Every day, Johns Hopkins students, faculty and staff members develop innovative ideas, create novel technologies and push the boundaries of science and research to make life better for people all over the world.

One breakthrough after another, they’re changing the outlook for humanity, through new devices and drugs, digital tools that make surgeries safer and more successful, robotic solutions that shift the paradigm for small manufacturing companies, systems that improve maternal and infant mortality rates in developing countries, and more.

And it’s all happening right here in Baltimore, at Johns Hopkins—in our laboratories, FastForward innovation hubs, classrooms and dorm rooms.

Our mission at Johns Hopkins Technology Ventures is to ensure we are nurturing the growth of our entrepreneurial ecosystem so that all of the seeds of innovation planted here at Johns Hopkins have the chance to thrive and have an impact on society at large. We are equally committed to Baltimore itself and believe that if we do our job well, we can bring in outside capital to help companies grow and thrive here, which will provide jobs and opportunity for the people of this great city we call home.

This past fiscal year, Johns Hopkins Technology Ventures saw exciting growth—in the number of inventions disclosed, the number of startups created and funded, the programs and services we offer to support our constituents, in licensing revenues, and—importantly—in our team responsible for affecting change. We were thrilled to name Neil Veloso as our new executive director of technology transfer. The pages that follow provide a snapshot of some of the highlights from fiscal year 2015 and give a glimpse of the many efforts at work.

It is an honor to come to work every day at Johns Hopkins Technology Ventures and serve the incredibly talented faculty, staff and students at this university. Their creativity, drive and innovations have the potential to change the world. It is my hope and conviction that our efforts to support these ideas, technologies and companies will make the future brighter for our community and beyond.

Sincerely,

Christy Wyskiel
Senior Adviser to the President of The Johns Hopkins University and Head of Johns Hopkins Technology Ventures
This past year, we welcomed Neil Veloso as our new executive director of technology transfer. Already, he has proven to be a leader with strong management skills, strategic vision, customer service orientation and a collaborative work style.

Neil has extensive experience in technology transfer and commercialization, having joined us from Cleveland Clinic Innovations in Ohio, where he spent the last nine years in a variety of related roles. Most recently, he served as its senior director of innovation management, directing technology commercialization at Cleveland Clinic and at seven of the company’s Innovation Alliance Partners.

In our office, Neil focuses on intellectual property management and commercialization strategy across a broad portfolio of assets. He manages a team that advises inventors, administers intellectual property and promotes commercialization. His deep proficiency in deal execution and strong record of working with physician-scientists and researchers to identify technologies with market potential make him a strong asset to the university’s tech transfer efforts.

Neil earned his bachelor’s degree in biology at The Johns Hopkins University and master’s degrees in business and environmental health sciences at Case Western Reserve University.
FY 2015

INVENTION DISCLOSURES RECEIVED
516

MILLION IN LICENSING REVENUE
$17.9

NEW AGREEMENTS, INCLUDING OPTIONS
171
IN BRIEF

NEWLY CREATED STARTUP COMPANIES

- Anacrusis
- Ashvattha Therapeutics
- Baton
- Blade Therapeutics
- Brightfield Imaging
- DiPole Materials
- Intellix Checklists
- MycoMed Technologies
- Malaria Newco
- PapGene
- Pontifax Management
- Potenza
- Public Health Technologies
- Sonavex
- Tavec
- TheraCord

- 2,478 ACTIVE ISSUED PATENTS
- 7% INCREASE OVER FY 2014 ISSUED PATENTS
- 112 NEW U.S. PATENTS ISSUED
- 3,900 MATERIAL TRANSFER AGREEMENTS COMPLETED
NEWLY CREATED STARTUP COMPANIES
LICENSING JOHNS HOPKINS UNIVERSITY TECHNOLOGY

16

MORE THAN

$250

MILLION RECEIVED BY STARTUPS IN FOLLOW-ON FUNDING

6

NEW DREAMIT HEALTH BALTIMORE TEAMS

Baton
Decisive Health Systems
InsightMedi
REAL Dietitian
Redox
Sisu Global Health

26
TEAMS RECEIVING MARYLAND INNOVATION INITIATIVE FUNDING TOTALING

$2.6 MILLION
### Student Startups Receiving Ralph S. O’Connor Undergraduate Entrepreneurship Fund Awards

- Aezon
- BHEST Medical
- Forte Health
- Clean Air Pillow
- ShapeU/FitMango

### FastForward Innovation Hubs

- **5** MENTORS-IN-RESIDENCE
- **24** TEAMS PARTICIPATING IN I-CORPS
- **$4.5** MILLION RECEIVED BY STARTUPS IN SMALL BUSINESS INNOVATION RESEARCH FUNDING
- **107** APPLICANTS TO FASTFORWARD THROUGH FISCAL YEAR 2015
- **25** COMPANIES CURRENTLY IN “RESIDENCE” IN FASTFORWARD INNOVATION HUBS
- **12** TEAMS IN THE SOCIAL INNOVATION LAB
FastForward East

FastForward East, Johns Hopkins’ newest innovation hub, opened in February 2015. Located in East Baltimore in the Rangos Building at 855 N. Wolfe St., the 6,000-square-foot hub provides affordable co-working, office and laboratory space near Johns Hopkins’ medical campus to facilitate collaboration between entrepreneurs and researchers at the schools of Medicine, Public Health and Nursing, as well as at the flagship hospital. The innovation hub’s open plan and communal spaces encourage cross-pollination of ideas and startup strategies among entrepreneurs, faculty and staff.
Forest City broke ground at 1812 Ashland Ave. in May 2015 to build a 165,000-square-foot building with 25,000 square feet set aside to expand FastForward East. The new space will provide additional co-working, office, laboratory and conference space for startups. This new space is a reflection of the momentum Johns Hopkins’ innovation ecosystem is experiencing. Much of the Johns Hopkins Technology Ventures team will relocate to the new building as well when it opens in fall 2016.

