

UVM INNOVATIONS







Brent Osborne, PhD

Business Development & Technology Licensing

Who & What is UVM Innovations?

UVM provides resources & programs that enable commercialization of UVM Intellectual Property (IP)

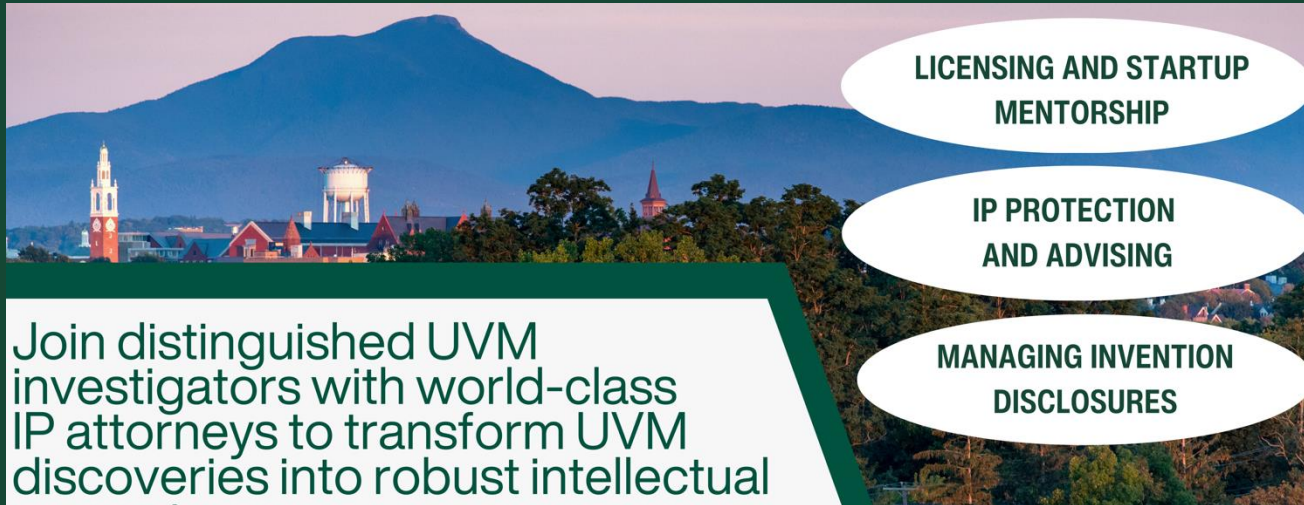
- Invention Discovery and reporting
- IP and patent prosecution
- Licensing and commercialization
- Startups and entrepreneurship
- Beyond traditional “Tech Transfer”
- Visit us: First floor of the **Leahy, room 101**

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UVM Innovations



LICENSING AND STARTUP MENTORSHIP

IP PROTECTION AND ADVISING

MANAGING INVENTION DISCLOSURES

Join distinguished UVM investigators with world-class IP attorneys to transform UVM discoveries into robust intellectual property.

ARC

The ARC program provides UVM students with innovative training and experiential learning opportunities to become the next entrepreneurial leaders of tomorrow.

SPARK-VT

SPARK-VT brings the experience and insight of a panel of distinguished industry experts and successful entrepreneurs to critically evaluate innovative applications of new knowledge.

INNOVATION PROGRAMS

MEYERS CUP

The Meyers Cup is one of the largest undergraduate business pitch competitions in the country. Grand prize winners receive a \$225,000 cash prize to develop their business, plus in-kind services from local organizations, and a network of mentors and advisors.

I-TREP

The I-Trep program provides professional development training to facilitate the generation and competitiveness of biomedical businesses and to foster economic growth in IDEa states.

I-CORPS

The NSF Innovation Corps (I-Corps) program is an immersive, entrepreneurial training program that facilitates the transformation of invention into impact.

