In fiscal year 2016, Johns Hopkins Technology Ventures forged ahead in its mission to bring forward technologies that will better society and shape our local economy. The following data demonstrate more than our progress. They are guides informing our move-forward strategies, enabling us to accelerate our impact.

**2016 YEAR IN BRIEF**

Invention Disclosures Received: 501

$58 Million in Licensing Revenue

Licenses & Options: 162

New U.S. Patents Issued: 153

Increase over FY 2015 Issued Patents: 8%

Active Technologies with U.S. Issued Patents: 1,100

Active Patents - Active, Issued U.S. and Foreign Patents: 2,454

Material Transfer Agreements Completed: 4,306
22 NEWLY CREATED STARTUP COMPANIES

24 TEAMS RECEIVING MARYLAND INNOVATION INITIATIVE FUNDING TOTALING $3.1 MILLION

MORE THAN $434 MILLION RECEIVED BY STARTUPS IN FOLLOW-ON FUNDING

6 STUDENT STARTUPS RECEIVING RALPH S. O’CONNOR UNDERGRADUATE ENTREPRENEURSHIP FUND AWARDS

15 MENTORS-IN-RESIDENCE

$4.3 MILLION RECEIVED BY STARTUPS IN SMALL BUSINESS INNOVATION RESEARCH FUNDING

26 TEAMS PARTICIPATING IN I-CORPS

142 APPLICANTS TO FASTFORWARD THROUGH FISCAL YEAR 2016

10 TEAMS IN THE SOCIAL INNOVATION LAB

21 COMPANIES CURRENTLY IN "RESIDENCE" IN FASTFORWARD INNOVATION HUBS

1200+ ATTENDEES AT JHTV EDUCATIONAL EVENTS, PROGRAMING AND TECHNOLOGY SHOWCASES
In fiscal year 2016, JHTV continued making significant investments in space, services and funding to create a robust innovation ecosystem that nurtures the growth of new technologies.

**SPACE**

JHTV’s investments in flexible, affordable and strategically located facilities is empowering entrepreneurs to advance innovation, deliver solutions around the world and drive Baltimore’s economic development.

**FastForward East**

Located in East Baltimore, this 6,000-square-foot innovation hub provides startups with co-working, office and laboratory space, educational opportunities and one-on-one mentorship. It also facilitates meetings with key figures, such as venture capitalists.

**Coming Soon – FastForward 1812**

Opening in early 2017 at 1812 Ashland Ave., this 23,000-square-foot innovation hub will feature office, co-working and wet lab space; shared BSL2 benches; private BSL2 wet labs; state-of-the-art conferencing and event space; and cell culture, microscopy and cold storage rooms.

**Coming Soon – FastForward R.House**

FastForward Homewood will move to Remington in mid-2017. The new innovation hub will have 9,000 square feet of office, meeting and lab space. Since opening in 2013, FastForward Homewood has operated at capacity.

**SERVICES**

JHTV provides the services needed to support innovation, including a number of programs that enable startups to navigate unfamiliar territory.

**Social Innovation Lab**

This year, SIL received a record 61 applications from nonprofits and mission-driven for-profits aiming to turn ideas into thriving ventures. Eight startups completed the seven-month program.

**Mentors-in-Residence**

In fiscal year 2016, 15 experienced entrepreneurs, industry leaders and venture capitalists guided Johns Hopkins faculty and startups along the commercialization path.

**National Science Foundation’s I-Corps Program**

I-Corps helps innovators develop business plans and perform customer discovery projects. This year, 26 teams participated, and four of those qualified for the national program.

**University Technology Showcase**

This collaboration between Johns Hopkins, Greenspring Associates and two other universities sparked dialogue about emerging health care opportunities. Nearly 200 entrepreneurs, faculty members, venture capitalists and corporate executives attended.

**The Commercialization Academy**

This program provided technology commercialization experience, exposure to innovative technologies and skills for starting a career in science to 15 Johns Hopkins University student fellows.

**New Legal Support Program**

For the first time, four area law firms provided pro bono incorporation work and monthly office hours to FastForward startups navigating legal challenges.

**Johns Hopkins University Bootcamp for Technology Entrepreneurs**

Co-hosted by Johns Hopkins University’s Carey Business School and Whiting School of Engineering, the event brought in 16 mentors and 16 guest speakers to show how to move ideas from lab to market.

**FastForward Educational Series**

JHTV’s year-long educational series attracted 1,200 registrants to a variety of events, including a discussion with Nobel Prize recipient Randy Schekman and seminars on hot topics, like equity and QuickBooks.
## FUNDING

JHTV helped startups and early ventures attract funding to support their work, bridge the funding “valley of death” and move their endeavors forward.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
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<tr>
<td><strong>Louis B. Thalheimer Fund for Translational Research</strong></td>
<td>The first ever distributions from this $5.4 million fund provided three researchers a combined $204,000. Hai-Quan Mao, Ahmet Hoke and Francoise Marvel will use the funding to move their technology toward commercialization.</td>
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<td><strong>Ralph S. O’Connor Undergraduate Entrepreneurship Fund</strong></td>
<td>Six teams of student startups received grants for an experiential learning opportunity. Proscia, MoTrack Therapy, Grüp, Touch Plus, Semester.ly and Brevite each received $5,000 and have the chance to earn an additional $5,000.</td>
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<td><strong>Student Entrepreneurship Award</strong></td>
<td>In its first year, this fellowship awarded Fusiform $10,000, allowing the company comprising 12 Johns Hopkins undergraduates to work through the summer. Funding from the anonymous donor runs through 2020.</td>
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<td><strong>Accelerator Translational Incubator Pilot</strong></td>
<td>Managed by the Johns Hopkins Institute for Clinical and Translational Research, this program awarded five grants ranging from $50,000 to $95,000 to fund projects aiming to improve clinical interventions.</td>
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<td><strong>The Johns Hopkins University-Coulter Translational Partnership</strong></td>
<td>Eight teams of biomedical engineers and practicing clinicians received funding ranging from $25,000 to $100,000 to move research collaborations closer to commercialization. Since 2011, this fund has awarded $3 million.</td>
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<td><strong>The Maryland Innovation Initiative</strong></td>
<td>Designed to advance the commercialization of technologies emerging at select Maryland research institutions, MII awarded $3.1 million in grants to 24 FastForward teams in fiscal year 2016.</td>
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### CORPORATE PARTNERSHIPS

- **Bayer**
  - Johns Hopkins and Bayer are working together to discover and develop ophthalmic therapies for diseases of the back of the eye. By the close of fiscal year 2016, five projects had launched.

- **Celgene**
  - In April, The Johns Hopkins University closed a 10-year deal with pharmaceutical company Celgene and three peer institutions that could provide $300 million to bring new oncology therapies to patients.

- **MedImmune**
  - JHTV continued its collaboration with AstraZeneca’s global biologics research and development arm MedImmune. The partnership runs through fiscal year 2019, and 11 projects are in the works.

[ventures.jhu.edu/year-in-brief-fy-2016]