

2013/2014

ANNUAL REPORT



MISSION

The Martin Trust Center for MIT Entrepreneurship provides the expertise, support, and connections MIT students need to become effective entrepreneurs. Founded in 1990 by Professor Edward Roberts, we serve all MIT students, across all schools, across all disciplines.

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.
- 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 in the process. When we succeed, we aim to scale rapidly.
- 5. Honest Broker:** Neither the Center nor its faculty or staff take a “piece” of the new companies that we nurture and assist. Our only goal is the student’s 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.

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 Limited Brands) in 1978. He served on the board of directors for Limited Brands 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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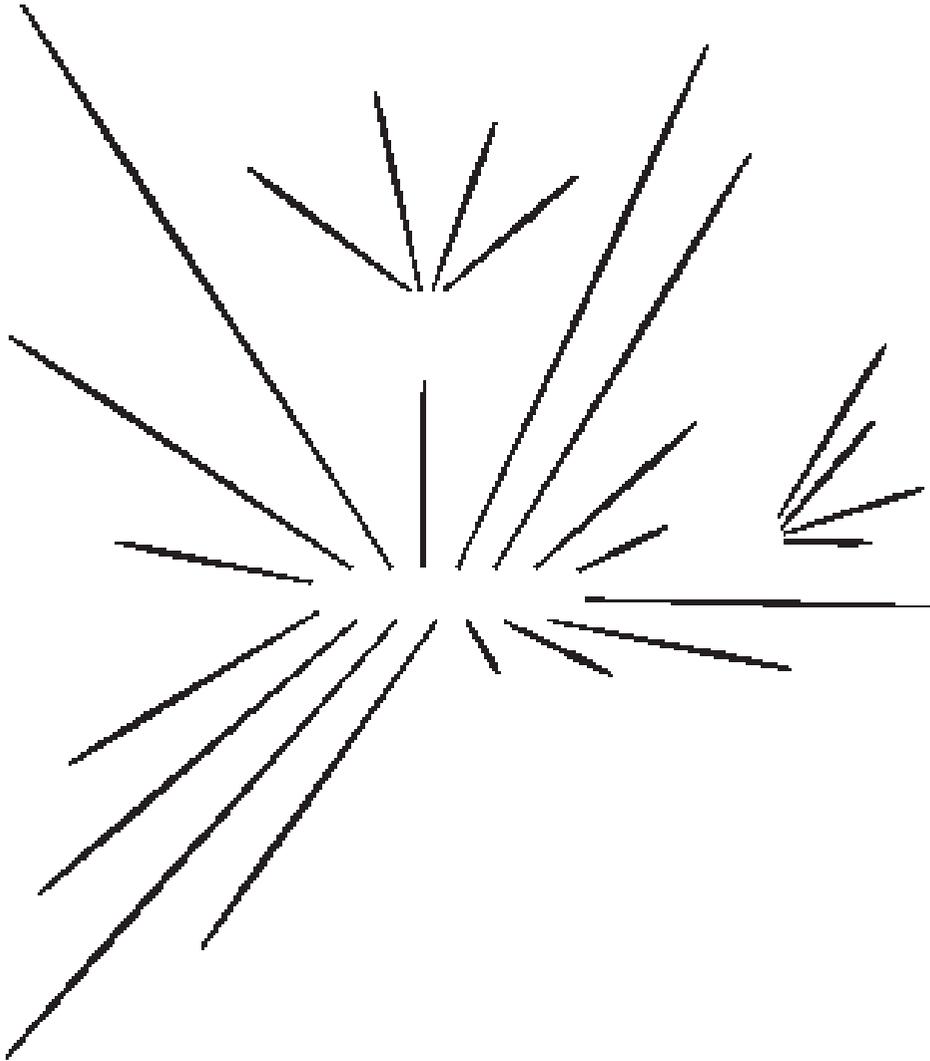
Community.30

The Future.32

Supporters.34

Phone: 617.253.8653

Email: trustcenter@mit.edu
<http://entrepreneurship.mit.edu>



**THE MARTIN TRUST
CENTER FOR MIT
ENTREPRENEURSHIP PLAYS
A UNIQUE AND EXTREMELY
VALUABLE ROLE
AT MIT AND BEYOND.**

The Martin Trust Center for MIT Entrepreneurship had a truly amazing year for the academic year 2013-2014. Fueled by a new significant gift from the Anne Goss Foundation, the Center was able to build upward from the groundwork that has been laid by the hard work of so many people over the previous years to realize extraordinary results.

SPECIFICALLY THESE RESULTS INCLUDED:

MIT Global Founders' Skills Accelerator: This capstone full-time summer accelerator program for our students became the gold standard for academic accelerators and is now financially secured for at least five years. A thousand people came to this year's Demo Day which was a major success and inspiration to the next wave of students. It is hard to describe in words how powerful this was so we encourage you to see the video online at <https://vimeo.com/album/3044614>

Integrated Set of Educational Offerings: The success of GFSA was a result of a now full set of integrated offerings for the students starting with the t=0 festival that immediately exposes MIT students to the many resources available to them. We have integrated our educational offerings with a common rigorous pedagogy and language so students can readily build from a common base while also allowing maximum flexibility for customizing the education to his or her specific interests. We have also seen this significantly accelerate that all important lateral learning between different teams in our community because they all have common understanding of the terms involved in the process.

International Perspectives: As we strengthen ties with the global entrepreneurship community, we are able to better expose our students to the international perspectives they will need to be successful entrepreneurs. Examples of these programs include the Regional Entrepreneurship Acceleration Program, now in its second cohort; the GFSA participant teams representing Mexico, Canada, Spain, and Morocco; the executive education Entrepreneurship Development Program drawing from over two dozen countries; the book *Disciplined Entrepreneurship* being translated into 11 languages; and the online MITx "Entrepreneurship 101" course, drawing 55,000 participants from around the world.

Additional Resources: We are pleased that our hard work in meeting the burgeoning demand for student entrepreneurship education has been recognized with additional critical resources, including the hiring of a third full-time entrepreneur in residence, Josh Forman, and a new program coordinator, Sam Breen, who will be a resource connector and business problem solver for students. We also were given additional meeting space to support our GFSA teams during the Fall 2014 semester, and we are optimistic that there is now a relatively clear path for medium- and long-term solutions for addressing our space needs.

Innovation Initiative: MIT President Rafael Reif has designated entrepreneurship and innovation as a top priority, and Professor Fiona Murray, Martin Trust Center faculty director, was selected to co-lead an Institute-wide Innovation Initiative, along with Professor Vladimir Bulović from the Department of Electrical Engineering and Computer Science. The two were appointed Associate Deans for Innovation in their respective schools. The Initiative will provide an excellent new structure and resources to bolster MIT entrepreneurship, and we are proud to support the Initiative in its work to foster collaboration across the Institute.

We could not be more proud of these successes, and we are also equally proud of our sensational staff at the Martin Trust Center who work tirelessly and selflessly to carry out our mission while upholding our principles of operation (see inside front cover). We also thank all of you who have contributed to the Center's success over these past 24 years (stay tuned for the 25th anniversary celebration because it is going to be legendary).

We hope you find this report informative but also hope you find some of the joy we get every day in being part of a center that is changing the world.



Bill Aulet

Managing Director, Martin Trust Center; Senior Lecturer, MIT Sloan



Fiona Murray

Faculty Director, Martin Trust Center; William Porter (1967) Distinguished Professor of Entrepreneurship



Edward B. Roberts

Founder and Chair, Martin Trust Center; David Sarnoff Professor of Management of Technology

2013 – 2014

HIGHLIGHTS

GFSA SUMMER ACCELERATOR 2014 IN REVIEW

Eleven MIT teams presented at the third annual MIT Global Founders' Skills Accelerator Demo Day in a packed Kresge Auditorium. The teams pitched their startups to a crowd of 1,000 attendees.



This team of three AeroAstro PhDs are developing a revolutionary new propulsion system for satellites.

Ashton Instruments

These passionate cyclists have created a new power meter for bicycles that is far cheaper and easier to install than anything on the market.



Using CSAIL algorithms and advanced financial analysis, Cardinal Wind is making it easier than ever for investors to analyze and invest in wind power.



Pharma companies spend millions trying to get lifesaving drugs through Phase III clinical trials. DataSight's proprietary machine-learning algorithms help pharma and biotech companies more accurately select the sites for Phase III clinical trials to increase accuracy and reduce time to market.