UVM ARC

ACADEMIC RESEARCH COMMERCIALIZATION

UNDERGRAD INTERNSHIP

The Academic Research Commercialization program provides undergraduate students hands-on, experiential learning in commercializing startups



Program Offerings

- Team leadership opportunities in a professional setting
- Project management analysis related to student's interests
- Startup stimulation and planning led by experts
- Technological advancement resources
- commercializing UVM faculty technologies





University
of Vermont

THE JOY AND JERRY MEYERS CUP

the largest undergraduate business competition in the country!



Program Offerings

- **Mentorship and guidance across sectors**
- **Healthy competition with other innovative undergrads**
- **Entrepreneurial development with a community focus**
- **Access to HULA Lakeside**
- **LaunchVT Student Accelerator curriculum**

The Joy and Jerry Meyers Cup is an annual initiative to help fund the businesses of outstanding undergraduate entrepreneurs at The University of Vermont. The goal of this competition is to select, mentor, and finance UVM undergraduate entrepreneurs to create new Vermont-based business ventures, which profitably contribute to the greater economic, social, and environmental fabric of Vermont. The grand prize winner will receive **\$225,000** in cash plus in-kind services from local organizations including dedicated desk space at a local entrepreneurial co-working space as well as pro bono accounting, legal, and business development services.



UVM Innovations

I-Trep Program



University
of Vermont

Larner College of Medicine



About

The I-Trep program provides education and skill development in entrepreneurship in order to facilitate the generation and competitiveness of biomedical businesses.

Features

- Innovation training courses
- One-on-One Consulting
- Webinars
- I-Trep Fellowship
- Travel Awards

Visit <https://med.uvm.edu/itrep/home> for more info!



UVM Innovations

INTERIOR NORTHEAST I-CORPS PROGRAM

The University of Vermont is a proud partner of the NSF [Interior Northeast Innovation Corps Hub](#) (IN I-Corps), supporting students, faculty, and researchers to accelerate their discoveries from lab to market.

Regional Courses

UVM students, faculty, and researchers can participate in [free month-long regional courses](#) taught by experienced entrepreneurs in the IN I-Corps Hub.

Learn to:

- Evaluate a technology's commercialization potential
- Find and talk to 30 potential customers and industry stakeholders
- Identify the real problem(s) the customer needs solved
- Develop an entrepreneurial mindset

NSF I-Corps Teams

- Regional course participants may be eligible to receive lineage and a letter of recommendation for the [NSF I-Corps Teams](#) national program (\$50K grant).
- Accelerate to \$275K+ in [SBIR/STTR](#) grants.

Successful applicants will have:

- An early-stage technology innovation– there's a prototype or scientific validation– it's beyond a simple idea
- One to three team members with the ability to spend ten hours a week on coursework, and conduct 30 interviews during the month-long course

Course Formats

- Virtual– combine self-directed online learning with Zoom-based classes and one-on-one instructor check-ins.
- Hybrid– includes a funded, customer discovery trip to an industry event and focus on technologies within a particular industry

IMPACT

2,500+

teams have participated since 2012

1,357

startups launched

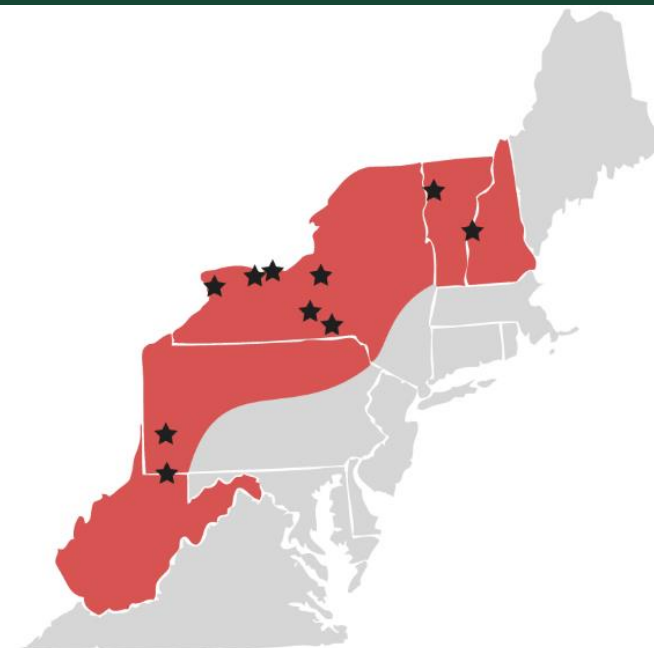
\$3.16B

in funding raised



The Interior Northeast I-Corps Hub (IN I-Corps) is representative of large portions of the US that are predominantly rural, economically underserved, and struggling to reduce out-migration and restore economic vitality after the decline of manufacturing and extractive industries. It is also rich in natural resources, open space, and strong research universities.

