Board of Regents
Committee on Economic Development and Technology Commercialization

March 30, 2023
Virtual (public listen only access at 443-353-0686, Conference ID: 911 013 805)
Committee Members will be sent Zoom information
Materials can be found here: https://www.usmd.edu/regents/agendas/

Public Session Agenda

(1) Research and Economic Development Highlights: A Focus on EDA support around the USM
bwtech@UMBC EDA Fellows Program – Marjie Cota, Director of Entrepreneurial Services at
bwtech@UMBC, and Aaron Miscenich, Executive Director of bwtech@UMBC (Information Item)

(2) USG 2.0: A Community of Innovation for the USM – Dr. Anne Khademian, Executive Director of USM
Shady Grove (Information Item)

(3) Current Activities of the Office of the Vice Chancellor for Research and Economic Development – Dr.
Michele Masucci, Mike Ravenscroft, Lindsay Ryan (Information Item)
Agenda

1. Research and Economic Development Highlights
   A Focus on EDA support around the USM
   bwtech@UMBC EDA Fellows Program

2. USM Shady Grove – Shady Grove 2.0

3. Current Activities of OVCRED

4. Q and A
US Department of Commerce support of USM institutions through funding, positioning, and programs

- $80 Million in EDA Funding to MD Obligated from 2017-2022
• The Maryland Innovation Extension is an Economic Development Administration (EDA) University Center
• Additional support provided by: UM Ventures Baltimore Fund, TEDCO MII, TEDCO RBII, TEDCO UBII, and the University System of Maryland (USM)
• Partners with Bowie State University, Morgan State University, Coppin State University, and the University of Baltimore
• Collaboration to bring entrepreneurial resources to the entire state of Maryland, with a particular focus on underrepresented groups in entrepreneurship
Maryland New Venture Fellowship

- The Maryland New Venture Fellowship for Cybersecurity is a $1.3M program funded by EDA with matching support from partners
- Partners include: bwtech@UMBC, UMBC, the University System of Maryland
- Supports cybersecurity entrepreneurs who are working in collaboration toward cyber solutions and technologies that impact the public
- Program Leadership: Marjie Cota, Director of Entrepreneurial Services and Aaron Miscenich, Executive Director of bwtech@UMBC
Dr. Anne Khademian  
Executive Director, The Universities at Shady Grove, 
and Associate Vice Chancellor for Academic Affairs, 
University System of Maryland
3. Update on Ongoing Activities of OVCREd

- USM Investments ecosystem and current market issues – Mike Ravenscroft
- Launch Fund (Early Capital Pilot) – Lindsay Ryan
- Outreach activities – Michele Masucci
4. Q and A
Contact OVRED

Michele Masucci, Ph.D.
Vice Chancellor for Research and Economic Development
mmasucci@usmd.edu
215-704-2739

Lindsay Ryan (she/her)
Interim Executive Director of Economic Development
lryan@usmd.edu
410-409-2236

Mike Ravenscroft
Managing Director, Momentum Fund
mravenscroft@usmd.edu
410.706.3361
TOPIC: bwtech@UMBC EDA Fellows Program

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 30, 2023

SUMMARY:

Marjie Cota, Director of Entrepreneurial Services at bwtech@UMBC, and Aaron Miscenich, Executive Director of bwtech@UMBC, will present an update on the U.S. Economic Development Administration (EDA)-funded Maryland New Venture Fellows program, now in its third year of operation. The program forms teams around promising technologies. The teams consist of a technologist, mentor, and program fellow. The cohort program has achieved dual objectives of venture creation/development and human capital development.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Michele Masucci 410-409-2236
mmasucci@usmd.edu
Programming

Mission
Partners
bwtech@UMBC Programming
Signature Events
Site Miners & Entrepreneurs in Residence (EiR’s)
Mission

Provide **BEST IN CLASS** programs and services

To be the **convener and connector**

Obtain **results** to **maximize social and economic impacts** for bwtech@UMBC and Maryland
Signature Events

- Maryland New Venture Fellows for Cybersecurity
- ScaleUp Maryland™
- Cyber & Tech Awards
- CEO Roundtable
MD New Venture Fellowship - Year 2

$1.3m EDA grant - three years
- Learn skills to start business
- Pitch, compete

Year 3 Applications in Fall 2022

Year 2 ended in June 2022
- 8 teams (Tech, Mentor, Fellow)
- Jan-June
- 2 Winners $10K and $1K

Year 1 ended in June 2021
- 7 teams
- 1 winner of $10k prize
MD New Venture Fellowship - Year 3

$1.3m EDA grant - three years
- Teams of 3
- Learn skills to start business
- Pitch and Win

Year 3 underway 2023
- 8 teams (Tech, Mentor, Fellow)
- New Project and Program Fellow
- 3 Technologists and 9 Fellows from UMBC
- February - May

Year 1 & 2 Completed
15 teams (Tech Mentor, Fellow)
- Over $21K in prize money
SCALEUP Maryland

Maryland Executives learn strategic growth plans

2022 Fall Cohort 4 - 11 Participants

2023 Spring Cohort 5 - 9 Accepted - 7 Participants
AWARD CELEBRATIONS

Bio Life/Sciences

Save the Date!

