



Agenda Item 3

Innovation Districts / Impact of USM Entrepreneurial Programs and Policies



BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION
INFORMATION OR DISCUSSION

TOPIC: Innovation Districts / Impact of USM Entrepreneurial Programs and Policies
(information item)

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: November 20, 2014

SUMMARY: The Committee will be briefed on the impact of USM entrepreneurial programs and policies, as well as our research parks. In addition, the emergence of innovation districts will be discussed. According to a recent Brookings Institution report: "A new complementary urban model is now emerging, giving rise to what we and others are calling 'innovation districts.' These districts, by our definition, are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators. They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail. Innovation districts are the manifestation of mega-trends altering the location preferences of people and firms and, in the process, re-conceiving the very link between economy shaping, place making and social networking."

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

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR'S RECOMMENDATION: This item is for information purposes.







COMMITTEE RECOMMENDATION:

DATE:

BOARD ACTION:

DATE:

SUBMITTED BY: Joseph F. Vivona (301) 445-2783

COMPANY	INVENTOR/SECTOR	STAGE
	Alessio Fasano, Medicine Celiac Disease	10/14: FDA approves initiating Phase III trials
	Jim Gammie, Medicine Cardiac Surgery Device	10/14: Closes \$3.6 million Series A Round, including \$100K UM Ventures investment
	Abhsihek Motayed, Engineering High-performance sensors and detectors	Phase III MII Award. Two Phase I SBIR Awards from EPA and NSF. Participating in I-Corps.
	Bob Gallo, Medicine Vaccines: HIV, Ebola, Marburg	3/14: \$26 million NIAD for Ebola 7/14: \$3.5 million NIH SBIR for HIV 10/14: \$26.6 million HHS & DOD for Ebola
	Angela Brodie and Vincent Njar, Medicine Prostate Cancer	9/14: Raises \$98 million in IPO. 11/14: Announces positive Phase II results
	Ramani Duraiswami, CMNS 3D Audio	9/14: Oculus co-founder/UMD Alum donates \$31 million to UMD 10/14: Visisonics Licenses rights to audio technology to Oculus



UNIVERSITY OF MARYLAND
UM VENTURES
MPOWERING THE STATE

Innovation Districts

November 20, 2014

UMB, UMBC, and UMCP are each developing research parks that are transforming the economies surrounding their campuses. The research parks are home to:

- 5,950 jobs
- 200 tenants – including start-up and mature technology companies, federal research centers, private research institutes, workforce training and executive education.
- 2.9 million square feet of privately financed research space
- \$1.125 billion in capital investment, the vast majority of which is from the private sector
- Capacity to add at least 3.6 million square feet and 7,500 high quality jobs.

- Since WWII, technology innovation has been concentrated in suburban locations: Silicon Valley, Research Triangle, Route 128 Corridor, Bell Labs
- New urban model: Innovation Districts: “geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators.” *Brookings: The Rise of Innovation Districts*
- US: Atlanta, Baltimore, Buffalo, Cambridge, Cleveland, Detroit, Houston, Philadelphia, Pittsburgh, St. Louis, San Diego, San Francisco.
- Globally: Barcelona, Berlin, London, Medellin, Montreal, Seoul, Stockholm and Toronto

- “Ultimate mash up of entrepreneurs and educational institutions, start-ups, and schools, mixed-use development and medical innovations, bike-sharing, and bankable investments-all connected by transit, powered by clean energy, wired for digital technology, and fueled by caffeine.”
- A recognizable and memorable sense of place.
- Active, walkable, retail-lined sidewalks with varying spaces for people to gather and interact
- Easy access to transportation and connectivity to communities



- Collaboration and innovation sharply decreases with distance – as little as $\frac{1}{4}$ of a mile becomes an impediment
- Rise in open innovation – collaborative workspaces
- Growing importance of small companies and Universities in driving innovation
- Job density gives flexibility and stability to workers and makes it easier for companies to recruit
- Create jobs in areas of high unemployment.
- Diversify economic vitality

Innovation Districts – Characteristics

Mixed-use with residential buildings and a hotel, 'live, work and play'...



Innovation Districts – Characteristics

Great streets with retail and open space create strong connections and places...



The BioPark Gateway has a strong presence in Baltimore. There is a contextual relationship with the campus and city, yet it makes a bold statement.