The Embr Labs team believes that thermal is personal and it's time to take control. By merging temperature and technology, this startup out of the MADMEC competition has created a wearable device that can heat or cool users depending on their personal temperature preferences.

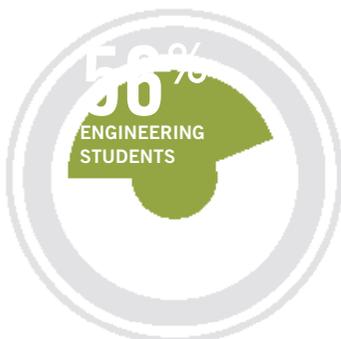


By tapping into the tiniest and most nutritious grain on the planet, teff, the Love Grain team is creating delicious gluten-free foods for American consumers while helping thousands of Ethiopian farmers.

MIRAMIX

This team has developed a beautiful consumer electronics device that can create custom personalized vitamins and supplements for users to help you be the healthiest version of you.

Degree Programs
 33% UNDERGRADUATE
 37% MASTER'S
 30% PHD





If you're a developer, you use GitHub. If you're a designer, you use Dribbble. But what do you use to showcase your work if you're a maker? Monograph is building a web platform for makers to help catalyze the second Renaissance.



smarking

By combining big data, analytics, and transportation logistics, the Smarking team is helping airports and parking management companies access predictive analytics and real-time tracking to optimize revenue and staffing, saving millions of dollars every year.



No one wants to pay a ton of money to hear a pre-recorded, lip-synched concert. The team at Sonabos is developing a connected platform that gives DJs and live performers the confidence they need to rekindle their creativity.



Nearly 80% of the world still lacks real-time traffic information. Wise Systems is combining big data, design, and logistics to route businesses in developing countries more efficiently than ever, saving time and money.

In addition, GFSA 2014 hosted four international teams:

INEVIO

(from Universidad Politécnica de Madrid, Spain)

Inevio is taking all your computers to the cloud—not just your files, but your apps as well, allowing you to collaboratively work from any device, anywhere, at any time.



(from Instituto Tecnológico Autónomo de México)

FarmUp is creating an e-commerce platform to allow restaurants to buy directly from farmers in Mexico, removing middlemen and streamlining operations to improve product quality for restaurants and prices for farmers.



(representing Mohammed VI Polytechnic University, Morocco)

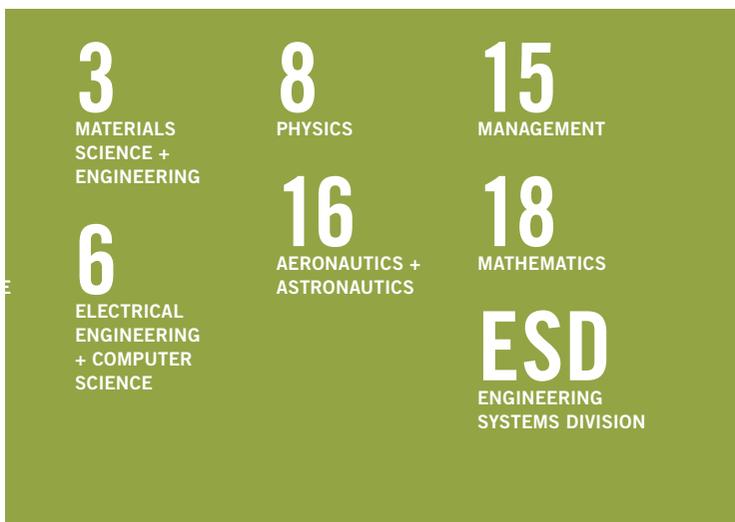
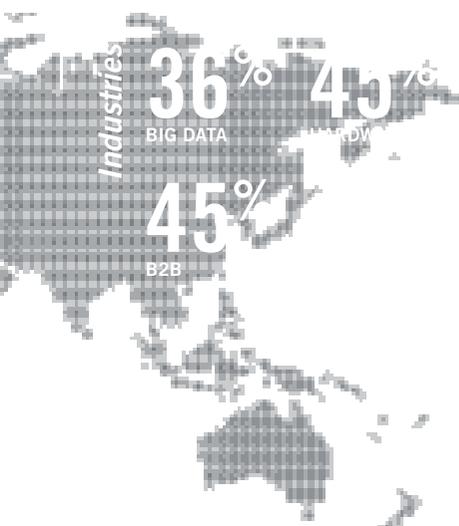
OBaa is building a mobile healthcare app to make maternal healthcare accessible for expecting mothers in rural Ghana and other developing nations.

HEMINGLY

(from McGill University, Canada)

Hemingly has created smart marketing for self-published authors, making it easier than ever for them to save time and money when finding and engaging their audience, and driving book sales.

See each team's Demo Day pitch at <http://vimeo.com/album/3044614> and for more information about the MIT GFSA, see page 25 or visit <http://gfsa.mit.edu>





Richard Cosnotti and Steve Sciarretta (2nd and 3rd from left), representatives of Jack Goss, meet with MIT Sloan Dean David Schmittlein (2nd from right), Martin Trust Center Faculty Director Professor Fiona Murray, and Martin Trust Center Managing Director Bill Aulet.

GOSS GIFT ACCELERATES STUDENT STARTUP TEAMS

A generous \$5 million gift from the Anne Goss Foundation, established by Anne and the late Jackson (“Jack”) Goss, has enabled the creation of the Jackson W. Goss Fellowship. The gift will provide educational and financial support for promising student entrepreneurs from MIT to pursue their business ideas full-time on campus.

Goss Fellows receive workspace, funding, mentoring, and instruction to develop their startup ideas as part of the MIT Global Founders’ Skills Accelerator.

Jack Goss was a native of Lamar, Missouri, who fought in the Battle of the Bulge and was a decorated war hero in his youth. He later had a long and successful career in the investment management industry. Goss passed away in December 2013.

“Jack constantly emphasized the need to improve society by utilizing the most powerful force the world has ever seen: capitalism,” said Martin Trust Center Managing Director Bill Aulet.

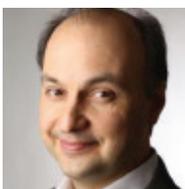
“To do this most effectively, Jack believed you needed to take teams of strong, disciplined individuals, provide them with expert training, and also give them the time and space to experiment. Such is the credo with which Jack so successfully lived his life, and such is the legacy that the Jackson W. Goss Fellows will carry forward.”

INNOVATION INITIATIVE PROCESS LAUNCHES

MIT President L. Rafael Reif took major strides in solidifying the innovation ecosystem at MIT by launching the process to create an MIT Innovation Initiative. The Initiative is an Institute-wide, multi-year agenda to transform MIT’s innovation ecosystem—internally, around the globe, and with its partners—for accelerated impact well into the 21st century. Building on MIT’s foundation of fundamental research excellence, it supports the aspirations for impact through innovation of all members of the MIT community.

As part of the launch of the process Innovation Initiative, Professor Fiona Murray, Martin Trust Center faculty director, and Professor Vladimir Bulović were promoted to associate deans for innovation in MIT Sloan and the MIT School of Engineering, respectively.

<http://innovation.mit.edu/>



Vladimir Bulović



Fiona Murray





STUDENT PROFILE

ACCION SYSTEMS

Many startups launch products. But very few startups quite literally launch products *into space*.

Natalya, Louis, and Fernando are addressing a key challenge faced by people who want to deploy satellites into orbit. As satellites become more useful across industries for monitoring and communications, people are faced with a tradeoff—either launch a large, expensive satellite with its heavy propulsion system, or a smaller satellite whose lack of thrusting capabilities makes it less useful.

“Keeping it in space, allowing it to maneuver, reach different orbits, point cameras and antennas—anything that you need some force to do” requires a propulsion system, Natalya says. “But if propulsion requires a \$2 billion satellite, that’s out of reach to students, new industries, and so many other great applications satellites could be used for.”

Accion Systems is solving this problem by commercializing a lightweight, inexpensive propulsion system out of technology developed at MIT’s Space Propulsion Laboratory, where the co-founders met. The system will enable small satellites to have a propulsion system.

The team varied in previous experience. Natalya had started a company before that had failed, while Louis and Fernando had no startup experience. “I never thought about being an entrepreneur,” Louis

said. “I knew nothing about being an entrepreneur, running a business. Coming to the Martin Trust Center and having someone say ‘read this, look at that,’ helped me understand what’s going on so much more.”

