University System of Maryland
New Company Formation
January 1, 2016 – June 30, 2016

Summary of New Companies Facilitated by USM Institutions by Tier

Tier 1: 13 total
• UMCP – Total: 5 licensed university-owned IP
• UMB – Total: 5 licensed university-owned IP
• UMBC – Total: 3 licensed university-owned IP
• Total Women-Owned: 3

Tier 2: 38 total
• UMCP – Total 18: 7 companies received significant mentoring through the Fearless Founders Program at the Dingman Center; 8 companies received significant mentoring through the Venture Accelerator Program at MTech; 3 received significant mentoring through the I-Corps Program through MTech;
• UMB – Total: 1 company received significant mentoring through the UM Biopark
• SU – Total: 5 received significant mentoring in SU’s Shore Hatchery
• UMBC – Total: 2 companies are new tenants in the Life Sciences Incubator
• SBDCs – Total of 12 received significant mentoring (Corridor Region - 6 (UMCP – 4, UMB – 2); Salisbury – 4; FSU – 2)
• Total Women-Owned: 4

Tier 3: 69 total
• UB – Total: 2 companies are using UB’s Incubator space
• SU – Total: 8 companies are Business Plan Competition winners
• UMBC – Total: 1 company received mentoring from the Alex Brown Center for Entrepreneurship
• SBDCs – Total of 58 received counseling services (Corridor Region – 40 (UMCP – 9, UMB – 31); Salisbury - 9; FSU - 9)
• Total Women-owned: 4

Tier 4: 37 total
• UMBC – Total: 15 companies moved into UMBC’s incubator from in-state
• UMCP – Total: 13 established companies are part of the Dingman Center Angel Investment program
• TU – Total: 9 companies moved into TU’s incubator
• Total Women-Owned: 5
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New Companies Facilitated by USM Institutions (excluding SBDCs)

Note: The scale for the Y-axis is logarithmic.

New Companies Created through the Small Business Development Centers (SBDCs)
By Institution

[Bar charts showing the number of companies created through SBDCs for each institution, with logarithmic scale for Y-axis.]
New Companies Classified By Industry
Tiers 1 & 2

Examples of New Companies:

Medical Device and Equipment
On Demand Pharmaceuticals – Developing a portable device the size of a briefcase that can produce therapeutic proteins, such as insulin, in small batches in just a few hours.

Pharmaceuticals/HealthCare
Living Pharmaceuticals, Inc. – Created personalized CAR T cell therapies tailored to the patient’s disease status and disease phenotype.

High Technology Manufacturing
North American Wave Engine Corporation – Developed a technology that substantially improves the design of valve-less pulse combustors also known as pulse jet engines.

IT/Technology
Hazel Analytics – Provides a suite of web-based automated tools that gather, integrate, standardize, and enable rich reporting and data analytics capabilities for regulatory food safety inspections of 1+ million retail outlets, including restaurants, grocery stores, convenience stores, food trucks, and institutional cafes.
Retail
CardBuddy – Established a stick-on phone wallet made of high-quality leather.

Food Services
Modernature – Provides sustainable fruit and vegetable growing systems using biomimicry and technology.

Services/Consulting
Campfire Marketing – Non-profit company that teaches youth about the mindfulness techniques (attention, stress and conflict).
Committee on Economic Development and Technology Commercialization

New Company Formation
January to June 2016

November 2016
Context

• Strategic Goal: USM institutions will facilitate the creation of **325 companies** over 10 years

• Several USM institutions are actively engaged

• Numerous resources are dedicated to facilitating the creation of start-ups
New Company Formation FY 2012 to FY 2016
Cumulative Data, including SBDC Companies

**Cumulative Data**

- **FY 2012**: 51 companies
- **FY 2013**: 118 companies
- **FY 2014**: 249 companies
- **FY 2015**: 388 companies
- **FY 2016**: 502 companies

2020 Goal of 325 companies
USM Tier 1 Startups FY 2012 to FY 2016

IP-BASED STARTUPS

- FY 2012: 7
- FY 2013: 14
- FY 2014: 8
- FY 2015: 12
- FY 2016: 26
New Company Formation by Tier for FY 2015 and FY 2016
Consolidated Data, including SBDC Companies

Total Tiers 1 & 2: 139

Total Tiers 1 & 2: 114

January to June 2016 Total Tiers 1 & 2: 51
USM Key Technology Transfer Indicators
FY 2016 versus FY 2015

- Invention Disclosures: FY 2015 - 330, FY 2016 - 364
- New Patents Filed: FY 2015 - 205, FY 2016 - 227
- Tier 1 Companies: FY 2015 - 12, FY 2016 - 26
- Licenses + Options Executed: FY 2015 - 58, FY 2016 - 60
- US Patents Issued: FY 2015 - 89, FY 2016 - 77
Evaluated whether Tier 1 startups (28 startups) that were formed between FY 2012 to FY 2014 were still active, 2 to 4 years after their formation.

Verified the status of these companies through their websites, news on funding, responses from inventors and other means.

- Companies that didn’t respond or didn’t have a website were deemed inactive.
Examples of Successful Start-Ups

- **Harpoon Medical**
  A UMB startup that is developing a minimally invasive mitral valve repair medical device.
  - Has raised **$17.5 million in funding** and has a financing deal with Edwards Lifesciences that could result in the California device-maker acquiring Harpoon next year

- **SilcsBio, LLC**
  A UMB startup that develops CADD software enabling pharmaceutical companies to rapidly identify new drug opportunities and reduce the overall costs and time requirements to bring drugs to market.
  - Received **$1.3 million funding** award from the National Institute of Health to develop new computer-aided drug design (CADD) software

- **N5 Sensors**
  A UMCP startup commercializing chip-scale chemical sensors for wearable applications and Internet of Things (IoT) devices.
  - Currently has 5 FTEs, 2 large OEM customers, $500K in annual revenues and has attracted **$1.5 million in funding** from TEDCO and MIPS