

ANNUAL REPORT

2016

*Creating the next generation of  
innovation-driven entrepreneurs*

# MISSION

At the Martin Trust Center for MIT Entrepreneurship our mission is to advance knowledge and educate students in innovation-driven entrepreneurship in a manner that will best serve the nation and the world in the 21st century.

The focus of our education is for MIT students to whom we provide proven frameworks, courses, co-curricular programs, state-of-the-art facilities, advisory services, and processes to create a rigorous, practical, customized, and integrated experience.

We accept and welcome our leadership role to advance the field at MIT as well as globally.

Founded in 1990 by Professor Edward Roberts, the Martin Trust Center serves all MIT students, across all schools and all disciplines.

*Entrepreneurship is a craft that can be taught.*

## PRINCIPLES OF OPERATION

### 1 *MIT Standard of Excellence and Rigor:*

We provide the highest-quality education, advising, and practical experiences.

### 2 *Collaboration:*

We work closely with other MIT departments, labs, centers, and groups to connect students with the best entrepreneurship programming across the Institute, and beyond when appropriate.

### 3 *Diversity:*

Entrepreneurship requires diversity of opinion and diversity of people. Throughout our courses, advising, and programming, we combine a range of critical perspectives.

### 4 *Experimentation:*

Each year we try new programs and activities. If we fail, we learn. We don't expect everything to work the first time; if it all does, we are not innovating enough.

### 5 *Honest Broker:*

First, neither the center nor its faculty or staff are allowed to take a financial interest in any of the new companies that we nurture and assist. Second, we strive to always provide our students with multiple options and educate them on the process to make an informed decision. The choice always rests with the student and the center will work to create a level playing field for the options. Our only goal is the student's entrepreneurship education and long-term entrepreneurial success.

### 6 *Mens et Manus:*

True to the motto of MIT, in all of our courses and throughout our activities, we operate on a hybrid model that fuses academic and practitioner perspectives.





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**MIT'S  
ENTREPRENEURIAL  
IMPACT\***

**30,200**  
ACTIVE  
COMPANIES

**4.6**  
MILLION  
PEOPLE  
EMPLOYED

**\$1.9**  
TRILLION (USD)  
ANNUAL  
REVENUES

**10TH**  
LARGEST GDP  
EQUIVALENT

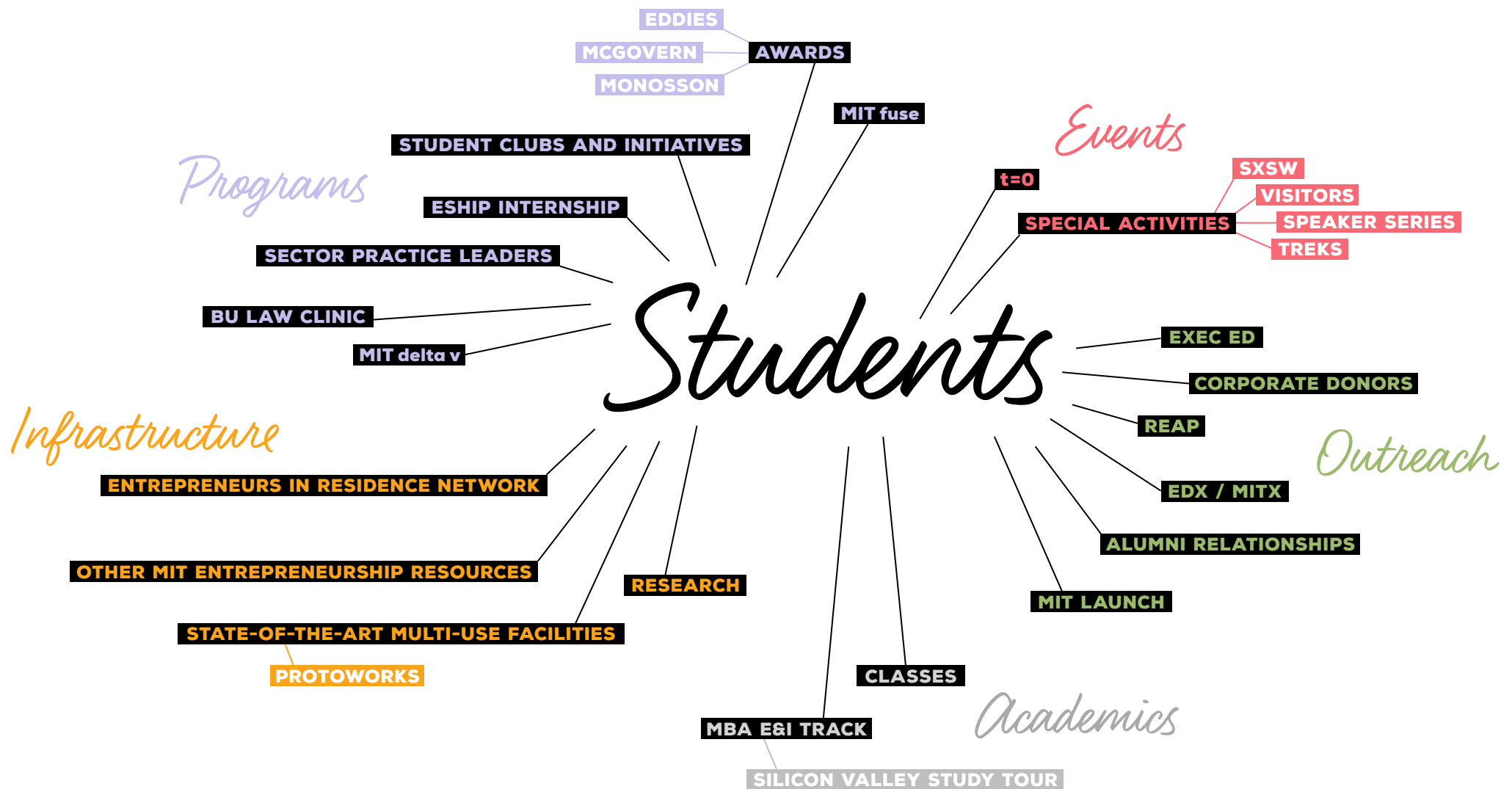
\*AS OF 2014

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The Martin Trust Center for MIT Entrepreneurship plays a unique and extremely valuable role at MIT and beyond



## LETTER FROM THE MANAGING DIRECTOR AND THE CHAIR

At the Martin Trust Center for MIT Entrepreneurship, every year seems to be more amazing than the last one and 2016 was no exception.

Last year we identified a series of very substantial challenges that we needed to address to better meet our mission. We are very glad to say we met and exceeded all of them. A few of the highlights:

**Enlarged and Improved Space:** After a year of design and a year of moving around, on June 1st the center formally opened its new expanded and dramatically redesigned space, essentially doubling our ability to support students and raising the bar for entrepreneurial education spaces globally.

**Increased Scale and Scope of Offerings:** We were able to enhance and broaden our services to the students on many fronts including academic courses, extracurricular programs, a new makerspace, our t=0 entrepreneurship festival, and the size and scope of the MIT summer student accelerator, MIT delta v.

**Upgraded Team:** We significantly upgraded and expanded our team, especially our Entrepreneurs in Residence (EIRs), the quality of whom now set a new standard, not just for ourselves, but also for universities globally.

**Reinforced Our Culture:** Not as visible or measurable, but still of the most fundamental importance to our center's effectiveness, we continue to lead with and strengthen our values. Every day the center operates as a 100% educational organization for MIT students. The center's professionals represent the MIT standard of excellence and rigor. Each course and program is run with a spirit and practice of collaboration. We focus on incorporating diversity and experimentation in everything we do while unquestionably serving as honest brokers to our customer, the students. We treasure our unique ability to work with academic faculty and practitioner faculty to create knowledge that leads to practical skills for our graduates. This underpins everything that we do and makes the center so special.

These are just some of the highlights of the year. Our annual report will further show all that we've achieved as **we strive to raise the bar for innovation-driven entrepreneurship education, not just at MIT, but as a global field of study** both today and well into the future. Is that an audacious and extremely challenging goal? Yes, but this is what energizes us. It also can be scary and overwhelming at times with our limited resources. However the support we get from MIT, the alumni, and the community keeps us going and helps us succeed.

Thank you for this support and we hope the center can continue to count on it going forward. Please take some pride and joy in being a part of an organization that is fundamentally changing entrepreneurship forever.

Best,

**Bill Aulet**  
Managing Director



**Ed Roberts**  
Founder and Chair



**2016 AT A GLANCE**

**60+**  
ENTREPRENEURSHIP  
COURSES

**3,758**  
EIR-STUDENT  
INTERACTIONS

**130+**  
PROFESSIONAL  
MENTORS &  
ADVISORS

**70+**  
GUEST  
SPEAKERS

**17**  
MIT delta v  
TEAMS

**21,482**  
FREE CUPS  
OF COFFEE

**1**  
GREAT  
YEAR

# HIGHLIGHTS

*"Amazing! This new space is a game changer."*  
—Lisette Tellez, class of 2018

## RENOVATION OF OUR SPACE

A garage-style conference room with automated glass doors that rise to create on-demand networking space. A workshop, complete with 3-D printers, a laser cutter, and other high-tech tools. Eight spacious collaboration rooms, plus plenty of co-working space for students to study and innovate. And a sleek, stainless steel kitchen fully stocked with coffee, espresso, Ramen noodles, and granola bars, otherwise known as the fuel of startups.

The newly expanded and refurbished Martin Trust Center for MIT Entrepreneurship is **among the most cutting-edge university facilities dedicated to entrepreneurship in the world**, and will play a pivotal role in the continued growth of entrepreneurship at MIT in the coming decades.

"Marty Trust has provided a wonderful gift for the MIT community and is raising the bar again for entrepreneurship education globally," says David Schmittlein, the Dean of the MIT Sloan School. "The thoughtfully-designed space will enable new and expanded collaboration across campus, with students from all parts of the Institute exploring entrepreneurial interests in a dynamic environment."

The team in charge of the renovation looked at a variety of co-working spaces, startup headquarters, and university facilities for design inspiration. The team's goal was to provide distinct "neighborhoods" for students to do different types of work and enable the conversations, teamwork, debate, and creative exchanges necessary for entrepreneurial innovation.

"The space creates new levels of flexibility by minimizing the role of walls and maximizing the role of furniture," says Bill Aulet, managing director of the center and a senior lecturer at MIT Sloan. "We have a café for serendipitous collisions, nooks and different styled conference rooms for huddle space, a beehive space which has lots of activity, a quiet car area—which resembles a first class train compartment—for those working on individual tasks, a makerspace for students whose companies require models and prototypes, a library with relevant literature, lockers for student clubs and projects, phone booths that provide free international calls, and, of course, lots and lots of IdeaPaint™ walls for collaborative work. Our hope is that the new space gives students a flavor of the energy and excitement of working at a startup."

"This new space marks another exciting step forward in enhancing MIT's campus and entrepreneurial evolution," Aulet continues. "The mentorship, guidance, and community support that MIT students receive from the Trust Center, along with the many other resources at MIT, provide students with an **unsurpassed environment to learn how to quickly and effectively start new ventures** that positively change the world."

Watch our Grand Re-Opening video at [ENTREPRENEURSHIP.MIT.EDU/MEDIA](https://ENTREPRENEURSHIP.MIT.EDU/MEDIA)



## RAISING THE BAR FOR ENTREPRENEURSHIP EDUCATION



**THE RENOVATED SPACE:**

**7200**  
SQUARE  
FEET

**63%**  
INCREASE  
IN SIZE

**10**  
CONFERENCE  
ROOMS

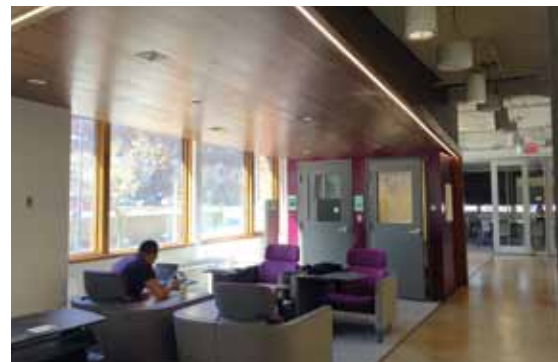
**5**  
PRIVATE  
PHONE  
BOOTHS

**332**  
NEW CHAIRS

**1000**  
PEOPLE ON  
WEEKDAYS

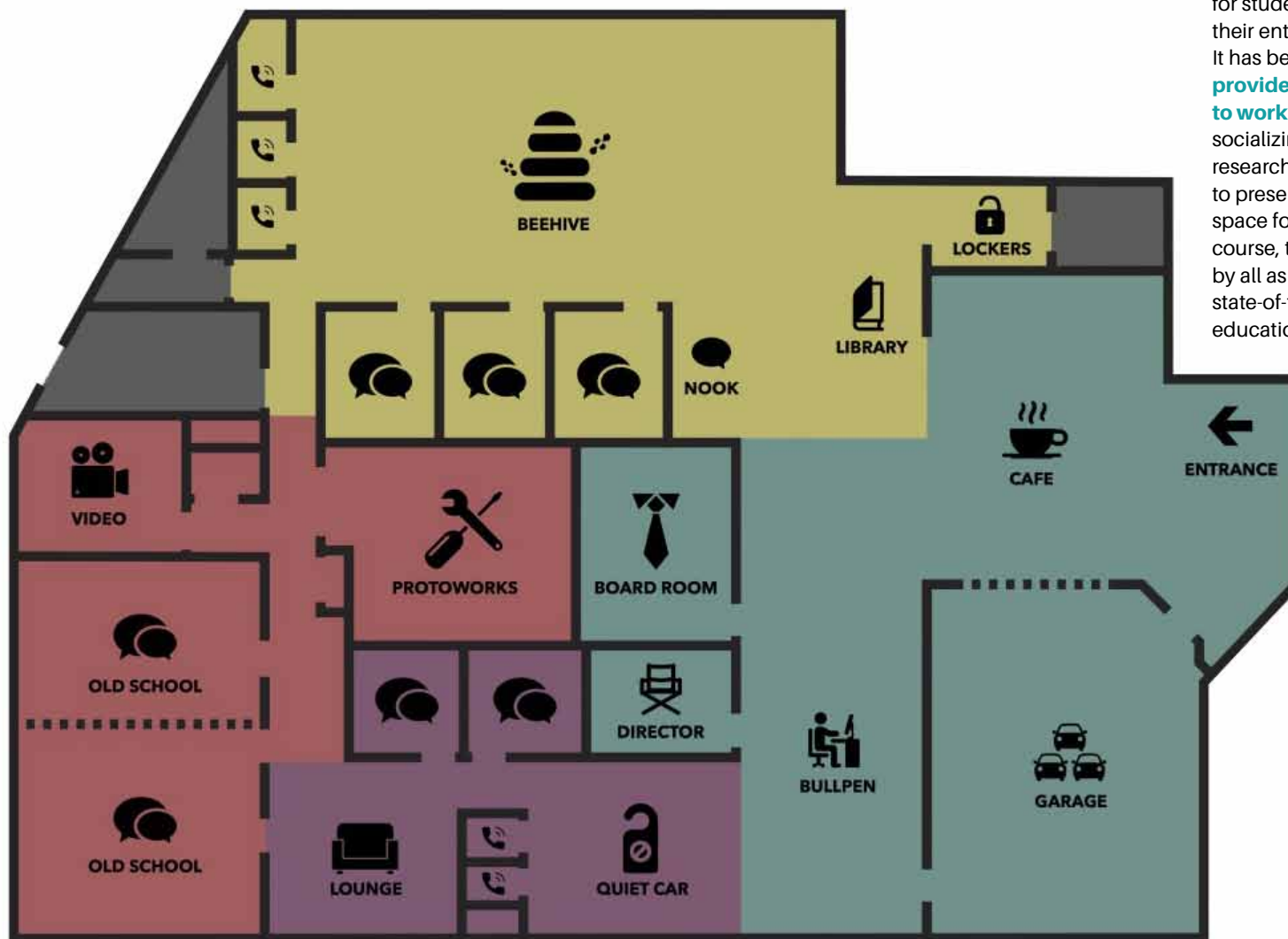
**300**  
PEOPLE ON  
WEEKENDS

*"Most energetic, welcoming, and well-designed space on campus."*  
—Dennis Lally, MBA '17