When the team started Accion over two years ago, “we started by making every possible mistake,” Natalya says. Through participating in the MIT \$100K, and especially the MIT Global Founders’ Skills Accelerator, the team was able to recover from their initial mistakes and develop their skills and knowledge in entrepreneurship.

“From day one, we were blown away by how valuable GFSA was,” Natalya says. “At first it was, ‘Ok, Kyle [Judah, GFSA program director], yeah, we’re going to do 30 customer development interviews...’ and then we did the first one and said, ‘Oh my gosh, are they all going to be this useful? I can’t believe the customer gave us that data, told us those numbers.’”

The structure of the program, with grants tied to milestones and monthly board meetings, also proved beneficial. “We kept so much momentum over the whole summer because we were accountable to people outside of just ourselves,” Natalya says. “GFSA is the reason that we have our first employee and first preorders.”

Post-GFSA, Accion is growing, hiring their first non-founder engineer, getting their own lab space, and preparing a test launch as early as 2015.



Natalya Brikner, PhD '14,
Course 16 (Aeronautics and Astronautics)



Louis Perna, SB '09, SM '14, PhD '17,
Course 16 (Aeronautics and Astronautics)



Fernando Mier Hicks, SM '14, PhD '17,
Course 16 (Aeronautics and Astronautics)

The team hopes that more students, particularly those in degree programs less commonly associated with startups, takes advantage of MIT’s vast entrepreneurship resources. “We’re excited to see entrepreneurship growing so strongly at MIT, and can’t wait to see it spread more among engineering students [in particular],” Louis says.

CONTINUED DEVELOPMENT OF GSD AND FOUNDER'S JOURNEY COURSES

Our advanced special seminar in entrepreneurship has now become a regular course offering, 15.378/15.370 Building an Entrepreneurial Venture: Advanced Tools and Techniques. The course helps student teams who have made significant progress toward a startup in introductory entrepreneurship courses to further develop their knowledge and skills in a rigorous MIT educational setting, while benefiting from a low student-to-faculty ratio and an independent work environment.

An entrepreneurship course offered by the electrical engineering and computer science department, 6.933 Entrepreneurship in

Engineering: The Founder's Journey, has been more closely integrated with the broader entrepreneurship curriculum. A diverse group of instructors, including Professors Vladimir Bulovic, Doug Hart, Fiona Murray, and Sanjay Sarma, as well as Lecturer and Martin Trust Center EIR Christina Chase, teach the course, which offers students the opportunity to see if they want to go into entrepreneurship and provides them with the skills necessary to do so. The course is designed for students who may not yet be ready to jump into a course like 15.390 New Enterprises or 10.807/15.371 Innovation Teams (i-Teams), but who still want to explore entrepreneurship in a rigorous way.

FACULTY ADDITIONS

Professor Christian Catalini joined the faculty this past year as the Fred Kayne (1960) Career Development Professor of Entrepreneurship. Catalini's main areas of interest are the economics of innovation, entrepreneurship, and scientific productivity. His research focuses on crowdfunding and online entrepreneurial finance, how proximity affects the recombination of ideas, Bitcoin, the adoption of technology standards, and science and technology interactions.

In our effort to continually revitalize our curricula, we have recruited several new practitioner faculty from the business community. Data Intensity CEO Kirk Arnold, former Netezza CEO Jim Baum, Kayak co-founder Paul English, and EMC senior vice president Dennis Hoffman all joined the Martin Trust Center faculty this year.

We also said farewell to longtime Senior Lecturer Howard Anderson, who retired from MIT at the end of the 2013-14 academic year. Howard taught several entrepreneurship courses, including 15.390 New Enterprises and 15.387 Entrepreneurial Sales, as well as 15.386 Managing in Adversity and 15.398 Corporations at the Crossroads. During his last New Enterprises class, co-instructor Bill Aulet and comedian Jimmy Tingle gave him a send-off the only way they knew how: the "24 Steps of Howard Anderson."

Highlights from the send-off can be viewed at <http://vimeo.com/EshipMIT/24stepsofhoward>



Christian Catalini



Kirk Arnold



Jim Baum

TAKING STARTUP EDUCATION GLOBAL

MIT for the first time offered our introductory entrepreneurship course, 15.390 New Enterprises, as an online course through the edX platform. The course, called 15.390x Entrepreneurship 101: Who is Your Customer?, enrolled over 54,000 students during spring 2014. The 15.390x course development team had an extraordinary challenge in how to translate the action-based interactive nature of 15.390 into a format heavily dependent on one-way video. They accomplished their goal by using video to show real MIT startup teams actively engaging in customer interviews and other elements of the startup process, giving the 15.390x students real insight in how to apply what they are learning into practice.

Over the summer of 2014, 47 people from 22 countries who took the online course met at MIT for a week-long bootcamp led by MIT faculty. The bootcamp was an experiment by MIT to help edX students further their online education with in-person instruction while meeting people from around the world with similar interests. “It was an incredibly creative and a remarkable experience not just for the students but for all of us involved at MITx and edX,” said Professor Anant Agarwal, the CEO of edX.

<http://newsoffice.mit.edu/2014/50-startups-five-days-one-bootcamp-change-world-0829>



Paul English



Dennis Hoffman



Locu founders Marc Piette, MBA '11 (2nd from left); Rene Reinsberg, MBA '11 (2nd from right); and Marek Olszewski (far right) pose with GoDaddy CEO Blake Irving and NASCAR driver and GoDaddy spokeswoman Danica Patrick, after Locu was acquired by GoDaddy for a reported \$70 million in 2013.

ALUMNI PROFILE

LOCU

Despite years of innovation on businesses' websites, it still takes many restaurants days, or even weeks, to update their online menus—which are now listed across a growing number of social media and review websites.

A team of MIT graduate students—Rene Reinsberg, MBA '11; Marc Piette, MBA '11; and Marek Olszewski—set out to tackle this problem using the concept of the Semantic Web, a common framework allowing data to be shared and reused regardless of where it is originally published. Now, Locu serves 40,000 businesses, ranging from restaurants to salons, accountants, and photographers, and was acquired in 2013 for a reported \$70 million by domain host company GoDaddy.

The Locu co-founders met in 2010 in an MIT course, Linked Data Ventures, taught by Tim Berners-Lee, the 3COM Founders Professor of Engineering. The course paired engineering and management students to build working prototypes and viable business plans around the Semantic Web and linked data. The team first designed Goodplates, an app that allowed people to upload photos of individual dishes they've eaten at local restaurants, and later pivoted to their current idea.

The team used Martin Trust Center resources to work out their startup's kinks, receive mentorship from seasoned entrepreneurs, and find the niche market for their product.

"It was the perfect breeding ground for us," Reinsberg says. "It's really hard to imagine how this would have worked out without MIT."

For Piette, Locu's chief operating officer, MIT provided what he calls a "well-rounded [entrepreneurial] education" that included discovering product-market fit, customer value, basic accounting and financing, and how to structure fundraising rounds. "When we started the journey, there was never an area where we had absolutely no clue," he says. "We either knew what to do or knew who to ask."

Apart from learning startup strategies, the co-founders say they developed a more entrepreneurial mentality, where business lows are followed by highs—and vice versa—and persistence is rewarded. "To know that you have a bad day, there'll be a good day, but just don't give up—that's what you learn at MIT," Reinsberg says.

A version of this profile was published as "Keeping 'digital storefronts' fresh," *MIT News*, Oct. 2, 2013, <http://newsoffice.mit.edu/2013/locu-1002>

MIT RESEARCH DEMONSTRATES GENDER DISPARITIES IN VENTURE FUNDING

You can't judge a startup by the looks of its founder—but many potential investors do.

That's the upshot of a recent study co-authored by Professor Fiona Murray, Martin Trust Center faculty director, and visiting scholar Sarah Wood Kearney, SM '12. The study shows that attractive men have disproportionate success in obtaining venture capital funding for startups, compared with women and with less physically appealing men.

In a controlled experiment the researchers conducted as part of the study, identical business-plan videos were narrated by either male or female voices; respondents chose the plans presented by males 68 percent of the time.

“The fundamentals of the entrepreneur's business proposition and the previous experiences of the entrepreneurs themselves are regarded as the main criteria for investment decisions,” notes the paper, published this week in *the Proceedings of the National Academy of Sciences*. However, the authors add, there remains “a profound and persistent preference for entrepreneurial ventures pitched by men, particularly attractive men.”

“We don't always like the results we find, but this sort of systematic evidence helps us to start a conversation and discuss ways to change biases and ensure that women can engage as effectively in innovation-driven entrepreneurship as their male counterparts,” says Murray.

