

OFFICE OF THE VICE CHANCELLOR FOR RESEARCH AND ECONOMIC DEVELOPMENT

USM Board of Regents
Committee on Economic Development & Technology Commercialization
March 29th, 2024
Zoom

AGENDA FOR OPEN SESSION**1:00 p.m.****Call to Order****Isiah Legget**

1. [Renewing Committee Charge – Change of Committee Name](#)
2. Research and Economic Development Review
 - [New Awards of Distinction](#)
 - [Research IT Infrastructure provided by MDREN](#) – **Jerry Waldron**, Interim Executive Director
 - University of MD Muri Awards
 - [Bala Balachandran](#) – *Minta Martin Professor; Distinguished University Professor Department of Mechanical Engineering Disorder – UMD: “Influenced Collective Dynamics of Nonlinear Oscillator Systems.”*
 - [Edo Waks](#) – *Professor in Electrical & Computer Engineering – UMD: “Piezoelectric Control of Quantum States in Solid-State Defects (PIQS).”*
3. [Momentum Fund Update – Update on Minnowtech](#), CEO **Ken Malone**
4. [Venture Heads and Major Resources](#)
 - In-Person Retreat Highlights

Q and A



UNIVERSITY SYSTEM
of MARYLAND

Board of Regents
Committee on Research and Economic Development
January 25, 2024

Charge:

The Committee on Research and Economic Development shall provide strategic leadership for the USM's research, economic development, technology commercialization, innovation, and entrepreneurial initiatives, programs, and policies.

Role and Responsibilities:

The Committee on Research and Economic Development shall consider and report or recommend to the Board of Regents on matters concerning economic development and technology commercialization, innovation and entrepreneurial initiatives, and research, including translational research and technology transfer.

Members of the Committee on Research and Economic Development are appointed annually by the Chairperson of the Board. The Committee shall meet as needed, but no fewer than four times during the fiscal year.

Created in July 2011 in recognition of the increasing importance of translational research, entrepreneurship and innovation, and the supply of skilled workers in STEM fields for the State of Maryland, the Committee, working with the Vice Chancellor for Research and Economic Development, may expect to receive information for review in order to consider, and/or act on any of the following matters:

- A. Aligning resources with market demand
- B. Leveraging USM resources through collaborations
- C. Enhancing partnerships with industry, state, and federal entities
- D. Strengthening the USM Research and Innovation ecosystem, including engaging with research funding and commercialization partners, enhancing research administration and compliance infrastructure, and fostering excellence in scholarship, research, creative, and innovation
- E. Strengthening the USM entrepreneurial ecosystem, including engaging the investment community and enhance access to capital for USM affiliated startups and innovators

Office of the Vice Chancellor for Research and Economic Development

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

Michele Masucci, Ph.D.

Vice Chancellor for Research and Economic
Development

March 29, 2024



Agenda

1. Renewing Committee Charge - Change of Committee Name

2. Research and Economic Development Review

- New awards of distinction

- Research IT Infrastructure provided by MDREN – **Jerry Waldron**, Interim Executive Director

- University of MD Muri Awards

Bala Balachandran - Minta Martin Professor; Distinguished University Professor

Department of Mechanical Engineering Disorder – UMD: “Influenced Collective Dynamics of Nonlinear Oscillator Systems”

Edo Waks - Professor in Electrical & Computer Engineering – UMD:

“Piezoelectric Control of Quantum States in Solid-State Defects (PIQS)”

3. Momentum Fund - Update on Minnowtech, CEO Ken Malone

4. Investment Funds, Major Resource Centers, and Economic Development Programs –

3-15-2024 Retreat Summary

1. Renewal of Committee Charge

Committee on Economic Development and Technology

Commercialization Charge update:

- Change of name from “Economic Development and Technology Commercialization” to **Research and Economic Development**
- The name change reflects the development of new Office of Vice Chancellor for Research and Economic Development, with an added focus of research
- The name change reflects the charge that includes a focus to include research and related initiatives, programs, and policies
 - Review of policies underway, recommendations to follow

Committee on Economic Development and Technology

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2. HIGHLIGHTS ACROSS USM

- **Research IT Infrastructure provided by MDREN**
Jerry Waldron, Interim Executive Director
- **University of Maryland MURI Awards**
Bala Balachandran - Minta Martin Professor;
Distinguished University Professor Department of
Mechanical Engineering Disorder – UMD: “Influenced
Collective Dynamics of Nonlinear Oscillator Systems”
Edo Waks - Professor in Electrical & Computer
Engineering – UMD: “Piezoelectric Control of Quantum
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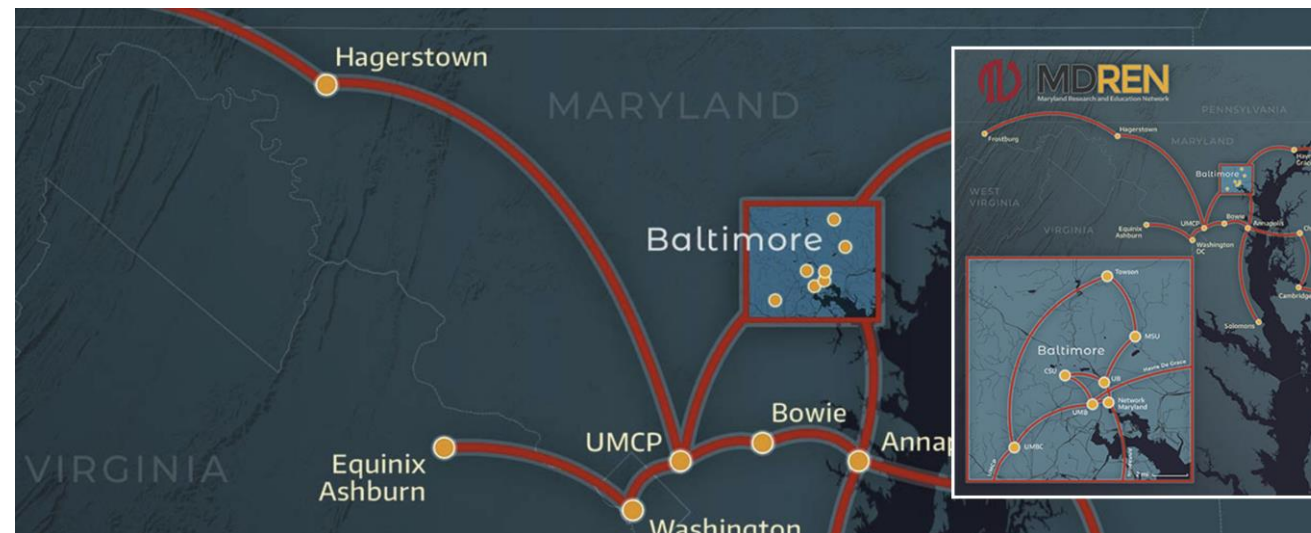
- Instrument development support to Dr. Mehdi Benna at UMBC's NASA-funded CSST Center, the Lunar Environment Monitoring Station (LEMS)
<https://www.nasa.gov/news-release/nasa-selects-first-lunar-instruments-for-artemis-astronaut-deployment/>
- Professor Lori Harvin, Coppin State University, Selected as inaugural Business Higher Education Forum Innovation Fellow
<https://www.bhef.com/faculty-innovation-fellowship>
- NSF Convergence Accelerator Award to Ming Li at UMCES for developing tools to manage salt contamination of fresh water - \$600K
<https://www.umces.edu/news/new-research-effort-will-consolidate-tools-to-manage-salt-contamination-of-fresh-water-supplies>
- Sloan Research Fellowship for studying plasmas surrounding black holes and neutron stars awarded to UMD's Sasha Philippov, 75K
<https://sloan.org/fellowships/2024-Fellows>
- Greater Baltimore Committee Tech Hub resource application requesting \$70M advances to EDA
<https://technical.ly/civic-news/eda-tech-hubs-baltimore-70m-spending-plan/>

MDREN – Maryland Research and Economic Development Network

MDREN offers a variety of high-quality, reliable services to members beyond internet connectivity to support collaboration, network and IT infrastructure needs.