IT IS BUILT TO BE A CREATIVE SAFE SPACE WHERE ENTREPRENEURIAL STUDENTS CAN BE WITH “THEIR PEOPLE.”



The new Trust Center is designed to create an ideal physical location for students to explore and advance their entrepreneurship capabilities. It has been **carefully built to provide different modalities to work** from brainstorming to socializing to building/making to researching to crunching numbers to presenting the plan, plus ample space for events, programs, and, of course, the staff. It is to be enjoyed by all as an example of what state-of-the-art entrepreneurship education can and should be.

*"A long history of serious and successful entrepreneurship activity at MIT has existed for more than a century."  
—Martin Trust, SM '58*

## GRAND RE-OPENING CELEBRATION

On June 1, several hundred MIT alumni, students, faculty, staff, and invited guests gathered in E40-160 to commemorate the grand re-opening and expansion of the Martin Trust Center for MIT Entrepreneurship. The evening was an occasion to celebrate MIT's entire entrepreneurial ecosystem and the opportunities for world-changing innovation that the expanded space will help to foster. The celebration also included a Demo-palooza featuring the work of 17 successful Trust Center alumni companies.





JUNE 1, 2016



**17**  
ALUMNI  
COMPANIES  
PRESENTING

**300**  
MIT LUMINARIES  
ATTENDING

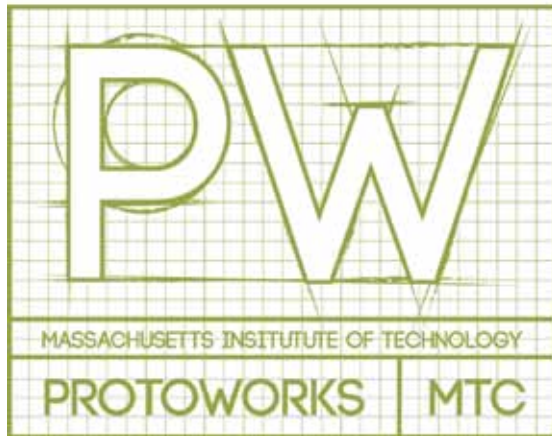
**250**  
CUSTOM  
TRUST CENTER  
CUPCAKES

**12**  
EDDIES  
AWARDED



*"ProtoWorks has fundamentally changed my MIT experience and integrated me into the full power of MIT."*  
 —Connie Yee, MBA '18

## PROTOWORKS & MIT'S MAKER INITIATIVE



An integral part of the renovations of the Martin Trust Center was the expansion of our ProtoWorks makerspace. The timing coincided perfectly with the creation of Project Manus, the Institute-wide program geared to creating a gold standard for next-generation maker systems that was rolled out for the fall 2016 semester. As part of this initiative, all incoming freshmen enrolling in the fall were invited to join one of the more than 40 different makerspaces across campus and, once trained, have access to \$100 worth of "Maker Bucks" to purchase materials.

To tie in with Project Manus, ProtoWorks functions as a resource and community for entrepreneurial students looking to accelerate learning and growth via experimentation and initial physical prototyping. To help foster these ideas, the Trust Center brought in state-of-the-art 3-D printers, a laser cutter, a thermoforming device, bench tools, electronics components, and much more, all overseen by a paid staff of ProtoWorks 'guardians' who help with training, mentoring, and workshops in the different maker disciplines. If students need more specialized equipment, they are seamlessly connected through MIT's Project Manus network to other makerspace facilities (such as glass blowing, woodworking, even candy making, and much more) via an app called "Mobius" that provides a snapshot of the equipment on campus and when it is available.

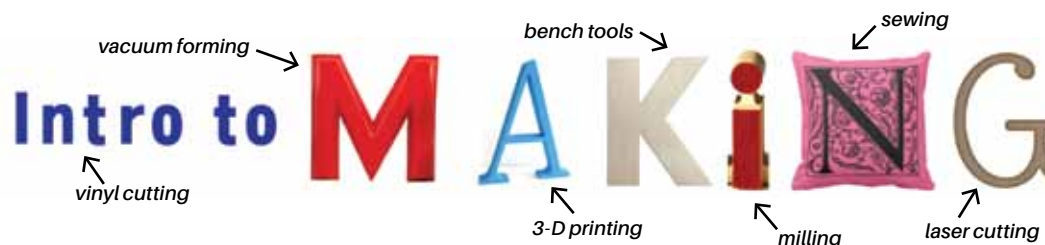
"ProtoWorks enables MIT students to have the holistic experience that combines MIT's bedrock principle of Mens et Manus with their entrepreneurial passions," says Martin Culpepper, professor of Mechanical Engineering and MIT's 'Maker Czar.' "The ProtoWorks facility, the programs of the Martin Trust Center, and the community of passionate people that inhabit both, form an entrepreneurial ecosystem that supports anything from software to the hard-core technical innovation that defines MIT."

The Trust Center was also home to the first ever 15.S50 "Intro to Making" class during the Fall 2016 semester where students received a complete overview of each of the different maker disciplines as well as a hands-on education for how to use these resources. Both the class and ProtoWorks were overseen by the tireless efforts of the Trust Center's Laurie Stach, who is our own entrepreneurial maker czar. The course was such a rousing success, it is being offered again in the Spring of 2017 with a larger enrollment size to meet student demand.

The philosophy behind ProtoWorks may best be expressed by the Trust Center's Managing Director Bill Aulet: **"Making and entrepreneurship can be fun, but there is also a craft involved with both to be successful. Each skill can be taught, and when they are integrated, it produces extraordinary results;** both the educational experience and the outcomes are dramatically enhanced. The Trust Center is extremely excited about this pioneering initiative that will greatly benefit our students."

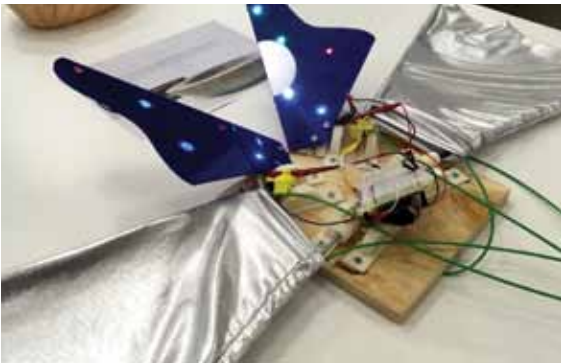
The ProtoWorks initiative and equipment were made possible by a generous donation from Ron Kurtz, '54, '59, SM '60, who was very interested in seeing more students trained on how to make things, and then make them in America.

[ENTREPRENEURSHIP.MIT.EDU/PROTOWORKS](http://ENTREPRENEURSHIP.MIT.EDU/PROTOWORKS)





## ACCELERATING LEARNING VIA EXPERIMENTATION



**150**  
MONTHLY  
MAKERS

**6**  
PROTOWORKS  
GUARDIANS

**30**  
"INTRO TO  
MAKING"  
STUDENTS IN  
FIRST-EVER  
CLASS

**214**  
TRAINED  
STUDENTS

**600+**  
CUBIC  
INCHES OF  
3-D PRINTER  
FILAMENT  
USED

## NEW ENTREPRENEURS IN RESIDENCE

The Entrepreneurs in Residence at the Martin Trust Center are highly experienced professionals who have worked in numerous startups and are looking to share that experience with MIT students during a time in their career when they're between ventures. **EIRs focus on educating, mentoring, and coaching aspiring entrepreneurs on the challenges surrounding startup life**, spending a few years at the Trust Center before leaping to their next endeavor.

This constant refresh of the position leads to continuous innovation of the center's programs. Each new EIR raises the bar on the work done by his or her predecessors. Over the past year, the Trust Center was blessed to be joined by three exceptional professionals.

**In addition, one of our current EIRs, Trish Cotter, was promoted to become the Associate Managing Director of the Trust Center in addition to her EIR role.**

### DONNA LEVIN



**Donna Levin** had a 15-year career as a social entrepreneur before coming to the Trust Center in November 2015. She is one of the co-founders of Care.com, the world's leading online site for helping families find and manage family care. Donna played key roles in building and leading numerous high-performing teams, including senior care planning and care concierge. As VP of Operations, she built and launched all of Care.com's operational systems, policies, and procedures, and led the way on safety protocols, playing a fundamental role in scaling the Care.com platform. As Vice President, Public Policy, CSR, and Global Workplace Solutions, Donna advocated for business and government programs and changes that help families manage the costs and challenges of care.

Donna was also VP of Operations at Upromise, an online service that helps families save for college, and held several leadership positions across a broad range of technology and startup organizations including Furniture.com, Turning Point Software (acquired by Metamore Worldwide), and Thomson Financial. She received her MBA from MIT Sloan in 2016 and serves on the boards of the Center for Women and Enterprise, The Alliance for Business Leadership, and Zero to Three.





## RAISING THE BAR

### NICK MEYER



**Nick Meyer** joined the team in the spring after having founded several startups as well as being the product or engineering lead for software companies in industries as diverse as social, video, travel, music, and gaming.

While still in high school, Nick co-founded the MMOG (multiplayer massive online game) Kings of Chaos, which saw hundreds of thousands of players daily. He then came to MIT as an undergrad and spent some of his freshman year founding Reble.FM, a peer-to-peer streaming music service that was partially funded through Y Combinator and was acquired by Playlist.com three years later. Nick then co-founded MileWise in 2009, a travel metasearch engine, where his roles included UI design, PR and marketing, and fundraising, until the company was acquired by Yahoo! in 2013. His most recent company was Sup, a mobile video app that was funded by Khosla Ventures.

### SORIN GRAMA



**Sorin Grama** is an EIR at both the Trust Center and the Legatum Center for Development & Entrepreneurship, spending half of his work week with each organization. Sorin brings extensive experience of starting and scaling a business in a developing economy to both centers. Before coming to MIT over the summer, he had spent the past three years living and working in India, an experience he can share with students building startups to serve developing countries.

Sorin co-founded and served as CEO and CTO of Promethean Power Systems, a manufacturer of thermal energy storage systems for refrigeration and cold-storage applications. He was the principal inventor of Promethean's thermal battery, an energy storage device that provides effective backup in areas with unpredictable grid power. Dairy farmers and processors in rural India use this battery to chill milk at village collection centers. Promethean was also one of the four founding companies of Greentown Labs, a grassroots effort that has grown to become the nation's largest cleantech incubator.

## VIBRANT VENTURES FROM OUR ALUMNI IN 2016

The home page of our website boldly proclaims: ***"We don't create companies...we teach people how to create companies."*** One way we measure the success of the center is through the success of our alumni in creating vibrant and growing ventures that are having a significant impact in the world. Here are the stories of just a few of our noteworthy alumni from the past year.

### VANESSA GREEN & ANTHONY SAGNERI



**Vanessa Green, MBA '11**, admits that when she came to MIT Sloan, "I didn't realize that people like me might have the opportunity to start a company. Then I took Energy Ventures and was exposed to a bunch of passionate people interested in commercializing technology." Bitten by the entrepreneurship bug, it was in another course (New Enterprises) that she was exposed to a technology that had the potential for providing energy storage for the mobile market using high frequency circuitry architecture and Green paired up with her FINsix co-founder, **Anthony Sagneri, SM '07, PhD '11**, who was getting his doctorate in Electrical Engineering.

Except...the mobile space was crowded and startups there were well-funded and at least three years further along. Green and Sagneri pivoted to an area where opportunities for innovation were more promising: LED lighting. This pivot allowed the team to receive grants to further refine the tech, but ultimately the lighting industry as a market was still very much set in its old "incandescent" ways and the margins just weren't there.

So Green and Sagneri pivoted a second time because, as she says, **"We needed to be in a segment where people saw value in small."** And that's why we got excited about the laptop power adaptor space." Others were excited as well and when their first product, the Dart, was launched on Kickstarter, the company raised over \$150,000 in the first seven hours. With a 30-day goal of \$200K, the crowdsourcing finished at more than \$450,000 pledged from 4200+ backers.

