



UNIVERSITY SYSTEM
of MARYLAND

Agenda Item 5

USM Economic Development Update

SUMMARY OF ITEM FOR ACTION
INFORMATION OR DISCUSSION

TOPIC: USM Economic Development Updates, T. Sadowski (information item)

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: November 9, 2017

SUMMARY: The Committee will be updated on current activities and new initiatives undertaken by the Office of Economic Development. The topics include an overview of the recent award of the Anchor Ventures grant from TEDCO that will provide for a Venture Café Model prototype in Baltimore; an update on the NSA Technology Transfer partnership; an update on CMAV; and the latest USM new company creation report.

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: Tom Sadowski / Suresh Balakrishnan (301) 445-2783

Office Economic Development Update

Board of Regents, Committee on Economic
Development and Technology Commercialization

November 7, 2017



NSA EDUCATIONAL PARTNERSHIP AGREEMENT

- SPARC (Scalable Partnerships Assessing Research Commercialization) is a program between the NSA and U.S. colleges and universities that applies student-led research to assess the commercial potential of Agency-patented technologies
- Working with UMCP FedTech
- Spring 2017 -Two NSA Patented technologies were presented for evaluation
 - *Identifying Voice Duplicates* technology has identified customers & is licensed to LG-Tek
 - *Detecting SIM Card Removal and Reinsertion* technology is undergoing further evaluation for licensing by students
- Fall 2017 Cohort will have 2 additional patents evaluated
 - *Method of Fabricating Flexible Organic Integrated Circuit*
 - *Device for and Method of Language Processing*
- In discussions with Bowie State University and Coppin State University for program expansion

UM VENTURES BALTIMORE FUND



TEDCO Incubator Challenge

Anchor Ventures: Connecting and Educating
Maryland's Innovation Workforce

Anchor Ventures

A venue to match talent, technology and innovation partners across sectors

- **\$125,000 Award**
- **Audience:** Aspiring and experienced entrepreneurs; investors; industry partners in relevant sectors, others
- **Location:** Alternating USM, UMB, JHU from
- **Monthly:** Topical programming from 4-5 pm; networking from 4:30 – 7:00 pm
- **Quarterly:** C-level roundtables, keynote speakers, investor education series
- **Ad Hoc:** Take it to the table, Speed dating

Committee on Economic Development and Technology Commercialization

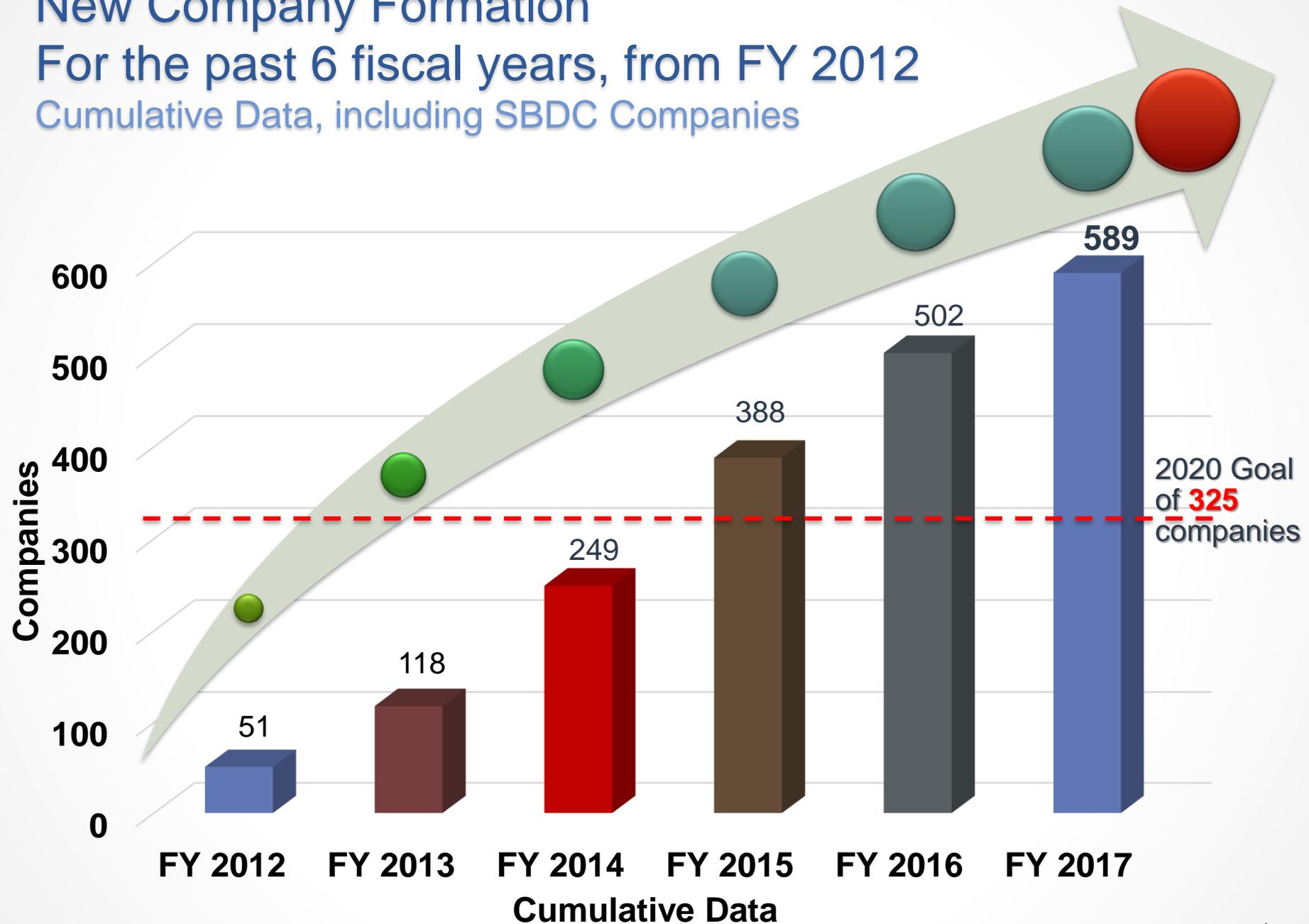
**New Company Formation
January to June 2017**

