Board of Regents
Committee on Economic Development and Technology Commercialization

March 25, 2021
Virtual (public listen only access at 443-353-0686, Conference ID: 316 220 802)
Committee Members will be sent Zoom information

Public Session Agenda

(1) **Featured Startup: Inventwood** – Josh Cable, CEO (Information Item)

(2) **Activating Fearless Ideas for Transformational Impact Supporting Companies Like Inventwood** – Julie Lenzer, Chief Innovation Officer, University of Maryland, College Park (Information Item)

(3) **Corporate Training and Development** – Dr. MJ Bishop, Associate Vice Chancellor and Director, William E. Kirwan Center for Academic Innovation at the University System of Maryland (Information Item)

(4) **USM Office of Economic Development Update** – Tom Sadowski, Vice Chancellor for Economic Development (Information Item)
   a. COVID-19 Task Force Activity
   b. Legislative Activity
   c. Momentum Fund
TOPIC: Featured Startup: Inventwood

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 25, 2021

SUMMARY: Josh Cable, CEO of Inventwood, will present the company's progress to date. InventWood uses material science innovations to alter wood for different purposes, making it incredibly strong, transparent, or insulating. The company is based on technology developed by a team of material scientists at the University of Maryland, led Professor Liangbing Hu.

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

FISCAL IMPACT: There is no fiscal impact.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Tom Sadowski 410-576-5742 tsadowski@usmd.edu
We are InventWood

InventWood™ is committed to transforming the world by developing advanced wood materials that are high-quality, cost-effective, and environmentally-sustainable.

structural & support

MettleWood™
- Stronger than steel
- Light-weight
- Low-cost

thermal management

Insulating ‘Nano’ Wood
- Tunable strength
- Strong insulation properties
- Non-toxic, fully biodegradable

Radiative Cooling Wood
- Energy emitting, IR invisible
- Record-high cooling efficiency
- Low-cost and biodegradable

optical & light management

Transparent Wood
- Light-channeling potential
- Lighter and tougher than glass
- 6x better thermal insulation

‘Aesthetic’ Wood
- Stunning visible grains
- 6x better thermal insulation
- Smart light management

...And many more to come!
The Challenge Ahead of Us
Three major environmental issues

- **Climate Change**
  - Greenhouse gas emissions
  - Fossil fuel consumption

- **Ecological Imbalances**
  - Invasive species
  - Mass deforestation

- **Waste Disposal**
  - Microplastics in waterways
  - Non-biodegradable landfill waste
The Answer Grows on Trees

Wood is the solution!

- **Carbon Sequestering**: Wood captures and retains CO₂ during its lifecycle.
- **Naturally Insulative**: Wood is far more insulative than steel, no concrete needed.
- **Abundant & Plentiful**: Most wood is sustainable and an ever-growing resource.
- **Biodegradable**: Wood decomposes naturally in a relatively short period of time.
- **Ecologically Balancing**: Invasive species can be used to encourage natural restoration.
- **Biophilic**: Exposure to wood has been shown to alleviate depression.
An Introduction to Advanced Wood Materials
Addressing natural wood’s shortcomings

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<tr>
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<th>Regular Wood</th>
<th>Advanced Wood Materials</th>
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<tr>
<td><strong>Strength</strong></td>
<td>Weak (30-70 MPa for most species)</td>
<td>Very Strong (Up to 1,000 MPa)</td>
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<td><strong>Environmental Resistance</strong></td>
<td>Varies and highly dependent on species and circumstances</td>
<td>Highly resistant to many environmental challenges like water, fire, and termites</td>
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<td><strong>Formability</strong></td>
<td>Very difficult to shape and form like other materials</td>
<td>Can be easily shaped and formed like metals and plastics</td>
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<tr>
<td><strong>Species Dependency</strong></td>
<td>Yes, performance &amp; aesthetic highly dependent</td>
<td>Can be made into consistent products independent of species</td>
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<td><strong>Economics</strong></td>
<td>Regarded often as low-cost and low-value commodity</td>
<td>Can be high-value agricultural export, reinvigorating rural communities</td>
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</table>
An Introduction to MettleWood
The true ‘green steel’

- Lightweight with High Specific Strength
- Incredibly Strong & Unbelievably Tough
- Cost-Efficient
- Durable & Resilient
- Sustainable & Biodegradable
A Few Recent Headlines

‘Super wood’ in the news

**Stronger Than Steel, Able to Stop a Speeding Bullet—It’s Super Wood!**

Simple processes can make wood tough, impact-resistant—or even transparent

**New Chemical Treatment Makes ‘Super Wood’ That Could Replace Steel**

It can make soft woods over 10 times as strong.