In September of 2016, the Dart was finally rolled out, selling for \$99, available at numerous retail chains such as Staples, and compatible with nearly every brand of laptop. CNET described it as a "dainty princess compared to regular adaptors." Green herself is no dainty princess when it comes to what it takes to make a business successful. "Entrepreneurship isn't easy," she says. "There are ups and downs, but you can do it if you think about your product and find out who cares about what you believe in."



## SHIREEN YATES &amp; SCOTT SUNDVOR



Nima ended 2015 in the best way possible when *TIME* named its pocket-sized gluten sensor one of the year's best 25 inventions. But 2016 turned out to be an even bigger year for the company and its co-founders, **Shireen Yates, MBA '13**, and **Scott Sundvor, '12 (course 2)**. Right out of the gate in January, they took home the grand prize in the TechCrunch Hardware Battlefield at the Consumer Electronics Show in Las Vegas and became a darling of the technology press.

In May, Nima closed a \$9.2M Series A round targeting the money to help them develop food sensors for peanut and milk allergy sufferers. Says Yates, **"We envision a world where everyone is equipped with real-time data about their food to know exactly what they're putting in their bodies."** The same month, they announced the company would change its name from 6SensorLabs and share the same name as their product. "Nima means fair and equitable in Persian," Yates explains. "It really stands for everything that we're doing in regards to food transparency."

6SensorLabs was actually the company's second name, as Yates and Sundvor had gone by Gluten-Tech when they took part in the Trust Center's summer accelerator (then known as Global Founders' Skills Accelerator) in 2013. "GFSA was incredible," Sundvor says. "It gave us the opportunity to have a safe space to go full-out on this for three months, have mentors, and just enough money to squeak by." The prototypes the team developed that summer, self-described as "so ugly and like lightsaber handles," *did* work and helped to land their first investors.

Nima is now shipping pre-orders for early adopters. And the data the company is collecting via their app has Yates most excited as they move forward, declaring "Nima data is changing restaurant operations on one end while people now feel empowered to 'get back their social life' because they feel more confident eating out."

## VIBRANT VENTURES CONTINUED

## GAËTAN BONHOMME



Cleantech startups are notoriously tricky business propositions, especially one like Kurion, co-founded by **Gaëtan Bonhomme, MBA '08**, to address the most challenging technical problem associated with nuclear energy: isolating nuclear waste from the environment for proper disposal. When Bonhomme came to MIT Sloan he had already received his PhD in Materials Science but was working towards an MBA as part of the very first class of students to take part in the Entrepreneurship & Innovation track.

Bonhomme spent his time in Cambridge getting involved, developing and co-chairing the first Elevator Pitch Competition run by the MIT \$100K and as a key member of the MIT Sloan team that won the international Venture Capital Investment Competition. He was the epitome of the type of student who is honored with the McGovern Award for outstanding contribution to entrepreneurship at MIT, which he took home in 2008.

As a founding member of the Kurion team funded by Lux Capital, **it was Bonhomme who was the first on the ground in Fukushima, Japan following the nuclear disaster there in 2011.**

The company was the only American venture—and the only startup—involved in clean-up operations following the tsunami, having developed a solution in just three weeks, then designing, building, transporting, installing, and operating their technology in just eight weeks' time. Kurion successfully removed 99 percent of the radiation from contaminated sea water at the plant.

His leadership and expertise led to rapid growth and, just eight years after its founding, Kurion was acquired by the French water and waste giant Veolia for \$365M. Bonhomme is now a technical advisor for the firm and has co-founded a second company called Snakt, a technology and media platform.



## NATALYA BAILEY &amp; LOUIS PERNA



Rocket science is commonly used in sayings as a measuring stick for degree of difficulty, which must mean that actually becoming a rocket scientist is a significant feat. When you've become a rocket scientist AND a CEO by the age of 30, you've really achieved something. And when your startup is on the flight path of Accion Systems, you're exceptional.

Pick the blast-off metaphor of your choosing to describe the last 12 months for **Natalya Bailey, PhD '15**, (née Brikner, part of her busy 2016 included getting married). Accion, the company she co-founded in 2012 with **Louis Perna, '09, SM '14 (course 16)**, while both were at the MIT Space Propulsion Lab, develops revolutionary satellite propulsion systems the size of pennies using ion beam technology. The company closed a \$7.5M Series A, has received a \$3M Department of Defense grant, and took its first orders this past year for delivery in 2017.

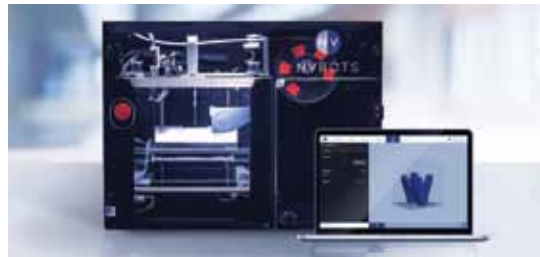
As a member of the 2014 GFSA (now MIT delta v) cohort, Bailey and Perna learned how valuable consistent customer feedback was to help the team orient technology to customer needs, a model they continue to use to this day. The duo also learned the value of team and culture, pushing current employees outside their comfort zones and having them learn skills that they then present to the rest of the company to further spread knowledge. It's management like this that allows this small startup to play in the same market—and beat—an industry giant with 30 years of expertise, solely by building a better product.

**Bailey and Perna's vision for Accion Systems is to be a leader in the small satellite revolution** where, for example, groups of farmers could afford to monitor their fields from space, especially in the developing world.

These are just four of the growing multitude of entrepreneurial teams that have taken part in all the programs and classes that the Trust Center offers each year. We love sharing their stories as each team strives to help make the world a better place to live.

## WHERE ARE THEY NOW?

An incomplete update on other alumni of the Trust Center and our programs.



**NVBOTS (2013)**, a maker of automated, enterprise 3-D printers geared towards the business and education markets, rolled out their NVLABS initiative, the only 3-D printing technology that can print using multiple metals such as stainless steel, titanium, copper nickel, and more, all in the same build. This breakthrough helps companies commercialize innovations in ways previously never thought possible. In addition, NVBots announced the closing of a \$5.3M Series A funding round in August.

**EVERVEST** (which went by Cardinal Wind when they took part in GFSA in **2014**) was acquired this past year by Ultra Capital, an infrastructure investment company focusing on energy, water, waste, and agriculture. The Energy Ventures startup, bootstrapped coming out of our accelerator, helped developers and funders assess and value renewable energy projects.



**MINISTRY (2012)** rebranded and expanded in 2016, shortening their name from Ministry of Supply, and increased their brick-and-mortar presence by opening new retail locations in Chicago, Atlanta, and Washington, DC. Most excitingly, the company rolled out a line of women's outfits, joining their technologically innovative men's line of performance clothes for the workday. Ministry's 3-D robotic knitting process and NASA-developed materials allowed co-founder Gihan Amarasiriwardena, '11, to set a Guinness World Record this year for running the fastest half marathon (1:24) while wearing a suit.

**EMMA (2015)** took part in our summer accelerator program, joining us from Instituto Tecnológico Autónomo de México (ITAM) to help develop its business that helps provide home care services and companions for the aging population. Fernanda Sotil, one of Emma's founders, was named Mexico's Global Student Entrepreneur by the Entrepreneurs' Organization and represented the country in the international finals in Thailand.



The **SPYCE (2015)** boys—Braden Knight, Kale Rogers, Luke Schlueter, and Michael Farid—received the Lemelson-MIT Student Prize for their development of the world's first completely automated restaurant. While the \$10,000 prize was nice, even nicer was the \$2.6M funding round they raised while participating in MassChallenge over the summer and setting up at MIT spinout Greentown Labs in Somerville.

**THRIVEHIVE (2011)** was started out of MIT Sloan by Max Faingezicht, MBA '11, and Adam Blake, MBA '11, as "the HubSpot for small business." ThriveHive's marketing platform of plug-and-play tools focusing on email marketing and web design attracted the interest of one of its chief competitors, Propel Business Solutions, and resulted in Propel acquiring ThriveHive for \$11.8M in March with both Max and Adam continuing to work for the company.

More funding was landed by 15.390 (New Enterprises) alum company **REFLEXION MEDICAL (2009)** with a \$52M series B round. The medical device company is developing a radiotherapy system for personalized cancer treatments. Johnson & Johnson Innovation was a substantial participant in the funding round.



**PILLPACK (2013)** had a very busy year. The simplified pharmacy solution that delivers customers personalized packets of medication announced a \$55M Series D round in September to help fuel the company's expansion. PillPack was named one of the Top 3 Most Innovative Companies in Healthcare by *Fast Company*, were the cover subject for *Boston* magazine's piece on "Top Disruptors," and provided a great growth opportunity for the Trust Center's Renee Lawlor to join its staff.

**PODIMETRICS (2012)**, an alum of the Beehive Cooperative and Hacking Medicine, reached an important milestone when they received FDA approval and brought to market their Podimetrics Mat, a wireless, in-home monitor that helps to prevent diabetic foot ulcers. The company also closed a \$5.8M Series B round in 2016.

**SPOILER ALERT (2015)** is a technology platform that helps food businesses, farms, and others manage, sell, and donate unsold food inventory. In just a year's time, the "screen to table" company has partnered with retail giant Ocean State Job Lot and food distribution leader Sysco Corporation, was accepted into Techstars Boston, and closed a \$2.5M seed round.



Born out of the "Product Engineering Processes" class, **ELLO (2012)** was a product that became a company. That product is the Glyde, a hand truck with fold-out treads and brakes designed to make hauling beer kegs up and down stairs safer and easier. ELLO's three-year development and product enhancement cycle has landed them partnerships with Anheuser Busch InBev and leading manufacturer Magliner. Their next markets include grocery distributors and moving companies.

**TVISION INSIGHTS (2014)** sprung out of 15.390 (New Enterprises) and the advanced entrepreneurship courses at MIT. The company's core tech uses data science and motion capture technology to passively assess "eyes on screen," the single most accurate way to measure engagement with video content. Now TV networks, ad agencies, and brands engage with TVision Insights to determine how best to capture the attention of viewers. This past year saw great growth for the company with a \$6.8M Series A round, a 6x increase in revenues, and partnerships with ABC, ESPN, Proctor & Gamble, and Google among others.



**HUMON (2015)** spent their first year post-Trust Center further developing their wearable for performance athletes, launching a beta pilot, and taking pre-orders for delivery of their first product in 2017. Humon also was named the winner of the Startup Blitz Competition at the MIT Sloan Sports Analytics Conference.

Another acquisition took place when **ARSENAL HEALTH (2012)** (known as Smart Scheduling during the first GFSA cohort) was acquired by athenahealth. The Arsenal Health team met during Hacking Medicine where they decided to apply machine learning to the issues around scheduling appointments with doctors. athenahealth had partnered and invested in the startup during its early days.

**OKTA (2009)** continues to be one of Silicon Valley's biggest successes. The enterprise software company, fresh off a second \$75M funding round in 2015, spent this past year opening new offices in London and Seattle and announced a second Bay Area HQ coming to San Jose in 2017. Okta continued to launch new product lines and expanded its ongoing Google partnership that helps large enterprises connect on-premises tech with cloud-based applications.



# PROGRAMS

*"The best educational experience of my life."*

*—Aleksandra Kalinowska, course 2, class of 2016*

## MIT delta v

The MIT delta v capstone educational accelerator is our most visible program and its success has created a ripple effect that has helped make all of the Trust Center's initiatives and courses more successful for thousands of other students.

Through a competitive process, we take the best teams from across all of MIT's schools as well as top student teams from select global university partners. The program focuses on providing a unique combination of space (for cohort-based lateral learning), stipends (so students can and must be full-time), structure (as a forcing function for learning and building capabilities), and status (for personal confidence and broader exposure).

Over three months, participants receive entrepreneurship training, direct advising from coaches and mentors, mock board reviews, up to \$20,000 in equity-free funding, office space, and access to prototyping tools and lab space. MIT students taking part also receive a \$2,000 monthly fellowship from the Goss Foundation.

**MIT delta v puts students through a rigorous, educational summer-long startup accelerator,** allowing them to make dedicated time for their project and to learn by doing. The program takes great teams with an interesting idea or proof of

concept and works with them to make significant progress toward identifying their beachhead market, building the right product, and securing initial customers or partners. By coaching and mentoring teams throughout the summer and with the goal of helping them hit escape velocity by Demo Day in September, the Trust Center is focused on creating impactful, innovation-driven entrepreneurs who are seeking to change the world.

**"This really is the greatest day of entrepreneurship at MIT,"** Bill Aulet said from the Kresge Auditorium stage at Demo Day 2016. "We don't know what's going to come out of delta v, but every year it raises the bar of what MIT can do." Following Demo Day at MIT, the teams travel to present in New York City and San Francisco as well.

And the most beautiful thing about MIT delta v is that the whole process starts over each year. A new crop of aspiring student entrepreneurs—who don't have a team or often an idea—will evolve during the school year and then amaze us with plans, presentations, and products that are even stronger than the previous year. As such, the educational experience goes on and gets better and better.



*The MIT delta v journey as told by emojis*



## EDUCATIONAL ACCELERATOR



*L: A sold out Kresge Auditorium*



*R: Dharmesh Shah, SM '06, founder & CTO of HubSpot, delivers the keynote*



*L and R: Members of the 2016 cohort*



*Lower L: Ambika Singh, MBA '16, of Armoire*





*"I really consider MIT to be one of the true treasures of Massachusetts."*  
*—Gov. Charlie Baker at Demo Day.*

## 2016 delta v TEAMS

**Alfie** knows student debt makes pursuing your dreams difficult, so it works with universities to offer an income-based financing solution. Alfie predicts future income profiles and invests in students for a fixed percentage of income over a set period of time. Students get greater flexibility and never have to worry about debt again!



**Armoire** is pioneering 'wardrobe-as-a-service,' offering customers an endless stream of high-end clothes to rent, personalized to her style and fit preferences using machine learning algorithms. With door-to-door pickup and delivery on her schedule, Armoire conveniently provides the quality and variety of clothing that a busy life demands for less than the price of a gym membership.



**DeepStream** helps broadcasters turn passive video audiences into engaged and informed communities through a video tool that easily integrates content from across the web. Using DeepStream, broadcasters can add context to videos including articles, polls, maps, social media feeds, and more, which increases engagement metrics and opportunities for monetization. DeepStream's tool can work with almost any livestream or on-demand video service and can be embedded on the broadcaster's website, creating new reasons to promote their most valuable digital property.