March 30, 2022

5:00 PM - 7:30 PM

UMBC - bwtech South Campus

Alumni * Experts * Innovators

Technology

Save the Date!

October, 2023

5:00 PM - 7:30 PM

UMBC - bwtech South Campus
Collaboration Expert Presenters
Soft Landing for Foreign Companies started Fall 2022
20 MD Participating Partners in MD - 5 bwtech clients!

Australia

Spain

Korea

Australia

England
Entrepreneurs in Residence

South
- Dave Fink
  MII Site Miner
- Rick Chipkin

North
- Hillel Glazer
  SMII Site Miner
- Bill Anderson
- Tom McCabe
March 30, 2023 Committee on Economic Development & Technology Commercialization - Public Session

- Questions
- Comments
- Feedback
TOPIC: USG 2.0: A Community of Innovation for the USM

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 30, 2023

SUMMARY:

USG 2.0 centers on building the capacity for innovation to serve the fluid student of today and tomorrow -- students who need to flow in and out of jobs and education, rather than pursue a degree in two or four years; who direct their educational experience toward personalized career opportunities, while stacking and banking credentials and experience into degrees; who want choices to study virtually, in person, and in applied experiential settings; and students for whom an institutional ranking and record of degree completion may be less relevant than the support they receive to achieve meaningful employment related to their areas of study. This is fundamentally about a new model of higher education that is pathway focused, centered in career readiness, and built through a new partnership between academic partners and employers to deliver on meaningful employment and career/business success--lifelong learning.

The presentation will focus on how the Universities at Shady Grove is building this effort, and to socialize the idea of USG being designated (as some point) by the regents, and perhaps the legislature, as a hub to do this innovative work with our academic and workforce partners. Our challenge is how to catalyze the opportunity of 9 (and hopefully 12) institutions working together in one campus to transform and scale opportunities for the fluid students of today and tomorrow.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Michele Masucci 410-409-2236 mmasucci@usmd.edu
USG 2.0: A “COMMUNITY OF INNOVATION” FOR THE USM

Committee on Economic Development & Technology Commercialization
USM Board of Regents
March 30, 2023
USG AT A GLANCE: AN RHEC AND USM ASSET

The Universities at Shady Grove (USG), is an innovative partnership of nine University System of Maryland (USM) universities on one campus in Montgomery County. Each of the partner universities provides its most highly sought academic programs and awards its own degrees. USG, in turn, provides centralized on-site student, academic and administrative services.

This unique integrated approach allows USG to offer 80 upper-level undergraduate, graduate degree and certificate programs, in flexible formats that allow students to live, work and study close to home. USG connects students to outstanding career opportunities while providing regional employers with a highly educated, skilled workforce.

15,000+ students have earned degrees from programs offered at USG since its inception in 2000.

3,100+ in undergraduate and graduate programs; all undergraduate are upper-level transfers.

$8,000 can be saved by completing the 2+2 community college to university pathway versus a 4-year pathway.

79% of students who transfer to programs at USG graduate within four years. This is higher than the four year graduation rate of 55% for transfers across the system.

80% of undergraduate students transfer from a community college.

88% of graduates are working in the region or attending graduate school in their intended field.
EDUCATING A DIVERSE STUDENT BODY

Age Profile of Students at USG

UNDERGRADUATE

26
Average

23
Median

GRADUATE

34
Average

31
Median

Gender Profile of Students at USG

UNDERGRADUATE

60% Female or Female Assigned

40% Male or Male Assigned

GRADUATE

70% Female or Female Assigned

30% Male or Male Assigned

Undergraduate Students Ethnic Diversity

25% Hispanic

16% Asian

24% African American

13% Other/Unknown

Graduate Students Ethnic Diversity

38% White

24% African American

12% Hispanic

8% Asian

18% Other/Unknown
USG 2.0 STRATEGIC PLAN

THE FLYWHEEL

THE FLYWHEEL conveys that change is not a single action, but is an ITERATIVE PROCESS building on many decisions and actions, all directed towards a COMMON VISION. The USG Flywheel consists of processes, actions, programs, and innovations identified as the KEY DRIVERS behind what the Universities at Shady Grove is deeply passionate about.

A 10-YEAR VISION
USG 2.0
STRATEGIC PLAN

USG 2.0: BUILDING ON DECADES OF SUCCESS

The Universities at Shady Grove always has been—and always will be—a CHAMPION FOR STUDENTS who are often underrepresented in higher education.

With our deep commitment to equity, diversity and inclusion, we proudly provide life-changing opportunities for all students to access high quality, career-enriching academic degree and/or certificate programs offered through our university partners. We excel at successfully serving the unique needs of non-traditional students, which now comprise 70 percent of all students in higher education, nationally.

FOUR NEW STRATEGIC IMPERATIVES

1. THE PROMISE
2. PATHWAYS TO-CAREERS
3. CAREER-READY STUDENT
4. FINANCIAL SUSTAINABILITY
Where the USM’s work has been centered on our institutions and processes, it must instead be centered on our students. Where we’ve been focused on degree output, we must be focused on learner outcomes. Where we’ve been siloed, we must be collaborative. Where our innovation has been institution-bound, it must be scaled. Where our impact has been local, it must be global.”