The Interior Northeast I-Corps Hub aims to expand the nation's geography of innovation by developing a regional I-Corps innovation network that can become a repeatable, effective model of education and workforce training designed for and by innovators based in rural regions and small cities.



UVM Innovations

SPARK-VT



Advancing new ways of thinking about:

- Environment
- Social systems
- Human health
- Economic development

SPARK-VT brings the experience and insight of a panel of distinguished industry experts and successful entrepreneurs to critically evaluate innovative applications of new knowledge.

Reward: \$45,000

ABOUT SPARK-VT

- **Accelerate** the process of moving discoveries into the marketplace for the benefit of society.
- **Develop** an environment at UVM that encourages and enables moving innovative, collaborative research toward commercialization.
- **Increase** competitiveness for research funding involving small business and commercialization.
- **Educate** on how to transition innovative ideas and discoveries into commercial applications.



UVM Ventures Fund

Interested in...

- Commercialization of technology
- Next-generation employment
- Start-up/licensing opportunities
- Local and state economic development

ABOUT UVM VENTURES

For projects that are ready to accelerate the commercialization of technology developed at the University of Vermont and provide next-generation employment opportunities throughout Vermont.



\$100,000 Award



Access to UVM resources



Startup Support

Submit a proposal to The Office of the Vice President for Research (OVPR)



Elevating UVM-Enabled Entrepreneurship

Patent Process, Technology Transfer, Licensing/Commercialization

Focus:

Enable and **support** an
expanding number of
UVM-based **startups**



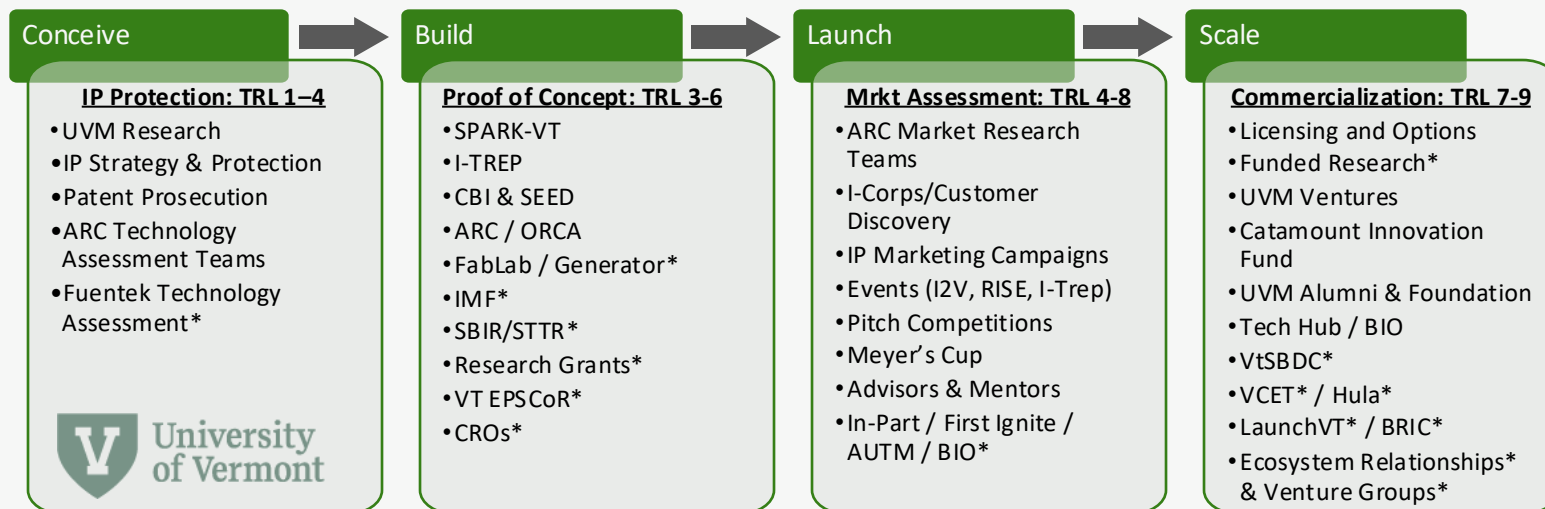
What is a “UVM Start-up”?

