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

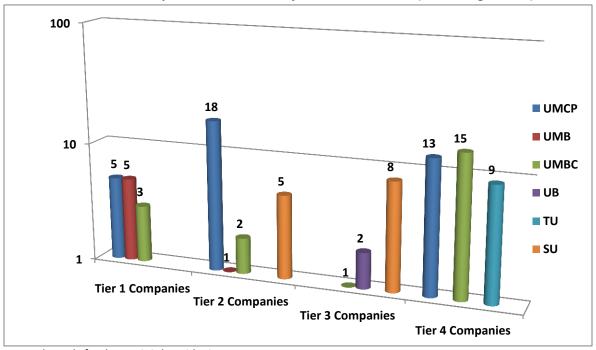
- UB Total: 2 companies are using UB's Incubator space
- SU Total: 8 companies are Business Plan Competition winners
- UMBC Total: 1 company received mentoring from the Alex Brown Center for Entrepreneurship
- SBDCs Total of 58 received counseling services (Corridor Region 40 (UMCP 9, UMB – 31); Salisbury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

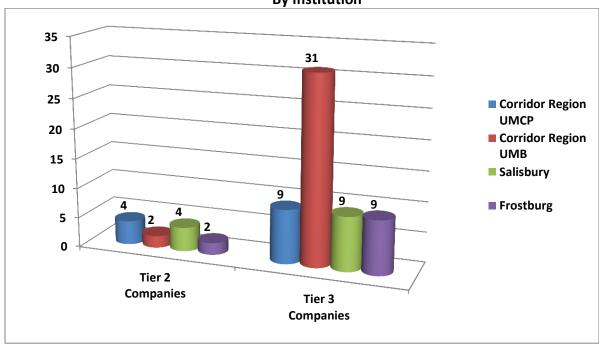
January 1, 2016 - June 30, 2016

#### New Companies Facilitated by USM Institutions (excluding SBDCs)



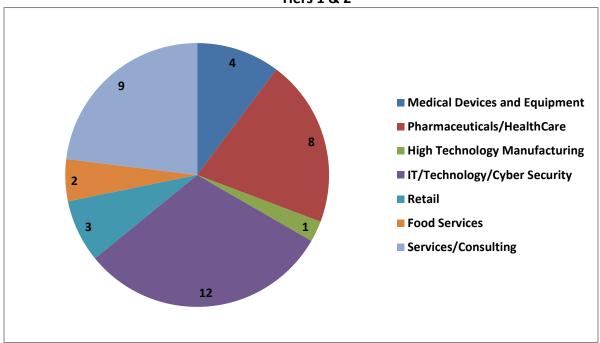
Note: The scale for the Y-axis is logarithmic.

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



January 1, 2016 – June 30, 2016

### 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

<u>Living Pharmaceuticals, Inc.</u> – Created personalized CAR T cell therapies tailored to the patient's disease status and disease phenotype.

#### **High Technology Manufacturing**

<u>North American Wave Engine Corporation</u> – Developed a technology that substantially improves the design of valve-less pulse combustors also known as pulse jet engines.

#### IT/Technology

<u>Hazel Analytics</u> – 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.

January 1, 2016 – June 30, 2016

#### Retail

<u>CardBuddy</u> – Established a stick-on phone wallet made of high-quality leather.

#### **Food Services**

<u>Modernature</u> – Provides sustainable fruit and vegetable growing systems using biomimicry and technology.

#### Services/Consulting

<u>Campfire Marketing</u> – Non-profit company that teaches youth about the mindfulness techniques (attention, stress and conflict).