Jerry Waldron – Interim Executive Director

<https://www.mdren.net/>



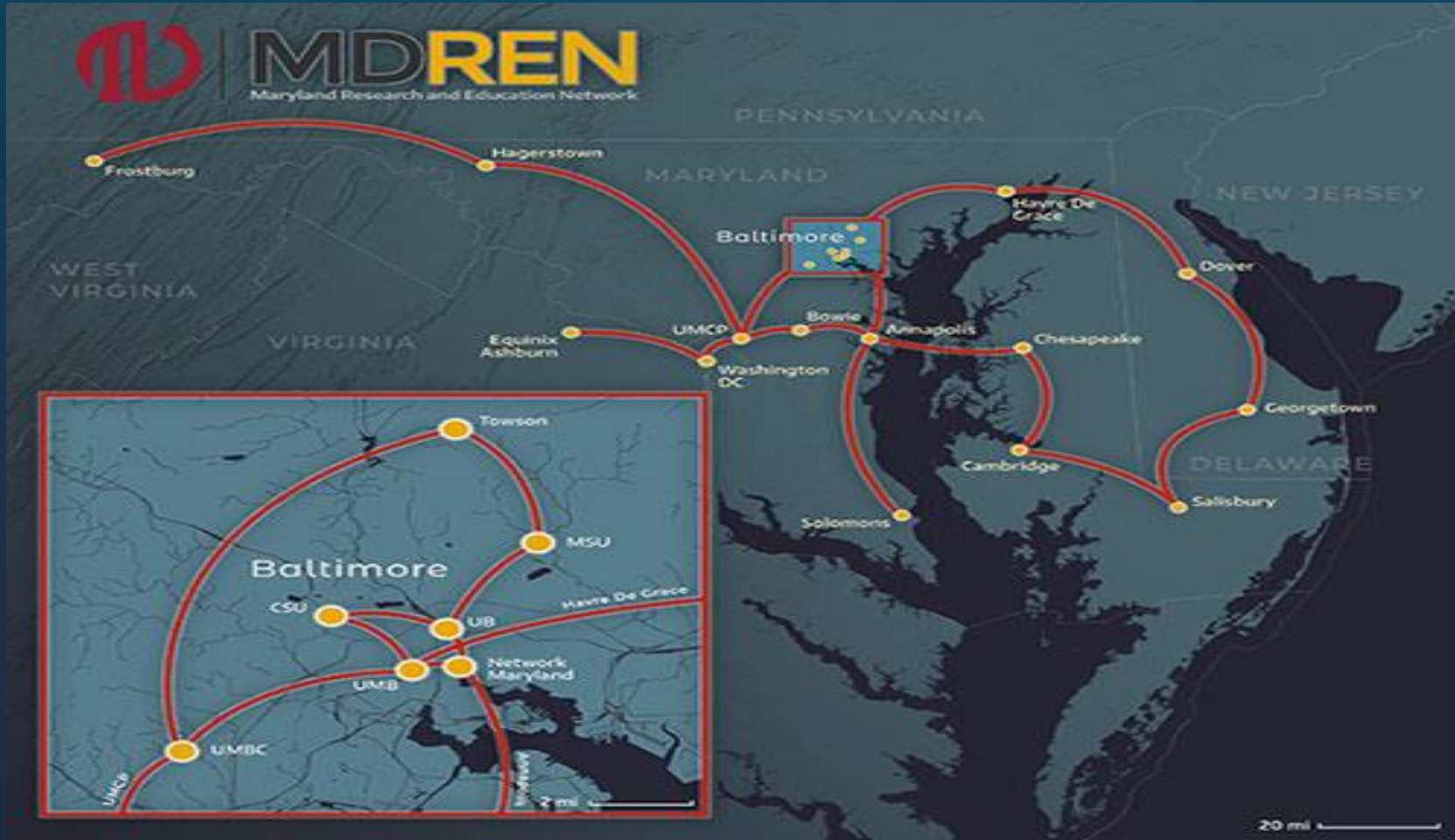


MDREN

Maryland Research and Education Network



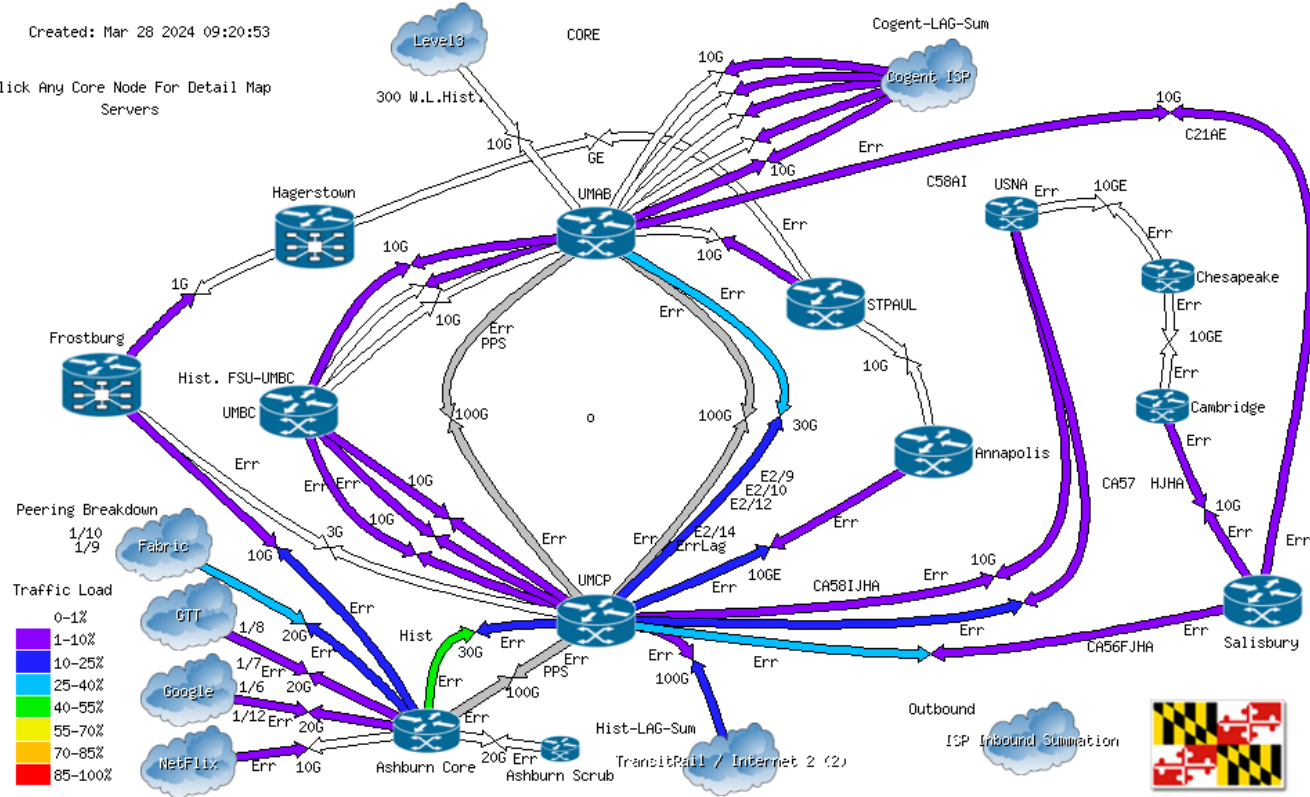
MDREN
Maryland Research and Education Network



MDREN
Maryland Research and Education Network

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Click Any Core Node For Detail Map Servers



Network Map created with [PHP Network Weathermap v0.98a](#)



Location - Adelphi, Maryland

Support 22 colleges and universities in Maryland with redundant high-speed internet connectivity.

Provide access to Internet 2

Facilitate access to Eduroam

Provide DDoS mitigation to deter network attacks.

Provide orchestrated high-speed data transfer for large data sets between member campuses and sites globally.

Support campus network engineers

Provide researchers and engineers with information related to cyberinfrastructure grants and funding sources



Current projects

- Network upgrade – expanding capacity to 100GB to each campus.
- Extending expanding capacity to western and southern Maryland.
- NSF Strategy Grant – working with campus researchers at smaller universities and HBCUs to provide access to HPC resources





- **Contact Information**

- Jerry Waldron
- Interim Executive Director
- jwaldron@usmd.edu
- 301-479788
- www.mdren.net

FY2024 DOD MULTIDISCIPLINARY UNIVERSITY RESEARCH INITIATIVE (MURI) Funded Programs

<https://www.defense.gov/News/Releases/Release/Article/3700836/department-of-defense-announces-fiscal-year-2024-university-research-funding-aw/>

Multidisciplinary University Initiative (MURI) efforts involve teams of researchers investigating high priority topics and opportunities that intersect more than one traditional technical discipline. For many military problems this multidisciplinary approach serves to stimulate innovations, accelerate research progress and expedite transition of results into naval applications.

Bala Balachandran - Minta Martin Professor; Distinguished University Professor Department of Mechanical Engineering Disorder – UMD: “Influenced Collective Dynamics of Nonlinear Oscillator Systems”

Edo Waks - Professor in Electrical & Computer Engineering – UMD: “Piezoelectric Control of Quantum States in Solid-State Defects (PIQS)”

MURI Presentation

Prepared for USM BOR

Bala Balachandran
Minta Martin Professor
Distinguished University Professor

March 29, 2024



A. JAMES CLARK
SCHOOL OF ENGINEERING
DEPARTMENT OF MECHANICAL ENGINEERING

What is a MURI?

- MURI stands for Multidisciplinary Research Initiative and the MURI Program is a part of the basic defense related research projects of the Department of Defense (DoD)
 - **A tri-service University Research Initiative sponsored by the Office of Naval Research (ONR), the Army Research Office (ARO), and the Air Force Office of Scientific Research (AFOSR)**
- Started in 1985, DoD's MURI program has allowed teams of investigators from multiple disciplines to generate collective insights, facilitating the growth of cutting-edge technologies to address DoD's unique challenges
 - **Accelerated, high-risk basic research to understand or achieve something that has never been done before**
 - **Significant scientific breakthroughs with far reaching consequences to the field of science, economic growth, revolutionary new military technologies, and commercial sector applications**
 - **Doppler radar detection leading to new detection physics for landmines**
 - **Cold-atom quantum methods with potential applications in quantum sensing and communication**