- Start-up company primarily based on UVM-IP, which usually includes UVM research faculty/staff engaged as a (co-)founder and/or advisor
- UVM Innovations licenses the IP to the NewCo (Start-up) and can advise on commercialization activities



UVM is Well-suited to Inspire Entrepreneurial Activities & Facilitate Startup Formation

- The UVM Innovations office has helped establish 39 startup companies based on licensed UVM IP; 41% currently of these companies remain active, including several successful exits (M&A).
- To support these efforts, UVM Innovations manages two seed funding programs (SPARK-VT & UVM Ventures) to support program/product development and bring innovative technologies closer to the market. We also manage the Academic Research Commercialization (ARC) student internship program designed to help UVM researchers further their technology commercial development.
- **We facilitate the entire process of transferring technology from lab to market.** Through partnering with our network of internal and external (* below) collaborators, we enable technologies to reach critical mass and increases the likelihood of successful commercial development.



Sampling of UVM-affiliated Startups



BioLabs Innovation Center at University of Vermont (UVM)



360 S Park Dr, Colchester, VT 05446

- Part of UVM's Colchester Research Facility

Site includes:

- 25+ lab benches in shared lab
- 20+ desks in shared office
- Private lab & office options (for teams of up to 10)
- Community areas, shared amenities, and \$1M+ in lab equipment
- Access to UVM core facilities and library resources



UVM Innovations Startup Trail Process & Milestones

Idea

Following an **Invention Disclosure**, or offering concept, this step could include an IP Strategy and Patent Prosecution or further researching the offering



Market Assessment

This stage includes a competitive, and ideal customer discovery, iterating back to POC until the invention meets viable market demand. Additional activities could include finding advisors, partners, funding opportunities, and go to market planning.



Proof of Concept

Validation of the concept could include tech development, pilot projects, to gather market feedback. Resources could include modeling, funding for research development and/or human capital.



Commercialization Options

Go to market options options may include partnering with or licensing to established companies or the founding of a new startup entity.



Startup

Entrepreneurs and Researchers choosing to create a startup can be supported through mentoring, advising, accelerators, incubators, and access to venture funding or other human capital support.

