

Vermont's 21st Century Economy: Building an Entrepreneurial Ecosystem



Dr. Corine Farewell
Director, Office of Technology Commercialization
University of Vermont



Kauffman Foundation

“Starting a venture is a complex task, and entrepreneurs thrive best in places where they have communities or "ecosystems" to draw upon—people who can stimulate their thinking, offer advice or assistance in many forms, and even participate in their ventures.”

Kauffman Foundation website

Entrepreneurship Trends in the Burlington-South Burlington, Vermont, Metropolitan Statistical Area (MSA) from the Ewing Marion Kauffman Foundation

http://www.kauffman.org/~media/kauffman_org/microsites/mayors/msa/burlingtonsouthburlingtonvt.pdf



Tools to Advance Vermont's Innovation Culture

- Entrepreneurship Ecosystem consists of 6 Domains:
 - Conducive Culture
 - Enabling Policies and Leadership
 - Appropriate Finance
 - Quality Human Capital
 - Venture-friendly Markets
 - Institutional and Infrastructural Supports

Daniel Isenberg

<http://www.forbes.com/sites/danisenberg/2011/05/25/introducing-the-entrepreneurship-ecosystem-four-defining-characteristics/>



Office of Technology Commercialization

- Promotes public benefit from the commercialization of technologies emerging from UVM research, including the creation of new business.
- Promotes innovation and economic development in Vermont and beyond by fostering interaction between the University and the private and public sector.
- Supports research operations by enabling service and industry sponsored research agreements.