**Wood–Be Weight Savior – Technologue**

The next big light/strong material grows on trees

**New Super Wood Beats Metals in Feats of Strength**

A new method combining chemical, pressure and heat treatments can create ultra-dense material that is stronger than steel
MettleWood Creation Process
Efficient, low-cost, sustainable

MettleWood vs. regular wood:

- 20x Strength
- 15-20x Stiffness
- Moisture, fire, and termite resistant

InventWood™
From Nature | For the Future
Why MettleWood?

Clear benefits

Compared to structural steel, MettleWood is:

- **80%** Lighter
- **50%** Cheaper*
- **Zero** Emissions**

* Cost target; final costs may vary on a number of factors
** Assumes green energy (i.e. zero emissions) is used in production and transport
Unlimited Potential, Countless Applications

Real-world possibilities for MettleWood

Furniture & Leisure Items
Shelves and Frames for Logistics
Aerospace Components
Lightweight Vehicles

Beams, Posts, and Scaffolding
Shipping Containers and Boxcars
Energy Efficient Buildings & Retrofits
Wind Turbine Blades

InventWood™
From Nature | For the Future
InventWood’s Timeline

**Progress toward widespread adoption**

- **Sep 2016** Founding
  InventWood founded as a spin-off of the University of Maryland

- **Feb 2019** Validation
  1st customer exploration project begins for use of MettleWood in a commercial application.

- **Jun 2018** Formation
  InventWood formally begins commercial prospecting with hiring of core leadership team and the formalization of a business strategy.

- **Sep 2019** Grant Awards
  InventWood receives ARPA-E federal grant award funding for MettleWood research and commercialization.

- **Feb 2020** IP Licensing
  InventWood concludes an exclusive license agreement with the University of Maryland to license a portfolio of technologies.

- **Jun 2020** Development
  InventWood formally opens its own labs and begins sample production.

- **Dec 2020** Paid Pilot
  InventWood receives first commercial revenues for MettleWood validation project.

- **Sep 2019** Grant Awards
  InventWood receives ARPA-E federal grant award funding for MettleWood research and commercialization.

- **Jun 2021** Product Sales!
  InventWood plans to manufacture and release 1st batch of MettleWood products.
InventWood Team

Focused, experienced, and innovative

Liangbing Hu*
Ph.D.
Founder

Josh Cable
CFA
CEO

Amy Gong
Ph.D.
CSO

Jiaqi Dai
Ph.D.
CTO

Liza Pikus
MBA
VP, Strategy

Soo-Hwan Jang
MSc.
Materials Engineer

* Non-employee equity shareholder
University of Maryland Resources

It takes a village!

MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE

UM VENTURES

A. JAMES CLARK SCHOOL OF ENGINEERING

STARTUP

MARYLAND ENERGY INNOVATION ACCELERATOR

InventWood™
From Nature | For the Future

University of Maryland Francis King Carey School of Law
Thank you!

For additional inquiries, please contact info@inventwood.com
TOPIC: Fearless Ideas for Transformational Impact - Supporting Companies like InventWood

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 25, 2021

SUMMARY: Julie Lenzer, Chief Innovation Officer at the University of Maryland, College Park, will provide information about supporting startups based on intellectual property, such as the featured startup, InventWood. Ms. Lenzer will provide detailed examples of UMD efforts to commercialize technology, nurture new venture creation and growth, such as in the case of IonQ, which plans to go public soon.