**dot Learn** is the first widely-accessible MOOC (Massive Open Online Course) platform for the developing world. In countries like Ghana, streaming an hour of video can cost more than a day's salary. Using technology that delivers full-length video courses for less than the cost of an SMS, dot Learn is making online education accessible for the first time to millions of students across the developing world, starting in West Africa.



**Emerald** transforms your home to be health-aware, detecting falls, providing health insights, and sending alerts when emergencies are detected. Based on an award-winning technology, Emerald's device uses wireless signals to track mobility, sleep quality, and health status, so there is no need to wear a pendant or bracelet or install cameras. Take care of your loved ones, even when you are not around!



### WHY THE NEW NAME?

To more reflect the MIT spirit, our summer accelerator program—formerly known as “GFSA” (Global Founders’ Skills Accelerator)—was renamed by proclamation of students this past summer with a little help from MIT delta v director Trish Cotter, and EIR Nick Meyer. When we first started this initiative, there were few accelerators and virtually none at academic institutions. We felt unique. And while the full GFSA name identified and differentiated what the program was all about, we wanted to more strongly brand it as





## EDUCATIONAL ACCELERATOR

**FactoryShop** empowers America's machine shops, the unsung heroes of the manufacturing world. It optimizes the fluctuating and unmet demand experienced within the \$46 Billion industry by redistributing work within its network of high-quality shops, enabling them to grow their business while maintaining existing customer relationships.



**FleteYa** seeks to make freight transportation more efficient by connecting carriers and shippers through its platform so trucks that travel empty toward a certain destination can haul shippers' freight toward that same destination or nearby. FleteYa turns backhauls into an additional income for carriers while reducing the logistic costs of shippers up to 40% through more competitive freight rates.



**Hive Maritime** is a predictive analytics platform for maritime intelligence. Blending a wealth of naval experience with the latest operations and data analytics research from MIT, Hive Maritime reduces operational costs and risks.



Wearable technology is poised to affect the way any game is played, transforming sports more than anything has ever done before. For the past few years, professional sports teams have taken advantage of this technology by using analytics tools to improve their performance, reduce injuries, and analyze their players on the field. **Kiron** is empowering non-professional soccer teams to take control of their game by providing them with affordable and easy-to-use performance analytics solutions.



**Kumwe Logistics** is a tech-enabled brokerage that lowers the cost of transporting goods in East Africa. Freight transportation in the region costs 60% more than in developed countries, which has a crippling effect on economic development. Kumwe is lowering these costs by connecting shippers and truck owners via an online marketplace. By working with Kumwe, shippers gain access to a larger network of price-competitive transporters, and these transporters gain access to more jobs.



**LeanOnMe** is a mobile-based anonymous peer-to-peer support network that is improving the general state of mental health on college campuses by supplementing existing counseling services. Stigma around mental health leaves many students untreated, which causes them to perform poorly academically or to drop out, thus costing universities financially and otherwise. LeanOnMe has launched an alpha at MIT (used and deemed helpful by over 150 students) and is currently in the process of releasing betas at other schools including UChicago.



*a key part of the MIT ecosystem. Hence "delta v" was embraced because our students achieve acceleration of their learning and progress on their startup. As any MIT student knows, the derivative of velocity is acceleration; in fact, it is important that the lower case "d" be used for delta to appropriately represent the scientific connotation. To an outsider the new name can be a bit mysterious, but within MIT the new name has been enthusiastically accepted as a bit different and a bit quirky. Just like the school itself.*

*"If you leave this room and what you previously thought about MIT does not change, I will be shocked."*  
 —Bill Aulet at Demo Day.

## 2016 delta v TEAMS CONTINUED

The fight against cancer can be scary, stressful, and acutely dangerous. During chemotherapy, the immune system is temporarily killed, and if it doesn't recover in time, severe infections can cause a more life-threatening risk than the cancer itself. **Leuko Labs** is working to allow patients and their caregivers to monitor their immune system recovery in the home, through a revolutionary tabletop non-invasive, finger-based blood cell monitor, reducing the stress and risk of outpatient chemotherapy.



Without a deeper insight into strength and conditioning, college coaches are leaving wins on the field. **Perch's** camera vision system tracks weightlifting workouts and provides coaches with crucial information about the performance and health of their athletes. Perch pushes elite athletes to perform at their best and will one day help millions of Americans build healthier, more athletic lives.



70% of Americans will require long-term care solutions where rates of depression can reach as high as 50%, leading to hospitalizations and more rapid cognitive decline. **Rendever** is building a research-based virtual reality platform to improve the aging process by providing cognitive stimulation and social engagement for the elderly. Its technology provides older adults the opportunity to travel the world, cross off bucket list items, attend family events, and partake in therapeutic programming.



In most developing countries, smallholder farmers face difficulties in accessing the capital needed to run their farms. This results in exploitation by informal lenders and an unrelenting cycle of poverty. Leveraging data analytics and an innovative creditworthiness assessment, **Ricult** drastically increases farmers' income through a mobile platform that links affordable credit together with high-quality farm inputs.



80% of America is locked out of the solar market because they cannot install solar on their own roof. **Solstice Initiative** radically expands access to clean energy by providing community-shared solar power to American households. This model enables any resident to enjoy clean energy at no upfront cost and save money on their electric bill every month.



Globally, 1.2 billion people lack access to electricity, mostly in areas where grid extension is economically infeasible and other solutions are not scalable. **uLink's** smart energy router and cloud-based analytics platform enable provision of lowest cost electricity by forming plug-and-play microgrids. uLink is the most easily deployable and scalable microgrid solution in the \$12 billion off-grid electricity market.



Watch each team's Demo Day presentation at [ENTREPRENEURSHIP.MIT.EDU/ACCELERATOR/DEMO-DAY](https://ENTREPRENEURSHIP.MIT.EDU/ACCELERATOR/DEMO-DAY)



## 2016 COHORT: A QUICK LOOK

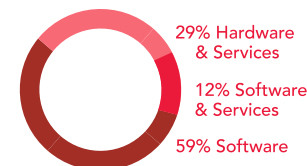
26% Female

74% Male

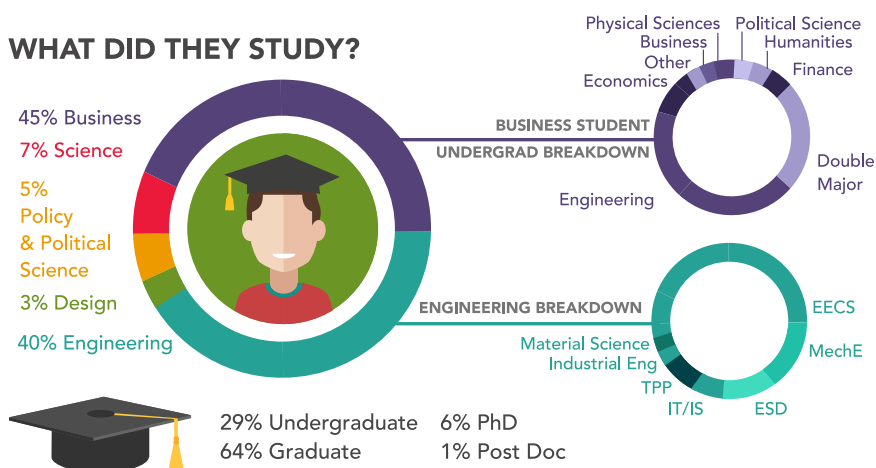


Average team has 5 members

**86 ENTREPRENEURS**  
**17 TEAMS**



### WHAT DID THEY STUDY?



### 9 INDUSTRY VERTICALS REPRESENTED





*"It was hard leaving the Trust Center, but we were prepared and we needed to find out if we could make it real. Turns out, we could."*  
 —Ricult's Usman Javaid, MBA '15

## delta v – FIRST 3 MONTHS

Our 2016 cohort came to a close in late September following Demo Day in San Francisco. But our teams continue to churn, hitting the ground at full velocity and making impressive strides in the first three months "on their own." Here are a few of the highlights.



The **Armoire** team departed for the climes of Seattle, operated their first pop-up shops to show off curated clothes for the "boss ladies" of the Pacific Northwest, and partnered with another Trust Center alumni company, Ministry, to offer its women's clothing line as part of Armoire's collection.

**LeanOnMe** released the next iteration of its anonymous peer support network using text messages and also expanded beyond the MIT campus to the University of Chicago. In addition, the company's CEO, Charlie Andrews '17, represented MIT at the "Team Ninja Warrior: College" championships where the underdogs finished second place overall.



**dot Learn** set up shop in Ghana to begin moving toward their target of delivering online education to 50 million students in Africa by 2020. Their pilot product, WASSCE-Tutor, is an app to help students in West Africa study for the regional college entrance exam.



**Rendever's** virtual reality tools to improve the aging process received memorable coverage on "CBS This Morning." The company was selected as one of the teams to take part in the first ever PULSE@MassChallenge digital health cohort along with another delta v 2016 team, **Emerald**.

**FactoryShop** officially launched in New England, allowing customers access to machining of custom metal parts in mere days. The company aims for a broader roll out in the coming year.



**Ricult** beat out 63 teams and was one of three startups to be awarded \$100,000 grants from the Karandaaz Pakistan Fintech Disrupt Challenge in November. The platform that connects farmers and online buyers in developing worlds will also receive support and mentorship from the Karandaaz network.



**Solstice Initiative** received an \$800,000 U.S. Department of Energy SunShot Initiative Award in October. The company will use the grant money to radically expand access to community-shared solar power by deploying projects servicing low to moderate income consumers.

*"The  $t=0$  festival introduced me to the MIT entrepreneurial ecosystem in one week, as opposed to a month or more, and it would not have been as comprehensive or fun."*

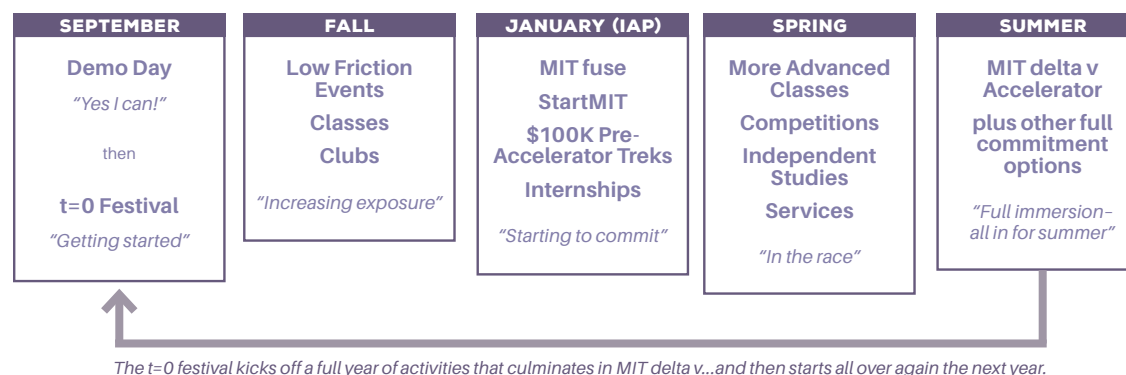
*—Annie Zhang, class of 2019*

## t=0

Every September, the Trust Center kicks off the school year with a celebration known as the **t=0 festival**. In true MIT parlance, students recognize the equation as meaning "the time is now," a way of representing that there is no better time than the present to get involved with the myriad of organizations and activities devoted to entrepreneurship across campus.

A fun aspect of  $t=0$  is how it showcases the cyclical nature of our calendar by kicking off with the MIT delta v Demo Day at Kresge Auditorium, the finale of our three-month summer accelerator program from the previous academic year. This highly visible presentation featuring the output of a year's worth of effort allows us to begin September by filling the top of the funnel with new students interested in entrepreneurship and holding aspirational goals to appear on that stage themselves in twelve months' time.

This past year's  $t=0$  was easily our best festival ever thanks to the tireless planning and work by EIR Donna Levin and her support team who organized **over 20 events under the three rubrics of Explore, Engage, and Educate**.



For the curious learner, we brought in nearly three dozen partners for our Entrepreneurship & Innovation Student Clubs Fair and E&I Resource Round-Up. We engaged the student body by producing events appealing to hackers, hipsters, and hustlers alike including our mad scientist "Make Cool ShMIT" maker party and numerous networking events held by our sector practice leaders in the Trust Center Garage. For the education piece, multiple speakers shared their startup stories, like game developers and MIT Sloan alums Karthik and Guha Bala. While open houses were held at departments across campus, Bill Aulet and our EIR team held open office hours to hear what students were interested in and help steer them toward the appropriate resources or courses.

The most exciting new event launched during this year's  $t=0$  festival was our first ever Pitch2Match program, an opportunity for students to pitch their skills, ambition, and hustle in one slide and 60 seconds with the goal of finding potential co-founders and team members. To make the network as broad as possible, students from Harvard, Northeastern, Babson, Tufts, Wentworth, and BU were also invited and **more than 300 students divvied up into four separate "themed" classrooms in the Stata Center to find collaborators for their hopes and dreams**.

MIT is known worldwide for innovation and entrepreneurship.  $t=0$  is an event and exhibition that brings together student clubs, departments, and startups to showcase innovation and entrepreneurship in multiple sectors. MIT students from across campus discovered the compelling work being done and learned from their peers how to get involved in the MIT innovation scene. We look forward to continually evolving the  $t=0$  festival and raising the bar will be an even tougher challenge in 2017.

**24**  
SEPARATE  
EVENTS

**40+**  
PARTNER  
CLUBS AND  
ORGANIZATIONS

**8**  
HELIUM TANKS'  
WORTH OF  
BALLOONS

**3000+**  
STUDENTS  
TAKING PART

*"One-on-one mentorship from the ETRs, plain and simple, was incredibly helpful. Everything else was good, but this is by far the biggest value add for me."*

## MIT fuse

**12**  
TEAMS

**37**  
STUDENTS

**25**  
INTENSE  
DAYS  
(INCLUDING  
WEEKENDS)

**100%**  
COMMITMENT  
DURING  
MIT fuse



MIT has the unique scheduling idiosyncrasy of giving its students the entire month of January off from the academic rigors of the school year. This Independent Activities Period (IAP) allows the MIT community to roll up their sleeves and explore an area of curiosity or intense interest. The Trust Center takes advantage of this time by offering our MIT fuse program (formerly known as StartIAP), **a 3.5 week hands-on experience designed to get small teams used to working at "entrepreneur speed."** MIT fuse is sort of like a micro-accelerator for the students.