November 2017

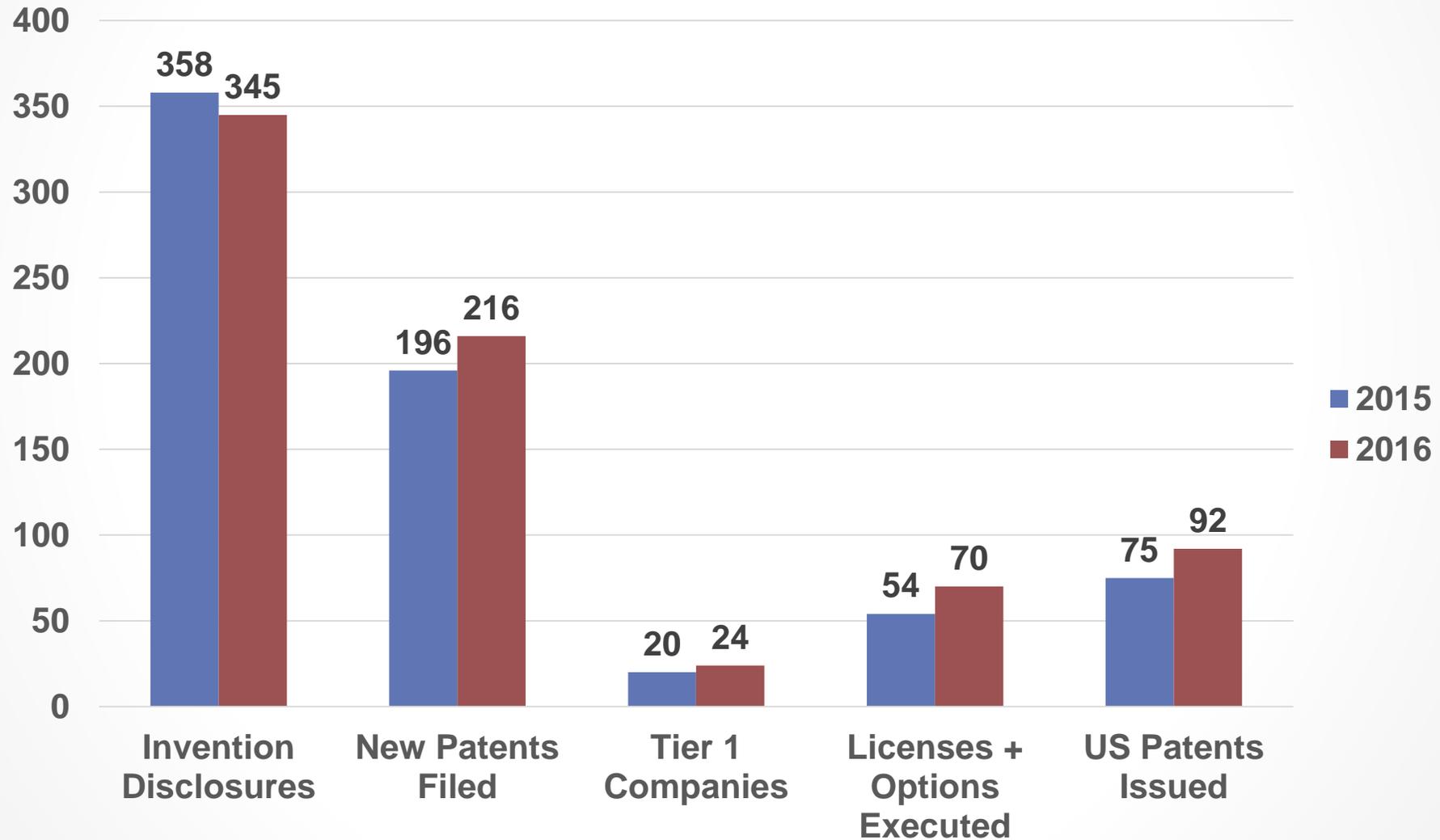
New Company Formation

For the past 6 fiscal years, from FY 2012

Cumulative Data, including SBDC Companies



USM Key Technology Transfer Indicators Calendar Years 2015 and 2016



The UM Ventures Baltimore Fund

A CMAV initiative

October 20, 2017

DRAFT

Goal: Locate and develop companies affiliated with Maryland Public Higher Education Institutions (PHEI) in Baltimore City.

Partners: Baltimore Development Corporation, Maryland Department of Commerce, and University System of Maryland

Initiatives:

1. Provide rent subsidies to early-stage companies affiliated with Maryland PHEI locating in affiliated Baltimore City innovation centers. Subsidy levels:

| | |
|------------------|---|
| Co-working space | 100% subsidy for six months |
| Office space | 50% subsidy for one year up to \$6,000 per company |
| Lab space | 50% subsidy for one year up to \$12,000 per company |

- Affiliated companies include companies based on IP owned by a Maryland PHEI and/or companies with founders who are current students or who graduated from a Maryland PHEI within the last ten years.
 - Companies must be nominated by their academic institution and accepted by an affiliated innovation center in Baltimore City, including:
 - o Betamore
 - o Fast Forward at JHU
 - o Harbor Launch at IMET
 - o University of Maryland BioPark
 - Companies are required to report economic impact for three years after receiving the subsidy, including the number of jobs, amount of funding raised, and collaborations with Maryland PHEI.
2. Provide conditional grants to established companies with significant collaborations with one or more Maryland PHEI.
 - Companies must be nominated by one or more Maryland PHEI.
 - Companies must create new jobs in Baltimore City by opening a new facility or expanding an existing facility.