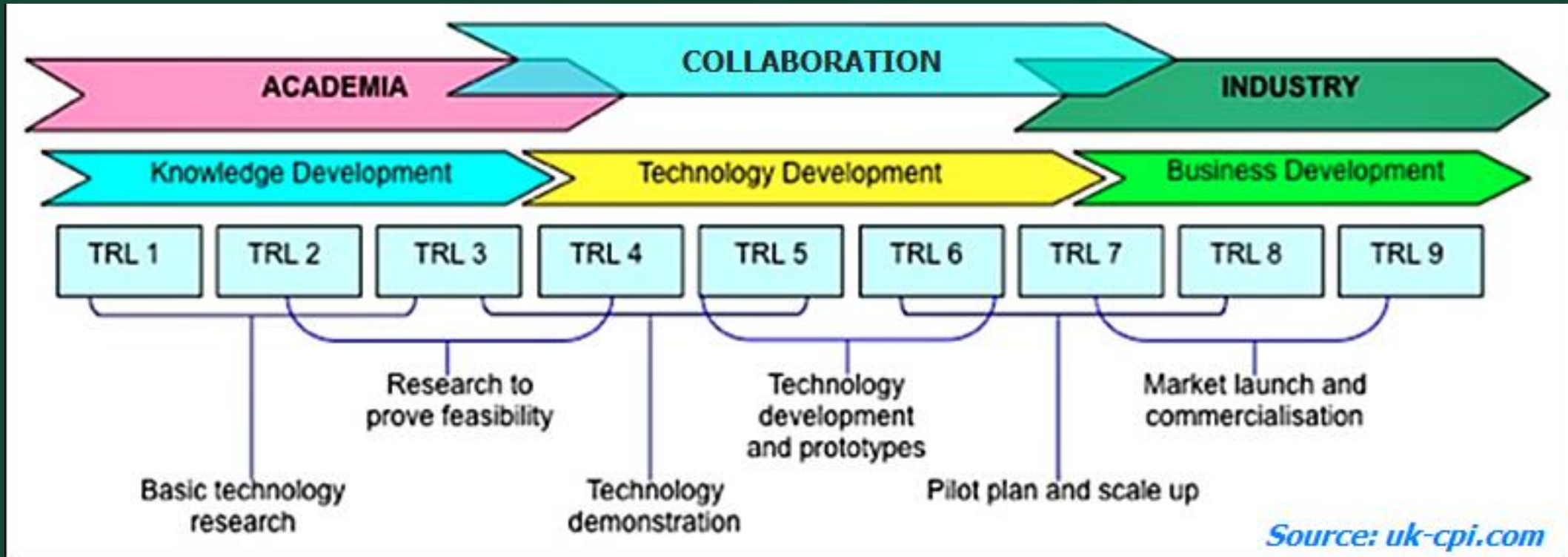


On-Going Support

UVM continues to support the startups as they bring their solution to market. Activities include advising, mentoring, or partnering through manufacturing, funding, or continued product development and customer acquisition.



Technology Readiness Levels (TRL)



4 Focus Areas that Drive Increased Startup Activity



Centralize Entrepreneurial Resources



Accelerate Skill Development



Ease Access to Resources & Advisors



Enable Access to Capital

1: Cross-University Entrepreneurial “Hub”

- **Formalize a coordinated cross-campus entrepreneurial hub for communication and resources.**
 - Leverage, coordinate, and accelerate dispersed entrepreneurial-focused activities.
 - Single-point of contact & communication to collaborate with, and leverage, community resources.
- **Encourage and support participation in entrepreneurial activities.**
 - Ease friction and balance between startup actions and UVM responsibilities.
 - Support and encourage collaboration across college and cross-discipline skills, resources, and teams.
- **Expanded Invention/Idea disclosures to feed a broader pipeline.**
 - Streamline assistance path for Non-UVM-IP concepts.
 - Broaden access to UVM Innovations / Entrepreneurial Hub assistance.
- **Expand the ARC model beyond UVM-research-based engagements.**
 - Cross-skill and TRL-stage-based ARC Teams .
 - ex: ARC-Eng, ARC-Fab, ARC-Tech Assessment, ARC-Market Assessment.
 - Feeder for improved SPARK, UVM Seed Fund, and other startup opportunities.