The paper, “Investors prefer entrepreneurial ventures pitched by attractive men,” was written by Alison Wood Brooks, of Harvard Business School; Laura Huang, of the University of Pennsylvania's Wharton School; Murray, the William Porter (1967) Distinguished Professor of Entrepreneurship and associate dean for innovation at the MIT Sloan School of Management; and Kearney.

“Our experiments are part of an emerging research field we call ‘innovation science’—an approach to studying the messy process of innovation and entrepreneurship in a more systematic way,” Murray says. “By borrowing tools from the worlds of psychology, economics, and other social sciences, we can shed light on complex and often controversial issues.”

<http://newsoffice.mit.edu/2014/study-says-attractive-men-fare-best-in-gaining-venture-capital>

ADDITIONAL FACULTY RESEARCH, NEWS, AND AWARDS HIGHLIGHTS:

Christian Catalini received the 2014 Wiley Blackwell Outstanding Dissertation Award from Academy of Management's Business Policy and Strategy Division for “Three Essays on the Impact of Geographic and Social Proximity on Innovation.”

Matt Marx testified before the Massachusetts Legislature Joint Committee on Economic Development and Emerging Technologies on his research about the effects of noncompete agreements on individuals and entrepreneurial ecosystems (see page 21). Massachusetts considered banning noncompetes earlier this year.

Fiona Murray was appointed to the UK Council for Science and Technology, which advises the Prime Minister on strategic science and technology policy issues.

Eric von Hippel's work on user innovation was recognized with a Humboldt Research Award from the Alexander von Humboldt Foundation and an honorary doctorate from the Technical University of Hamburg-Harburg in Germany.

Bill Aulet wrote several op-eds for *TechCrunch*, including “Our Dangerous Obsession with the MVP” and “Culture Eats Strategy for Breakfast,” as well as op-eds for *Xconomy* and other publications. His 2012 book, *Disciplined Entrepreneurship*, based on the 15.390 New Enterprises curriculum, has been or will be translated into Arabic, Chinese (simplified and traditional), Croatian, Japanese, Korean, Polish, Russian, Spanish, Swedish, and Thai, and was also released as an audiobook.

Phil Budden wrote op-eds for *The Boston Globe* including “Lessons for the States applied in Britain's capital.”

Elaine Chen wrote op-eds for *Xconomy* and *Forbes* including “How To Start A Business AND Stay In College.”



STUDENT PROFILE

WISE SYSTEMS

Moving goods efficiently is difficult when you don't know how to analyze the data you've collected on your fleet, and when you're in part of the 80% of the world without real-time traffic data to fall back on.

Enter Wise Systems, which helps companies understand the data they're collecting so that they can optimize their routes and understand when goods will arrive.

"There are lots of implications to not optimizing how we move things—time equals money, fuel, carbon emissions, and more," says co-founder Layla Shaikley.

Layla, Chazz Sims, and Ali Kamil met and conceived of the idea in the course 15.375/EC.731J/MAS.665J Development Ventures, which serves as "a connector, bringing people together, coming up with ideas, and showing where to seek resources to build a startup," Ali says.

The founders bring diverse backgrounds to the table. Layla is an architect who co-founded TEDxBaghdad and worked at NASA. Ali did strategy consulting for several years and worked at a Pakistani education nonprofit. Chazz interned at Goldman Sachs and at several startups while at MIT. Their fourth co-founder, Jemel Derbali, is a Harvard Law School student.

The team was drawn to entrepreneurship because of their interest in creative problem solving and opportunity for impact. "At big companies, I didn't feel I had a large impact on things. Entrepreneurship gives me a space for that," says Chazz. "I love being able to do more than just code—strategy, business, sales—getting to do all of those things in one job is my ideal."

The team took advantage of a large number of MIT resources, from the IDEAS Global Challenge and \$100K Pitch Contest to the Carroll Wilson Award, the Legatum Fellowship, and the E14 Fund, a fund supporting startups by Media Lab alumni. They also found useful resources in the Harvard community. "The ability to cross-pollinate across the bridge was helpful," Layla says.

The MIT Global Founders' Skills Accelerator served as a catalyst for moving the team to the next level. "Going through the 24 Steps with Bill and Kyle, understanding the strategy of what our idea is and who we are selling to, was a lifeline. We became a real company through GFSA," Layla says.

Wise Systems has come out of GFSA strong, hiring additional employees, ramping up product development, and forging partnerships with multinational corporations.



Ali Kamil, SM '14, Course ESD
(Engineering Systems Division)



Layla Shaikley, SM '13, Course 4 (Architecture)



Chazz Sims, '13, M.Eng '14, Course 6
(Electrical Engineering & Computer Science)

IN MEMORIAM: PATRICK J. MCGOVERN, JR. AND AUDREY DOBEK-BELL

This year, we remember two individuals who contributed greatly to the MIT entrepreneurship ecosystem—Pat McGovern, '59, and Audrey Dobek-Bell. We will miss them both.



Patrick J. McGovern, Jr., '59

Patrick J. McGovern, Jr., '59

Pat was a part of our center from the beginning, serving on our initial nine-person advisory board of MIT alumni founder-CEOs who helped create the first set of priorities and direction for organized entrepreneurship at MIT.

He also established the McGovern Entrepreneurship Award to recognize students and student teams that have made a significant impact on the quality, visibility, and overall spirit of entrepreneurship education and support across the Institute. He delighted in frequently giving the award in person.

Pat founded International Data Group (IDG) in 1964. The company created numerous tech publications including *Computerworld* and *PC World*, as well as the "... for Dummies" series of books.

His impact was felt throughout MIT; he served as a member of the MIT Corporation since 1989 and established the McGovern Institute for Brain Research at MIT.

Audrey Dobek-Bell

Audrey served as senior administrative assistant to the Center's managing directors from 1996 until her retirement from MIT in 2012. Her excellent judgment and deep knowledge of MIT, honed in her work in the Office of the Corporation since 1979, was a valuable asset to the then-young entrepreneurship center.

Her warmth, charm, and welcoming nature endeared her to many an international student, especially those from Spain, as she was fluent in Spanish and worked and travelled in Spain on many occasions. She kept in touch with some students even after graduation, often gifting favorite works of children's literature as they began their families.



Audrey Dobek-Bell



**WHAT
WE DO.**

ACADEMICS

CURRICULUM

MIT's motto, **mens et manus (mind and hand)**, is an integral part of MIT's entrepreneurial culture and its many entrepreneurship courses. Courses combine theory and practice to give students ample opportunity to use the skills they have learned within the curriculum.

Nearly all entrepreneurship courses are open to all MIT students, undergraduate and graduate, from all disciplines.

Fall 2013

1.462/11.345

Entrepreneurship in Construction and Real Estate Development

2.009 The Product Engineering Process

2.723/6.902/ESD.051

Engineering Innovation and Design

2.75/2.750/6.525/6.025

Medical Device Design

6.932/15.377

Linked Data Ventures

6.933 Entrepreneurship in Engineering: The Founder's Journey

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

Principles and Practice of Drug Development

9.455/15.128/

20.454/MAS.883

Neurotechnology Ventures

10.807/15.371 Innovation Teams (i-Teams)

15.360 Introduction to Technological Entrepreneurship

15.366 Energy Ventures

15.369 Corporate Entrepreneurship: Strategies for Technology-Based New Business Development

15.375/EC.731/MAS.665 Development Ventures

15.387 Technology Sales and Sales Management (starting Spring 2014 this course is now called Entrepreneurial Sales)

15.395 Global Entrepreneurship I: Entrepreneurship Without Borders

15.389 Global Entrepreneurship II: Global Entrepreneurship Lab

15.390 New Enterprises

15.399 Entrepreneurship Lab (E-Lab)

15.615 Basic Business Law for the Entrepreneur and Manager

15.933 Strategic Opportunities in Energy

15.S05 Spec Sem: Regional Entrepreneurial Acceleration Lab (REAL)

15.S07 Spec Sem: Healthcare Ventures

15.S71 Spec Sem: Application of Advanced Entrepreneurial Techniques (starting Fall 2014 this course is offered as 15.378/15.370 *Building an Entrepreneurial Venture: Advanced Tools and Techniques*)

HST.590 Biomedical Engineering Seminar Series

IAP 2014

15.S21 The Nuts and Bolts of New Ventures/
Business Plans

15.S24 From MIT to CEO: Technologists Leading Startup Ventures

15.S25 The Story of One Laptop Per Child

15.S62 The Business of Robotics

Spring 2014:

2.739/15.783/ESD.32 Product Design and Development

15.356 Product and Service Development in the Internet Age

15.615 Basic Business Law for the Entrepreneur and Manager

15.S16 Spec Sem: Entrepreneurial Product Development and Marketing

2.752/2.753 Development of Mechanical Products

15.358 Software and Internet Entrepreneurship

15.618 Law and Cutting-Edge Technologies

15.S71 Spec Sem: Application of Advanced Entrepreneurial Techniques

2.888 Professional Seminar in Global Manufacturing Innovation and Entrepreneurship

15.363/HST.971 Strategic Decision Making in the Life Sciences

15.648 Spec Sem: Focus on Intellectual Property in New Technologies

(starting Fall 2014 this course is offered as 15.378/15.370 Building an Entrepreneurial Venture: Advanced Tools and Techniques)

3.086/3.207 Innovation and Commercialization

15.376/MAS.664 Media Ventures

15.818 Pricing

ESD.125 Mapping and Evaluating New Energy Technologies

6.903/15.628 Patents, Copyrights, and the Law of Intellectual Property

15.387 Entrepreneurial Sales

15.911 Entrepreneurial Strategy

MAS.533 Imaging & Fabrication Ventures

6.933 Entrepreneurship in Engineering: The Founder's Journey

15.390 New Enterprises

15.S08 Spec Sem: User-Centered Innovation in the Internet Age

10.807/15.371 Innovation Teams (i-Teams)

15.394 Dilemmas in Founding New Ventures

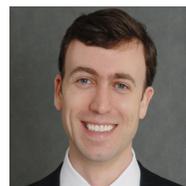
15.S15 Spec Sem: Entrepreneurship in Large Markets with Low Income

15.399 Entrepreneurship Lab (E-Lab)

15.431 Entrepreneurial Finance

At the Martin Trust Center, we not only got knowledge to pursue our dream, but we got invaluable connections and consistent support to successfully launch our company.

JASON WHALEY,
MBA '11,
CO-FOUNDER
OF MANUS
BIOSYNTHESIS



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

Fiona Murray,
Faculty Director

Edward Roberts,
Founder & Chair

Professors

SCHOOL OF ENGINEERING

Tim Berners-Lee
Vladimir Bulović
Charles Cooney
Martha Gray
Doug Hart
Bob Langer
Don Sadoway
Sanjay Sarma
Joel Schindall
Alex Slocum

SCHOOL OF ARCHITECTURE + PLANNING

Joi Ito
Sandy Pentland
Ramesh Raskar

SLOAN SCHOOL OF MANAGEMENT

Christian Catalini
Michael Cusumano
Steven Eppinger
Charles Fine

Yasheng Huang
Matt Marx
Fiona Murray
Edward Roberts
Antoinette Schoar
Scott Stern
Catherine Tucker
Eric von Hippel

Lecturers

Noubar Afeyan
John Akula
Kirk Arnold
Howard Anderson
(through FY14)
Bill Aulet
Steven Bauer
Jim Baum
Phil Budden

Elaine Chen
Zen Chu
Jim Dougherty
Paul English
Jonathan Fleming
Joe Hadzima
Brian Halligan
Dennis Hoffman
Tod Hynes

Shari Loessberg
Francis O'Sullivan
Luis Perez-Breva
Katherine Rae (through FY14)
Imran Sayeed
Lou Shipley
Reed Sturtevant (through FY14)
Andrey Zarur

2.739/15.783/ESD.32 PRODUCT DESIGN AND DEVELOPMENT

Engineering, business, and industrial design intersect in this cross-disciplinary course that guides students through designing and developing a new product over the course of a semester.

“We want 2.739 students to leave with a set of methods readily available to them to use at whatever stage they are at in the development process,” said Professor Warren Seering, who co-teaches the course with Professor Steve Eppinger and Rhode Island School of Design (RISD) Professor Matt Kressy. “This is their introduction to a much more structured approach to developing new products.”

After each of the twice-weekly lectures, students participate in a hands-on lab session to develop their product. Students are broken into teams of six to eight students, including at least one engineering student, one management student, and one RISD student. The students must learn to work together to accomplish the essential components of designing and developing a new product, including consumer research, design, prototyping, financial planning, marketing, testing, and a final presentation of the manufactured prototype.

“The mechanical engineers work out feasibility and production methods, but we also want them to learn how to do the parts that the other team members do too,” Seering says. “We want them to be able to interact with those types of people in an enlightened way. Because it’s a big group, they have to help one another or they won’t get it done.”

The final presentations take place at RISD and MIT in alternating years and are presented in front of an audience, as well as a board of reviewers. The students are judged on the market value of their product idea, their justification for the market opportunity, the quality of the prototype, and the effectiveness of their presentation. Before the presentation, groups often patent their products.

The 2014 final presentations, held at MIT, showcased products such as a solar-powered tailgating shelter, an infant pulse oximeter, a heated ice scraper, a keyless bike lock, a personal measurement system, and a pollution-filtering scarf.

<http://newsoffice.mit.edu/2014/product-design-and-development-class-partners-mit-sloan-and-risd>

15.390 NEW ENTERPRISES

15.390 New Enterprises is a hands-on course that teaches students a rigorous framework for starting a company, providing valuable experience that students can use to be more successful in starting ventures.

Students who begin the semester with an idea, a technology, or simply a passion to start a company learn how to turn that idea, technology, or passion into a product that customers are willing to pay money for.

New Enterprises is structured around a 24-step framework developed by Center Managing Director Bill Aulet, a serial entrepreneur who started two companies and led a major financial turnaround at a third startup.

“When I started teaching entrepreneurship, I would just talk about my experiences, and students would give me high ratings, but they weren’t becoming better entrepreneurs,” he says. “So I took the best research from MIT and elsewhere, combined it with the lessons I

learned from my successes and failures, and designed the 24 Steps in a manner befitting the rigor that MIT students need to be more successful in founding companies.

“Entrepreneurship is not a purely sequential process, but we needed to give people a place to start to keep them from getting lost ... While there are many iterative loops along the roadmap, it gives enough structure so that people can get going.”

The semester starts with students pitching ideas to each other; they eventually form teams of three around interesting ideas. Over the course of the semester, students immediately put what they learn into practice through the ideas they are developing.

“Starting a company is not solely an analytical exercise; it requires action,” Aulet says.
 “Entrepreneurship is not a spectator sport.”

While the primary focus of the course is simply to learn more about how to start a company, countless students have developed ideas from the course into successful enterprises, or met future co-founders while taking the course. Marketing company HubSpot, which recently raised over \$100 million in an IPO, and FINsix, which has a half-million dollars in preorders for its miniature laptop power adapter, are just two companies that trace their origins, in part, to New Enterprises.

“New Enterprises was transformational for us,” say Justin Burkhart, ’06, SM ’10; and Tony Sagneri, SM ’07, PhD ’12; who co-founded FINsix with Vanessa Green, MBA ’11; and George Hwang, PhD ’10. “We met our business partners and developed a plan to create a real business. [FINsix] never would have happened without this course.”

FACULTY PROFILE

MATT MARX Mitsui Career Development Professor of Entrepreneurship

Noncompete agreements in Massachusetts are getting heat from local startups that complain they cannot effectively recruit employees because they are locked into noncompetes with other companies, and often must leave their industry to work for another employer.

Professor Matt Marx has quantified that impact in his studies, and he recently testified in front of two Massachusetts legislative committees about the harmful effects that noncompetes have on individuals and the entrepreneurship ecosystem as a whole.

“My work shows a ‘brain drain’ as top talent decamps for California and other areas where noncompetes are not enforced,” he says. “I hate to say it, but

when students come to me with two job offers, one in California and one in Massachusetts, I tell them to head west simply to avoid the noncompete.”

Marx also studies how startups use dynamic technology commercialization strategies to establish their place in the market. A startup with a promising new technology may want to license it to an established company, but since the technology is unproven, the startup may create a product using the technology, providing validation that an established company needs to decide to acquire the startup. Marx found that this behavior is more common among startups than many had previously thought.

Marx started out as a software engineer and executive in the speech recognition industry before becoming a professor. “One of the reasons I returned to academia was to try to have a greater impact,” he says. “I hoped as a researcher to



be able to find principles that could be of benefit to many startups as well as entrepreneurial ecosystems.”

MIT has been a rewarding place for him to teach and research because students “are not just learning and thinking about entrepreneurship, but are actually doing it,” he says.