Fiscal Year 2024 MURI

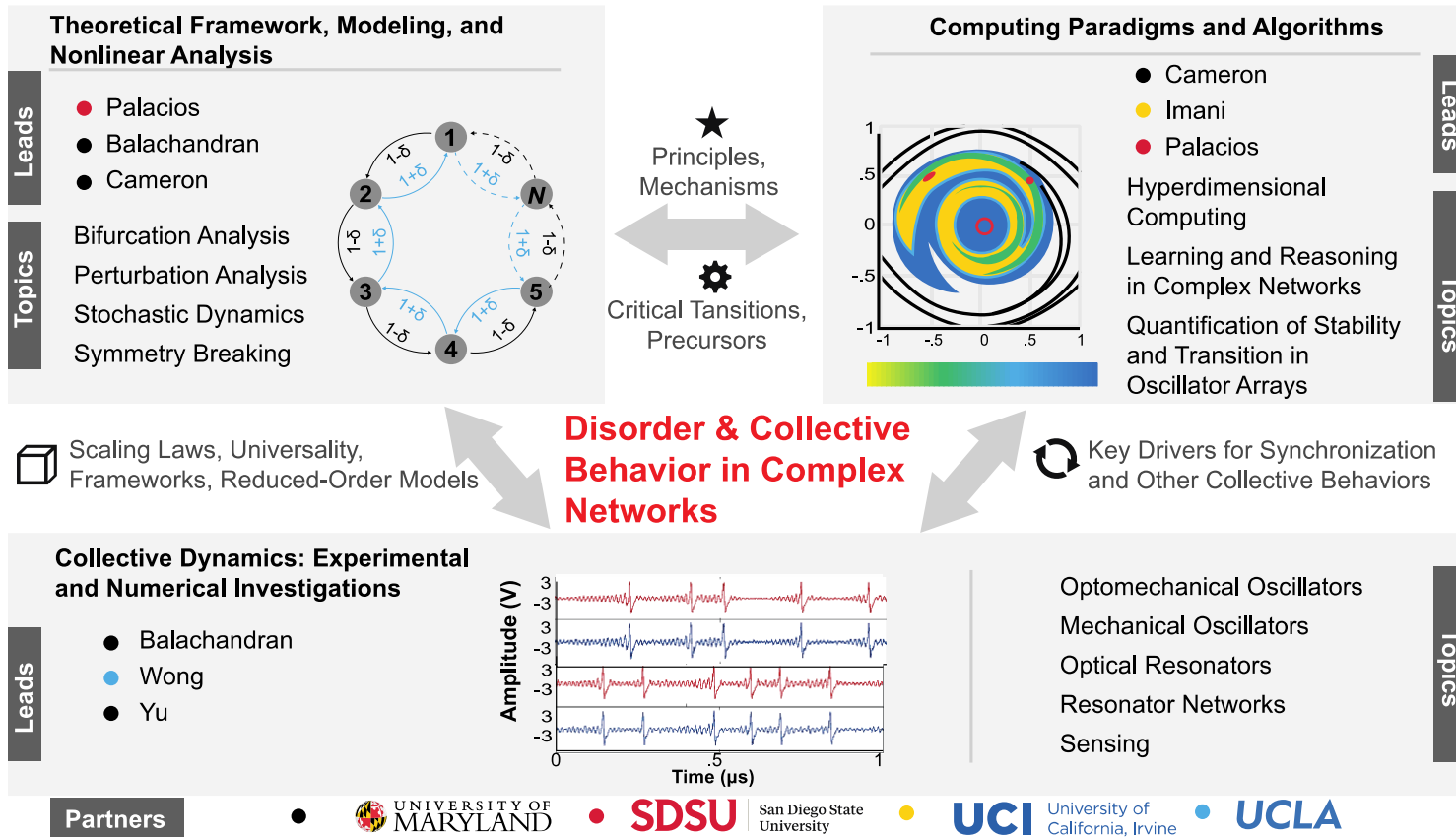
- Solicitation in 2023 for proposals in 25 topics of strategic importance to DoD.
- 276 white papers were submitted. After merit review by a panel of experts, 102 were invited for proposal submissions, from which the final 30 awards were selected.
- On the average award amount was \$7.5M over five years (\$1.5M per year). In total \$221M was awarded to support 30 teams across 73 US academic institutions
 - Across 6 out of the 25 topics, 7 teams out of the 30 selected to receive \$9M over five years specifically to support the participation of historically Black colleges and universities and minority-serving institutions (HBCU/MIIs).
- This year, the University of Maryland (UMD), College Park was the lead awardee on 2 out of the 30 teams (ONR, AFOSR) and a sub-awardee on 3 other teams (ONR).
- UMD has a history of receiving the prestigious URI and MURI Awards
 - Alfred Gessow Rotorcraft Center, A. James Clark School of Engineering, ARO sponsored URI (1992-1997); ARO sponsored MURI (1996-2001); ARO sponsored MURI (2004-2008)

ONR Sponsored 2024 MURI Award to UMD

ONR: FOA Number: N00014-23-S-F003

Topic 4: (ONR) Complexity Science Disorder-Promoted Synchronization

Disorder-Influenced Collective Dynamics of Nonlinear Oscillator Systems; \$9M over five years (2024-2029)



The overall goal of the proposed five-year effort is to develop a comprehensive framework informed and enabled by dynamical systems theory, experimental investigations, and brain-inspired computing paradigms, for understanding the interplay amongst parameter disorder, delay, and noise in a wide range of oscillator and waveguide arrays and harnessing disorder-influenced collective dynamics in nonlinear networks.

ONR Sponsored 2024 MURI Award to UMD

Disorder-Influenced Collective Dynamics of Nonlinear Oscillator Systems; \$9M over five years (2024-2029)

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UMD-SDSU-UCI-UCLA Team: 6 faculty members, 8 graduate and 4 undergraduate students, and 3 post-doctoral researchers.

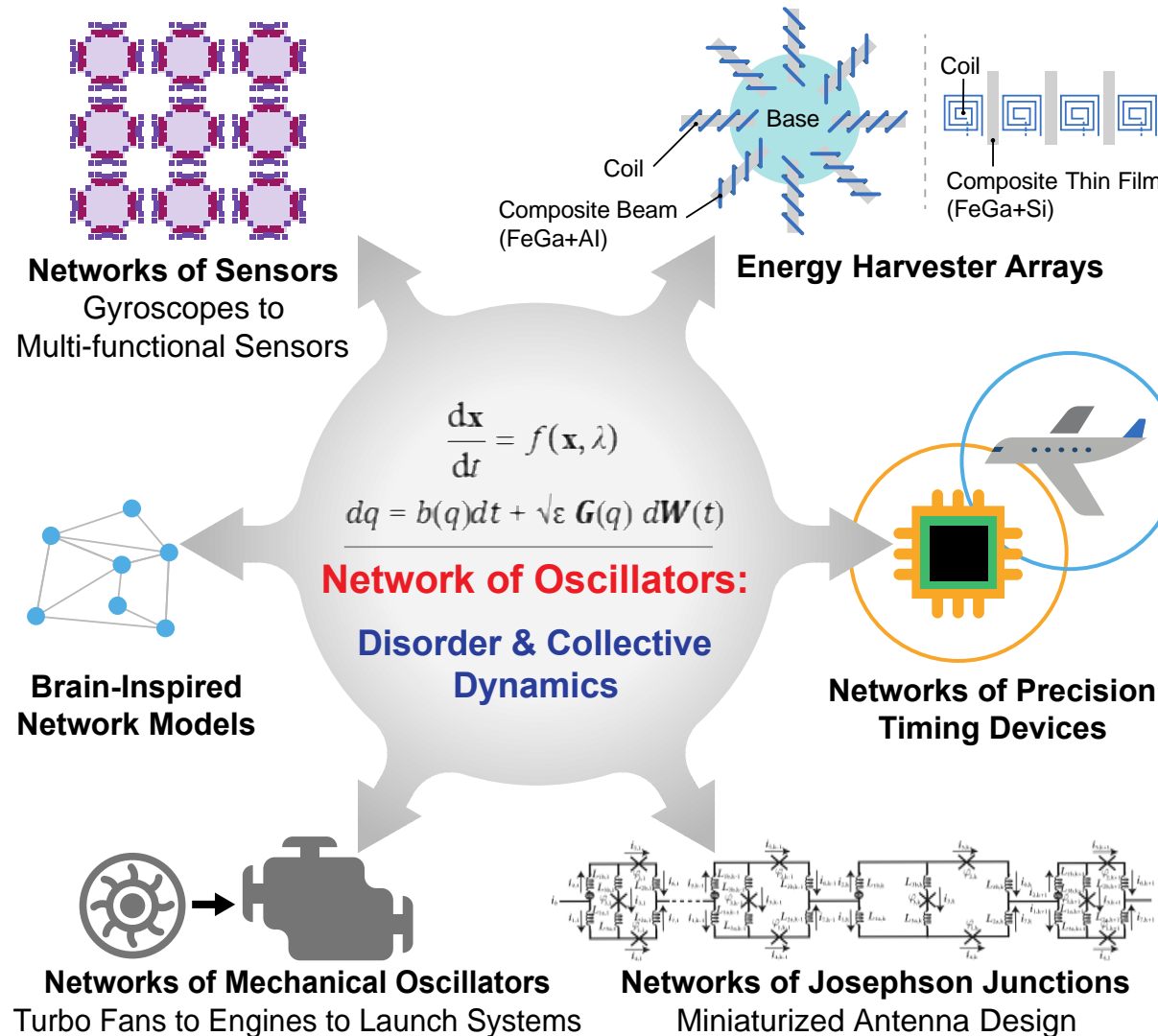
UMD: 3 faculty members from Mechanical Engineering and Mathematics, 5 graduate students, and 1 post-doctoral researcher



Total Direct Costs Over 5 Years: ~\$7.38M; Total Indirect Costs: ~\$1.62M; UMD Portion of Budget: ~\$4.82M

ONR Sponsored 2024 MURI Award to UMD

Disorder-Influenced Collective Dynamics of Nonlinear Oscillator Systems; \$9M over five years (2024-2029)