Our Entrepreneurs in Residence are able to get students working, thinking, and talking like an entrepreneur through individualized and focused

mentoring that helps each team push through the problems facing them on *that* day and focused on creating a plan for immediate action. We also bring in guest speakers and alumni founders to share their stories of challenge and achievement pertinent to the journey each participant is currently on.

But mostly MIT fuse is a condensed opportunity for teams to eliminate the usual daily distractions and focus on their idea or product in an effort to begin the path to becoming a viable venture. The program is about "hard work not home work," and even students who realize the startup life may not be for them to learn tactics that are useful in other settings.

All but taking over our entire center for the month, the "fusers" focus on primary market research (PMR), digital marketing, prototyping without coding, UX and testing, and storytelling and pitching. But as important as all of these are, students also focus on how to work with their fellow co-founders into building a successful startup team.

Three of the participants from the January 2016 program—FactoryShop, LeanOnMe, and ProForm Fitness (now Perch)—used what they learned during IAP to get accepted into our MIT delta v summer accelerator program and each is now further developing their products and working with an initial customer base. Not bad for 25 days during the coldest month of the year.

**ENTREPRENEURSHIP.MIT.EDU/MIT-FUSE**



## SECTOR PRACTICE LEADERS



The Sector Practice Leaders (SPL) program run out of the Trust Center recognizes that each industry presents unique challenges for entrepreneurs and helps provide resources, events, and communities to help students succeed in their pursuits. While broad-based entrepreneurship education is useful, there is an additional need to provide knowledge to address key obstacles faced when starting companies in specific industries.

**Our SPL program focuses on five different industries: Creative Arts, Healthcare, Financial Technology (FinTech), Energy and Water, and new for 2016, Education Technology (EdTech).** Student leaders are selected each academic year through a competitive process to develop plans and implement comprehensive, integrated, and cutting-edge programs such as advanced classes, active student clubs, annual conferences, business plan contests, hackathons, regular social events, guest speakers, and more. Funding for this program is possible thanks to a grant from a generous foundation.

In the **Energy sector**, 2016 marked the chance to celebrate 10 years of Energy Ventures so a concerted effort was made to build MIT's entrepreneurial energy community through alumni outreach efforts.

Over a half dozen events were planned and held across the country while the 2016 MIT Energy Night in the fall saw over 300 attendees including students, alums, and industry professionals enjoy a showcase of current student efforts. In addition to the relaunch of the Muddy Water Speaker Series, the Energy SPL supported the Energy Hackathon, the Clean Energy Prize, and the Water Innovation Prize among others.

The **Creative Arts** space was vibrant all year long, highlighted by the launch of the Creative Arts \$15K competition (won by 2015 Trust Center accelerator participants Tekuma). A Creative Arts Pitch Night was launched at the Trust Center and, in addition to supporting many student groups, the Creative Arts helped to launch the VR@MIT group focusing on virtual and augmented reality startups. The year culminated in the sold out weekend-long Hacking Arts conference featuring a 24-hour hackathon, conference, and tech expo for students and industry professionals from across the country.

**Healthcare** rolled out two exciting new initiatives in 2016: the creation of a new course called Biomedical Ventures to debut in the spring '17 semester, and the MIT Sloan Healthcare Innovations Prize, which debuted with 62 teams applying to win \$30K in prizes (including the Grand Prize winner that went on to win the MIT \$100K competition as well). In addition to very popular monthly speaker series and networking events, Healthcare saw over 200 attendees at its Ideation 2016: Biotech and Healthcare event in November.

In its first full year of existence over 500 attendees came to the MIT Media Lab for the **FinTech** Conference in the spring and six teams took home over \$20,000 in total prizes at MIT's

first ever FinTech Business Plan Competition. In the fall, the FinTech Ventures course saw registrations reach waiting list levels in its second year being offered and 10 different teams began new FinTech ventures thanks to the class. This past fall was also the launch of our newest sector, Education Technology. In addition to launching networking events in this space, **EdTech** also held a two-day hackathon with nearly 50 attendees focusing on using data to develop solutions that can help educators.

Our Sector Practice Leaders for the 2015-16 academic year were Liz Voeller (Energy & Water), Natalie Pitcher (Arts), Isaac Stoner (Healthcare), and Carlos Sanchez Altable (FinTech), each of whom received the Patrick J. McGovern, Jr. Award for making a significant impact on the quality and spirit of entrepreneurship at MIT during their time at MIT Sloan. Beginning in the fall of 2016, the leaders for each sector were Helen Smith and Jacob Loewenstein (Arts), Ryan Macpherson (Energy & Water), Priscilla Koepke and Arturo Moreno (FinTech), Greg Ekchian (Healthcare), and Guillermo Alba (EdTech).



**34**  
EVENTS HELD

**3200**  
ATTENDEES

**8**  
WORKSHOPS  
CREATED

**3**  
NEW  
COMPETITIONS  
AND PRIZES

**1**  
NEW ACADEMIC  
COURSE

*"I couldn't have asked for a better internship experience."*

*—Nithin Buduma, class of 2019*

## ESHIP INTERNSHIP

AN INNOVATION IN ACTION LEARNING

**47**  
UNDERGRADS  
APPLIED

**9**  
SUMMER  
INTERNSHIPS

**8.6**  
AVERAGE  
RATING BY  
PARTICIPANTS



At the Trust Center, we practice what we preach, always striving to find innovative new ways of teaching entrepreneurship to MIT students. This summer, thanks to a generous donation from **MIT Sloan senior lecturer Bob Pozen**, we launched a pilot program that allowed MIT undergraduates the experience of working in a startup. Since students need to make money over the summer and startups don't have cash to spare, the Trust Center provided the funds for the undergraduates to have a highly attractive paid internship at one of our MIT delta v program's alumni companies. It was a great opportunity for both the interning student and our hosting businesses. Thus was born the Entrepreneurship Internship

Our alumni companies, including Accion Systems, Spyce, Humon, and Infinite Analytics, provided detailed job descriptions for what each intern would be working on during the 10 weeks of the summer program. Undergrads completed detailed applications sharing their interests and experiences and which companies they wanted to work for. Following a matching process and deliberation by the alumni founders, nine students were chosen by eight companies to take part in the alpha class of the "E-ship I-ship."

When August came, it was easy to see that the pilot had been a success on both ends. Students shared their many positive experiences of having a chance to work on projects that were making a real difference for these startups. Meanwhile, **many of the companies directly asked the students to consider taking a permanent position at the company upon graduation.** With such positive word of mouth, we are already being asked by students and alumni companies what our plans are for summer 2017 when we expect to run our second iteration of the internship program.

The best feedback we received were the written reflections of each student's summer experience, a requirement to take part in the program. Here are just a few of our favorite quotes:

**After this summer, I learned that startup life is for me. I really enjoyed this dynamic work.**

*—Joe Huang, class of 2018*

**My internship helped build my technical skills and contributed to my professional development. Thank you so much for this internship experience.**

*—Val Healy, class of 2017*

**It was particularly rewarding to know that I was finally at a level intellectually to have a professional opinion and respected by my co-workers.**

*—Noland Peard, class of 2019*



*"The law clinics filled a need to help the MIT student-clients and BU student-lawyers learn about risk: not avoiding risk, but taking intelligent, informed risks."*

*—Greg Morgan, MIT Senior Vice President and Secretary of the Corporation*

## BU LAW CLINIC

One area of tremendous concern and uncertainty for fledgling founders are the numerous legal issues that arise when starting a venture. The launch of the BU Law Clinic, a joint partnership between MIT and the BU School of Law, has allowed hundreds of MIT students to receive free legal guidance over the past year.

Through this unique collaboration, student innovators and entrepreneurs at MIT are connected with student advocates from BU Law to address legal issues associated with their efforts to turn ideas into businesses. All students currently enrolled in any school or department at MIT are eligible for free legal advice through the clinic, which offers short or long-term representation and is available to counsel clients all the way from seed stage through exit.

**"We're thrilled to partner with MIT on these cutting-edge new law clinics,"** says BU Law Dean Maureen A. O'Rourke. "Our Intellectual Property Program has long been recognized as one of the best in the country, and this addition gives students the kind of practical, hands-on experience of working with real clients that will prove invaluable as they begin their law careers."

The clinic is divided into two separate areas of expertise with MIT students able to meet with BU law students for drop-in appointments at the Trust Center once a week during the academic year. The Entrepreneurship & Intellectual Property Clinic was launched under the guidance of Professor Eve Brown and is now overseen by clinic director Jerry O'Connor.

Areas of law the IP Clinic can assist with include:

- Choosing a form of entity and incorporating
- Advising on intellectual property strategy
- Invention assignment arrangements and agreements
- Advising on equity allocation and vesting
- Negotiating and drafting founders' agreements
- Drafting and reviewing contracts
- Non-disclosure agreements
- Trademark and copyright registration
- Early-stage financing transactions

The Technology & Cyberlaw Clinic is run by its director, Andy Sellars, and assists MIT students with legal matters related to their ventures in areas including:

- Privacy and data security
- Computer crimes and torts
- Use of third-party intellectual property
- Communications law
- Freedom of Information Act, public records, and access to government information
- Publication of sensitive information
- Response to cease-and-desist letters and other legal threats

MIT President L. Rafael Reif says of the launching of the BU Law Clinics, **"By providing our students with the legal guidance to navigate the complexities of starting or running a business, the clinics will give them the freedom and confidence to focus on what they do best: creating innovative ideas, technologies, and companies."**

At MIT, we believe in our students' potential to change the world, and we want to equip them with the tools to make an impact. These clinics will provide our students with an important new resource for pursuing their dreams and aspirations."

**150+**  
MIT STARTUPS  
ADVISED  
ON LEGAL  
MATTERS

**12**  
EDUCATIONAL  
SEMINARS  
DURING THE  
SCHOOL YEAR

A poster for the BU Law Clinic. It features a red square with the text "BU LAW" in white. Below the square, on a teal background, is the text "EVERY FRIDAY 10A - 5P" in white. Underneath that, in smaller white text, is "Free clinics to offer student innovators & entrepreneurs legal guidance". At the bottom, in even smaller white text, are two bullet points: "• Entrepreneurship & Intellectual Property" and "• Technology & Cyberlaw Clinic". At the very bottom, in white text, is the email address "BULAW@MIT.EDU".

**BU  
LAW**

**EVERY FRIDAY 10A - 5P**

Free clinics to offer student innovators & entrepreneurs legal guidance

- Entrepreneurship & Intellectual Property
- Technology & Cyberlaw Clinic

BULAW@MIT.EDU



*MIT has more than 30 student clubs and initiatives with a focus on entrepreneurship.*

## STUDENT CLUBS AND INITIATIVES

The Trust Center provides programmatic advising to many of these clubs and several of them use our E40-160 space to hold club meetings and events.

### CLUBS WITH AN ENTREPRENEURSHIP ELEMENT:

CPW (Campus Preview Weekend)  
 Freshman Pre-Orientation Program (FPOP)  
 MakeMIT  
 MIT Energy Club  
 MIT Energy Club at Sloan  
 MIT Sloan Business Club  
 MIT Sloan Data Analytics Club  
 MIT Sloan Healthcare Club  
 MIT Sloan Tech Club  
 MIT Sloan Women in Management (SWIM)  
 MIT Undergraduate Association Innovation Committee  
 MIT Waste Alliance  
 MIT Water Club  
 STE@M Sports Technology Group  
 TechLink  
 TechX

### CLUBS SPECIFIC TO ENTREPRENEURSHIP:

Astropreneurs  
 Discover Entrepreneurship and Leadership (DEAL)  
 Hacking Arts  
 Hacking Medicine  
 HackMIT  
 MIT \$100K Entrepreneurship Competition  
 MIT-China Innovation and Entrepreneurship Forum (MIT-CHIEF)  
 MIT Clean Energy Prize (CEP)  
 The MIT Entrepreneurs Club (E-Club)  
 MIT Entrepreneurship Review (MITER)  
 MIT FinTech Club  
 MIT Food & Agriculture Club  
 MIT Global Startup Workshop (GSW)  
 MIT IDEAS Global Challenge  
 MIT Sloan Entrepreneurs for International Development (SEID)  
 MIT Sloan Entrepreneurship & Innovation Club  
 MIT Venture Capital and Private Equity Club  
 StartLabs  
 VentureShips  
 Women Business Leaders

# ACADEMICS

## FACULTY AFFILIATES

*Our “dual-track” faculty model brings professors and adjunct practitioners together in the classroom so that students benefit from a broad range of perspectives and experiences.*

### LEADERSHIP TEAM

Bill Aulet  
*Managing Director*

Edward Roberts  
*Founder & Chair*

### PROFESSORS

#### SCHOOL OF ENGINEERING

Tim Berners-Lee  
Vladimir Bulovic  
Anantha Chandrakasan  
Charles Cooney  
Martin Culpepper  
Yoel Fink  
Martha Gray  
Doug Hart  
Dina Katabi  
Bob Langer  
Don Sadoway  
Sanjay Sarma  
Joel Schindall  
Alex Slocum  
Greg Stephanopoulos  
Kripa Varanasi

#### SCHOOL OF ARCHITECTURE + PLANNING

Joi Ito  
Sandy Pentland  
Ramesh Raskar

#### SLOAN SCHOOL OF MANAGEMENT

Christian Catalini  
Michael Cusumano  
Steven Eppinger  
Charles Fine  
Bengt Holmstrom  
Yasheng Huang  
Andrew Lo  
Matt Marx  
Fiona Murray  
Edward Roberts  
Ben Roin  
Antoinette Schoar  
Scott Stern  
Catherine Tucker  
Eric von Hippel