“Over and over, students tell me that they are using what they learned in the classroom that same week,” he says. “It’s especially exciting when engineers and management students come together, as with the founding team of FINsix [a company that used its patented VHF power technology to create a radically small laptop power adapter], to come up with innovative strategies for commercializing new technologies.”

SELECTED RECENT RESEARCH & PUBLICATIONS IN ENTREPRENEURSHIP & INNOVATION

CHRISTIAN CATALINI

Agrawal, Ajay, Christian Catalini, and Avi Goldfarb, "Crowdfunding: Geography, Social Networks, and the Timing of Investment Decisions," SSRN Working Paper, 2014.

MICHAEL CUSUMANO

Gawer, Annabelle, and Michael A. Cusumano, "Industry Platforms and Ecosystem Innovation," *Journal of Product Innovation Management*, Vol. 31, No. 3, 417-433, 2014.

Staying Power: Six Enduring Principles for Managing Strategy & Innovation in an Uncertain World, Oxford University Press, 2010.

MATT MARX

Marx, Matt, Joshua S. Gans, and David H. Hsu, "Dynamic Commercialization Strategies for Disruptive Technologies: Evidence from the Speech Recognition Industry," NBER Working Paper No. 19764, 2013.

Marx, Matt, and Lee Fleming, "Non-compete Agreements: Barriers to Entry...and Exit?" in Lerner, Josh, and Scott Stern, eds., *Innovation Policy and the Economy*, Vol. 12, 39-64, University of Chicago Press, 2012.

FIONA MURRAY

Alison Wood Brooks, Laura Huang, Sarah Wood Kearney, Fiona E Murray, "Investors prefer entrepreneurial ventures pitched by attractive men," *Proceedings of the National Academy of Sciences*, Vol. 111, No. 12, 4427-4431, 2014.

Ding, Waverly, Fiona Murray, and Toby Stuart, "From Bench to Board: Gender Differences in University Scientists' Participation in Corporate Scientific Advisory Boards," *Academy of Management Journal*, Vol. 56, No. 5, 1443-1464, 2013.

Murray, Fiona, Scott Stern, Georgina Campbell, and Alan MacCormack, "Grand Innovation Prizes: A theoretical, normative, and empirical evaluation," *Research Policy*, Vol. 41, No. 10, 1779-1792, December 2012.

EDWARD ROBERTS

Eesley, Charles E., David H. Hsu, and Edward B. Roberts, "The contingent effects of top management teams on venture performance: Aligning founding team composition with innovation strategy and commercialization environment," *Strategic Management Journal*, 2013.

Roberts, Edward B., and Charles E. Eesley, "Entrepreneurial Impact: The Role of MIT—An Updated Report," *Foundations and Trends in Entrepreneurship*, Vol. 7, Nos. 1-2, 1-149, 2011.

ANTOINETTE SCHOAR

Kerr, William R., Josh Lerner, and Antoinette Schoar, "The consequences of entrepreneurial finance: Evidence from angel finances," *Review of Financial Studies*, Vol. 27, No. 1, 20-55, 2014.

SCOTT STERN

Lerner, Josh, Shane Greenstein, and Scott Stern, "Digitization, Innovation, and Copyright: What Is the Agenda?" *Strategic Organization* Vol. 11, No. 1, 110-121, February 2013.

Delgado, Mercedes, Michael E. Porter, and Scott Stern, "Clusters, Convergence, and Economic Performance," NBER Working Paper No. 18250, July 2012.

ERIC VON HIPPEL

Hienerth, Christoph, Eric von Hippel, and Morten Berg Jensen, "User community vs. producer innovation development efficiency: A first empirical study," *Research Policy*, Vol. 43, No. 1, 190-201, 2014.

Torrance, Andrew W., and Eric A. von Hippel, "Protecting the Right to Innovate: Our 'Innovation Wetlands'," MIT Sloan Research Paper No. 5115-13, 2013.

Income from the Hammond-Krasner Endowed Fund and the Roberts Endowed Fund is provided annually to junior faculty and doctoral students to aid their entrepreneurship research studies.

E&I TRACK

The **Entrepreneurship & Innovation Track** within the MIT Sloan MBA program, designed for MBA students who have a strong commitment to entrepreneurship, focuses on launching and developing emerging technology companies. 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 the first-semester course 15.360 Introduction to Technological Entrepreneurship, led by Martin Trust Center Founder and Chair Professor Edward Roberts. Students meet key MIT faculty and outside entrepreneurs, angel investors and VCs, and learn about MIT's renowned entrepreneurial network. In the second semester, students explore startups and develop their 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.

<https://entrepreneurship.mit.edu/ei>

ENTREPRENEURSHIP DEVELOPMENT PROGRAM

EDP leverages MIT's culture of high-tech entrepreneurship to help entrepreneurs, corporate venturing executives, and others involved in entrepreneurial environments learn what they need to develop ideas into successful businesses, and how to increase entrepreneurial opportunities in their corporations, institutions, and regions. The material will introduce participants to MIT's technology transfer system, entrepreneurial educational programs, and entrepreneurial network.

Through lectures by senior MIT faculty, visits to high-tech startups, and live case studies with successful entrepreneurs, participants will be exposed to the content, context, and contacts that enable entrepreneurs to design and launch successful new ventures based on innovative technologies. Specially designed team projects give participants hands-on, practical experience developing a business plan, while networking events bring participants together with members of MIT's entrepreneurial community.

<http://executive.mit.edu/edp>

We have adopted EDP as a MUST in our acceleration program and we have consistently excellent results year after year.

JV PONS, FOUNDER AND
MANAGING DIRECTOR,
BUSINESS INNOVATION;
FOUNDER, VALENCIAN
GLOBAL GROWTH PROGRAM



MIT REGIONAL ENTREPRENEURSHIP ACCELERATION PROGRAM

MIT REAP is a capstone global initiative at MIT designed to help regions accelerate economic growth and job creation through innovation-driven entrepreneurship (IDE). 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's history of leadership in innovation-driven entrepreneurship uniquely positions MIT REAP to educate and engage groups to drive entrepreneurial action in their regions. In contrast to a consulting agreement, in which outside experts tell a region how it should operate, MIT REAP uses frameworks built upon MIT faculty research and practice to enable member regions to develop and implement strategies customized to their strengths and opportunities.



MIT REAP admits 8-10 partner regions annually to participate in the two-year MIT REAP engagement. A typical MIT REAP region has a population of 3-10 million people. Each partner region has a team comprised of 5-7 highly driven and influential regional members and is headed by a regional champion. All five major stakeholder groups are represented in an MIT REAP team: government, corporate, academia, risk capital, and the entrepreneurial community. Such team diversity enables teams to fully represent the stakeholders that inform and influence a regional strategy and ecosystem, ensuring that that programs and policies that bolster the innovation-driven entrepreneurial ecosystem are effectively implemented.

The program consists of four action-learning cycles over a two-year period. These cycles involve highly interactive three-day workshops every six months, which are interspersed by action phases. This integrated experience is designed to develop regional programs that are then tested and iterated. All regions in a cohort attend together all workshops where they have time to interact with faculty, work together as a team, and collaborate with other regions. Two of the workshops take place on the MIT campus, and the other two workshops take place in member regions to showcase other ecosystems and have a central action-learning-oriented case study.

<http://reap.mit.edu>

MIT REAP helped us dramatically improve our entrepreneurial ecosystem, advancing our economic progress. We now have a compass for the future.

– DONNA CHISHOLM,
HIGHLANDS AND
ISLANDS ENTERPRISE,
SCOTLAND



RESOURCES

PROGRAMS

MIT Global Founders' Skills Accelerator

The MIT Global Founders' Skills Accelerator (MIT GFSA) is the premier university student accelerator in the world, offering a capstone educational program to students to round out their multi-dimensional, entrepreneurial experience.

We take the best teams from across all of MIT's schools as well as top student teams from select global university partners, since we believe that the best entrepreneurs approach their ventures with a global mindset.

Student teams are put through a rigorous, educational, summer-long startup accelerator so they make significant progress toward identifying their beachhead market, building the right product, and securing initial customers or partners. GFSA is focused on empowering MIT students seeking to change the world to build impactful, innovation-driven startups.

<http://gfsa.mit.edu/>

Jackson W. Goss Fellows Program

The Jackson W. Goss Fellows Program is a 7-month co-curricular experience that combines academic and experiential learning. The program is designed to prepare exceptional MIT students to create, launch, and grow successful high-impact new ventures.