MURI Interactions and Impact

- Research outcomes that can benefit a wide range of systems and DoD applications (optical sensing systems, coupled inertial navigation sensor systems, precision timing systems, chip scale nanophotonic devices, fluxgate magnetometers, and communication devices)
- Student and Post-doctoral Researcher Training
- Curriculum and facilities development that will impact education of undergraduate and graduate students
- DoD Labs Interested in Interacting on this Work: ARL, Adelphi, MD; NSWC, Carderock, MD; NIWC, San Diego, CA; NSWC, Corona, CA
- Industry Interested in Interacting on this Work: Northrop Grumman, CA

The End



Piezoelectric Control of Quantum States in Solid-State Defects (PIQS)

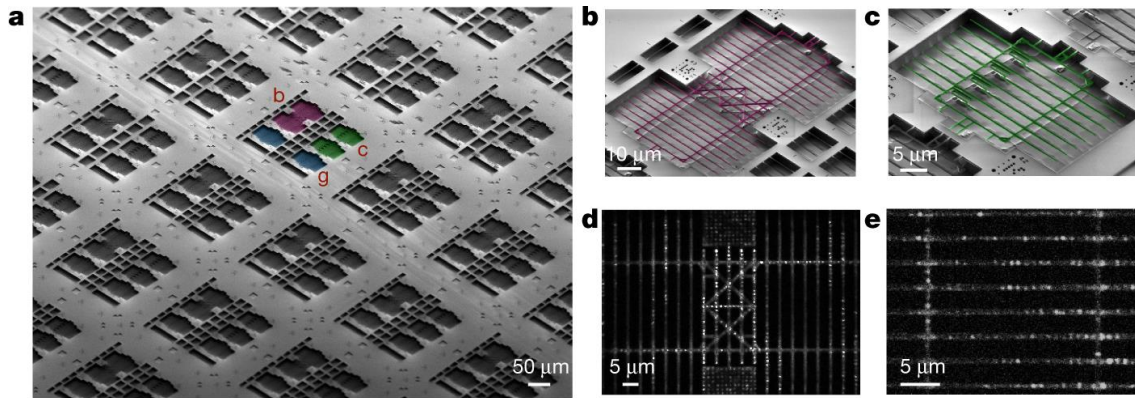
Edo Waks

**Department of Electrical and Computer Engineering, Joint Quantum
Institute**

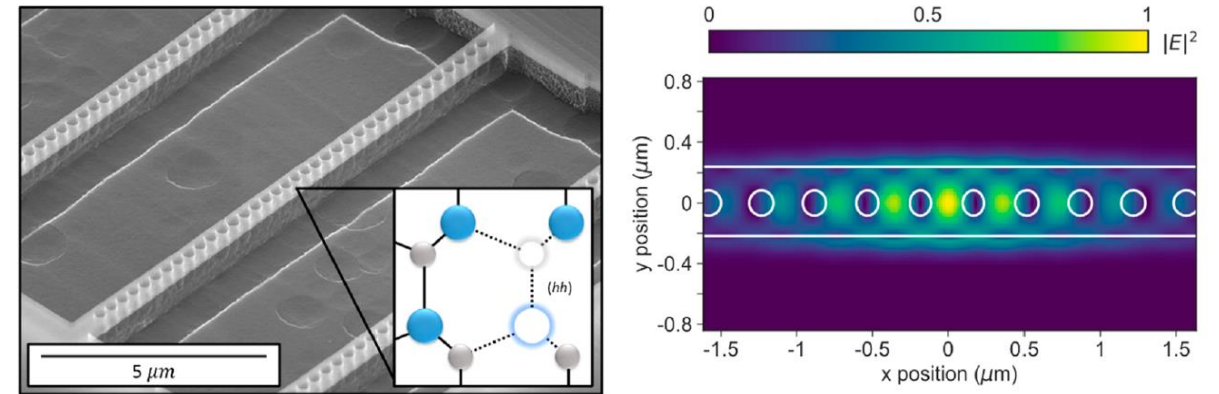
University of Maryland College Park, Joint Quantum Institute



Solid-state qubits enable scalable quantum technology



Wan et al., *Nature* **538**, 226 (2020)

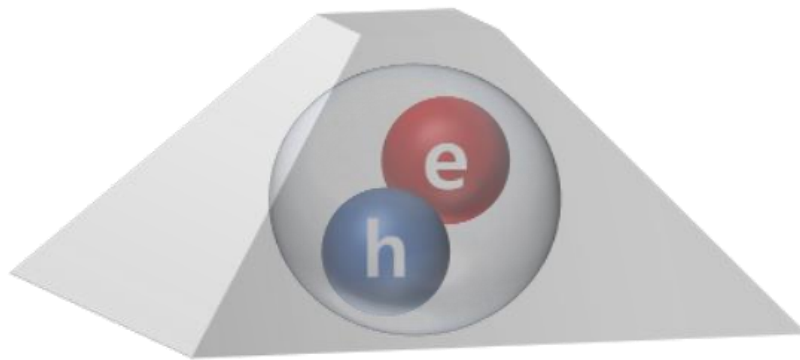


Crook et al., *Nano Lett.* **20**, 3427 (2020)
These are spin qubits in SiC (for Edo)

Solid-state qubits should satisfy two requirements

Optical properties

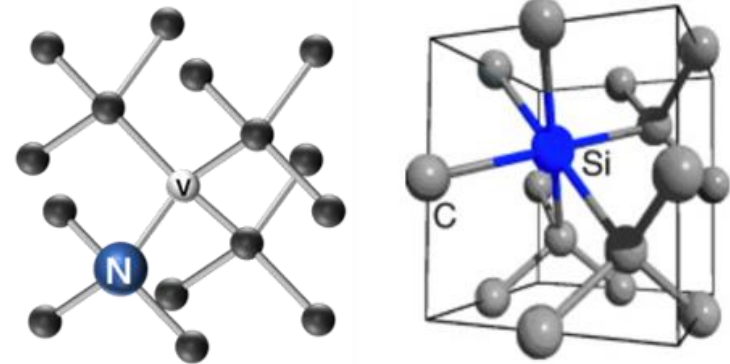
High Brightness
High optical coherence



Exciton in
Epitaxial quantum dots

Spin properties

Long spin coherence times
High temperature operation



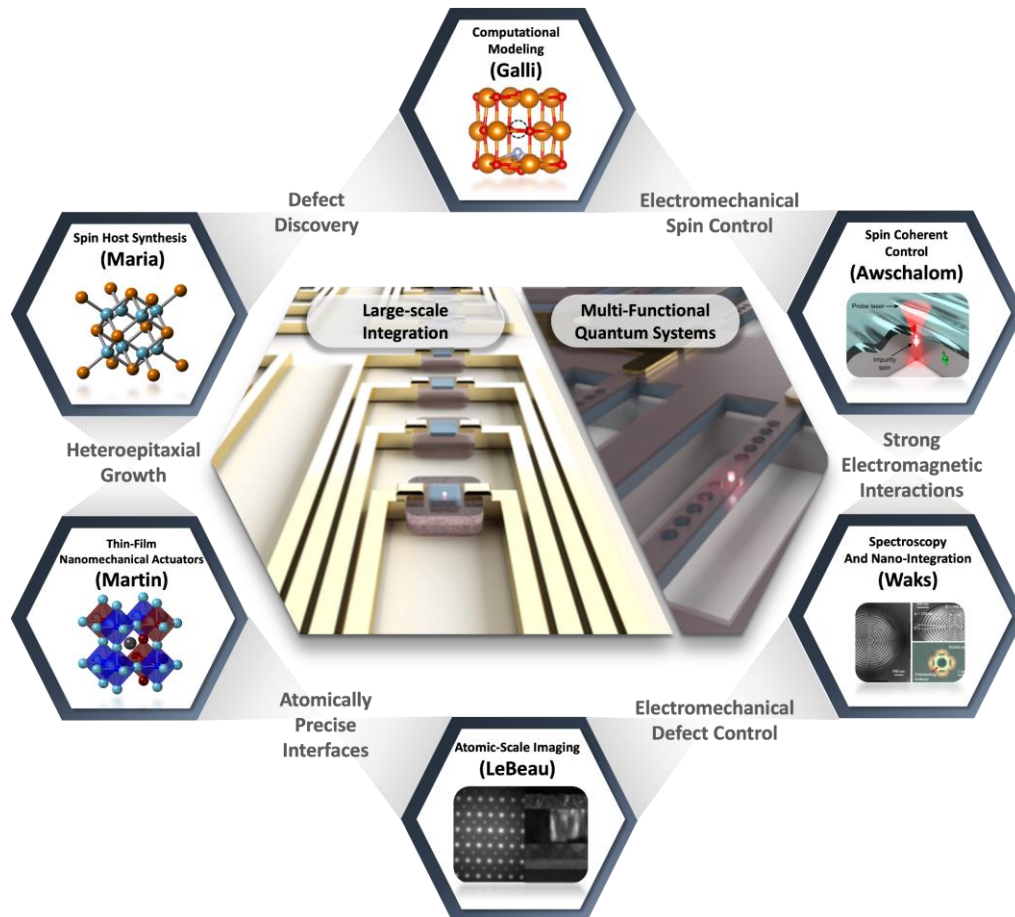
Atomic defect
In crystals

The PIQS program



AFOSR: FOA-AFRL-AFOSR-2023-0004

Topic 14: Piezoelectric Materials Interfaced with Semiconductors for Integrated Quantum Systems