2: Cross-Skill Development

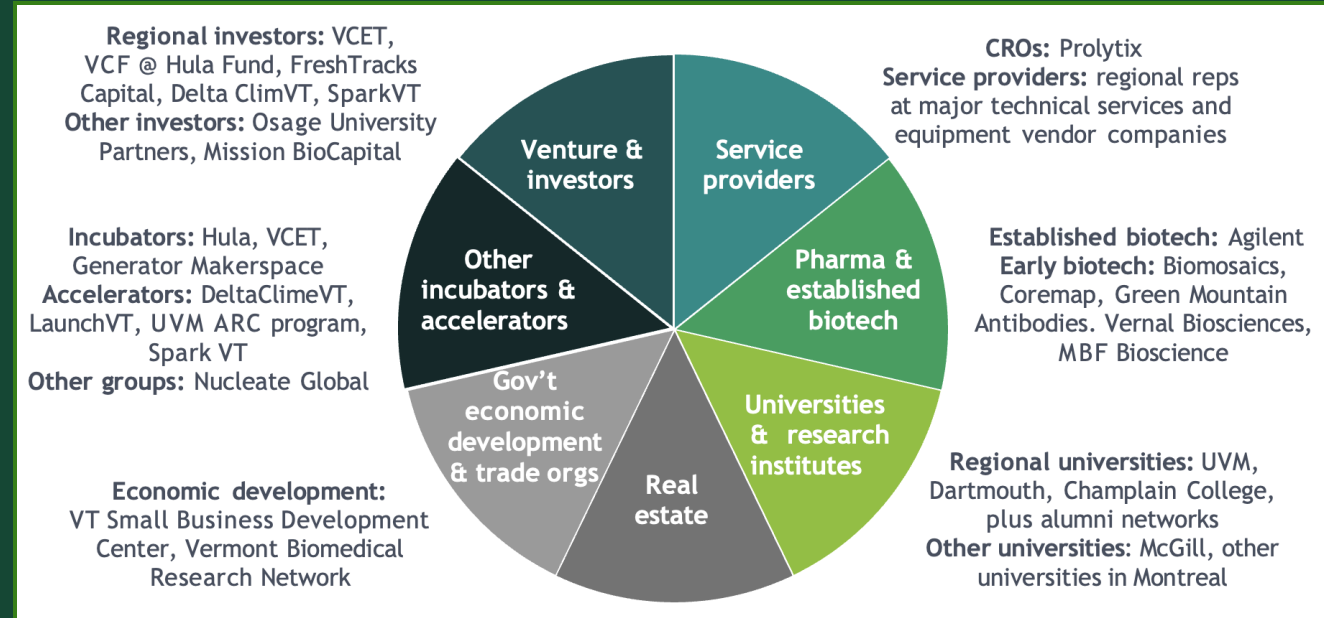
- **Stage-based curriculum**
 - POC, MKT Analysis, Marketing, Manufacturing, Financial, Comp Analysis, Gen Biz, etc.
 - Stage-Based Templates including: market analysis, customer profile, break-even analysis, pricing models, pitch deck, etc.
- **Provide faculty guidance choosing a scientific advisor and/or non-full time founder involvement**
- **Partner with entrepreneurship faculty and PACE curriculum**
 - Cross-pollinate with skills and viewpoints from other colleges
- **UVM / External Accelerator collaboration on content**
 - UVM-only and/or Meyer's Cup focus LaunchVT / Tech Stars / Y Combinator style cohort
 - Tech Hub (GaNerator) / Bio-specific cohort
 - UVM access to accelerator curriculum / community access to UVM curriculum
- **Cross-discipline recommendations to enhance and expand founding team skill sets**
 - Ex: Biz skills for engineers, prototyping for finance majors, pitch skills for everybody
 - Extend reach & collaboration across disciplines/colleges
- **Increase number & size of skill-diverse / stage-based ARC Teams**

3: Experts, Resources and Advisors

- **Mentor and advisor resources**
 - SMEs, consultants, advisors
 - Entrepreneur(s)-in-Residence
 - Expansion of E-Forum, E-Club, etc.,
 - Scheduled advisor office hours, workshops, guest & alumni lectures
 - Establish a value prop for advisor participation.
- **Technology Readiness Level (TRL) Stage-based Assistance**
 - Startup Readiness Assessments and Templates
 - Prototyping, Fab Lab, Generator
 - Proof of Concept, Go-to-Market Assistance
 - Legal, Financial, HR Assistance
- **Networking & feedback events**

4: External Network & Capital

- Pitch Assistance, Mentoring, Templates
- Highlight additional opportunities with all UVM-based Startups
- Creation of additional financing opportunities
 - UVM based Seed / Angel / Venture Fund(s), Grants, Alumni Syndicate, etc.
 - Meyer's Cup & Pitch Competitions
- Community & Corporate-focused ARC projects/teams
- Streamline connections with Local Capital Ecosystems, BioLabs Innovation Center at UVM, Tech Hub, VCET, Hula, etc.



Thank you!

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- Come visit us on the first floor of the Leahy Bldg, room 101