The Goss Fellows Program seeks to instill in these students the same attitude, energy, and

drive possessed by Jack Goss, who conveyed his WWII experiences and his small-town Midwestern work ethic and values into a prolific career in business. Jack believed you needed teams of strong individuals who believed in constant training, discipline, and responsibility, and such is the legacy that the Goss Fellows will carry forward.

t=0 Festival of Innovation and Entrepreneurship

MIT is known worldwide for innovation and entrepreneurship. But with so many programs and activities throughout the Institute for students to learn about, they might go through their time at MIT without knowing about some of the most exciting projects going on at MIT.

t=0 is designed to change that. It is an event and exhibition that brings together MIT student clubs, startups, organizations, projects and labs that are producing the latest cutting edge projects and startups for students to see. We have also

gotten together a host of famous MIT speakers to discuss some of the compelling work being done across industries, and to share with students how they can get involved in the MIT innovation scene.

Speakers in 2014 included Professors Annette "Peko" Hosoi, Donald Sadoway, Anant Argawal, Michael Cima, Neil Gershenfeld, and Doug Hart.

StartIAP

StartIAP is a mini-accelerator program that takes place during MIT's Independent Activities Period, a four-week break in January between the fall and spring semesters. Teams participate in hands-on workshops on topics such as agile product management, legal responsibilities, and fundraising taught by industry experts and

Martin Trust Center Entrepreneurs in Residence. Teams also have dedicated desk space at the Martin Trust Center and access to labs around campus to further develop their products and companies. During StartIAP, teams will have every chance to go all the way from concept to company.

Advising

The Martin Trust Center's advising network matches current MIT students with Peer Advisors, Entrepreneurs in Residence (EIRs), and Professional Advisors who provide advice about entrepreneurship and startups.

Peer Advisors are student leaders who have experience utilizing MIT's entrepreneurship resources and serve as an entry point to students new to startups. Entrepreneurs in

Residence are full-time MIT staff with extensive entrepreneurial experience. Professional Advisors are highly qualified industry experts and entrepreneurs located throughout the country who offer their time and expertise to provide later-stage guidance to MIT students in accordance with our honest broker policy.



STAFF PROFILE

KYLE JUDAH

Entrepreneur in Residence and Program Director, MIT Global Founders' Skills Accelerator and Jackson W. Goss Fellows Program

Kyle is a two-time software entrepreneur who has raised over \$10 million in venture funding and who had a startup acquired. Just as valuable as that experience have been the failures along the way—the “hard and expensive lessons that I can pass on to MIT student entrepreneurs,” he says.

He also worked for the National Guard's marketing and recruiting division, and says that “the same discipline that the military encourages and demands, the same attributes—determination, commitment, creativity—that the Guard looks for in servicemen/women, are very similar to the attributes and discipline needed to be a successful entrepreneur.”

Two key focus areas at MIT for Kyle are working with student groups to

spin up new centers of excellence where MIT can have a competitive edge in entrepreneurship education, and developing and managing co-curricular and extracurricular learning opportunities such as StartIAP and the MIT Global Founders' Skills Accelerator.

“MIT has done an incredible job of identifying areas like clean energy, medical devices, and biotech, where with the right structures, you can yield a 20x return in the number of entrepreneurs and companies created,” he says. “We like to solve hard problems, and in areas ranging from financial technologies to robotics, drones, and space, we have all the right technologies, talent, and industry connections and expertise for MIT students to make a big impact.”

MIT's community is particularly important for student entrepreneurs, he says. “You can only learn how to be an entrepreneur by being an

entrepreneur,” he says. “And you can be an entrepreneur in isolation, or in a supportive community where you can tap into the right resources, organizations, and community to accelerate learning and position yourself to create an impactful startup. At MIT, you have professors who have created life-saving and life-improving technologies, classmates with brilliant industry and technical expertise, and the right kind of ecosystem to support the kinds of entrepreneurs that our world needs now.”

MIT operates as a “pay-it-forward” ecosystem where alumni support is crucial, he says, and he encourages alumni to reach out to him to get involved. “We cannot best serve the next generation of student entrepreneurs without the knowledge and experience of those who have come before,” he says.

AWARDS

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

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 Martin 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 recipient for 2014 is Andrea Ippolito, SM '12, G (Hacking Medicine and tireless support of MIT entrepreneurship).



McGovern Award recipient Andrea Ippolito, SM '12, G, poses with Professor Steven Hall, the chair of the faculty.



Kevin Berkemeyer, MBA '14



George Miller, MBA '14



Andrew Radin, MBA '14



Elad Shoushan, MBA '14

The Ronald I. Heller Entrepreneurship Grant

The **Heller Grant** is presented annually by the Martin Trust Center for MIT Entrepreneurship to a student group or individual students, working closely with our Center, who make a significant impact on the quality and overall spirit of entrepreneurship at the Institute.

The Heller Grant recipients for 2014 are Kevin Berkemeyer, MBA '14; George Miller, MBA '14; Andrew Radin, MBA '14; and Elad Shoushan, MBA '14.

The Howard and Carol Anderson Fellowship in Entrepreneurship

The Anderson Fellowship is awarded each year by MIT Sloan to recognize up to three distinguished second-year MBAs who have demonstrated excellence in academics and entrepreneurship within the context of the Martin Trust Center's activities.

The Anderson Fellows for 2014 are Haya Al Ghanim, MBA '14; Kathleen Stetson, MBA '14; and Brint Markle, MBA '14.



Haya Al Ghanim, MBA '14



Kathleen Stetson, MBA '14



Brint Markle, MBA '14

The Adolf F. Monosson Prize for Entrepreneurship Mentoring

Created to honor the memory of MIT graduate 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. & Mrs. William S. Grinker, '56, the award continues Monosson's mission of providing mentoring to potential entrepreneurs.

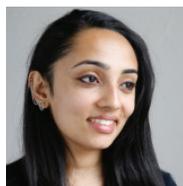
The 2014 Monosson Prize was awarded to Senior Lecturer Zen Chu for his wide-reaching efforts to bolster the healthcare entrepreneurship community at MIT. He co-founded the Hacking Medicine initiative and co-created the course 15.S07 Healthcare Ventures, and his passion and encouragement has inspired countless MIT students, regardless of past experience in healthcare or startups, to pursue healthtech entrepreneurship.



Martin Trust Center Senior Lecturer Zen Chu, recipient of the 2014 Monosson Award for Entrepreneurship Mentoring.

The whole experience at the Trust Center was invaluable to us. Nowhere could we have gotten better support, in all dimensions, to become the entrepreneurs we are today.

– SHAMBHAVI KADAM,
'06, MBA '12,
CO-FOUNDER
OF DEPICT



– KIM GORDON,
MBA '13,
CO-FOUNDER
OF DEPICT



OUR STAFF

Leadership Team



Bill Aulet,
Managing Director



Fiona Murray,
Faculty Director



Edward Roberts,
Founder & Chair

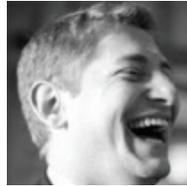
Staff



Christina Chase,
Entrepreneur in Residence & Lecturer



Josh Forman,
Entrepreneur in Residence



Kyle Judah, Entrepreneur in
Residence & Program Director,
MIT GFSA and Goss Fellows



Sam Breen,
External Resources Connector &
Business Problem Solver



Ana Cuellar,
Chief of Staff



Chris Snyder,
Program Coordinator



Eliza Deland,
Academic Coordinator



Pat Fuligni,
Senior Administrative Assistant



Georgina Campbell Flatter,
Director, Executive Programs,
MIT REAP



Steve Haraguchi,
Director, Program Design &
Implementation, MIT Innovation Initiative



Laurie Stach,
Program Manager, High School
Education Program



COMMUNITY

STUDENT CLUBS AND INITIATIVES

MIT has over 20 student clubs and initiatives with a focus on entrepreneurship. The Martin Trust Center provides programmatic advising to many of these clubs, and several of them use our E40-160 meeting space to hold club meetings and events.