- **Use electromechanical force to engineer and control defect properties**
- **Achieve ultra-high density arrays of solid-state spin qubits**
- **Device integration with nanophotonic and nanomechanical structures for quantum transduction**

The Team



Jon-Paul
Maria



Material Growth

- High purity PVD
- MBE



Lane
Martin



David
Awchalom

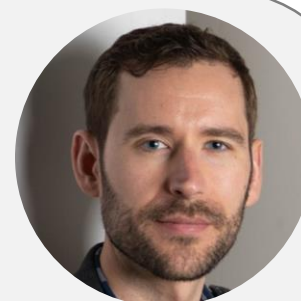


Characterization

- Spectroscopy
- Electron microscopy



Edo
Waks



Jim
LeBeau



Giulia
Galli



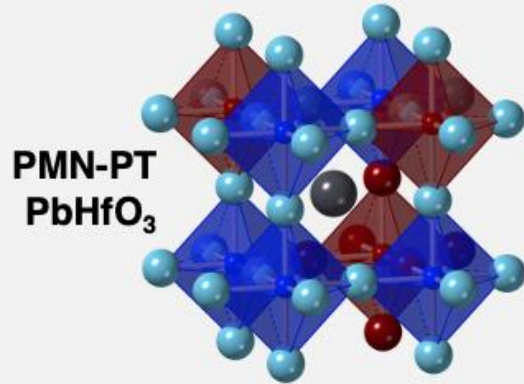
Theory

- High throughput computational search

PIQS will create spin hosts atomically interfaced with eletro-mechanical actuators

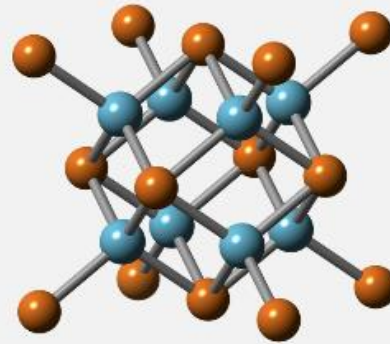
Component Materials: CeO₂ (spin host), Ferroelectric perovskites (high strain), AlN (high frequency)

Piezo-I: FE & AFE perovskites, Research intensive material identified by **Martin** group



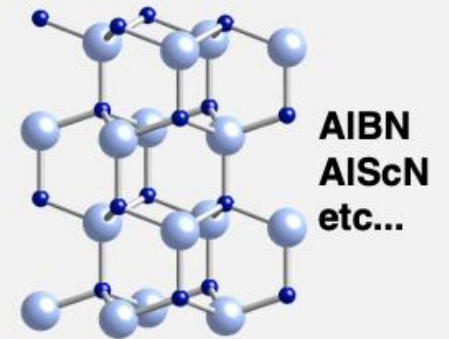
Record-setting piezo-strain, broad solid solution space to minimize lattice mismatch

Qubit Host: CeO₂, Research intensive material identified by **Galli** group



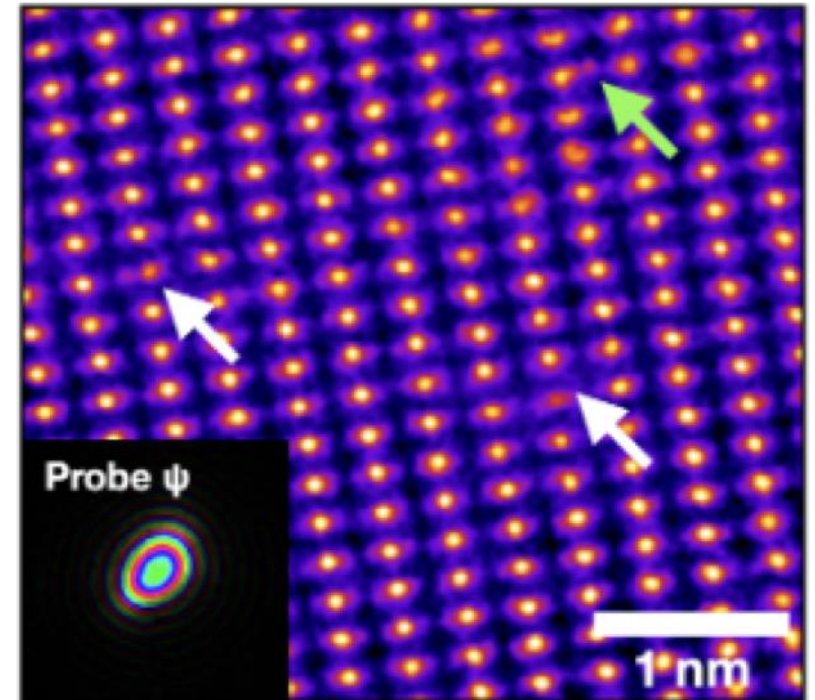
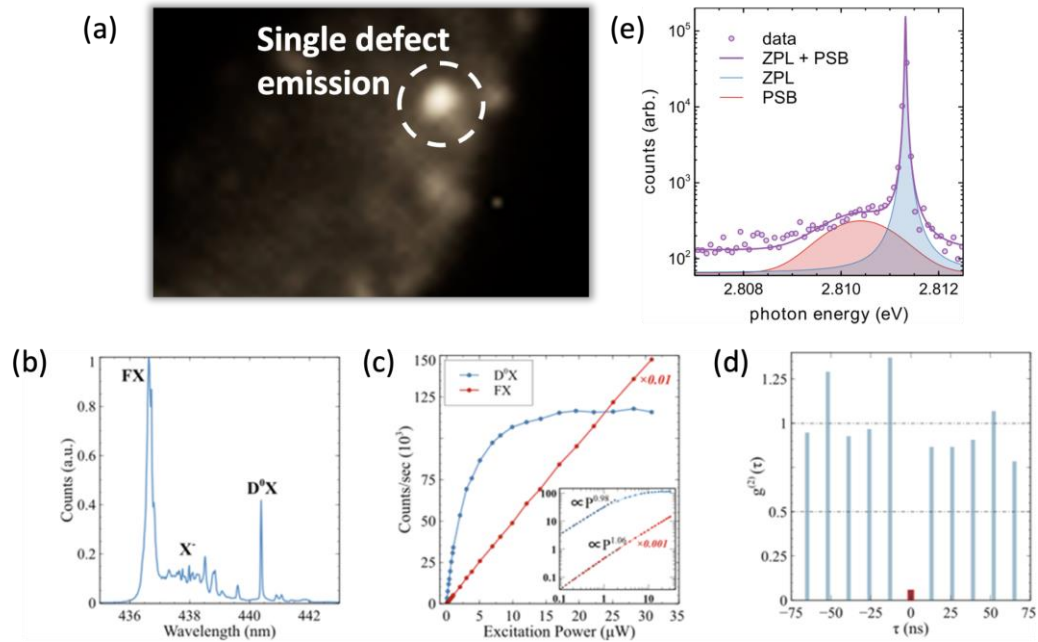
¹⁴⁰Ce & ¹⁴²Ce comprise 99% natural abundance with 0 spin, CeO₂ also strong electrostrictor

