Michigan State University's pre-seed investment fund [Michigan Rise](#) launched in mid-August 2020. \$3.7 million in investments in 26 companies that went on to raise \$101.2 million collectively in follow-on investments. The state just authorized an additional \$6.5M, \$3M will experiment with loans.

**Enable additional capital innovation.** Unique source in Maryland for info about the capital needs of early-stage entrepreneurs, which may enable additional capital innovation.



**BOARD OF REGENTS**

SUMMARY OF ITEM FOR  
INFORMATION

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**TOPIC:** USG 2.0: Economic Development and Job Performance

**COMMITTEE:** Economic Development and Technology Commercialization

**DATE OF COMMITTEE MEETING:** June 9, 2022

**SUMMARY:** In March of 2021, Anne Khademian, Executive Director, Universities at Shady Grove (USG) presented on the key objectives for USG in the area of education and career pathway development, as well as research and workforce development, with a strategic focus on the Life Sciences.

Dr. Khademian returns to update the Committee on “USG 2.0” broadly, including four strategic imperatives: 1) holding itself accountable for ensuring that students are able to secure meaningful employment and career opportunities; 2) planning for and building career pathways; 3) sharpening the focus on career competencies and readiness; 4) building a new model for fiscal sustainability.

**FISCAL IMPACT:** This item is for information purposes.

**CHANCELLOR’S RECOMMENDATION:** n/a

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COMMITTEE RECOMMENDATION:

DATE:

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BOARD ACTION:

DATE:

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SUBMITTED BY: Lindsay Ryan (410) 409-2236

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The Universities  
AT SHADY GROVE



# USG 2.0: ECONOMIC DEVELOPMENT AND JOB PERFORMANCE

Board of Regents Committee on Economic  
Development and Technology Commercialization

June 9, 2022

# USG: 9 UNIVERSITIES, 1 CAMPUS, USM RHEC ASSET



# REGION & STATE'S WORKFORCE NEEDS ARE CHANGING RAPIDLY



- ▶ **65%** of jobs nationwide require *college degrees* \*
- ▶ **75%** in Montgomery County
- ▶ Skyrocketing **growth** in health and life sciences, IT and Cybersecurity
- ▶ **High demand** for teachers, behavioral health professionals in Montgomery County
- ▶ **Career-ready AND research-ready** employees

\* [\*Source: Recovery: Job Growth and Education Requirements through 2020\*](#)