### LECTURERS

Noubar Afeyan  
John Akula  
Kirk Arnold  
Bill Aulet  
Steven Bauer  
James Baum  
Phil Budden  
Elaine Chen  
Zen Chu  
Patricia Cotter  
James Dougherty  
Jonathan Fleming  
Josh Forman  
Joseph Hadzima  
Brian Halligan  
Dennis Hoffman  
Thomas (Tod) Hynes  
Charles Kane  
Donna Levin  
Shari Loessberg  
Francis O’Sullivan  
Luis Perez-Breva  
Imran Sayeed  
Louis Shipley  
Rob Stoner  
Andrey Zarur

*Ranging from introductory to advanced, MIT has all the courses in entrepreneurship students need to succeed.*

## CLASS LISTINGS

### KEY

Foundation Subjects: Practice  
Foundation Subjects: Theory  
Skill Sets  
Industry Focus  
Additional  
Introduction

### SPRING

6.933

10.807 / 15.371

15.373

15.390 (G) / 15.3901 (U)

15.910 H1

15.911 H2

2.739 / 15.783 / ESD.32

6.903

15.385

15.387

15.392 H1

15.394

15.431

15.615

15.618

15.S72 H1

3.086 / 3.207

15.363 / HST.971

15.376 / MAS.664

MAS.533

2.752 / 2.753

2.888

10.407 H2

15.378 (G) / 15.3781 (U)

15.399

15.S14

15.S68

Entrepreneurship in Engineering: The Founder's Journey

Innovation Teams (i-Teams)

Venture Engineering

New Enterprises

Innovation Strategy

Entrepreneurial Strategy

Product Design and Development

Patents, Copyrights, and the Law of Intellectual Property

Social Innovation and Entrepreneurship

Entrepreneurial Sales

Entrepreneurial Product Development and Marketing

Dilemmas in Founding New Ventures

Entrepreneurial Finance and Venture Capital

Basic Business Law for the Entrepreneur and Manager

Law and Cutting-Edge Technologies

Introduction to Product Management

Innovation and Commercialization of Materials Technology

Strategic Decision Making in the Biomedical Business

Media Ventures

Imaging Ventures: Cameras, Displays, and Visual Computing

Development of Mechanical Products

Professional Seminar in Global Manufacturing Innovation and Entrepreneurship

Funding Strategies for Startups

Building an Entrepreneurial Venture: Advanced Tools and Techniques

Entrepreneurship Lab (E-Lab)

Technology, Design, and Entrepreneurship: Operating in Emerging Communities

Technology Management

Learn more at [ENTREPRENEURSHIP.MIT.EDU/COURSES](https://entrepreneurship.mit.edu/courses)





## FALL

6.933

10.807 / 15.371

15.390 (G) / 15.3901 (U)

2.723 / 6.902 / ESD.051

15.360

15.369 H2

15.378 (G) / 15.3781 (U)

15.389

15.395 H1

15.399

EC.729

1.462 / 11.345 H2

7.547 / 10.547 / 15.136 / ESD.691 / HST.920

9.455 / 15.128 / 20.454 / MAS.883

15.366

15.933 H1

15.S09

HST.590

2.00 H2

2.75 / 6.525

4.140 / MAS.863

15.375 / EC.731 / MAS.665

15.615

15.S03 H1

15.S05 H2

**Entrepreneurship in Engineering: The Founder's Journey**

**Innovation Teams (i-Teams)**

**New Enterprises**

**Engineering Innovation and Design**

**Introduction to Technological Entrepreneurship**

**Seminar in Corporate Entrepreneurship**

**Building an Entrepreneurial Venture: Advanced Tools and Techniques**

**Global Entrepreneurship Lab**

**Entrepreneurship Without Borders**

**Entrepreneurship Lab (E-Lab)**

**D-Lab: Design for Scale**

**Entrepreneurship in Construction and Real Estate Development**

**Principles and Practices of Drug Development**

**Revolutionary Ventures: How to Invent and Deploy Transformative Technologies**

**Energy Ventures**

**Strategic Opportunities in Energy**

**FinTech Ventures**

**Biomedical Engineering Seminar Series**

**Introduction to Design**

**Medical Device Design**

**How to Make (Almost) Anything**

**Development Ventures**

**Essential Law for Business**

**Digital Product Management**

**Startup Sales**

## FOR CREDIT COURSES FRAMEWORK

### ABOUT ENTREPRENEURSHIP

15.360, FJ, VE, StartMIT

### BECOME AN ENTREPRENEUR

15.390, MIT fuse

#### SKILLS

Partial Portfolio

Strategy  
Finance  
Fundraising  
Legal  
IP  
Product Dev  
Marketing  
HR  
Sales  
Scaling

#### INDUSTRY

Partial Portfolio

Energy  
Healthcare  
BioTech  
FinTech  
Social  
Dev World  
Real Estate  
Media

#### IN-COMPANY EXPERIENCE

Partial Portfolio

E-Lab  
G-Lab  
S-Lab  
DE-Lab

*All taught with academic and practitioner faculty wherever possible providing a rigorous/disciplined understanding and skill set.*

## E&I TRACK AT MIT SLOAN

A STRUCTURED PROGRAM FOR MBAS

The Entrepreneurship & Innovation (E&I) Track, led by Martin Trust Center Founder and Chair Professor Edward Roberts, is for **students within the MIT Sloan School of Management MBA program who have a strong commitment to entrepreneurship**. The E&I Track focuses on understanding and building capability in launching and developing innovative and emerging technology companies. The strong emphasis is on the integration of academic lessons, team practice, and the real-world application of entrepreneurship. Students meet and work with a cohort of like-minded peers; gain exposure to key MIT faculty, staff, and other entrepreneurship resources; and tap into a global entrepreneurship network.

The track curriculum heavily emphasizes team practice linked to real-world entrepreneurial projects, balances theoretical and practitioner education, and provides a thorough exposure to the many building blocks of an entrepreneurial career, while leaving freedom to explore MIT's rich course catalog.

The E&I Track starts with first-semester course 15.360, Introduction to Technological Entrepreneurship, taught by Ed Roberts. Students meet key MIT faculty, outside entrepreneurs, angel investors, and VCs, and learn about MIT's renowned entrepreneurial network on the Silicon Valley Study Tour, while a specialized curriculum helps them choose appropriate courses to further their interests and goals. Students who fulfill the E&I Track requirements receive a Certificate in Entrepreneurship & Innovation concurrent with their MBA degree.



MIT Sloan School of Management

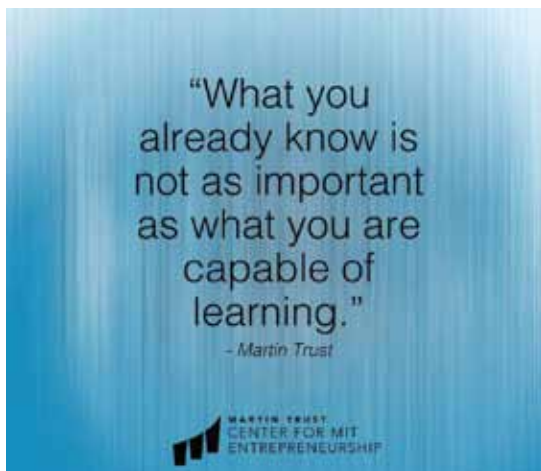
[ENTREPRENEURSHIP.MIT.EDU/MBA-ENTREPRENEURSHIP-INNOVATION](https://ENTREPRENEURSHIP.MIT.EDU/MBA-ENTREPRENEURSHIP-INNOVATION)

## MIT adds Entrepreneurship and Innovation minor for fall 2016 semester

### ENTREPRENEURSHIP MINOR

For the fall 2016 semester, MIT undergraduates will be able to add a new minor to their course of study as the School of Engineering and MIT Sloan School of Management are jointly offering a minor in Entrepreneurship and Innovation.

**The E&I minor educates students to serve as leaders in the innovation economy with the knowledge, skills, and confidence to develop, scale, and deliver breakthrough solutions to real-world problems.** Students will be prepared to do so within a range of organizational contexts: as a founder of an entrepreneurial startup of their own, as a key member of a founding team, or as an entrepreneurial member of a large organization.



This minor is designed as an interdisciplinary program with a coherent combination of conceptual and practical elements that draws on a wealth of prior educational activities in this domain. Students who complete the E&I minor will have developed knowledge and skills in:

- The **innovation process** from the conception of an initial invention and the problem it may solve, to the refinement of the solution, to the considerations needed in the scale-up and delivery of the solution, to the launch of an appropriately funded entity.
- The personal skills of **communication, teamwork, decision-making and leadership, and the integrity and character** that are necessary to engage with stakeholders and develop the invention into a real-world product or process.
- **Strategies and methods** to engage in rigorous iterations to identify and deeply understand societal needs or problems and develop robust, scalable solutions.
- **Types of organizational models and designs** for the delivery of innovations to the world.
- A range of **global contexts for entrepreneurship and innovation**, including variations in the interface with key stakeholders whose interests have the potential to enable or limit the potential effectiveness of innovation and entrepreneurship.



The E&I minor is one of seven new minors, along with four new majors, being rolled out by the Institute. Krishna Rajagopal, professor of physics and chair of the MIT faculty, says, "Like so many things at MIT, [these minors are] driven by student interest and demand, including an increasing desire for interdisciplinary flexibility and the ability to combine opportunities across schools and departments. It is exciting to see so many faculty, departments, and schools responding with innovative new programs."



# OUTREACH

*Making MIT's content accessible to the world*

## EDX / MITX

In 2013, at the behest of edX CEO Anant Agarwal, MIT Vice President of Open Learning Sanjay Sarma, and MIT Office of Digital Learning lecturer Erdin Beshimov, the Trust Center embarked on an “after hours” project to explore putting our entrepreneurship education materials online. It was a true experiment with no sense of the outcome, but what a leap of faith it would turn out to be. Today we are a strong believer—with the data to back it up—that **well-designed Massive Online Open Courses (MOOCs) can create a broad impact beyond the boundaries of the MIT campus in a way not possible otherwise.**

In three years, our initiative has grown into four online courses translated into seven languages (English, Mandarin, Spanish, French, Korean, Turkish, and Portuguese) that have already touched over 300,000 people across 199 countries. And the *online* has now been taken *offline* as the MOOCs have led to the creation of a brand new program, the MIT Global Entrepreneurship Bootcamp,

a one-week, in-person course for some of the best learners from the MOOCs, giving these online, high-achieving learners an opportunity to truly experience MIT.

Since the first on-campus Bootcamp in August 2014, four more have been held for global entrepreneurs, three at MIT and one in Seoul, South Korea. In addition, MIT has presented two Bootcamps for entrepreneurship educators with the goal of imparting our entrepreneurship education methodologies. Finally, these Bootcamps have provided a new platform for MIT alumni to get involved with the Institute, with dozens of alums who are entrepreneurs or venture investors taking part in the Bootcamps as mentors.

While the online content was originally centered on the foundational 15.390 New Enterprises course, the offerings have rapidly expanded, evolving dramatically in both the format and quality in the way they are being presented.

COURSE NAME	YEAR RELEASED	# OF TIMES RUN	ENROLLMENT
<b>Entrepreneurship 101: Who is your customer?</b> <i>Instructors: Bill Aulet &amp; Erdin Beshimov</i>	spring 2014	8	over 150K
<b>Entrepreneurship 102: What is your product?</b> <i>Instructors: Bill Aulet &amp; Erdin Beshimov</i>	winter 2015	7	over 40K
<b>You Can Innovate: User Innovation and Entrepreneurship</b> <i>Instructors: Eric von Hippel &amp; Erdin Beshimov</i>	winter 2015	2	over 70K
<b>Becoming an Entrepreneur</b> <i>Instructor: Laurie Stach</i>	spring 2016	1	over 30K
<b>MIT Global Entrepreneurship Bootcamp</b> <i>Instructors: Anant Agarwal, Bill Aulet, Erdin Beshimov, Rodney Brooks, Elaine Chen, Steve Eppinger, Charlie Fine, Antón García Abril, Jeff Grossman, Sanjay Sarma, Eric von Hippel</i>	2014	4	263

## MILESTONES FOR 2016

### NEW QUALITY LEVEL:

A major investment of time and effort helped create **“Entrepreneurship 103: Show Me the Money!”** This course will launch on February 1, 2017 and has set a new bar for quality of user experience, such that we will likely be forced to redo our earlier courses to raise the bar across the board.

### EXPANDED PORTFOLIO:

In addition to Entrepreneurship 103, MIT Professor Larry Susskind launched a new course called **“Entrepreneurial Negotiations: The MIT Way”** that teaches new techniques and technologies for negotiation.

### MORE BOOTCAMPS:

While online is a great entry point, top performers in the MOOCs clearly benefit from having a follow-on residential experience. We continue to grow and refine these Bootcamps with our next one planned for Brisbane, Australia in March 2017 in partnership with Queensland University of Technology (QUT). The Bootcamps are becoming an important way for MIT to extend its global footprint.

### BUILDING A TRULY GLOBAL COMMUNITY:

We talk about success being not just the heart (spirit), head (knowledge), and hands (practice), but also having a home to foster lifelong learning and to provide support on the difficult journey of building an entrepreneurial venture. To create deeper connections between the people participating in our courses, strong community building has taken place with Bootcamp alumni organizing and leading entrepreneurship events, workshops, and classes in the US, Canada, Mexico, Brazil, UK, Denmark, Poland, Cyprus, India, Pakistan, Nepal, China, Japan, South Korea, Singapore, Philippines, and Australia. This global MIT entrepreneurial community is tied together by a common knowledge base and experience and will ensure our students' success persists beyond the day they receive their certificate.

The Trust Center looks forward to continuing this extremely beneficial partnership with the MIT Office of Digital Learning to not only bring its rigorous innovation-driven entrepreneurship content to the world, but also see it tested with hundreds of thousands of people globally and help us to continually enhance our core content for our MIT students as well.