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

FISCAL IMPACT: There is no fiscal impact

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Tom Sadowski  410-576-5742
              tsadowski@usmd.edu
Activating Fearless Ideas for Transformational Impact
Supporting Companies like Inventwood

Julie Lenzer, Chief Innovation Officer
jlenzer@umd.edu
Office of the Chief Innovation Officer

[Logos of various initiatives and programs related to economic development and technology commercialization]
Over 60 programs* across campus

# 7 in entrepreneurship¹

#13 in innovation impact²

#28 worldwide in issued patents³

*See appendix for complete list with links

1 – 2020 Princeton Review and Entrepreneur Magazine
2 – The Innovation Impact of US Universities, GWB Institute
3 – National Academy of Inventors
Specifically for spin-offs…

- Startup Resource Guide [startupguide.umd.edu](startupguide.umd.edu)
- Business Fundamentals for Scientists
  - in 2020: 72 workshops
  - >1,600 attendees
  - 360 YouTube channel views
- 4 EiR’s, 3 Site Miners, I-Corps
- > $8M in MII funding
- Maryland Momentum Fund invested in 6 UMD spin-off’s
- 7 listed in MD Governor’s Future 20
Startup story: Inventwood

- 18 invention disclosures, 34 pending US and intl patent apps
- 3 US patents issued and licensed,
- UMD patent expenses for licensed portfolio: over $300K
- Staff hours expended: > 1,700
- ‘Startup’ deal terms - minimal cash up front, payment plan for IP reimbursement, shared risk

5 jobs created
>$160K R&D grants
$120K raised
Startup story: IonQ

22 invention disclosures, 75 patent applications
UMD patent expenses for licensed portfolio: $0
Hours expended: >3600
License terms heavily favor company
Significant investment in real estate improvement

65 jobs created
$88M raised pre IPO
Startup story: Ion Storage Systems

32 invention disclosures
22 US and International patents issued and licensed
UMD patent expenses for licensed portfolio: over $400K
Hours expended: >4500
‘Startup’ deal terms - minimal cash up front, payment plan for IP reimbursement, low royalties

12 jobs created
>$12M R&D grants
$8M raised
Bottom Line

- It takes time and resources to see success
- Investible IP is foundational for startup success
- For every ‘success’ there are 10 others, all requiring similar resources
- Diversity of technologies requires more and varied resources *(ecosystem breadth, alumni outreach)*
- MII and Momentum Fund are strong assets, but many companies need *more* and *earlier* capital
# UMD Innovation / Entrepreneurship Programs
*(find all via innovate.umd.edu)*

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<td>AgEnterprise Challenge</td>
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<td>Center for Social Value Creation (CSVC)</td>
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<td>Chesapeake Bay Seed Capital Fund (Mtech)</td>
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<td>Consult Your Community (student consulting group)</td>
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<td>Contrary (a student-run venture capital group)</td>
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<td>Corprened (Mtech)</td>
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<td>Dingman Center for Entrepreneurship</td>
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<td>Discovery District</td>
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<td>Ed Snider Center for Enterprise and Markets</td>
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<td>enTERPreneur (student entrepreneurship club)</td>
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<td>Faculty and Graduate Student Startup Guide</td>
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<td>Global Consulting Fellows (run by Center for Global Studies in Smith School)</td>
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<td>Gold Public Health Innovation Award</td>
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<td>Graduate Innovation Fellowship (run by AIE)</td>
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<td>Hinman CEOs Program</td>
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<td>Honors College Entrepreneurship &amp; Innovation Program (EIP)</td>
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<td>Innovation and Entrepreneurship Minor (run by the Smith School)</td>
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<td>iSchool iConsultancy Experiential Learning Program</td>
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<td>John and Stella Graves Makerspace</td>
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<td>Ladies First (run by Dingman)</td>
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<td>Makerspace Initiative (MSI)</td>
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<td>Maryland Center for Humanities Research</td>
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<td>Maryland Industrial Partnerships Program (MIPS)</td>
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<td>Maryland International Incubator (on hiatus)</td>
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<td>Maryland Momentum Fund</td>
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<td>Maryland Small Business Development Center</td>
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<td>Master of Professional Studies in Technology Entrepreneurship (Mtech)</td>
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<td>Michelle Smith Collaboratory for Visual Culture</td>
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<td>Minor in Technology Entrepreneurship (Mtech)</td>
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<td>Mtech Ventures</td>
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<td>Peer Innovation Coach Program (run by AIE)</td>
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<td>Pitch Dingman Competition</td>
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<td>QUEST Honors Program</td>
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<td>Singh Sandbox</td>
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<td>Social Innovation Fellows (on hiatus)</td>
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<td>Southern Management Leadership Program (formerly the Hillman CEOs)</td>
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<td>Startup UMD</td>
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<td>STEM Library (makerspace)</td>
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<td>Sustainability Fund</td>
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<td>TechPort</td>
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<td>Terps Makeathon</td>
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<td>Terp Startup Accelerator (run by Dingman)</td>
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<td>Terrapin Development Company</td>
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<td>Terrapin Innovation Network</td>
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<td>Terrapin Works</td>
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<td>UM Ventures, College Park</td>
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<td>UMD American Marketing Association RedBlack Consulting (student consulting group)</td>
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<td>Virtual Business Information Center (part of UMD Libraries)</td>
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*University of Maryland*
TOPIC: Corporate Training and Development