Committee on Economic Development and Technology Commercialization

**New Company Formation
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Context

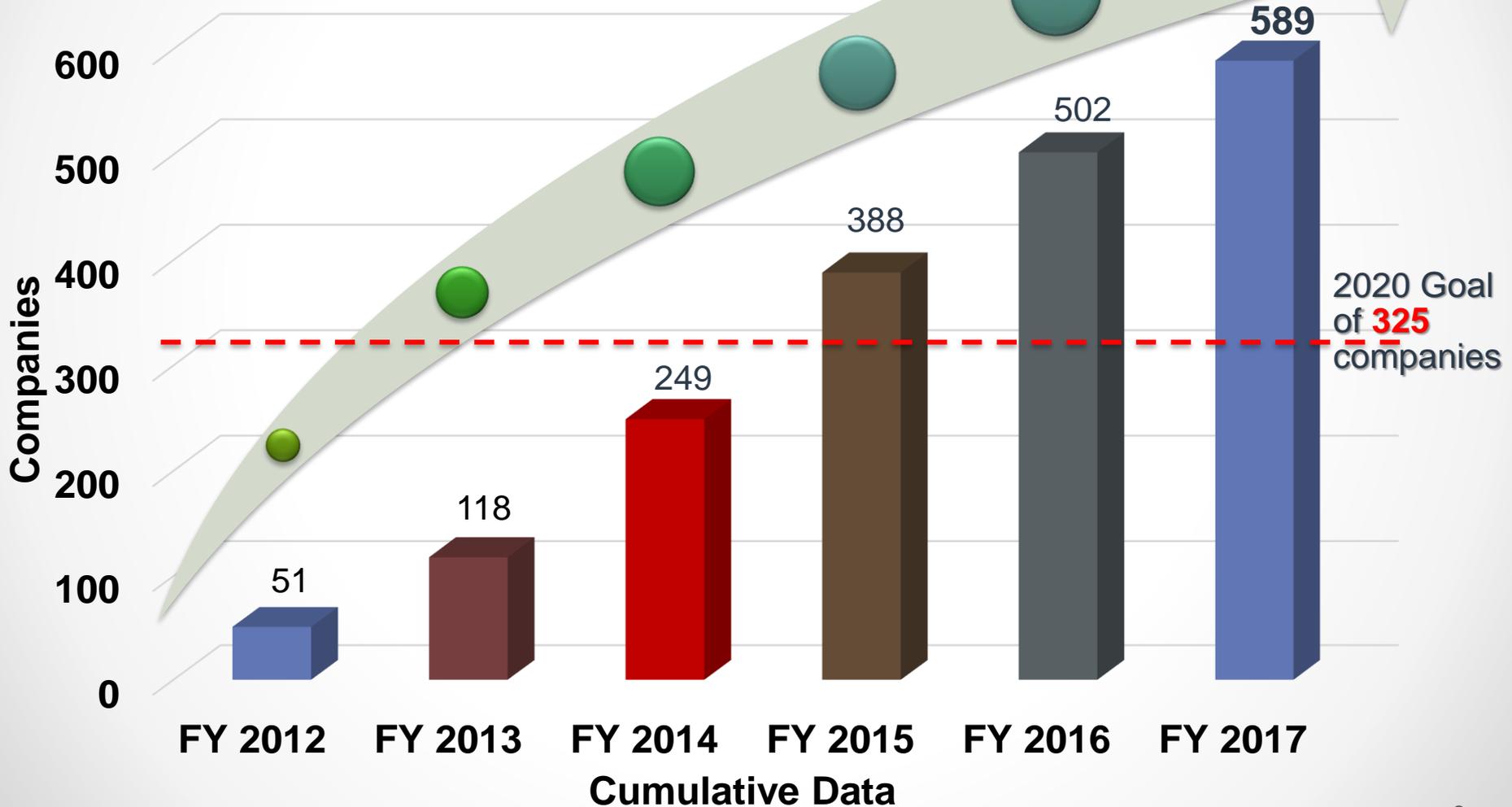
- **Strategic Goal: USM institutions will facilitate the creation of 325 companies over 10 years**
- **Several USM institutions are actively engaged**
- **Numerous resources are dedicated to facilitating the creation of start-ups**