Office of Technology Commercialization

A
c
a
d
e
m
i
c

R
e
s
e
a
r
c
h

D
i
s
c
o
v
e
r
y

I
n
v
e
n
t
o
r
i
e

A
s
s
e
s
s
m
e
n
t

P
a
t
e
n
t

Marketing &
Negotiations

License to
existing companies

License to Startup

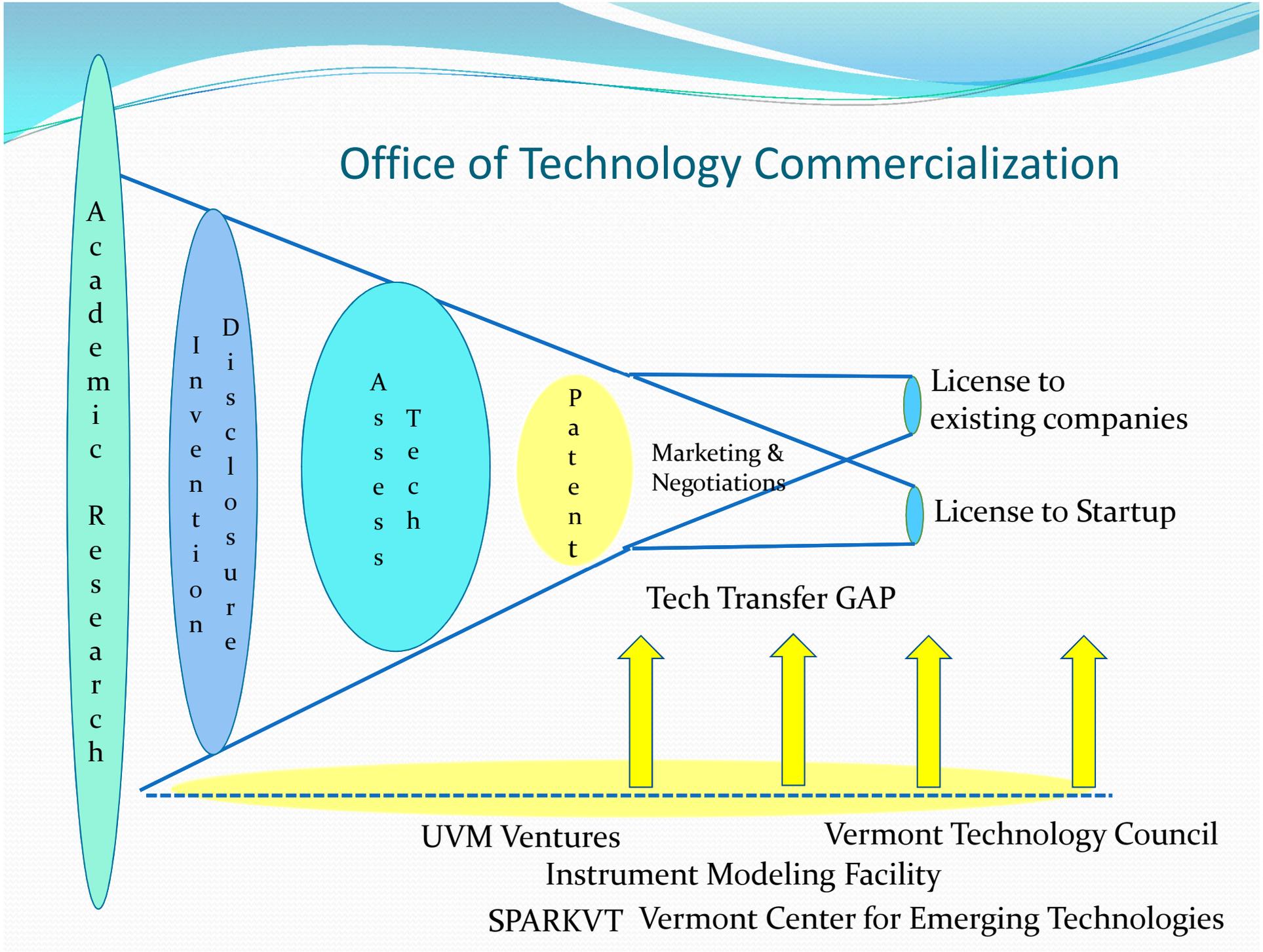
Tech Transfer GAP

UVM Ventures

Vermont Technology Council

Instrument Modeling Facility

SPARKVT Vermont Center for Emerging Technologies



Office of Technology Commercialization

- **Culture**
 - **Interest & recognition for “Academic Entrepreneurs”**
 - **Invention 2 Venture Conference: April 7, 2016**
 - **UVM Ventures, campus-wide SPARK VT**
 - **UVM Communications new link: Innovations & Entrepreneurship**
 - **OTC outreach to students, faculty & community**
 - **Interest & recognition for “Vermont Entrepreneurs”**
 - **Kauffman Foundation recognition of Vermont**
 - **Forbes recognition of Burlington**
 - **LAUNCHVT, numerous Meetup groups**



Culture: UVM Communications

Getting the Word out with new link “Innovations and Entrepreneurship” website:

http://www.uvm.edu/~uvmpr/?Page=news_techent.php&SM=newssub.html

Kauffman Foundation: Vermont named #5 for Startups

<http://www.uvm.edu/~uvmpr/?Page=news&storyID=21046&category=techent>

Forbes: Burlington named Top 10 Tech Hub

<http://www.uvm.edu/~uvmpr/?Page=news&storyID=20307&category=techent>

Office of Technology Commercialization

- Enabling Policies and Leadership
 - University invests in IP and shares revenues with inventors

UVM Intellectual Property Policy:

“In furtherance of the UVM mission, University community members develop inventions, discoveries, copyrightable material and new knowledge that constitute the intellectual property of the Institution. The University seeks to promote application of that knowledge for the benefit of society while enhancing the capacity of the University to conduct its mission and protecting the interests of the University, its faculty, students and staff.”

Office of Technology Commercialization

- **Quality Human Capital**
 - **Internship Opportunities in all phases of Technology Commercialization**
 - **Co-teaching Technology Commercialization Class in the Sustainable Entrepreneurship MBA program**
 - **Provide real-time cases of UVM technologies with faculty inventors for all Technology Commercialization classes**
 - **Support of Senior Engineering Design class and other entrepreneurship classes where intellectual property awareness is beneficial**
 - **Active in a variety of groups throughout community**

Office of Technology Commercialization

Appropriate Finance:

- **University invests in Patents**
- **Connections to funding opportunities**
 - Corporate research support & licensing agreements
 - SBIR/STTR
- **UVM Ventures:**
 - **Very early investment to**
 - Prove a concept
 - Co-Develop a technology to develop working prototypes and commercial feasibility
 - **Partnership with ACCD** <http://accd.vermont.gov/business>



UVM Ventures

UVM Ventures Fund, provide financial support for the development of inventions created at university.

- ACCD NextGen Grant funds \$100,000 eligible for renewal annually
- Awarded amount recovered from future revenues to replenish fund



UVM Ventures

Examples of what the funds may be used to:

- Develop prototype
- Perform proof of concept work
- Perform feasibility studies
- Human Capital: technical & professional services

Examples of what the funds may not be used for:

- Faculty salary
- Patent expenses



UVM Ventures

Management:

- Applications received on rolling basis
- Detailed description of opportunity and plans
- Generally awards are in the \$10,000 - \$30,000 range
- Detailed budget and invoices required for reimbursement
- Communicate with ACCD on opportunities and results

<http://www.uvm.edu/uvminnovations/>

UVM Ventures: EASY LLC

EASY: http://www.easytactilegraphics.com/ FY 2012 ACCD Pre-Seed Grant \$20,000 FY 2013 ACCD Innovation Grant \$100,000	Immediate	Near term (1-3yrs)	Midterm (3-5yrs)	Long term (5+yrs)
Building a Community of Innovation	2011 VCET BTV office	Tech Jam demo	WPTZ TV 03/2015	
Capital Attraction	\$100,000 National Federation Blind	\$165,000 Phase 1 NIH STTR granted	\$1,000,000 Phase 2 NIH STTR submitted	
Business Formation and Job Creation FTE is a 2011 UVM graduate	1 FTE		Interns: 3 UVM, 1 Champlain	
Product introduced to market			2014 Already in 60+ schools with blind students	

UVM Ventures: Chroma Co-Dev

Aeroacoustic Cleaner: http://www.chroma.com/ FY 2014 ACCD Grant \$40,000	Immediate	Near term (1-3yrs)	Midterm (3-5yrs)	Long term (5+yrs)
Building a Community of Innovation	Proof of Concept	Leg. Summit		
Capital Attraction	Know-how and significant resources contributed from Chroma/89North	Licensing inquiries		
Business Formation and Job Creation	Grad Student Intern			
Product introduced to market				



TeleMedTest





Thank You!

Dr. Corine Farewell

Director

Office of Technology Commercialization

University of Vermont

corine.farewell@med.uvm.edu

802-656-8780