- Five Transformation Imperatives: Diversity, Equity & Inclusion; Action & Accountability; Academic Excellence & Innovation; Access, Affordability & Achievement; Workforce & Economic Development
WHAT ARE WE ASKING?
FEEDBACK ON DESIGNATING USG AS A “COMMUNITY OF INNOVATION”

- Bowie State University
- Coppin State University
- Salisbury University
- Towson University
- UMBC
- Frostburg State University
- University of Baltimore
- University of Maryland, College Park
- University of Maryland, Baltimore
- University of Maryland Eastern Shore
- University of Maryland Global Campus
- University of Maryland Center for Environmental Science
A State recognition/designation of USG and other RHECs as a Community of Innovation and a commitment to the resources, flexibility, and support to take on this role sustainably for the long term.
COMPONENTS OF A COMMUNITY OF INNOVATION

- **A shared challenge**: Serving the fluid student of today and tomorrow
- **A shared purpose**: Building pathways for greater access, affordability, career readiness, and life long career opportunities
- **A shared framework**: Academic institutions and employers working in partnership
- **A shared benefit**: Activate the power of the USM to learn together, model, scale, impact, lower risk
A shared challenge
SERVING THE FLUID STUDENT: TODAY AND TOMORROW

- Working, family responsibilities, financing their own education, first generation, mental health challenges
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
A SHARED PURPOSE
THE PROMISE

Pilot Incubator

Career-Ready Graduates

Employer and community engagement

Planning and Integration

Measure, Assess, Learn

USG Culture and Operations

INDUSTRY CLUSTER COMMITTEE

STEM

Health and Life Sciences

INDUSTRY CLUSTER COMMITTEE

Business

Public Service, Education and Social Sciences

BUILDING PATHWAYS TO THE PROMISE
IMPLEMENTATION OF THE FLYWHEEL TO DATE

● Hire U and Career Readiness
● Employer Engagement Framework
● Culture & Operations
  ○ Diversity, Equity and Inclusion
  ○ USG Culture & Human Resources
  ○ Fiscal model development
● Academic Planning and Pathways Framework & Summit
● READY and Data Analytics Strategy
● Community Wealth Building Summit
● Community Partners Summit on College Access
A SHARED FRAMEWORK: ACADEMIC & EMPLOYER PARTNERSHIP FOR PATHWAYS
“Building a diverse, highly skilled talent pool is vital to ensuring continued economic growth and the success of any industry. . . By measuring and assessing what works best, we hope they can continue to model and scale such successful pathways.”
Google partnership: Shanika Hope, Director of Google’s Education for Social Impact team.

- **Common Goal:** Delivering on the promise for the fluid student
- **Partnership and dialog:** Academic partners and employers work together to plan for, build and activate pathways
- **Organizational structure:** Four sector model – hubs with multiple stakeholders
- **Agreed upon metrics and exceptions:** Measure assess and learn, flexibility
- **Collective impact:** without sacrificing academic quality
THE PROMISE is an integration of employers and academic partners, building lifelong learning pathways for the fluid student.
IMPLEMENTATION OF THE 4 SECTOR MODEL, TO DATE

- Board of Advisors Reorganization
- Launch of the STEM Industry Sector Hub
- Academic Partners and Employers Summit for Sector Alignment
- Early READY work with Reach Advisors
COMMUNITIES OF INNOVATION

Current State:
- Individual Institution initiatives at home campus & Kirwan Center support
- Communication and Assessment for Individual Initiatives around identified subject areas

Current State PLUS Pilot Incubator:
- Individual Institution initiatives at USG that can be measured, scaled, and applied to home campus
- No changes to current relationships and structure

Pilot Incubator PLUS Community of Innovation: operation warp speed for USM
- **Common Goal:** Delivering on the promise for the fluid student
- **Partnership and dialog:** Academic partners and employers work together to plan for, build and activate pathways
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- **Collective impact:** without sacrificing academic quality
THE POWER OF A DESIGNATION

Navy Demonstration Project at China Lake
(China Lake) in San Diego

Pay for performance approach and flexibility to fill vacancies and maintain top performers at China Lake

1980, permanent in 1994
SHARED IMPACT AND BENEFIT

- Activate the power of the USM to learn together, model, scale
- Greater impact for access, affordability, and enrollments
- Reduce the risk to individual institutions, apply lessons
- Deliver on a *student centered approach* and ROI for fluid students
- Develop shared assessment framework
PATHWAY TO SOCIALIZATION

- USM C8: January 30th
- BOR Overview: February 17th
- USM CUSP and Councils: March 6th
- USG Provost Executive Group March 8th
- Economic Development & Technology Commercialization: March 30th
- BOR Meeting: April 14th
- Initiate/design study of Communities of Innovation and develop blueprint: May - October 2023
- Designation request submitted to Governor: Nov-Dec 2023
- Designation request submitted to Legislature: January 2024