New Company Formation

For the past 6 fiscal years, from FY 2012

Cumulative Data, including SBDC Companies

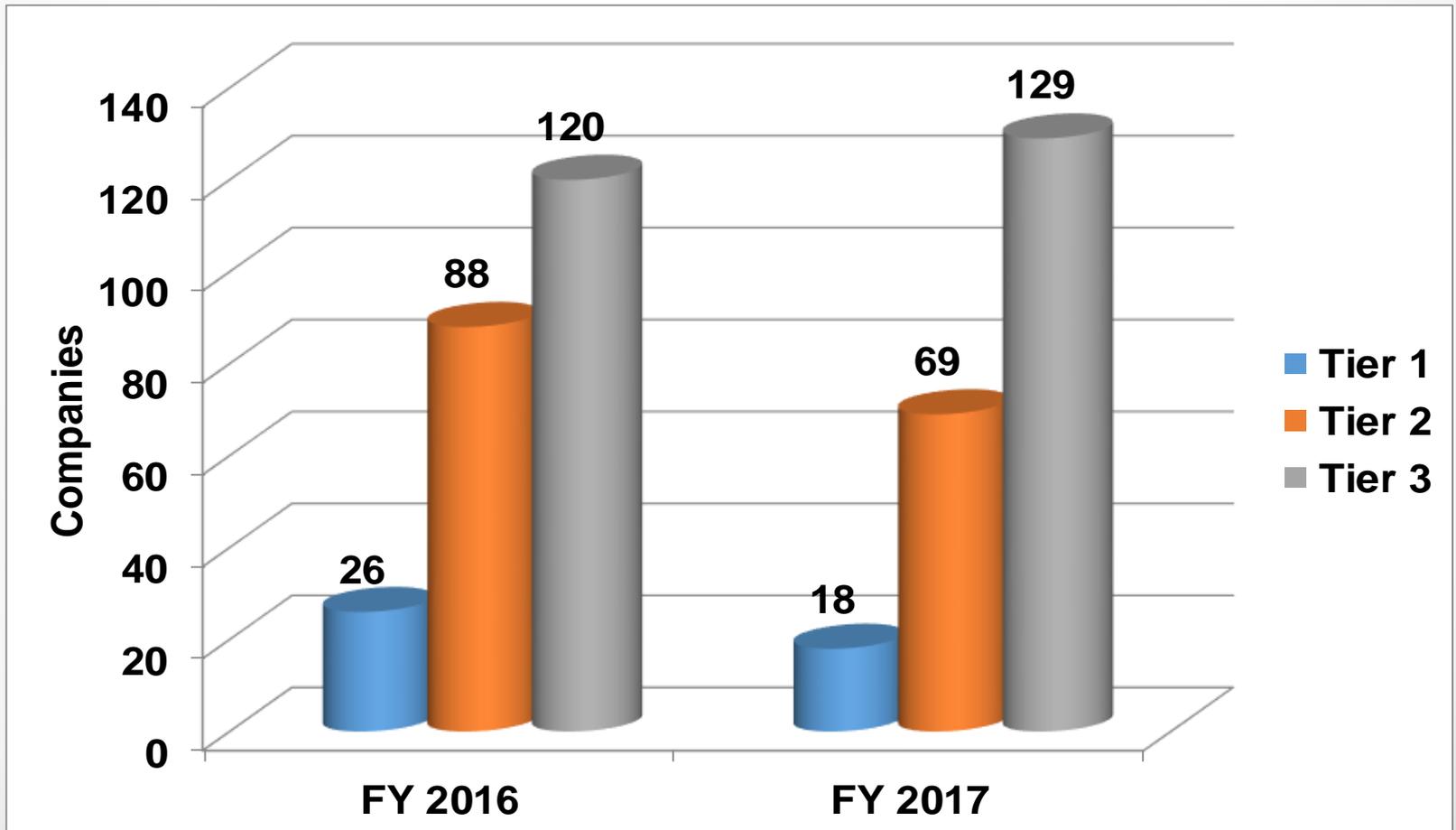


New Company Formation by Tier for Fiscal Years 2016 and 2017