*“I found my people.”*

—Sarah Klein (USA)

*“It really challenged me. But it was [also] a great deal of fun.”*

—Renee Rock (USA)

*“The high-quality engagement is the most valuable thing to add to our entrepreneurial journey. You realize that you’re no longer alone; instead you’re now part of a global community of entrepreneurs, supporting each other.”*

—Yen Pei Tay (Malaysia)

*“I’ve gained a close-knit family from all over the world.”*

—Abhinav Gautam (India/USA)

*“There’s no [entrepreneurship] map. You can’t even see your destination clearly. All you have are the slivers of light that you can marshal directly in front of you. [It’s] so important to approach life with a very particular kind of discipline. To be able to rely on a set of methods and approaches that can be repeated to find your way in the inevitable fog. I came to the Bootcamp to better learn that discipline, to better enable myself to find the ambiguous glow needed to guide my team into our shared future.”*

—Basit Chaudhry, M.D. (USA)

*“The Bootcamp was like a two-year business school for me, and even more than that. It literally transformed me to innovate and think differently.”*

—Jamshid Hashimi (Afghanistan/UK)

*“The Bootcamp program taught me how to think more strategically, enabling me to make key decisions in a more focused and pragmatic manner. [It] gave me the support to successfully take my company from strength to strength, continuing as we aim to bring improved quality to a wider international market.”*

—Angela Scott (Scotland)

**ENTREPRENEURSHIP.MIT.EDU/ONLINE-LEARNING**

## Expanding the educational opportunities to high school students

### MIT LAUNCH

MIT Launch  
Executive Director  
Laurie Stach



Can high school students learn entrepreneurship from a rigorous program, just like the students at MIT? There are a number of data points that demonstrate they can. MIT Launch, which offers two month-long summer entrepreneurship programs, has proven tremendously effective in increasing participants' entrepreneurial spirit, knowledge, capability, and community, resulting in some impressive successes.

SafeStart, a sobriety testing system that uses infrared sensors to check blood alcohol levels,

helps prevent drunk drivers from getting on the road. Bulkr, an online platform, allows customers to buy high-quality organic food in bulk directly from local farms with little to no markup. Dropwise, which provides tools to monitor water usage, helps customers save thousands of gallons of water per year and hundreds of dollars on their annual bills.

These are just a few of the examples of projects having a real world impact that were created by high school students while attending MIT Launch. The program's goal: **to cultivate the next generation of entrepreneurs by giving high school students robust entrepreneurship training and a real opportunity to try their hands at starting a business.**

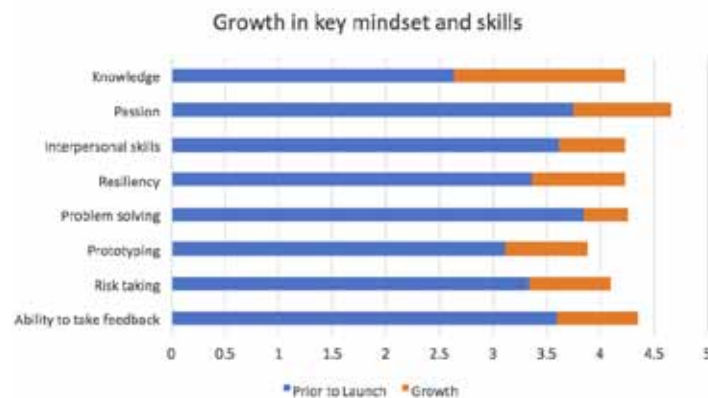
A confluence of factors—the pace of technological change, the ever-lowering barriers to entry of starting a company, and the natural curiosity and boundary-pushing mindset inherent to teenagers—mean that today's high school students have the potential to create world-changing businesses. Over the course of four weeks, students form teams

and learn how to develop their business ideas, determining the right customer base and strategy, prototyping a beta version of their offerings, and creating a comprehensive business plan that includes how they will make money and how the company will scale, all while being taught by, among others, members of the MIT faculty.

Competition to get in is stiff: only about 15% of applicants were admitted in 2016 with more than one-quarter of the students in the Launch class hailing from outside the U.S.

MIT Launch alumni have achieved other milestones too. Owen Xu, co-founder of MicroH2O, which designs water purification systems, recently saw his company hit the 1M RMB revenue mark in China. Meanwhile, Mihir Trivedi last year won second place at the TechCrunch Disrupt hackathon and Michael Matias, now 18, recently delivered a TED Talk on the value of being a teen entrepreneur and the effect of experimental learning on teenagers.

**MITLAUNCH.COM**





*"MIT REAP helped us link our region's innovation capacity with the entrepreneurship capacity."*  
—Lourdes Nunez Muller, REAP Team Andalusia

## MIT REAP

HELPING THE WORLD BUILD ENTREPRENEURS THROUGH ENTREPRENEURIAL ECOSYSTEMS

The MIT Regional Entrepreneurship Acceleration Program (MIT REAP) provides opportunities for communities around the world to engage with MIT in an evidence-based, practical approach to strengthening innovation-driven entrepreneurial (IDE) ecosystems.

We achieve our mission by translating research insights into practical frameworks, convening stakeholders focused on IDE, and educating regional leaders through team-based interaction to achieve economic and social progress.

**TRANSLATE** research and expertise into practical frameworks, approaches, and actions with widespread global application through case studies, frameworks, multimedia, and regional write-ups.

**CONVENE** stakeholders from ecosystems around the world to build a community for collaboration and learning via conferences, workshops, webinars, and a Global Innovation Network.

**EDUCATE** regional innovation ecosystem leaders through team-based learning to facilitate meaningful economic and social outcomes.

Partner regions form multi-disciplinary teams and commit to a two-year learning engagement with MIT. During this engagement, teams work with world-renowned MIT faculty and the broader MIT REAP community through a series of action-learning activities to build and implement a custom regional strategy for enhancing their IDE ecosystems.



MIT REAP admits up to eight partner regions annually to participate in the two-year engagement. A typical REAP region has a population of 1-10 million people and each partner region has a team comprised of five to eight highly-driven and influential regional members and is headed by a regional team champion. **All five major stakeholder groups are represented in an MIT REAP team: government, corporate, academia, risk capital, and the entrepreneurial community.** MIT REAP's fourth cohort, who entered into the program in 2016, include the regions of Dubai (UAE), Lagos City (Nigeria), Lima (Peru), Madrid (Spain), Nova Scotia (Canada), and Iceland.

There are four action-based learning cycles over the two-year engagement each involving highly-interactive workshops every six to nine months, and interspersed by action phases—active time between workshops where teams return home to deepen analysis, validate assumptions with a broad network, and implement new programs and policies. The last action phase now includes the Global Innovation Network alumni program to enable REAP teams to continue engaging and learning both with one another and MIT.

MIT REAP represents not only a way for the Trust Center **to disseminate its knowledge to create impact in the area of entrepreneurship, but also a way to stay current on the international trends in entrepreneurship.** It is an opportunity for MIT students who may be interested in becoming entrepreneurs and for students who wish to become entrepreneurship amplifiers (those who create the environment for entrepreneurship to thrive inside regions, companies, or other organizations). Interestingly, this is something that we have found a demand for among our students, with great synergy between the entrepreneurs and the entrepreneurship amplifiers.



**MIT REAP**  
Regional Entrepreneurship  
Acceleration Program

**REAP.MIT.EDU**

### 2016 HIGHLIGHTS

#### 2ND COHORT GRADUATED

SINGAPORE, LONDON, MOROCCO, MOSCOW, VALENCIA, PUERTO RICO, QATAR, SEOUL

#### CREATED GLOBAL INNOVATION NETWORK

ALUMNI PROGRAM FOR MIT REAP TEAMS TO CONTINUE ENGAGEMENT AND LEARNING

#### TEAM LONDON LAUNCHES GROWTH BUILDER

#### TEAM MOROCCO LAUNCHES PHOSPHATE HACKATHONS

#### TEAM SINGAPORE LAUNCHES SG INNOVATE

*"For ten years, we've studied the results of sponsoring a cohort of entrepreneurs from our region to go to MIT and found it to be one of the best returns on investment we've made."*

*—Donna Chisholm, Highlands and Islands Enterprise, Scotland*

## EXEC ED

### OPENING UP MIT RESOURCES TO THE OUTSIDE WORLD



Drawing from the vast culture of innovation and entrepreneurship at MIT, the MIT Executive Education Entrepreneurial Development Program (EDP) introduces participants to MIT's entrepreneurial education programs, technology transfer system, and global entrepreneurial network. It covers the entire venture creation process—from generating ideas to building viable global businesses—with a special emphasis on the nurturing roles of corporations, universities, governments, and foundations.

This week-long program allows entrepreneurs, corporate venturing executives, high-tech startup

companies, and others involved in entrepreneurial environments access to the full immersive experience of MIT students. They learn at a rapid pace—and with no excuses—what they need in order to develop ideas into successful businesses, and how to increase entrepreneurial opportunities in their corporations, institutions, and regions.

Through lectures, visits to high-tech startup companies, live case studies with successful entrepreneurs, and, most of all, a team-based, in-class, week-long project, participants will be exposed to the content, context, and contacts that enable entrepreneurs to efficiently and effectively

design and launch successful new innovation-driven ventures based on leading-edge technologies. Specially designed team projects give participants hands-on training, practical experience developing a business plan, and initial customer traction, while networking events bring participants together with members of MIT's entrepreneurial community.

Held each year in the last week of January, **this full-immersion, week-long course allows business professionals to get the same quality education that students at MIT receive, but in a time-compressed fashion.** EDP sessions are led by senior faculty affiliated with the Trust Center and world-leading practitioners. Participants are also exposed to the Kendall Square entrepreneurial ecosystem and the global MIT entrepreneurial network. And in a very healthy way, EDP, much like the field of entrepreneurship itself, continues to evolve each year to reflect the new realities in the world and the new learnings of the MIT faculty.

Year after year, EDP is one of the highest-rated and best-attended programs in the MIT Executive Education portfolio with a proud, powerful, and well-connected alumni base.

*"Outstanding, awesome, amazing, and any other highly-positive adjective you can think of. I'd highly recommend any seasoned executive with entrepreneurial ideas take this program."*

*—Daniel Vicente T.*

**THE NEXT ENTREPRENEURIAL DEVELOPMENT COURSE  
WILL BE HELD FROM JANUARY 28–FEBRUARY 2, 2018.**

**ENTREPRENEURSHIP.MIT.EDU/EXECUTIVE-EDUCATION/**



## THOUGHT LEADERSHIP

The Martin Trust Center for MIT Entrepreneurship takes its leadership role very seriously to produce and disseminate educational material in the field of innovation-driven entrepreneurship education. The past year has seen dramatic results in our efforts.

**"Disciplined Entrepreneurship,"** the book by the center's managing director, Bill Aulet, that came out of teaching the foundational "New Enterprises" class at MIT has now been translated into 15 languages beyond English and the audio version. It has been a best seller in numerous countries and won an award for top business books in South Korea.

Based on frequent requests, Bill recently submitted a follow-on book to his publisher to complement the original called **"Disciplined Entrepreneurship Workbook,"** that will be available in March 2017. This new book is targeted not just at entrepreneurs, but also for entrepreneurship educators who would like more structure and deeper knowledge on the fundamentals of successful innovation-driven entrepreneurship.

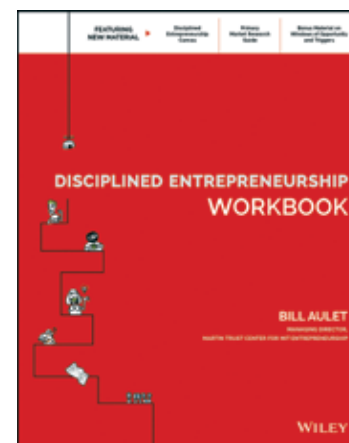
In addition, the center has made available all the teaching materials for "New Enterprises," to any credible educator who requests including syllabus, slides, homework assignments, grading rubrics, videos, examples, and other materials. To date, hundreds of people have accessed this information from dozens of top universities around the globe including McGill, Kings College, Strathclyde, Duke, ITAM/Mexico, and Tokyo Tech. The center asks for nothing in return because we are highly confident that these educators have put the resources to great use and have made a positive impact, which is our goal.

Entrepreneurship Educators' Forum ([www.eef.io](http://www.eef.io)) is an initiative that was designed to go beyond the educational content of "New Enterprises" and "Disciplined Entrepreneurship" and develop a more comprehensive, open, and flexible framework for entrepreneurship education. EEF is designed to create content and generate dialogue about best practices in key areas across participating schools. While MIT was a convener and a significant contributor, the initiative has integrated materials and speakers from Stanford, Harvard, the University of Michigan, Northwestern, the University of Chicago, New York University, and Columbia to name a few. All material is available via the website and the response has been extremely positive with over 1,000 educators from across the world accessing the material. The initiative lost some momentum this year when EEF's great founding



executive director **Michal Gilon-Yanai** accepted a position at NYU Medical School as the associate director of their Biomedical Entrepreneurship program. She is now responsible for developing, launching, and managing an entrepreneurship

program that will be dedicated to life science ventures there. Great for her and bad for us. Trust Center EIR and associate managing director Trish Cotter has picked up the leadership role, but Michal's skills, passion, and drive in helping launch the project have been sorely missed.



ence, one of the largest if not *the* largest collection of entrepreneurship educators in the world. His talk, titled **"The Past, Present, and Future of Entrepreneurship Education,"** was extremely well-received and he was asked to deliver it again at the Global Entrepreneurship Conference (GEC) in Medellin, Colombia. These two slide decks have been posted on Slideshare so as to be freely available and so far, with no marketing, have together generated over 120,000 views.

At the center we proudly utilize high-quality materials from external sources that can help our students and we will also generate new material where we see a gap as demonstrated above. We will continue to provide thought leadership and advocate for anything that will effectively advance the body of knowledge and field of study of entrepreneurship.

In another instance of the thought leadership the center provides, Bill Aulet was asked to give the keynote to the United States Association for Small Business and Entrepreneurship's (USASBE) annual confer-

**300,000**  
ONLINE MIT  
ENTREPRENEURSHIP  
COURSE STUDENTS

**199**  
DIFFERENT  
COUNTRIES

**120,000**  
VIEWS OF "PAST,  
PRESENT, AND  
FUTURE OF  
ENTREPRENEURSHIP  
EDUCATION"  
KEYNOTE TALK  
BY BILL AULET

**16**  
LANGUAGES  
THAT THE BOOK  
"DISCIPLINED  
ENTREPRENEURSHIP"  
IS AVAILABLE IN  
AS OF JANUARY  
2017



# GENERAL INFORMATION

## OUR CUSTOMERS – THE STUDENTS



**Lisette Tellez**, class of 2018

"While it's really fun to try to start a company in your dorm, I think it's way more fun to come here to the Trust Center and start a company where there's all these resources and so many cool things you can accomplish."