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 25, 2021

SUMMARY: A recent presentation to the Board of Regents by Deloitte indicated that, while “traditional higher education” still accounts for a very large portion of the U.S. educational market segments, the demand for corporate learning and development—as well as new strategies for learning and credentialing at scale—is growing rapidly.

The USM is well-poised move into these new market segments after several years of work led by the Kirwan Center in the areas of alternative credentials, MOOCs, and corporate partnerships. Additionally, UMGC and UMBC have been leading efforts to create a more systematic approach to addressing corporate learning and development needs in the region. However, transitioning to full-service offerings of customized learning opportunities for corporate clients will require a paradigm shift in the way higher education thinks about its customer base, marketing, staffing, content, pedagogical and instructional design approaches, and business models.

The Kirwan Center’s Director will update the Economic Development and Technology Commercialization Committee on the groundwork that has been done to date, discuss ideas for how to chart a path forward, and share plans to engage system institutions in exploring corporate training and development opportunities.

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

FISCAL IMPACT: There is no fiscal impact

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Tom Sadowski  410-576-5742
tsadowski@usmd.edu
BADGING ESSENTIAL SKILLS for TRANSITIONS
U.S. Educational Market Segments

**Traditional Higher Education**

$580bn (non-profit) & $16bn (for-profit)
Includes non-profit and for-profit public and private universities and colleges in the U.S. that offer academic courses and grant bachelors, graduate, and doctoral degrees.

**Corporate Learning & Development**

$92bn
Includes providers in the training market and learning services market in the U.S. that offer in-person and online courses to corporations and enterprises.

**MOOCs & OPMs**

$4bn
Includes Massive Open Online Course providers and Online Program Management providers in the U.S. that offer courses, microcredentials, and fully-online degree offerings.

*Figures are based on 2020 Market Size estimates: 1. MOOCs: Massive Open Online Courses, OPMs: Online Program Management*

"...and certificates! Strategies for learning and credentialling at scale."
U.S. Educational Market Segments

Traditional Higher Education
$580bn (non-profit) & $16bn (for-profit)
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MOOCs & OPMs
$4bn
Includes Massive Open Online Course providers and Online Program Management providers in the U.S. that offer courses, microcredentials, and fully-online degree offerings.

Estimated 1.2% CAGR through 2023

Figures are based on 2020 Market Size estimates. 1. MOOCs: Massive Open Online Courses, OPMs: Online Program Management

0.5% 3.5% 15%
CAGR

...and certificates! Strategies for learning at scale.
Who are Our Customers?
Now and in the future...

Individuals
Seeking Degrees and/or Certificates
• "Traditional" 18-year-old students <5 years out of high school
• Adult learners >5 years out of high school (likely with work or military experience)
Seeking alternative credentials (could be on Degree/Cert path)
• Unemployed seeking upskilling
• Employed seeking upskilling

Corporate /Non-profits/Government
• Purchasing in "bulk"
• Upskilling/reskilling employees
• Part of benefits package

Lifelong Learners: Consuming education in short spurts when they need it, rather than lengthy blocks of time. Seeking stackable, alternative credentials.
Questions?

mjbishop@usmd.edu
http://www.usmd.edu/cai/
TOPIC: USM Office of Economic Development Update

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, March 25, 2021

SUMMARY: Vice Chancellor Sadowski will provide an update on activities of the USM COVID Research & Innovation Task Force and discuss relevant state legislative activity, along with a brief Momentum Fund update due to the recent investment in the University of Baltimore-affiliated company Dynamhex.