Consolidated Data, including SBDC Companies

Total Tiers 1 & 2: 114

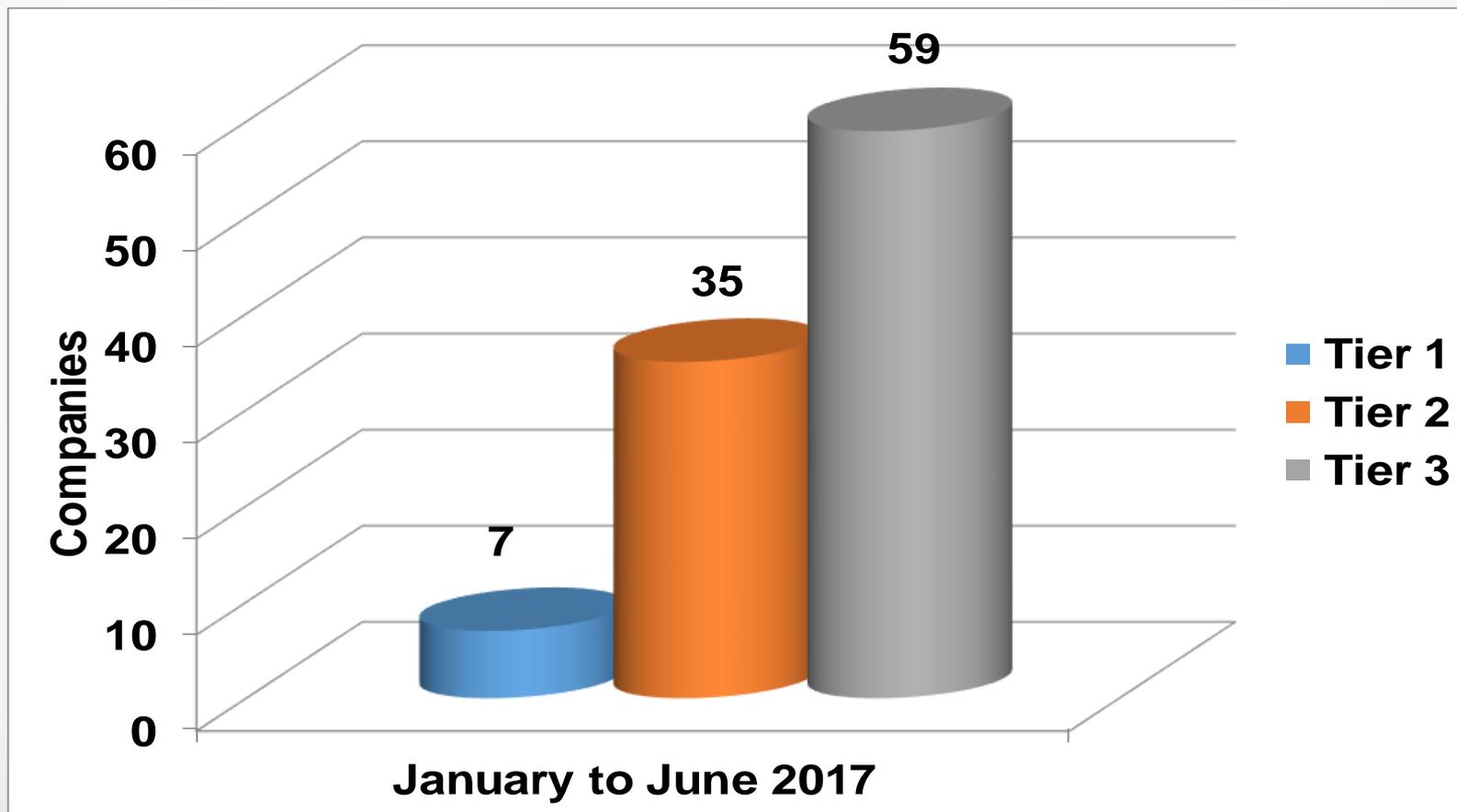
Total Tiers 1 & 2: 87



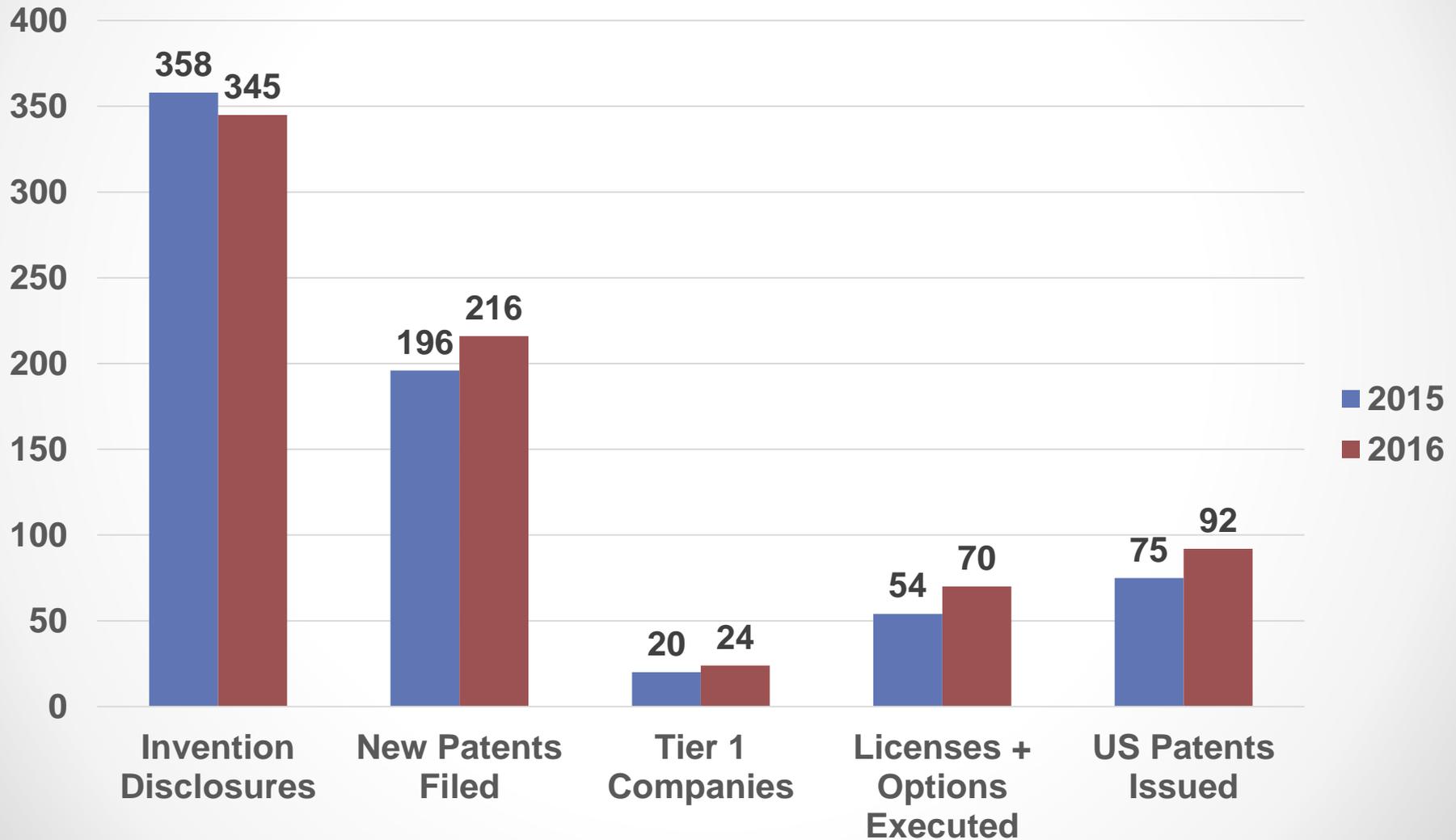
New Company Formation by Tier for the past period – January to June 2017