Piezo-II: Al_{1-x}M_xN Commodity material available, via **Maria** group

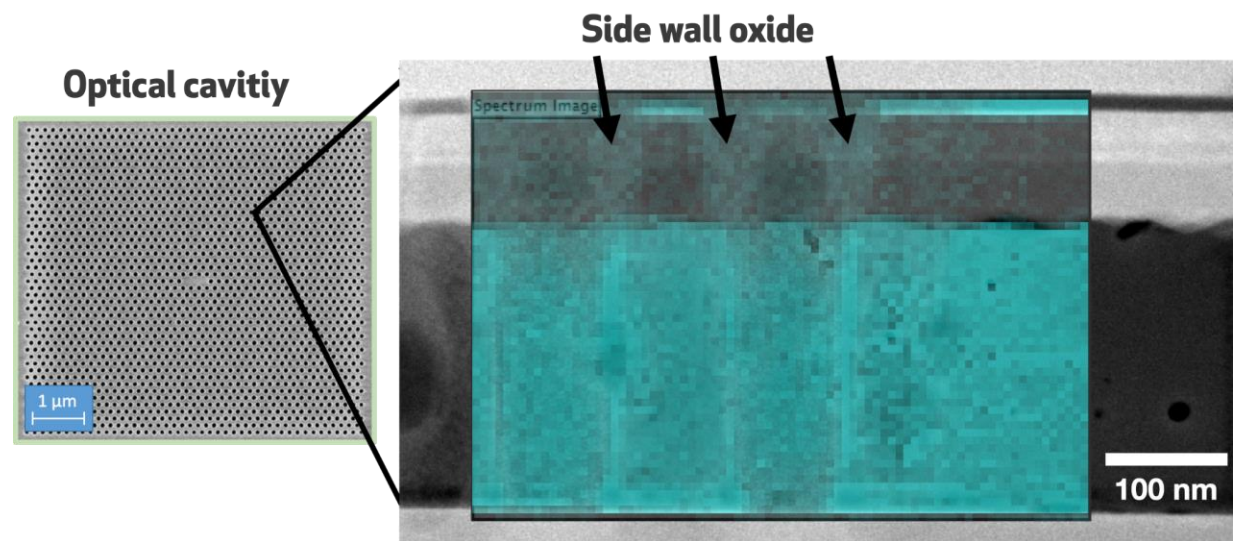
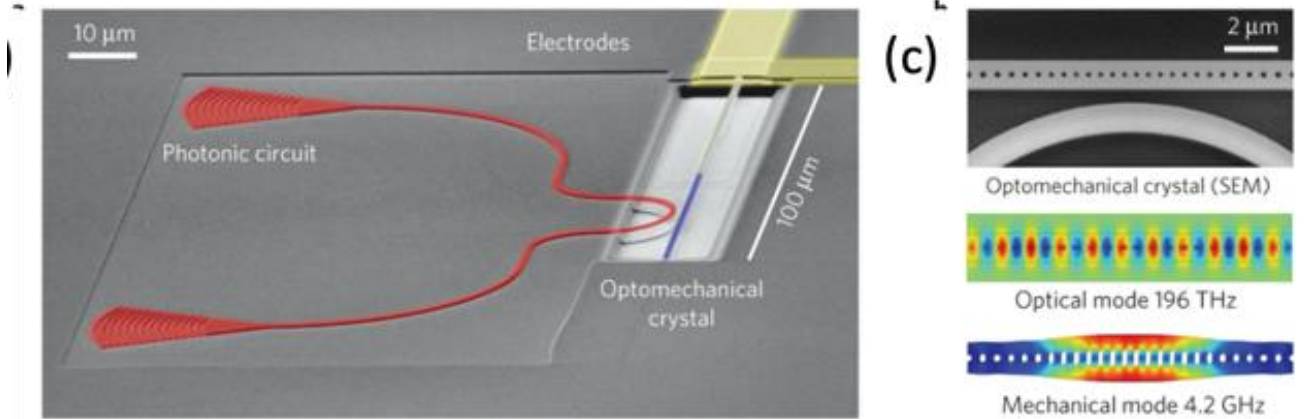
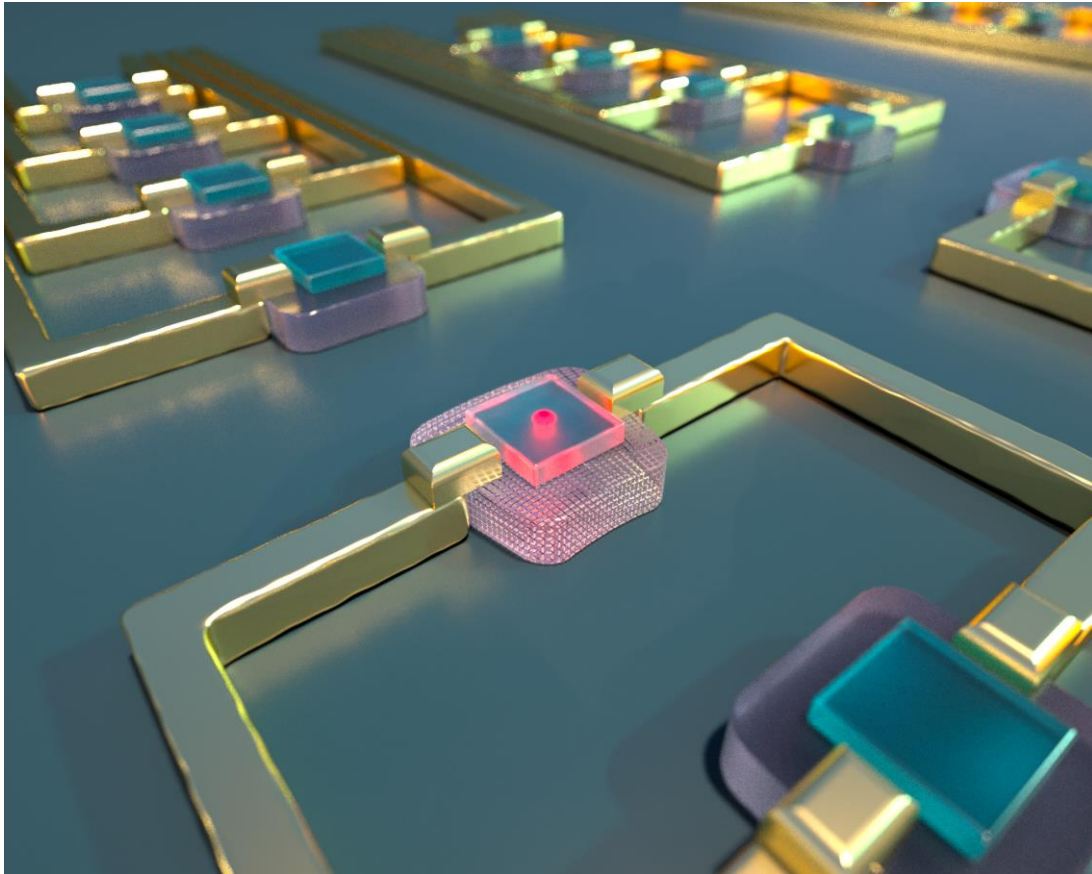


GHz actuation/oscillation, High mechanical Q, Near-RT synthesis

Our team will combine optical and electron microscopy to characterize spin qubits with atomic precision



Future vision: Ultra-compact nanoelectronic and nanophotonic quantum devices



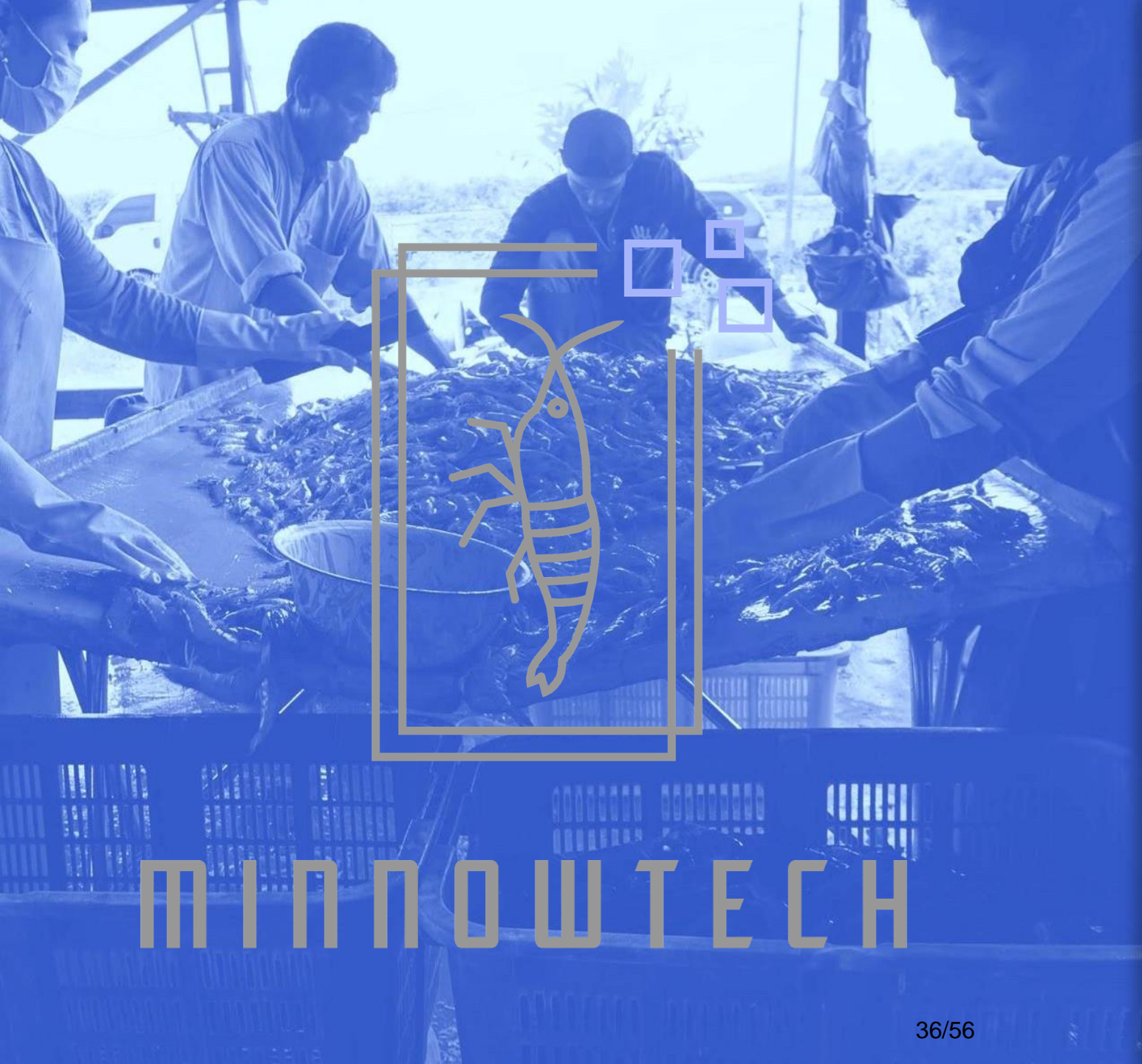
Thank You!

3. MOMENTUM FUND

MINNOWTECH Update

Ken Malone





WE MEASUR E SHRIMP

USM Board of Regents
Committee on Economic Development &
Technology Commercialization

March 29, 2024

MINNOWTECH

WHEN WE SAY SHRIMP....



MINNOWTECH

**If you think Gulf of Mexico, then
you're 20 years behind**



**Today, >\$50 billion raised on farms in
SEA, India, China, LatAm, MidEast**



SHRIMP ARE NOT EASY TO MONITOR



MINNOWTECH

Shrimp thrive in murky water.



Add in aeration, and it is impossible to see below the surface.