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

FISCAL IMPACT: There is no fiscal impact.

CHANCELLOR’S RECOMMENDATION: n/a

SUBMITTED BY: Tom Sadowski 410-576-5742
tsadowski@usmd.edu
USM Economic Development

Briefing for USM Economic Development and Technology Commercialization Committee

February 4, 2021
USM Economic Development

*Agenda*

- COVID-19 Task Force Activity
- Legislative Activity
- Momentum Fund
USM COVID Research & Innovation Task Force

Ongoing and Forward Initiatives

USM Long-Term Strategy Workshop: Results of two-session internal/external expert discussions have been summarized and are under discussion.

- Anticipate completed final USM Pandemic Preparedness report this Spring 2021

Bioproduction and Vaccine Development Strategy: Working with the Governor’s Life Science Advisory Board (LSAB), MD Commerce and MD Tech Council on comprehensive strategy to develop MD’s bio-manufacturing, vaccine development, medical supply chain and related workforce capacity; exploring federal funding and industry partnership opportunities.

- Engaged in talent supply / demand analysis, skill-set determination, and related workforce training needs

Connected DMV Pandemic Center Response Initiative Partnership: USM is lead academic partner in regional strategic planning and federal funding pursuit effort.

- Currently working on Pandemic Center HQ location and federal funding advocacy for strategic preparedness initiatives
Encouraging Marylanders experiencing “COVID fatigue” to remain vigilant, maintain sound public health practices and good hygiene, and when available, to get vaccinated. [Winners here!]

Blue Crab Hero Campaign

Chelsea Fowler
Graduate Student
University of Maryland Center for Environmental Science
**USM COVID Research & Innovation Task Force**

*Encouraging Industry Partnerships*

- **RNA Disease Diagnostics** is licensing UMB/UMBC intellectual property to develop a high-performing COVID-19 test that doesn't have to be sent to the lab.

- **Smith’s Detection (formerly PathSensors)** adapted a commercial instrument to identify COVID particles from an air sample. They are piloting a program with UMBC to allow their EHS department to test sensitive areas, monitor labs where people are working, and test the air post sanitation. They are looking for additional partnerships to understand if the ability to identify airborne COVID can help businesses and universities get back to normal faster.

- **BubbleLized Technologies** is looking to bring multiple new, innovative commercial-ready and vetted technology solutions for COVID-19 but also for future disease control challenges, including future pandemics. They are looking to understand challenges in getting back to normal, especially where widely-available/standard technologies are insufficient.
USM Legislative Update

*Direct USM Impact – Place Making, Tech Transfer / Commercialization, Research Partnerships, New Venture Creation and Workforce Development*

- **Western MD/TEDCO:** [SB0709](https://www.marylandgeneralassembly.gov/legislation/bill_details.aspx?BillNumber=SB0709&Year=2021) Pilot tech infrastructure program
- **Cyber:** [SB0902](https://www.marylandgeneralassembly.gov/legislation/bill_details.aspx?BillNumber=SB0902&Year=2021) Cyber Workforce Program and Fund

Green Text = Bill has been sent to the opposite chamber as of 3/22
USM Legislative Update

*Indirect USM Impact - Economic Development*

- **Department of Small Business, Entrepreneurship, and Innovation:** [HB0062](#) Establishes this new department, using parts of MD Commerce and MD Labor and all of the Governor’s Office of Small, Minority, and Women Business Affairs.

- **Manufacturing:** [HB0443/SB0577](#) Makerspace bill incl. Western Maryland Works and Baltimore’s OpenWorks. [SB0444/HB0658](#) Manufacturing in a Digital Economy.

- **Investment Tax Credits:**
  - [SB0019](#) Biotech. Lowers % back to investor; limits how much any one company can benefit in a given year and over time.
  - [SB0160](#) Cyber. Expands to “innovation” across certain industries (except biotech), determined by the Maryland Economic Development Commission after consulting with DOL. Allows three years of participation, up from one. Extends until 2025.
  - [HB0360/SB0246](#) Angel tax credit.