# Committee on Economic Development and Technology Commercialization

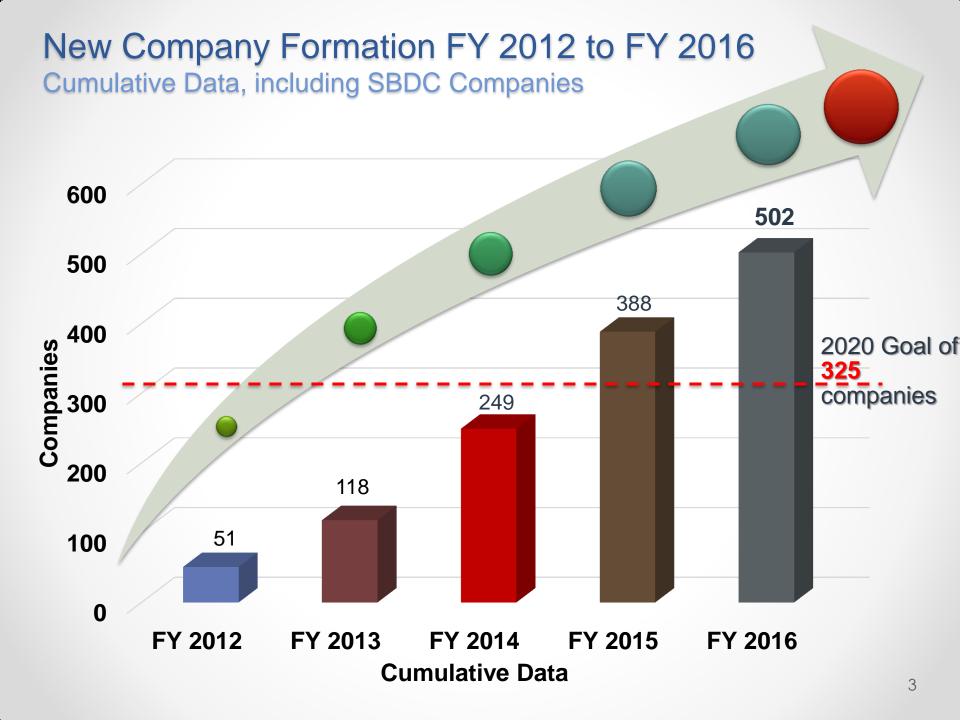
New Company Formation January to June 2016

November 2016

## Context

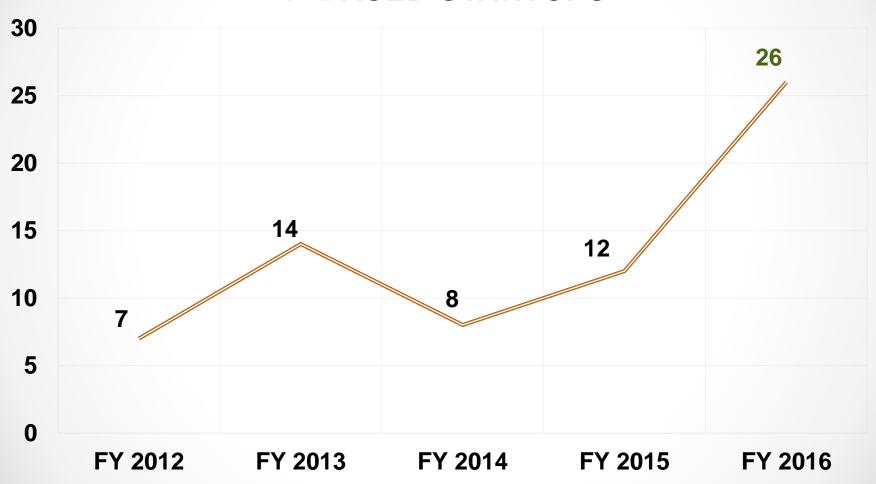
- Strategic Goal: USM institutions will facilitate the creation of 325 companies over 10 years
- Several USM institutions are actively engaged
- Numerous resources are dedicated to facilitating the creation of start-ups