Consolidated Data, including SBDC Companies

Total Tiers 1 & 2: 42

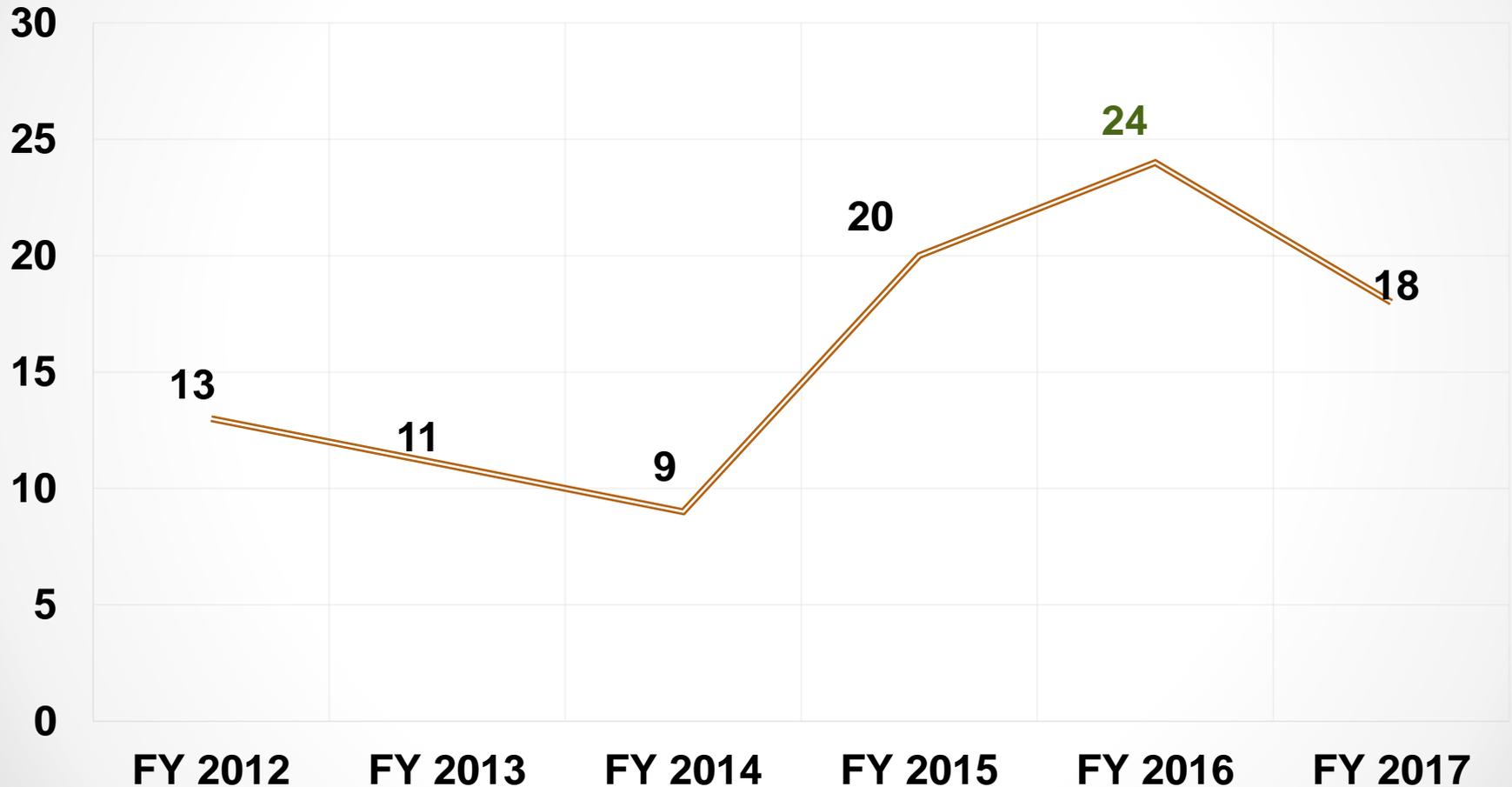


USM Key Technology Transfer Indicators Calendar Years 2015 and 2016



USM Tier 1 Startups – FY 2012 to FY 2017

IP-BASED STARTUPS



Examples of Successful Start-Ups

- **Living Pharma Inc.**

A UMB startup that develops personalized CAR T Cell Therapy™ tailored to the individual patient's cancer and disease phenotype.

- Lentigen Technology Inc. acquired Living Pharma, Inc. in July 2017. Living Pharma is the first UMB New Ventures Initiative start-up to execute a successful exit.

- **IonQ**

A UMCP startup that is advancing the application of quantum computing for commercial applications.

- Received **\$20 million** in series B funding, in July 2017, led by New Enterprise Associates (NEA) and GV (formerly Google Ventures), with participation from new strategic investors.

- **Remedy Pharmaceuticals**

A UMB startup that is focused on treatments for people affected by acute central nervous system (CNS) disease and injuries.

- In May 2017, Biogen completed its asset purchase of Remedy Pharmaceuticals' Phase 3 candidate CIRARA™ for a **\$120 million** upfront payment plus potential milestone and royalty payments. The target indication for CIRARA is large hemispheric stroke.