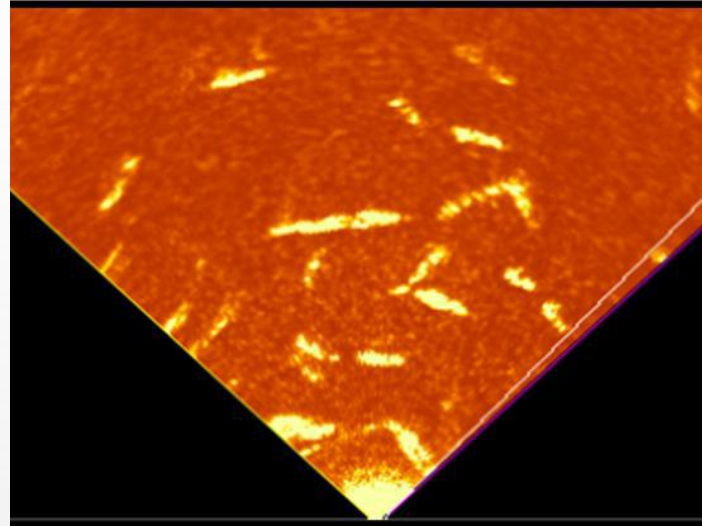
Current monitoring methods are inaccurate.



THE BIOMASS READER FOR SHRIMP (BRS-1)



MINNOWTECH



We use sonar to “see” shrimp where others can’t and *estimate biomass at >95% accuracy.*

SOLVING THE BIG PROBLEMS IN A GROWING INDUSTRY



\$53.91 billion shrimp market in 2021
>6.81 million MT of shrimp in 2020
Production growing at 5.3% annually

Value Propositions



Reduce the 65% cost of feed



Larger Shrimp Capture a Higher Price



Early detection to avoid 18% annual loss by disease



Timing harvest to match weekly price swings and processor capacity

<6 MONTH PAYBACK OF SONAR INVESTMENT



MINNOWTECH



Before

- This farmer is estimating the size and count of his shrimp using a *cast net*.
- The farmer accuracy is inconsistent and inaccurate (50-75%) making it difficult to *track mortality, predict yield and titrate feed*.
- **Losses from unfed shrimp and uneaten food are high.**



After

With Minnowtech's system (95% accuracy) farmers optimize the efficiency of their farm by *titrating feed, predicting yields* and checking for *unexpected mortality*.

Titrating feed for an average 3 month shrimp pond cycle in Ecuador

Net Accuracy	Minnowtech Accuracy	Feed Error	Per Pond Gains and Savings
75%	95%	Underfeeding Overfeeding	\$20,000 gained with fed shrimp \$20,000 savings in uneaten feed

WE EXIST BECAUSE OF USM



MINNOWTECH



**Suzan Shahrestani
PhD Fisheries Science
UMCES**



**Connected and funded
through IMET's REEF
Program**



**To her co-founders at
Early Charm**

++++ MIPS Funding and Two Rounds of Momentum Fund



- **NSF SBIR Phase I and II Funded with Supplementals**
- **HATCH Global Aquaculture Accelerator Pre-Seed Funding**
- **Seed investment**
 - OTAQ marine hardware company**
 - HATCH**
 - Momentum**
- **Series A investment**
 - Propel Fund**
 - Abell Foundation**
 - TEDCO**
 - Momentum**
 - HATCH (pending)**
- **Sales in Australia, Ecuador, Vietnam, Indonesia and France**

4. VENTURE DEVELOPMENT

Investment Funds, Major Resource Centers, and
Economic Development Programs –
3-15-2024 Retreat Highlights



Research and Economic Development Functions

Support Growth in Research and Development through Diversification of Funding Sources, collaboration approaches, and stakeholder engagement

Identify and pursue strategic
funding opportunities

Foster and develop research
collaborations

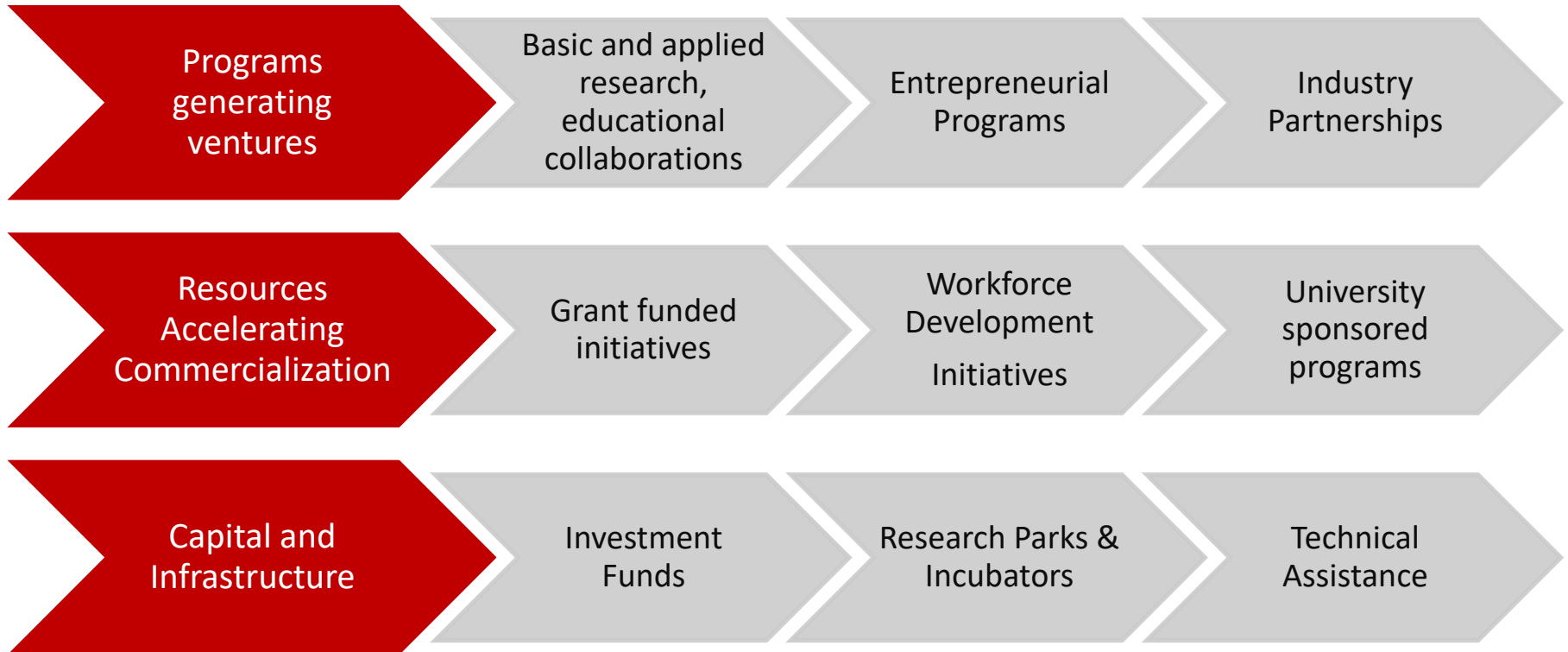
Advancement of cross-cutting efforts:

- Providing technical support
- Strategic and poisoning planning
- Development of frameworks for collaborative initiatives
- Cultivating innovation ecosystem

Strengthen technology transfer
and commercialization

Enhance philanthropic support
for R & D

Framework for USM Alignment related to venture investments and program development



Investment Funds, Major Resource Centers, and Economic Development Programs

- Convened ecosystem of funds and programs to identify alignment, gaps, challenges
- Discussed planned report on strengths and opportunities, gaps, and value proposition
- Identified resources of value to clients of funds
- Sought feedback on how to develop culture of support for the startup communities served by USM
- Discussed how to connect the pipeline(s) between basic and applied research and commercialization
- Identified strategies to improve communications related to USM successes

Funds and Major Resource Centers Represented

Salisbury University Shore Hatchery

<https://www.salisbury.edu/academic-offices/business/shore-hatchery/>

USM Launch Fund

<https://www.usmd.edu/launch/>

Towson University StarTUp Accelerator

<https://www.towson.edu/startup/accelerator/>

Maryland Industrial Partnerships (MIPS)

<https://mips.umd.edu/>

Maryland Innovation Initiative (MII) (*USM Institutional Reps*)

<https://www.tedcomd.com/funding/maryland-innovation-initiative>

Baltimore Fund

<https://www.umventures.org/about-us/initiatives/the-baltimore-fund>

Discovery Fund

<https://innovate.umd.edu/resources/discoveryfund>

Momentum Fund

<https://momentum.usmd.edu/>

Dingman Center Angels

<https://www.rhsmith.umd.edu/centers-initiatives/dingman-center/initiatives-programs/dingman-center-angels>