Specific to Entrepreneurship:

- | | | |
|---|---|--|
| MIT \$100K Entrepreneurship Competition | MIT Entrepreneurship Review (MITER) | MIT Sloan Entrepreneurs for International Development (SEID) |
| MIT Clean Energy Prize (CEP) | MIT Global Startup Workshop (GSW) | MIT Sloan Entrepreneurship & Innovation Club |
| Discover Entrepreneurship and Leadership (DEAL) | Hacking Arts | StartLabs |
| Freshman Pre-Orientation Program (FPOP) | Hacking Medicine | MIT Venture Capital and Private Equity Club |
| The MIT Entrepreneurs Club (E-Club) | MIT-China Innovation and Entrepreneurship Forum (MIT-CHIEF) | VentureShips Club |

With an Entrepreneurship Element:

- | | | |
|---|-------------------------------|--------------------------------------|
| The Do Innovation Team at MIT (do.it@MIT) | MIT Sloan Data Analytics Club | MIT Sloan Women in Management (SWIM) |
| MIT Energy Club | MIT Sloan Healthcare Club | TechX |
| MIT Energy Club at Sloan | MIT Sloan Sales Club | TechLink |
| MIT Sloan Business Club | MIT Sloan Tech Club | MIT Water Club |

<https://entrepreneurship.mit.edu/ecosystem/>

ECOSYSTEM

MIT DESHPANDE CENTER FOR TECHNOLOGICAL INNOVATION

Founded in 2002, the Deshpande Center was the first of its kind to promote technology commercialization in an academic environment with proof-of-concept grants to faculty members. To date the Center has funded more than 110 faculty research projects, and 28 spinout companies have been formed from these projects.

MIT ENTERPRISE FORUM

This external-facing organization, founded in 1978, provides a valuable network and resources to connect entrepreneurs to the outside world. The Enterprise Forum has 29 worldwide chapters including a very active Cambridge chapter and runs programs that integrate MIT alumni and the community.

BERNARD M. GORDON-MIT ENGINEERING LEADERSHIP PROGRAM

The Gordon-MIT Engineering Leadership Program, offered through the School of Engineering, enables MIT juniors and seniors to develop leadership and communication skills through an interactive program of realistic hands-on activities, exercises, and classes. Many of its graduates are in startup companies or are receiving accolades for their effectiveness and entrepreneurial initiatives in the larger companies where they work.

THE LEGATUM CENTER FOR DEVELOPMENT AND ENTREPRENEURSHIP

Established in 2007, the Legatum Center administers programs that promote and shape discourse on bottom-up development, especially in emerging economies. It also runs a fellowship program intended to launch enterprises in low-income countries.

THE LEMELSON-MIT PROGRAM

The Lemelson-MIT Program, established in 1994, is dedicated to honoring the acclaimed and unsung heroes who have helped improve our lives through invention. It runs programs and competitions to support this mission, including the \$30,000 Lemelson-MIT Student Prize.

MIT MEDIA LAB ENTREPRENEURSHIP PROGRAM

Founded in 2006, the Media Lab Entrepreneurship Program consists of several courses that help students leverage Media Lab technologies to create new businesses. Students are from the MIT's Sloan and Engineering schools in addition to the Media Lab, and also from Harvard's Kennedy, Public Health, and Education schools.

MIT PUBLIC SERVICE CENTER

The MIT Public Service Center (PSC) provides the guidance, support, and resources for the MIT community to achieve transformative outcomes through service. The PSC supports innovation and entrepreneurship through the MIT IDEAS Global Challenge, an annual competition that awards up to \$10,000 per team for the best ideas to tackle barriers to well-being.

MIT TECHNOLOGY LICENSING OFFICE (TLO)

The MIT TLO assists MIT inventors in protecting their technologies, and in licensing those technologies to existing companies and startups. In the past 10 years alone, it has licensed technology that has created 210 new companies. The office currently averages 80-100 agreements and 500 disclosures per year.

MIT VENTURE MENTORING SERVICE (VMS)

VMS was founded in 2000 and is a free service with no strings attached that is available to all MIT students, faculty, staff, and alumni who qualify. It provides an extensive and structured mentoring service through a network of hundreds of highly qualified mentors, most of whom are MIT alumni.

CHALLENGES FOR THE FUTURE

Last year, we identified three key challenges facing MIT entrepreneurship education. Addressing these challenges will require continual effort and they will not be fully addressed in one year, but progress is essential against these challenges if we are to continue to improve our capacity to deliver optimal results for our stakeholders.

HIGH DEMAND FOR HIGH-TOUCH ENTREPRENEURSHIP EDUCATION

MIT leads the way in university-based entrepreneurship education that consists of experiential learning in the classroom and a wide array of co-curricular activities. Central to our approach is ensuring that our courses are taught by academic faculty in full collaboration with experienced entrepreneurs. This mix of real-world experience and rigorous, tested frameworks creates a positive feedback loop that continually improves the quality of education.

The challenge (and the virtue) of the MIT model lies in its high-touch, resource-intensive approach at a time when demand for entrepreneurship education among students is exploding. Our solution will come not from watering down the quality of student education, but instead finding innovative, creative ways to meet demand.

ACCOMPLISHMENTS OF THE PAST YEAR INCLUDE:

- Documenting a large fraction of the foundational educational material we use in our courses and programs. The Disciplined Entrepreneurship framework, formalized in a book during the 2012-13 academic year, has been the basis for a realignment of the curricula of several entrepreneurship courses so they are better integrated. In collaboration with the Office of Digital Learning, we also created an online course to further disseminate MIT entrepreneurship knowledge.
- Identifying better ways to scale our entrepreneurship advising to incorporate a large group of mentors while maintaining rigor; one initiative is a Peer Advisor Network to train advanced students to help students new to entrepreneurship, allowing our full-time EIRs to engage with students on more specialized topics.
- Securing additional staffing to better support the increased interest in entrepreneurship among students. A third full-time EIR, Josh Forman, and a new program coordinator, Sam Breen, will further develop our ability to scale our entrepreneurship programs while staying lean.

DECENTRALIZED MIT ENTREPRENEURSHIP COMMUNITY

Entrepreneurship at MIT is widespread and can be found throughout the campus. Many leading faculty members are also successful entrepreneurs, dozens of student clubs have some connection to entrepreneurship, and alumni engage in entrepreneurship at ever-growing rates. This breadth has led to a proliferation of ways to engage would-be student entrepreneurs.

With this embarrassment of riches, our challenge is to ensure that the whole is greater than the sum of the parts. In particular, we want to ensure high educational quality based both on experience and on the plethora of entrepreneurship research (of which our faculty are among the world's experts). We also welcome the deep engagement of entrepreneurs and experienced investors in our educational mission at MIT, but we want to ensure that this is done through an honest broker approach that provides advice in a way that limits conflicts of interest, protecting the interests of our students.

ACCOMPLISHMENTS OF THE PAST YEAR INCLUDE:

- Regular meetings between the Martin Trust Center, Venture Mentoring Service, Technology Licensing Office, Deshpande Center, and Gordon Center for Engineering Leadership (the "Gang of Five") to share information, discuss key issues, and work together for the benefit of the MIT entrepreneurship ecosystem.
- Strengthened relationship with School of Engineering to support entrepreneurship efforts within existing engineering programs, including courses, competitions, and the Start6 IAP program; one of our EIRs, Christina Chase, has been invited to teach the introductory engineering entrepreneurship course 6.933 The Founder's Journey in the 2014-15 academic year.
- MIT's creation of Innovation Initiative, which the Martin Trust Center has a strong relationship with; the initiative will foster the free flow of ideas across the Institute, allowing improved coordination while keeping with MIT's decentralized culture.

SPACE CONSTRAINTS

We continually encounter heavy student demand for a wide range of infrastructure-based resources. From designated desk space for student teams and meeting space for teams and clubs, to machine shop and prototyping space, entrepreneurs need a range of different types of space, particularly if they are trying to build physical products.

Machine shops like the Hobby Shop and MITERS already have high demand from entrepreneurs and non-entrepreneurs alike, while dedicated workspace that is centrally located on campus is sparse. Our ability to meet the aspirations of MIT student entrepreneurs is limited by a lack of diverse high-quality types of space.

ACCOMPLISHMENTS OF THE PAST YEAR INCLUDE:

- Securing approx. 1,000 sq. ft. for MIT GFSA teams to support them in the months immediately following the conclusion of the summer accelerator.
- Collaboration with Professor Martin Culpepper in mechanical engineering to create a maker space for student startup teams, expected to open Spring 2015.
- Deep involvement in MIT's discussions on the future of space in Kendall Square; the latest public plans include the creation of an Innovation Space on Main Street.

SUPPORTERS

Individual Donors

We are thankful to those individuals whose generous donations to the Martin Trust Center help sustain our diverse entrepreneurship programming. These gifts, large and small, enable us to take on new challenges each year, continually improving the quantity and quality of our offerings.

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Writers

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