Innovation Districts – Characteristics

Interdisciplinary shared spaces facilitating innovation clusters...



cic AT A GLANCE

- 650+ startup companies, plus corporate R&D and academic labs
- 1600+ people in those companies
- 207,000 SF of office space in two buildings in Kendall Square
- 1700+ Startups served since opening in 1999

Service

- Full-service, world-class office space available month to month
- Higher density than traditional office environments

Impact

- \$1.8 Billion in venture capital raised to date by cic companies
- Increasingly a home for large firms wanting proximity to innovation/start up community



- 28,000 SF Facility in the heart of Kendall Square, Cambridge
- Fully outfitted and permitted lab space
- 25 startups comprising approximately 100 scientists and entrepreneurs
- Corporate sponsors include:
 - Pfizer
 - Johnson & Johnson
 - Life Technologies
 - Novartis
 - Silicon Valley Bank

DISTRICT HALL

A NEW HOME FOR INNOVATION IN BOSTON

Dedicated civic space where the innovation community can gather and exchange ideas: open workspace, classrooms, assembly space, flexible use pods, café and restaurant.



Innovation Districts

Kendall Square Headlines

- *September 29, 2014* - **Baxter** to open new research center in Kendall Square: Biopharmaceutical research facility will employ at least 400 in 200,000 SF in Kendall Square.
- *September 27, 2014* - Huge demand pushes up Boston office rents: In red hot East Cambridge, the area surrounding Kendall Square, average asking rents surged to \$63.87 per sf.
- *August 20, 2014* - **Amgen** is on the prowl for another 150,000 sf of space.
- *August 5, 2014* - **Google** Unveils Kendall Square Campus: new 200,000 sf office for 800 people
- *July 17, 2014* - Ipsen sets up shop in Cambridge: *French drug company new 62,600-SF space.*
- *June 15, 2014* - **Pfizer** opens 280,000-square-foot research center will house 1,000 researchers and staff
- *June 12, 2014* - **Moderna** more than doubles its Kendall Square footprint to 100,000+ sf
- *November 7, 2013* - **Novartis** to add 175 jobs in Cambridge, cut elsewhere
- *May 14, 2014* - **Amazon** Expands Boston-Area Office, Room for About 800
- *November 7, 2013* - **Facebook** opens office in Cambridge
- *September 9, 2014* - **Apple** is quietly expanding its Kendall Square research office
- *July 24, 2013* - **Biogen's** new offices look to break down barriers: 190,000 sf complex
- *August 8, 2013* - **GlaxoSmithKline** bases new VC fund at One Broadway in Kendall
- *February 5, 2013* - If You Want **Twitter** To Acquire Your Startup For Millions, Try Moving Into 1 Kendall Square: Twitter just dropped \$200 million to buy two start-up companies with 75 employees.
- *January 7, 2013* - **ARIAD** Pharmaceuticals has leased approximately 244,000 SF at Kendall Square

University of Maryland BioPark Innovation District Masterplan Concept





Commercial
Academic
Clinical
Training
Retail

- 36 tenants
- 650 jobs
- 800 students





Clinical and Research Center

- Approx. 2,000 patients will be treated a year
- Open December 2014
- First patient will be treated in 3rdQ 2015
- \$200+ million private capital investment
- 175 jobs



Innovation Center

- Life Sciences
- Info Tech
- Engineering
- Material Design
- Environmental
- Financial Services

**Local food market, café,
deli**

Eight stories

240,000 SF

\$90 million CapX

BioPark Hotel



- 11 story
- 167 extended stay rooms
- 1,500 SF lobby
- 3,500 meeting and pre-function space
- 1,500 SF terrace
- Pool and 750 SF fitness facility
- LEED Certified

University of Maryland BioPark Gateway Development



Innovation Districts

RISE Zone Legislation

- Provides tax benefits in designated districts adjacent to Universities and Federal Facilities
- Enables TIF proceeds to be used for Innovation Centers in RISE Zones
- Suggested enhancement of RISE Zones during 2015 Legislative Session: Allow University incubators and research parks to aggregate jobs created by multiple companies to be eligible for DBED economic incentive programs.
 - Job Creation Tax Credit – requires 60 jobs
 - One Maryland Tax Credit – requires 25 jobs
 - Maryland Economic Development Assistance Authority and Fund (MEDAAF) – generally focused on companies creating 50 to 100 jobs