- **Other Tax Credit Modifications:** [SB0196](#) R&D credit; [HB0278](#) job creation

- **SBIR:** [HB0654](#) incentive proposed; [SB0459](#) assistance bill modification

Green Text = Bill has been sent to the opposite chamber as of 3/22
The Dynamhex platform uses artificial intelligence to give carbon emission reduction recommendations that are personalized to each customer.

Already, Dynamhex has provided data to Duke Energy, Constellation Energy, the National Resource Defense Council, and their clients.

$250,000 investment as part of a $1.5M seed round, which includes Intelis Capital, the Exelon Climate Change Investment Initiative, the Chesapeake Bay Seed Capital Fund (funded by MD DNR and administered by UMCP), and KCRise Fund.

First University of Baltimore-affiliated company to receive Momentum Fund investment. Dr. Sunny Sanwar is a Professor of Entrepreneurship.
MMF(University+USMO) Investments: $6.9M
$5.2 MM just from MMF
$43M external fund match (~5.3 match)
Average investment: $262K
Average total round deal size: $1.7M

- NextStep Robotics
  - Feb. 2018
  - $250K
  - $1.14M Round

- PaverGuide
  - Mar. 2018
  - $300K
  - $675K Round

- MF Fire
  - Oct. 2018
  - $500K
  - Add-on investment $400k Round

- Neoprogen
  - Oct. 2019
  - $245K
  - $1.5M Round

- InferCabulary
  - Feb. 2020
  - $250K
  - $783K Round

- Zest Tea
  - Dec. 2019
  - $200,000
  - Add-on investment $650K round

- Pathotrac
  - May 2019
  - $150K
  - $1.2 MM Round

- NextStep Robotics
  - Aug. 2020
  - $250,000
  - $500k Round

- n5 Sensors
  - Sept. 2020
  - $300,000
  - $1M Round

- Veralox
  - Jun. 2019
  - $500K
  - $5.4M Round

- Retrium
  - May 2019
  - $400,000
  - $1.6M Round

- Minnowtech
  - Nov. 2019
  - $150K
  - $600K Round

- ARMR
  - Feb. 2020
  - $250K
  - $1.3MM Round

- KaloCyte
  - June. 2020
  - $300,000
  - $1M Round

- MiRecule
  - Aug. 2020
  - $250K
  - $3.5 MM Round

- DataKwip
  - Apr. 2019
  - $250
  - $650K Round

- Pathotrak
  - May 2020
  - $100,000
  - Add-on investment $1M Round

- n5 Sensors
  - Sept. 2020
  - $300,000
  - $1M Round

- Dynamhex
  - Mar. 2021
  - $250,000
  - $1.5M Round

- Zest Tea
  - Dec. 2019
  - $300K
  - $1.035M Round

- DeepTech
  - Technology
  - Consumer Product
  - Therapeutic
  - Data
  - Education Technology
  - Aquaculture
  - MedTech
  - Other Life Science

- NAWEC
  - Apr. 2018
  - $350K
  - $1.5M Round

- VisiSonics
  - Nov. 2020
  - $500,000
  - $6.75M Round

- MiRecule
  - Aug. 2020
  - $250K
  - $3.5 MM Round

- DeepTech
  - Technology
  - Consumer Product
  - Therapeutic
  - Data
  - Education Technology
  - Aquaculture
  - MedTech
  - Other Life Science

- Voxy
  - Oct. 2020
  - $500,000
  - $6.75M Round

- InCabulary
  - Sept. 2020
  - $100,000
  - Add-on investment $1M Round

- DataKwip
  - Aug. 2020
  - $250
  - $650K Round

- ARMR
  - Feb. 2020
  - $350K
  - $750K Round

- Minnowtech
  - Nov. 2019
  - $245K
  - $1.5M Round

- MiRecule
  - Nov. 2020
  - $250K
  - $3.5 MM Round

- InCabulary
  - Feb. 2020
  - $250
  - $650K Round

- ARMR
  - Feb. 2020
  - $250
  - $650K Round

- Neoprogen
  - Oct. 2019
  - $245K
  - $1.5M Round

- NextStep Robotics
  - Aug. 2020
  - $250,000
  - $500k Round

- Pathotrac
  - May 2019
  - $150K
  - $1.2 MM Round

- NextStep Robotics
  - Aug. 2020
  - $250,000
  - $500k Round

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  - Add-on investment $400k Round

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