FastForward Homewood
FastForward Homewood is Johns Hopkins’ original innovation hub. It occupies 12,000 square feet in Baltimore’s historic Stieff Silver building, within a mile of The Johns Hopkins University’s Homewood campus. The hub opened in early 2013, and its laboratory and office spaces have been full since.
Twelve startups participated in The Johns Hopkins University’s Social Innovation Lab in fiscal year 2015. The seven-month program supported these nonprofits and mission-driven for-profits addressing pressing social issues in Baltimore and beyond by offering them funding, mentorship, space and training to help transform their ideas into thriving ventures with measurable impact.

For the second year in a row, Johns Hopkins co-sponsored DreamIt Health Baltimore, a four-month accelerator program for health information technology startups. Six teams participated this year, each receiving $50,000 in funding along with entrepreneurial education; space in which to work; a mentor/advisor; pro-bono legal and accounting advice; introductions to potential funders, partners and customers; and time with industry, government and academic leaders.

Two dozen Johns Hopkins teams participated in the National Science Foundation’s I-Corps program, in which participating teams pair with mentors to develop business plans and customer discovery projects for their technologies. Johns Hopkins hosts and provides instructors for I-Corps programs, helps recruit and select teams, and matches teams with mentors.
For our first **University Venture Technology Day**, in December 2014, we partnered with local venture capital firm **Greenspring Associates** to bring top-tier venture capitalists and angel investors from around the country to Baltimore to hear pitches from two dozen Johns Hopkins startups. This event allowed Hopkins to showcase the technological breadth of startups created at the university and supported by FastForward.

We also hosted our annual joint meeting of the **Johns Hopkins Alliance for Science and Technology Development** and the **University of Maryland, Baltimore’s Commercial Advisory Board**. The event is a unique opportunity for researchers to showcase early technologies with commercial potential to a network of potential customers, partners, mentors and investors. In 2015, several Johns Hopkins startups also had the opportunity to showcase their technologies at the meeting.

In 2015 we supported the second **Johns Hopkins University Bootcamp for Technology Entrepreneurs**, co-hosted by The Johns Hopkins Carey Business School and The Johns Hopkins Whiting School of Engineering. The program provided participants—who hailed from a range of schools and disciplines—with the basic knowledge and skills needed to move ideas from laboratory to market.

Our **Mentors-in-Residence** program grew from eight to 14 mentors in fiscal year 2015. The program pairs experienced entrepreneurs, industry leaders and venture capitalists with entrepreneurial faculty and startups at Johns Hopkins. Through regular interactions, the mentors guide our startups and entrepreneurial teams along the commercialization path.

In 2015 the **Commercialization Academy** provided nine student interns with practical technology commercialization experience, exposure to innovative technologies around the university and other skills related to diverse careers in science. The Academy also launched an expert speaker series exposing students to a variety of subdisciplines within the field of commercialization, as well as an online entrepreneurial training platform and library for the entire Johns Hopkins innovation ecosystem. The plan is to grow this program to accommodate up to 30 interns.
Established in 2015, the **Louis B. Thalheimer Fund for Translational Research** will provide seed funding to Johns Hopkins faculty members to produce the proof-of-concept, prototype and commercial feasibility studies necessary to bring discoveries and innovations out of the laboratory and into the world. The first round of funding will be awarded in late calendar 2015.

The **Ralph S. O’Connor Undergraduate Entrepreneurship Fund**, which provides funding for undergraduate entrepreneurs, distributed its first round of grants in the spring of 2015. Five promising teams received grants ranging from $2,000 to $10,000.

The **Johns Hopkins University-Coulter Translational Partnership**, established in 2011 to fund exciting research collaborations between biomedical engineers and practicing clinicians at Johns Hopkins, has awarded $2.5 million so far to help move 23 Johns Hopkins projects closer to commercialization.

The **Johns Hopkins University Institute for Clinical and Translational Research** manages the Accelerated Translational Incubator Pilot program, which offers $100,000 grants—10 at Johns Hopkins in fiscal year 2015—to fund exciting projects seeking to improve clinical interventions.

Four Johns Hopkins University researchers received awards at the annual joint meeting of the **Johns Hopkins Alliance for Science and Technology Development** and the **University of Maryland, Baltimore’s Commercial Advisory Board** in April 2015.
Global biopharmaceutical company **Bayer Healthcare** and The Johns Hopkins University began a five-year collaboration in June 2015 to develop new therapies targeting diseases of the eye, such as age-related macular degeneration, diabetic macular edema, geographic atrophy, Stargardt’s disease and retinal vein occlusion.

Our collaborative work with **MedImmune**, the global biologics research and development arm of biopharmaceutical business AstraZeneca, continues to grow and evolve. In fiscal year 2015, six new projects were added to our list of ongoing collaborations, bringing the total number to 11.
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