Chesapeake Bay Seed Capital Fund

<https://www.cbscf.umd.edu/>

Review of fund characteristics and distribution

USM Capital	Applicant Affiliation Required	USM Eligibility	Year Formed	Inst Administering	Funding Source	Approx. Total Annual Deployment	Approx. New Companies Per Year	Form of Capital	Geographic Restriction	Tech/Industry Focus	Stage of Company
SU Shore Hatchery	-	All USM	2013	SU	Private Philanthropic	\$200k	12	Non-dilutive	Mid-Atlantic	All	All
USM Launch Fund	USM	All USM	2023	USM	USMO	\$200k	15	Non-dilutive	Maryland Only	All	Early
TU StarTup Accelerator	-	All USM	2020	TU	A Mix of County, Private, and State	\$150k	12	Non-dilutive	Attend In-Person at Towson	All	Ready for or Early Market Entry
Maryland Industrial Partnerships (MIPS)	-	All USM	1987	UMCP administers but all MD public insts participate as research partners	State (Various)	\$1.3M	25	Non-dilutive (in-kind)	Maryland Focus	All	All
Maryland Innovation Initiative (MII)*	UMCP, UMB, UMBC, pilot: FSU, BSU + Morgan and JHU	UMCP, UMB, UMBC, FSU, BSU	2012	TEDCO plus eligible institutions	State (TEDCO + Insts, Legislated)	\$2.5M*	3	Non-dilutive and Dilutive	Maryland Only	Tech	Early
Baltimore Fund	Public Inst of Higher Ed	All USM if locating company in Baltimore City	2017	UMB	State (Legislated)	\$2.5M**	10	Non-dilutive and Dilutive	Baltimore City Only	All	All
Discovery Fund	-	All USM if locating company in Prince George's County	2021	UMCP	State (Legislated)	Up to \$1M	4-5	Non-dilutive and Dilutive	Prince George's County Only	Tech	"Seed"
Momentum Fund	USM	All USM	2016	USM/UMB	State (USMO)	\$2M	5	Dilutive	Maryland Only	All	"Seed"
Dingman Angels	-	All USM	2005	UMCP	Individual Angels	***	10	Dilutive	Mid-Atlantic	All	"Seed"
Chesapeake Bay Seed Capital Fund	-	All USM	2008	UMCP	State (MD Dept Natr Res)	\$200k	2	Dilutive	Maryland Only	Improve air or water in Chesapeake watershed	"Seed"

In Development	Sector-Focused
Terrapin Fund	Algal Bloom Fund (UMCES)
Tiger Fund	REEF Fund (UMCES)
Founder's Fund	

Notes

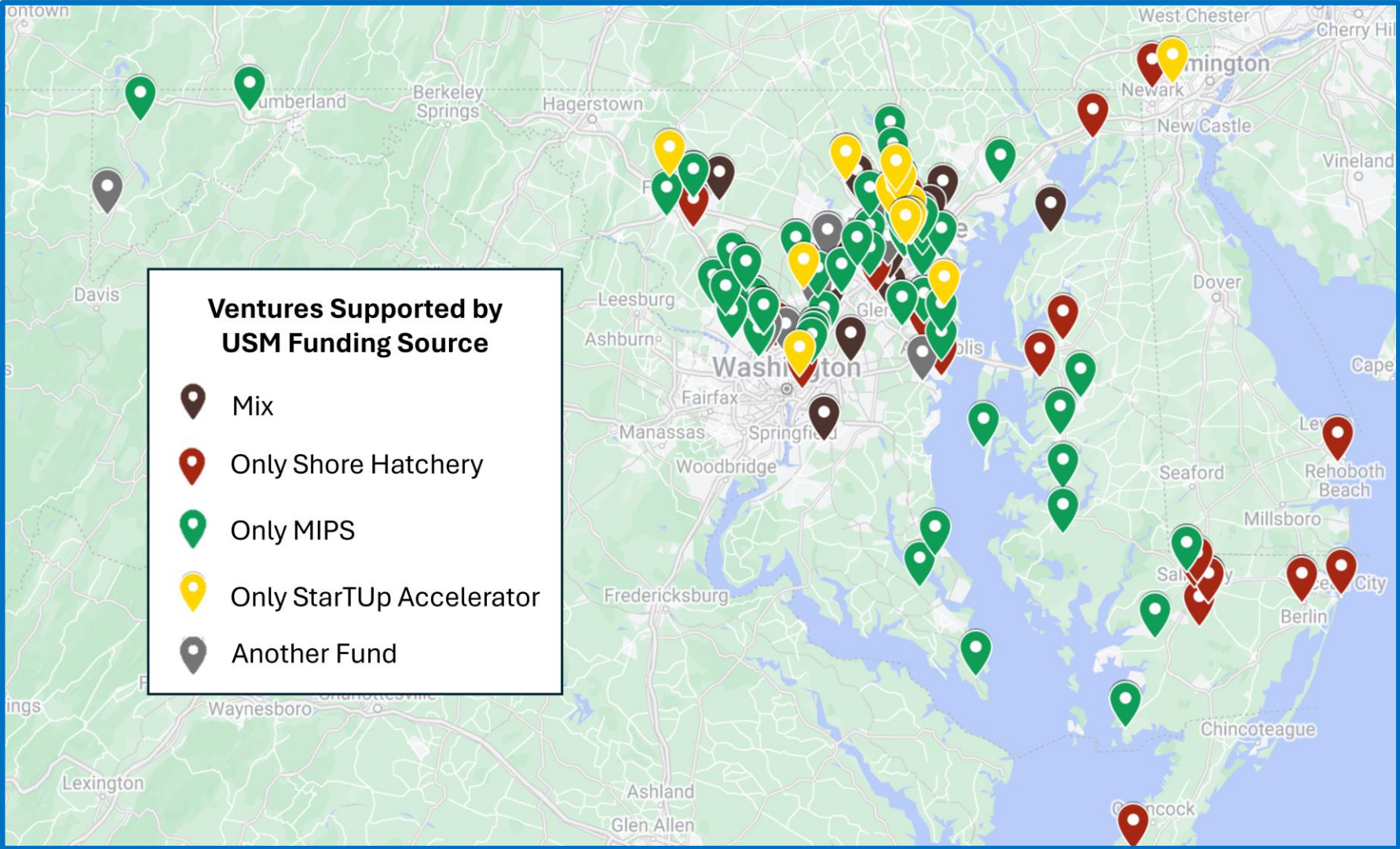
Approximate annual deployment and new companies supported per year are **estimates**. Year-to-year variation occurs due to a number of factors.

* Also open beyond USM; total budget is more like \$5M+, with at least half to USM institutions

** Some funding may be provided to infrastructure-enabling projects

*** Each angel decides independently whether or not to invest

Examination of funds provided to ventures supported



Reflections on Funding Portfolio Represented

- Recipients are geographically disbursed but still gaps
- Some capital sources have more overlap in portfolio than others
- Value in capturing USM investments across the system

Need to Communicate Resources and Success

- Metrics as well as startup stories provide insights related to impact
- Success and outcomes tracked in differing ways for each fund
- Value in telling individual fund and collective USM story and celebration of successes

Connecting

- Value in regular convening of USM Funds and Major Resource Centers can support fund and program clients and benefit from USM resource and technical assistance
- Value in addressing challenges of individual fund and program advocacy through more integrated and collective approach
- Convening and celebrating innovators and startups at a System level could be powerful and would not weaken any institutional efforts

Potential Successes

- Fund leaders may review impacts and access of the programs they individually lead
- Funds may develop systems for tracking jobs and businesses created in Maryland supported by their investments and technical assistance
- Fund information can support efforts to attract additional investments and improve access to local, state, and federal programs
- Need for decision making tools to provide the right capital at the right time
- Layering support across multiple USM resources may fill gaps in the Maryland startup and venture development ecosystem

Examples of USM Highlights:

- 228 have received significant funding from one or more funds represented at retreat since 2018
- 80% of those startups received \$50k or less, 50 received more, up to \$1M

Next Steps

- Connect with other USM support providers
- Develop a narrative report
- Understand gaps in the USM ecosystem
- Develop regular cadence of meetings of fund and program leaders

- **Research and Economic Development Partners** - USM OVCRED's largest group/convening; including USM professionals in the fields of research strategy and development, grants administration, commercialization, economic development, workforce development, and more to connect, collaborate, learn, and plan. All institutions participate.
- **Research and Economic Development Community of Practice** - Development professionals from universities or centers with growing entrepreneurial ecosystems. BSU, SU, UBalt, UMES, FSU, UMCES, and CSU participate.
- **System Research Administrators Group** - Sponsored Programs pre-award and post-award representatives to exchange information and ideas, collaborate on those issues which impact grant administration, and share best practices to support research and scholarly activities; supports all institutions.
- **COI Leaders** – Administrators of research COI professionals from research universities, supports all institutions.
- **Funds and Major Resource Centers Leaders** – Leaders of venture funds, investment programs, and technical support programs for research commercialization, innovation, and startup initiatives, supports all institutions.

Contact OVCRED

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UNIVERSITY SYSTEM
of MARYLAND

OFFICE OF THE VICE CHANCELLOR FOR RESEARCH AND ECONOMIC DEVELOPMENT

MEMORANDUM

TO: Members of the Committee on Economic Development and Technology Commercialization

Isiah Leggett

Kevin Anderson

Anwer Hasan

Robert Hur

Robert Rauch

Yehuda Neuberger

Ellen Fish

Michele Masucci

Josiah Parker

Linda R. Gooden, *ex officio*

FROM: Michele Masucci, Vice Chancellor of Research and Economic Development

DATE: March 29, 2024

RE: Meeting of the Committee via Video Conference

The Committee on Economic Development and Technology Commercialization of the USM Board of Regents will meet in public session via video conference at 1:00 p.m. on Friday, March 29.

The agendas and supporting materials will be available on Nasdaq Boardvantage for members of the Board and the USM website at <https://www.usmd.edu/regents/agendas/>.

Zoom details will be provided to the Regents prior to the meeting.

Public webinar access is provided here: <https://usmd-edu.zoom.us/j/97542378880>.

Public listen-only access is provided at +1 301 715 8592, room ID code 975 4237 8880.

cc: Other Members, Board of Regents
Office of the Attorney General
Chancellor's Council
Vice Presidents for Administration and Finance
Office of Communications
VCAF Managers