Additional Examples of Successful Start-Ups

 SQUARESPACE

 ZetaBoards

 Fruitees
SQUEEZING in the GOOD STUFF

 Lurn inc.
where u come first!

 fdbk

 bevo media
your internet marketing homepage

 dose spot

 OPENGOV

 GoMe

 BRAVE UX

 thumbtack'd

 INVESTOURS

 HD TRADESERVICES

 JAVAZEN
COFFEE BLEND

 CAREERPEER

 ALERTUS
LOCALIZED EMERGENCY NOTIFICATION

 Mowing
& More

 ZUSIN



 ONLINE Private Practices
WEB DESIGN AND CONSULTING

 MyFridge
Rental.com

 triumfun

 WAIDER'S

 GYM Q

 ventureboard

 OneReceipt BETA
keep the purchase, lose the receipt

 FN FiscalNote

 YALA

 dao cloud

 sparkgift



 FINAL

 GRIP BOOST

 S

 HARPOON
MEDICAL

 FLEXEL
www.flexel.com

 Light Point Security
Browsing the web has never been safer

 GLIKNIK
TRULY NOVEL THERAPIES

University System of Maryland

New Company Formation

January 1, 2017 – June 30, 2017

Summary of New Companies Facilitated by USM Institutions by Tier

Tier 1: 7 total

- UMCP – Total: 1 licensed university-owned IP
- UMB – Total: 5 licensed university-owned IP
- UMBC – Total: 1 licensed university-owned IP
- Total Women-Owned: 1

Tier 2: 35 total

- UMCP – Total 16: 2 companies received significant mentoring through Mtech; 8 companies received significant mentoring through the Venture Accelerator Program at The Dingman Center; 6 received significant mentoring through the Fearless Founders Accelerator Program through the Dingman Center;
- SU – Total: 5 received significant mentoring in SU's Shore Hatchery
- UMBC – Total: 1 company is a new tenant in the Cyber Incubator
- SBDCs – Total of 13 received significant mentoring (Corridor Region - 9 (UMCP – 2, UMB – 7); FSU – 2; SU - 2)
- Total Women-Owned: 6

Tier 3: 59 total

- TU – Total: 3 companies are CBE Business Plan Competition Winners
- SU – Total: 2 companies are Student Competition winners
- SBDCs – Total of 54 received counseling services (Corridor Region – 27 (UMCP – 18, UMB – 9); FSU - 21; SU - 6)
- Total Women-owned: 1

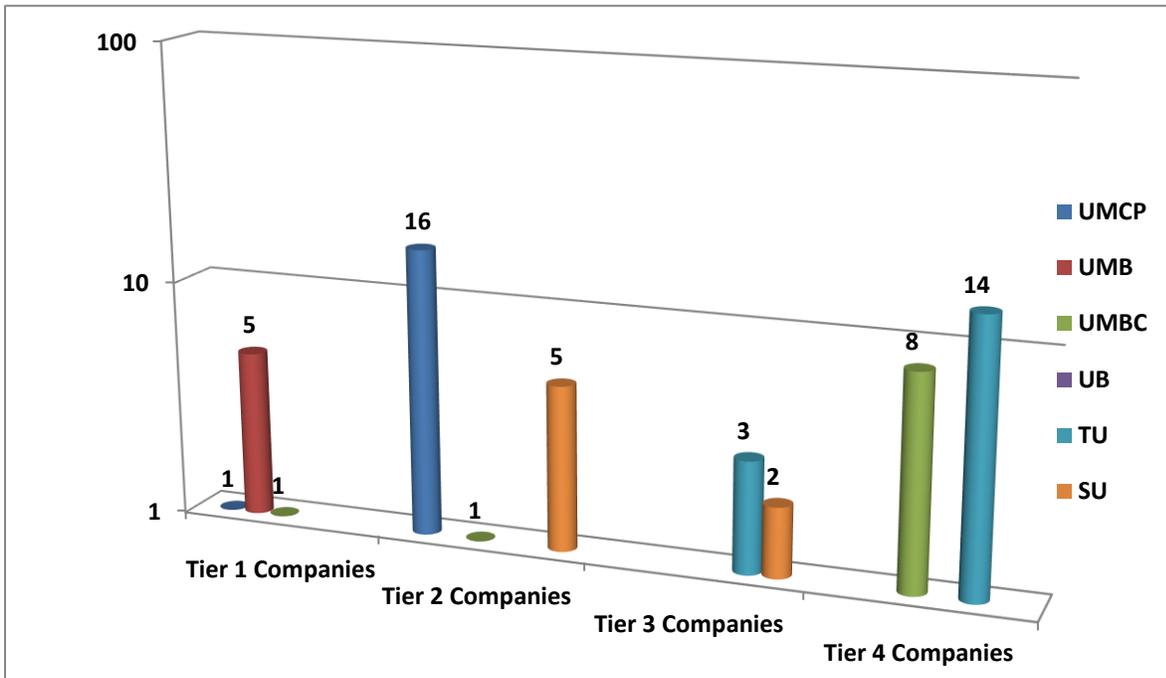
Tier 4: 22 total

- UMBC – Total: 6 companies moved into UMBC's Cyber incubator from in-state; 2 companies moved into UMBC's Life Sciences incubator from in-state
- TU – Total: 14 companies moved into TU's incubator
- Total Women-Owned: 4