# INDUSTRY DEMAND FOR 4-YEAR DEGREES AND BEYOND CONTINUES TO GROW



Maryland's Largest School District

**MONTGOMERY COUNTY PUBLIC SCHOOLS**

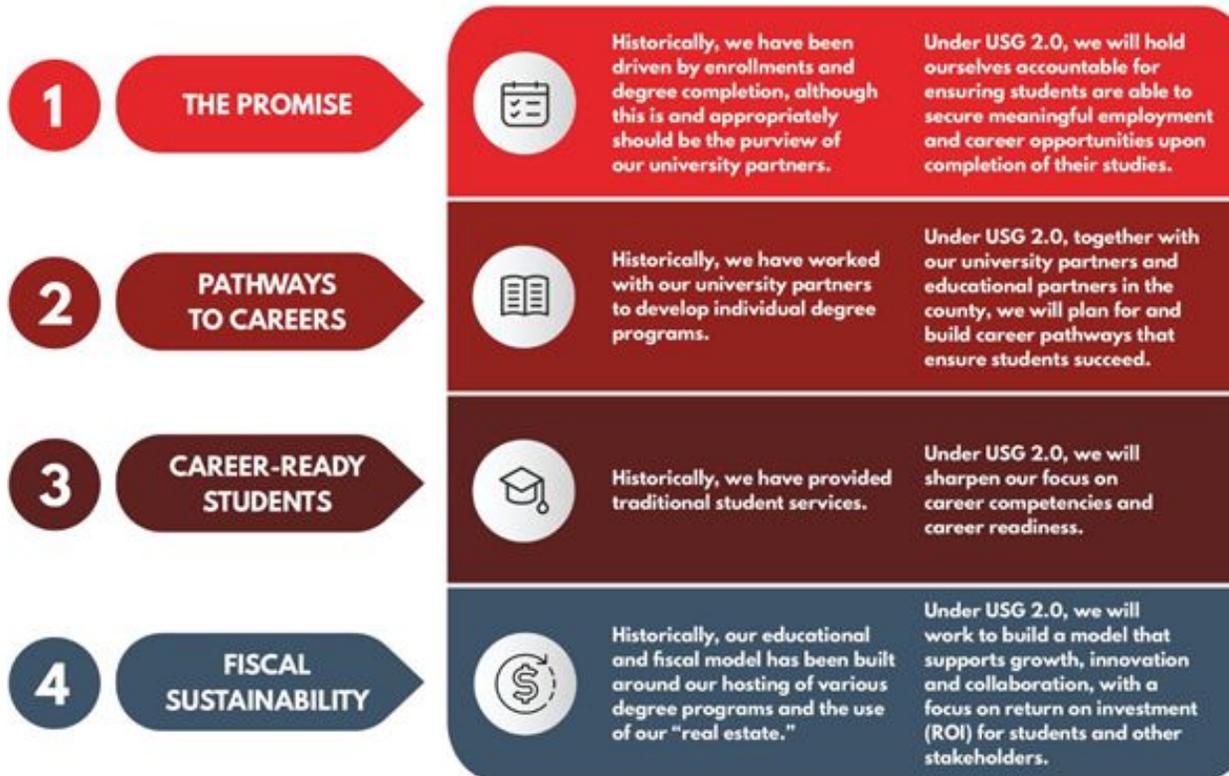


# MEET THE NEEDS OF THE FUTURE/NON-TRADITIONAL STUDENT



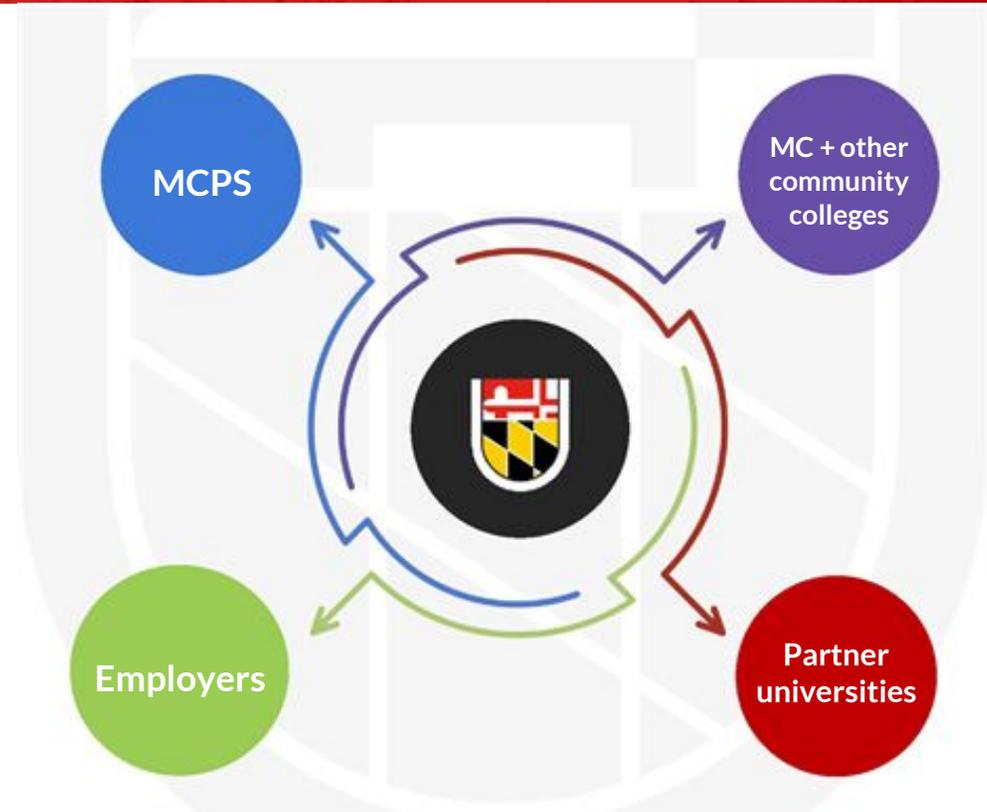
**REALIZING TRUE EQUITY IN EDUCATION**

# RISING TO THE CHALLENGE: USG 2.0 - FOUR STRATEGIC IMPERATIVES



# USG 2.0: BUILDING PATHWAYS TO THE EQUITY PROMISE

- ▶ STEM
- ▶ Healthcare and Life Sciences
- ▶ Business
- ▶ Public Service, Education and Social Sciences



# USG 2.0 CORE FUNCTIONS: FOUNDATION FOR MEETING THE PROMISE

## DATA ANALYTICS

and research builds on collaborative experience among the partners