**Alessandro Babini** SM '15  
**Daniel Wiese** SM '13, PhD '16

"As we started getting involved with the Trust Center, we did this whole market research and that answer led us to what we're building today and the product we're about to bring to market."



**Kun Qian** SM '15, MA '16  
**Marwan Aboudib** MA '16, SM '16

"The best thing about the Trust Center is it gets you out of your comfort zone; you leave the bubble that you're in."



**Natalie Pitcher** MBA '16

"When I look back on the past year of being a Creative Arts Sector Practice Leader, I actually can't believe how much I was able to accomplish and it's because of the support of the Trust Center."

## TRUST CENTER PROFESSIONALS



**Ed Roberts**  
*Founder and Chair*



**Bill Aulet**  
*Managing Director*



**Trish Cotter**  
*Associate Managing  
Director and EIR*



**Alicia Carelli**  
*Executive Assistant*



**Eliza Deland**  
*Academic  
Coordinator*



**Pat Fuligni**  
*Senior Administrative  
Assistant*



**Sorin Grama**  
*Entrepreneur  
in Residence*



**Travis Hunter**  
*Program Manager,  
MIT REAP*



**Donna Levin**  
*Entrepreneur  
in Residence*



**Tommy Long**  
*Head of Operations*



**Leah Lovgren**  
*Program  
Coordinator,  
MIT Launch*



**Erin Martin**  
*Program  
Coordinator*



**Sarah Jane Maxted**  
*Executive Director,  
MIT REAP*



**Nick Meyer**  
*Entrepreneur  
in Residence*



**Laurie Stach**  
*Executive Director,  
MIT Launch*



**Marvin Vilma**  
*Program  
Coordinator,  
MIT Launch*



**Greg Wymer**  
*Marketing and  
Communications  
Manager*

## AWARDS

MIT rewards and recognizes student excellence in entrepreneurship through awards overseen by the Trust Center. An additional award recognizes commendable effort in entrepreneurship mentoring.



*Isaac Stoner*



*Liz Voeller, Alessandra Henderson, Natalie Pitcher*



*Elaine Chen accepts the Monosson Prize*

### THE PATRICK J. MCGOVERN, JR. AWARD

The McGovern Award is given at each year's MIT Awards Convocation to an individual or team that, in working closely with the Trust Center, has made a significant impact on the quality and overall spirit of entrepreneurship at the Institute. The objective of the award is to motivate future student leaders, raise the profile of student-led organizations, and reward individuals for outstanding achievement in building entrepreneurial excellence. **The McGovern Award recipients for 2016 are Alessandra Henderson, MBA '16; Natalie Pitcher, MBA '16; Isaac Stoner, MBA '16; and Liz Voeller, MBA '16.**

### THE ADOLF F. MONOSSON PRIZE FOR ENTREPRENEURSHIP MENTORING

Created to honor the memory of Adolf F. Monosson, '48, the award recognizes entrepreneurship mentors who have committed their time, energy, and/or capital toward future generations of entrepreneurs. Established at the Sloan School of Management and made possible by Mr. and Mrs. William S. Grinker, '56, the award continues Monosson's mission of providing mentoring to potential entrepreneurs.

**The 2016 Monosson Prize was awarded to MIT Sloan Senior Lecturer and Trust Center Entrepreneur in Residence Elaine Chen.** Elaine has been tirelessly working with students at MIT since 2011; designs, develops, and teaches courses in entrepreneurship and primary market research; and built the Trust Center's founders knowledge base from the ground up.



# MIT ENTREPRENEURSHIP ECOSYSTEM

## Entrepreneur Resources

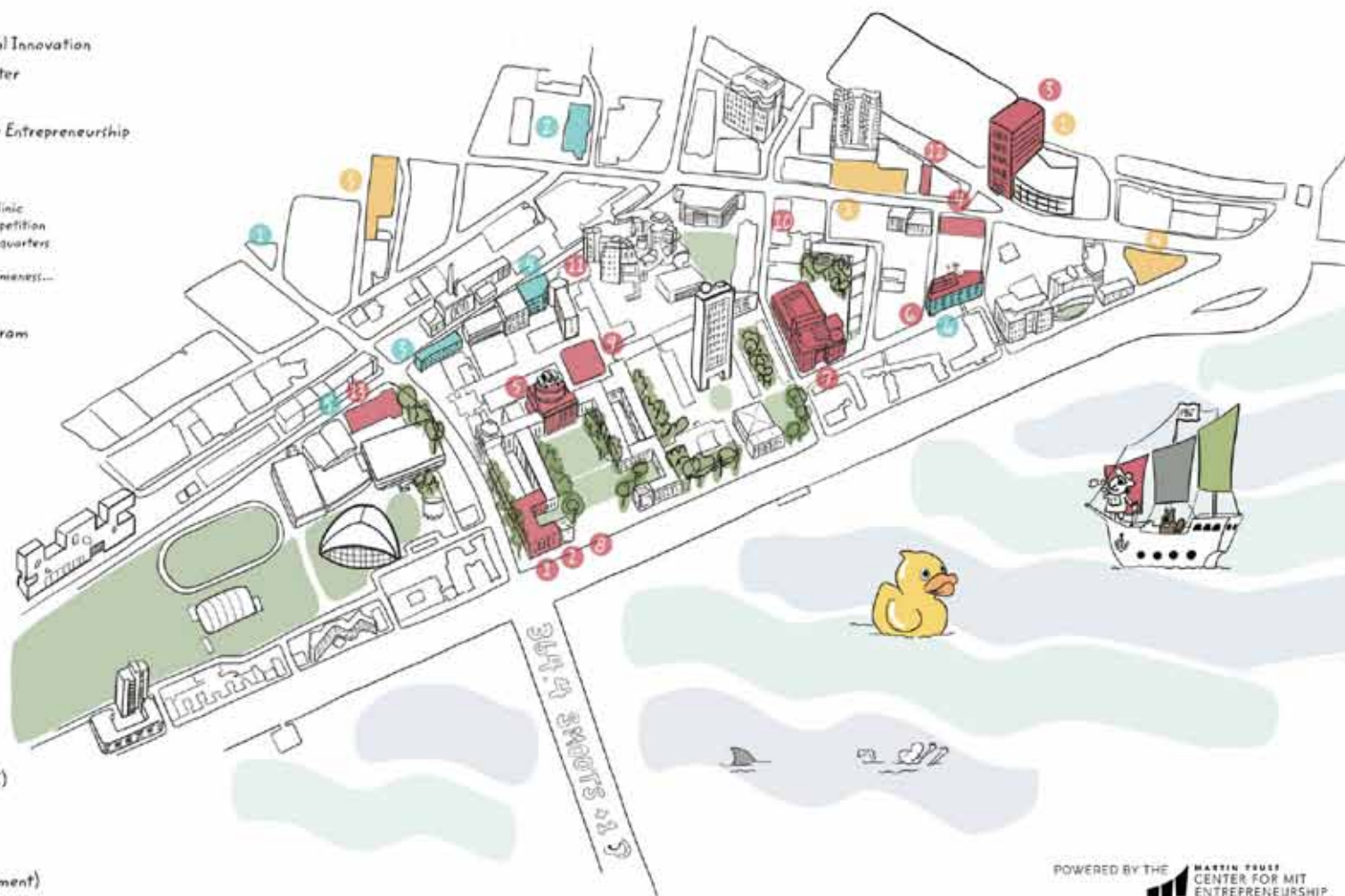
- 1 Deshpande Center for Technological Innovation
- 2 Gordon Engineering Leadership Center
- 3 Innovation Initiative
- 4 Legatum Center for Development & Entrepreneurship
- 5 Lemelson-MIT Program
- 6 Martin Trust Center
  - co-working space
  - MIT Clean Energy Prize
  - Delta V Accelerator
  - Full-time Entrepreneurs In Residence
  - and a lot more entrepreneurship awesomeness...
  - BU Law Clinic
  - 100K Competition
  - +100 Headquarters
- 7 Media Lab
- 8 MIT Sandbox Innovation Fund Program
- 9 MIT.nano
- 10 Tata Center
- 11 Translational Fellows Program
- 12 Technology Licensing Office
- 13 Venture Mentoring Service

## MakerSpaces

- 1 Area 51
- 2 Beaver Works
- 3 MakerWorks
- 4 MIT Central Machine Shop
- 5 MIT Hobby Shop
- 6 ProtoWorks

## External Resources

- 1 Cambridge Innovation Center (CIC)
- 2 Entrepreneur Walk of Fame
- 3 LabCentral
- 4 Microsoft NERD Center (New England Research & Development)



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MARTIN TRUST  
CENTER FOR MIT  
ENTREPRENEURSHIP

## CHALLENGES

2016 was a great year at the Trust Center, but—as we tell our students—success always comes with an expiration date, whether you can see it coming or not. Success can also often be just the absence of big failures, and, as entrepreneurs, we push ourselves to constantly innovate, which inevitably means we'll miss the mark at times.

Our recent track record has many more wins than losses thankfully and we are in an excellent position as we move forward, but our position also creates new challenges. There are four in particular that are fundamentally related to how we scale and consistently maintain our magic as we strive for the center to meet its mission in this and future years.

### 1. COLLABORATION

Success begets many followers but increases the demands on our time. As the center shows what is possible, new MIT organizations have sprung up (Innovation Initiative, Sandbox Innovation Fund, DesignX, The Engine, to name a few) that look to expand and amplify what the center has started. While quite the compliment, it muddles the landscape, competes for attention and resources, and can confuse both students and the public.

Entrepreneurship (and the way it is taught at MIT) should not originate from a “command and control” entity like a singular mainframe, but rather more of a “local area network” where de-centralized coordination is encouraged and rewarded. There should exist a common language that allows for knowledge sharing so we're not constantly reinventing the wheel—or worse, the flat tire—thanks only to a lack of organization. At a macro-level this seems simple, but on the micro-level where the rubber meets the road, the incentives often work against coordinated efforts.

We have successfully worked to create a collaborative environment with the key ecosystem players from years past (Technology Licensing Office, Deshpande Center for Technological Innovation, Venture Mentoring Service, Tata Center for Technology and Design, Legatum Center for Development and Entrepreneurship, and the Gordon-MIT Engineering Leadership Program), and we seek to collaborate further, but it gets more complicated as the number of stakeholders increases. Entrepreneurship is no longer niche at MIT. It is now central to many areas and of great interest to students, researchers, potential sponsors. While a wonderful problem, it is a challenge nonetheless.

### 2. SPACE

Our newly renovated and expanded space helped to relieve an enormous strain upon our operations and offerings. The excitement and energy you can feel in the center on a daily basis is now even more palatable. It has also attracted additional interest in what the center provides to students, leading to us hitting capacity not long after opening our doors. Despite our policy of no dedicated work spaces and an online reservation system, students express frustration about regularly having a lack of collaborative space available for working or holding events.

We are victims of our own success, tracking over 1000 visitors through our doors each weekday, a number that keeps growing on a monthly basis. Even on holidays and weekends more than 350 students use the space. Of course heavy foot traffic is what we wanted and what the redesign was meant to achieve—maximum impact of the center as a whole with our diverse “neighborhoods” designed for the different entrepreneurial demands of our students.

On the other hand, as we saw with our “old” space before the renovations, there can be a utilization rate that proves unproductive. We wish to avoid the Yogi Berra malapropism of “nobody goes there anymore; it's too crowded” because our space needs to be a friendly, open, and welcoming environment. While not an acute problem today, it is a challenge we will need to address in the not-too-distant future.



### 3. INCLUSIVE ENTREPRENEURSHIP

We have witnessed the power of innovation-driven entrepreneurship (IDE) to create enormous positive change. Far too often these results have the greatest impact on only a local scale and the center needs to be a leader on how to expand this potential to a broader societal base.

As we have seen with the rise of tribalism and nationalism in both our own and the global political landscape, populations across our planet are feeling a deepening sense of alienation and unease. Entrepreneurship education can have a positive impact on the quality of life around the world, but teaching IDE in a high-quality manner to broad audiences has its own set of particular challenges. While we need to reach broadly, we can not *teach* broadly; this education must have a local context in order for it to take root.

The target is for anyone and everyone to see entrepreneurship as an available path and an important profession, one that can help curtail income inequalities among and across communities worldwide. In the Trust Center mission, we state that we accept and welcome our leadership role to advance the field at MIT as well as globally, and, as such, we must actively address this challenge.

### 4. ENDOWMENT

For the ultimate long-term success and sustainability of the Trust Center, it is essential that we increase our financial base, specifically the center's endowment. Today we are popular and flush with achievements, many related to the success of the students who have walked through our doors. But what might happen when times change?

Much good work in the field of entrepreneurship has taken place over the course of many years, but in reality we have just begun to scratch the surface of what ultimately needs to be achieved in order to make this a respectable, recognized, and rigorous field of study. We are fortunate that entrepreneurship is currently a hot area of academic interest, but in order to create fundamental and lasting change, we need to think long-term and an increased endowment will allow us to do this.

Each year for the annual report we address the challenges that the center faces and actually find it heartening that they keep getting bigger in scope. While this shows we have been successful in addressing them in the past, our overall mission is not small in scope so our current challenges remain daunting. We refuse to rest upon our laurels and will always use MIT itself as a model for what we aim to be—an institution that constantly evolves, steadily innovates, and helps to meet the nation's and the world's greatest challenges in the 21st century.





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ABOUT  
MARTIN  
TRUST

*The Martin Trust Center for MIT Entrepreneurship is named for Martin Trust, SM '58. In 1970, Trust founded Mast Industries, which merged with The Limited Stores (now L Brands Inc.) in 1978. He served on the company's board of directors until 2003. He has advised the U.S. government on textile trade issues, and currently runs the investment firm Brandot International, which he founded. He holds a bachelor's in mechanical engineering from The Cooper Union as well as a master's in industrial management from MIT.*



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An aerial photograph of the MIT campus at sunset. The sun is low on the horizon, casting a warm orange glow over the city and the Charles River. The MIT buildings, including the iconic dome, are visible in the foreground and middle ground. The river flows through the city, and a bridge is visible in the distance.

*Creating the next generation of innovation-driven entrepreneurs*