University System of Maryland New Company Formation

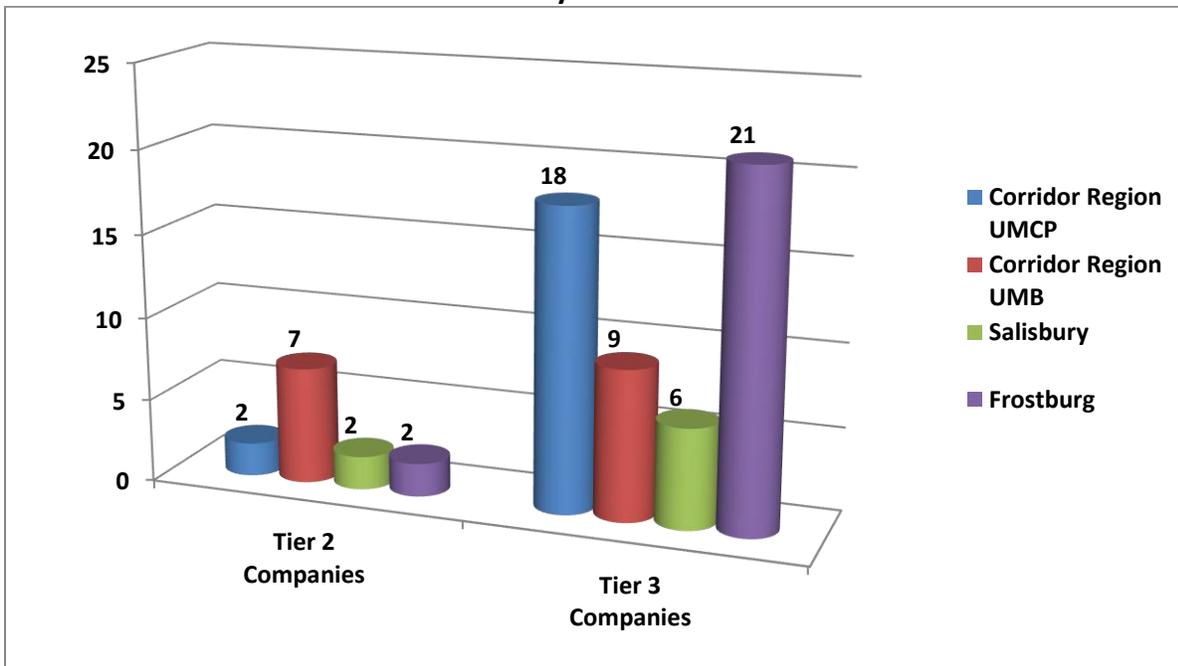
January 1, 2017 – June 30, 2017

New Companies Facilitated by USM Institutions (excluding SBDCs)



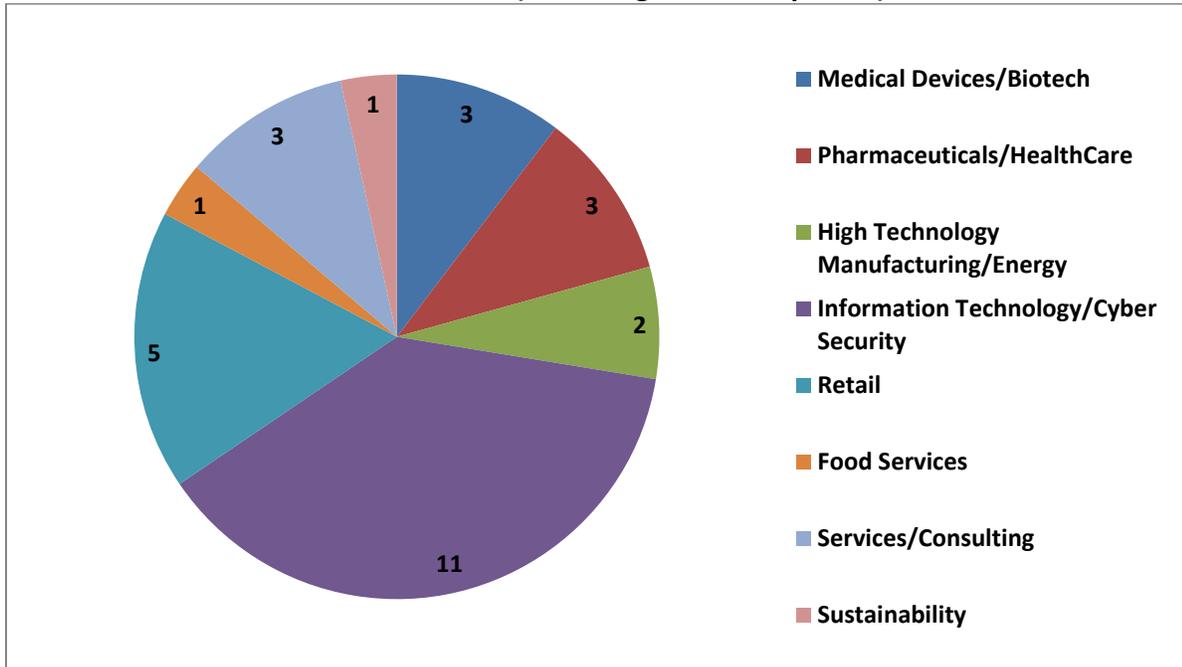
Note: The scale for the Y-axis is logarithmic.

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



**University System of Maryland
New Company Formation**
January 1, 2017 – June 30, 2017

**New Companies Classified by Industry
Tiers 1 & 2 (excluding SBDC companies)**



Examples of New Companies:

Medical Device and Equipment

Symbiont Health (UMCP) – Developed automatic detection devices to monitor for the numerous falls experienced by elderly people due to a sudden loss of consciousness.

Pharmaceuticals/Healthcare

FZata, Inc. (UMB) – Developing antibody-based therapeutic and preventive medicines.

High Technology Manufacturing

ReEmpower (UMCP) – Helping to alleviate global energy poverty through renewables, while also empowering the communities it serves.

IT/Technology

Surevine (UMBC) – Created a next generation cyber security information sharing platform, designed for secure cross-organizational collaboration and collaborative intelligence analysis.

Retail

Loophole (SU) – Produces an adhesive phone accessory and kickstand to prevent people from dropping their phones.

University System of Maryland

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January 1, 2017 – June 30, 2017

Food Services

Zest Tea (SU) – Produces high caffeine teas to bolster mental clarity and energy.

Sustainability

Terra Bella (UMCP) – Empowering people with the information to live and consume in an environmentally-friendly, sustainable way.