## USM Tier 1 Startups FY 2012 to FY 2016

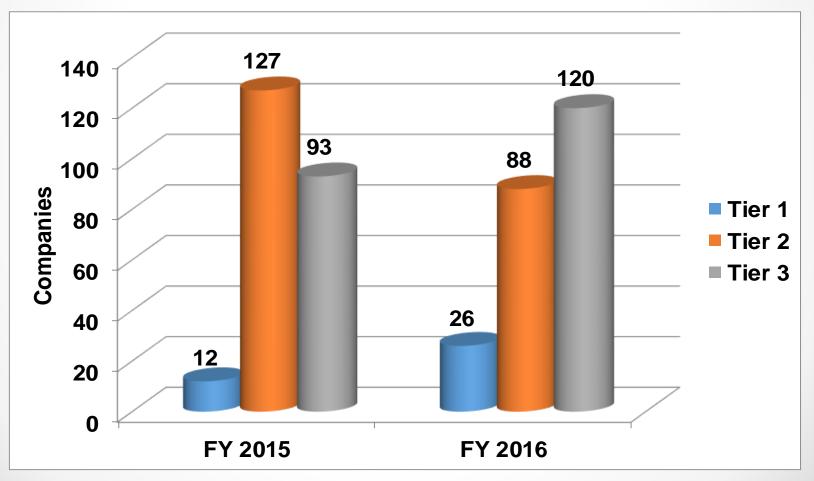
#### **IP-BASED STARTUPS**



# New Company Formation by Tier for FY 2015 and FY 2016

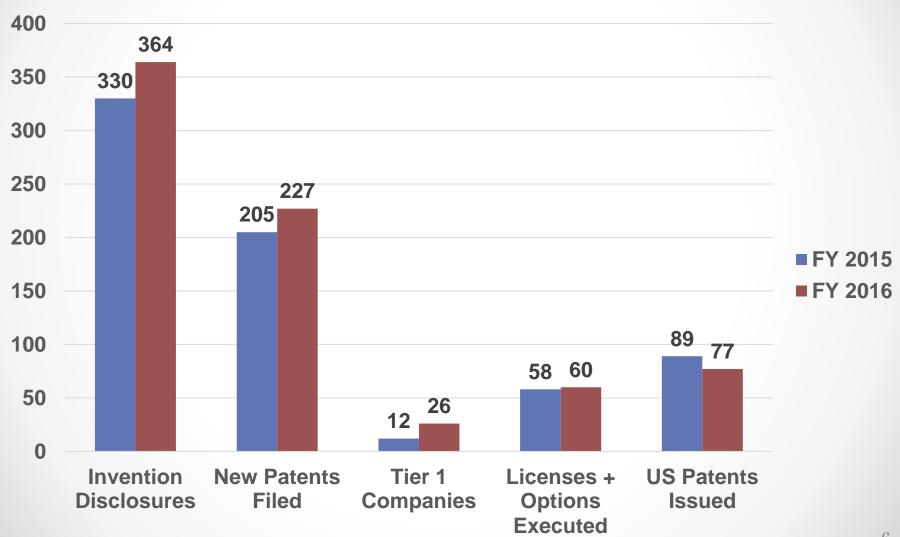
Consolidated Data, including SBDC Companies

Total Tiers 1 & 2: 139 Total Tiers 1 & 2: 114

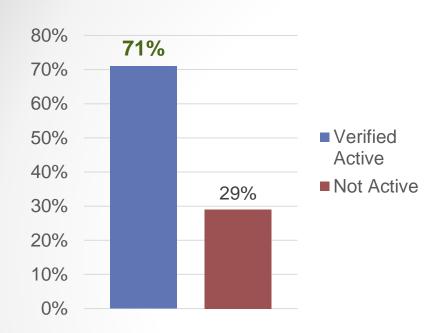


January to June 2016 Total Tiers 1 & 2: 51

## **USM Key Technology Transfer Indicators** FY 2016 versus FY 2015



## USM Tier 1 Startups - New Company Activity Tracking FY 2012 to FY 2014



USM New Company Activity Tracking FY 12 - FY 14			
	Tier 1 Startups	Verified Active	Not Active
UMBC	2	2	0
UMB	9	5	4
UMCP	17	13	4
Total	28	20	8

- 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
 N5 Sensors, Inc