

# Innovation Impact Report

July 2018—June 2019



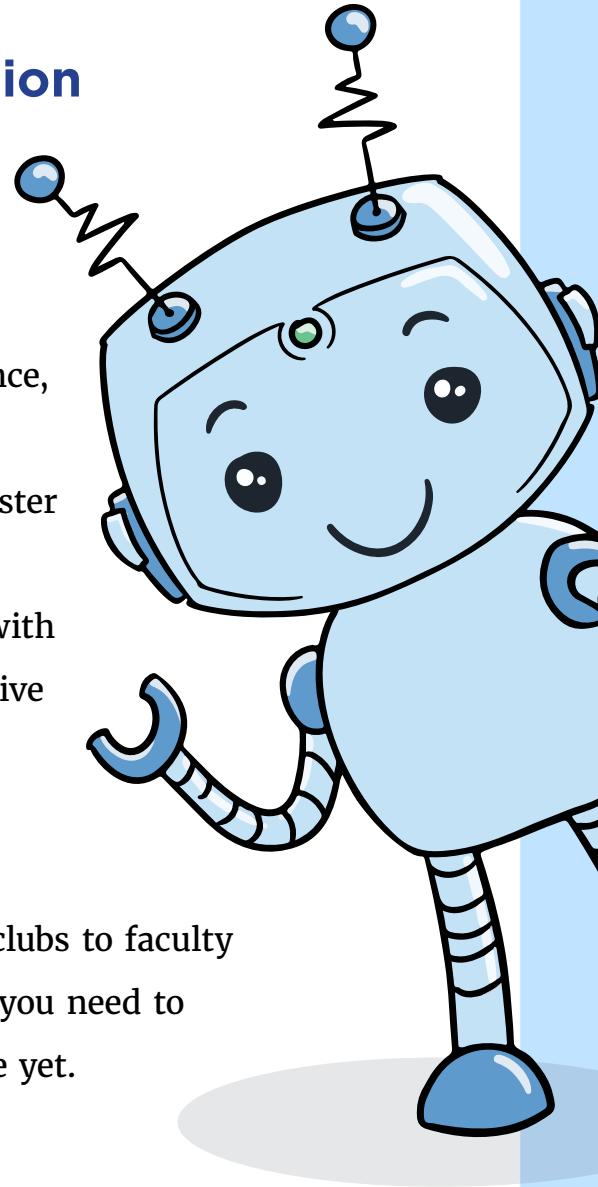
# Introducing Blinkie!

## Your Brandeis Link to Innovation and Entrepreneurship

Do you have an idea for a new project, startup, invention, art exhibit, product, conference, or other endeavor? Do you just like to explore innovative ideas with others? Do you want to foster innovative thinking among your students? Are you from a company that wants to collaborate with students/faculty or are you looking to hire creative Brandesians? Not sure where to start on your innovation journey?

Blinkie is here to help.

From classes to grant programs, student clubs to faculty support, Blinkie can guide you to the resources you need to make your time at Brandeis the most innovative yet.



**Get started today by going to  
[Brandeis.edu/InnoResources](https://Brandeis.edu/InnoResources)**



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# Innovation at Brandeis



It is with great pride that I bring to you the 2nd annual Brandeis University Innovation Impact Report. Brandeis Innovation, composed of the Office of Technology Licensing and the Hassenfeld Family Innovation Center, has compiled this report as a way to illustrate how deeply woven innovation is into the fabric of the university.

Brandeis Innovation is both a lighthouse to guide and collaboration space to catalyze and sustain collaborations and technologies across broad fields of science and scholarship. Some highlights of what we have achieved this year include:

- Over \$1.7 Million in follow-on funding for SPARK, SPROUT and I-Corps teams who have gone on to raise funds since the programs started.
- Over \$123,000 in pre-seed funding given to 23 projects and startups.
- More than 2,100 students, faculty, staff and alumni participated in Brandeis-sponsored innovation programs.
- 13 new patents issued, bringing revenue to Brandeis and bringing Brandeis-developed inventions to industries ranging from biotech to consumer products.
- Collaboration with a cross-campus team to create a new online Innovation Resource portal. Housed within the Brandeis Innovation website, the portal connects the Brandeis community to

innovation activities and support and provides external entities with ways to partner with the university to access talented students, creative staff, and breakthrough technologies.

We are in awe of the many innovation-related achievements coming out of classrooms, dorm rooms and labs here at Brandeis. We look forward to watching those seeds grow while helping enable today's new innovators develop and create solutions to repair the world.

I hope you enjoy reading this innovation impact report as much as we enjoyed putting it together for you!

**Rebecca Menapace**

Associate Provost for Innovation and  
Executive Director,  
Office of Technology Licensing

Historically, Brandeis Innovation has supported

# 125 projects

and startups, out of which:

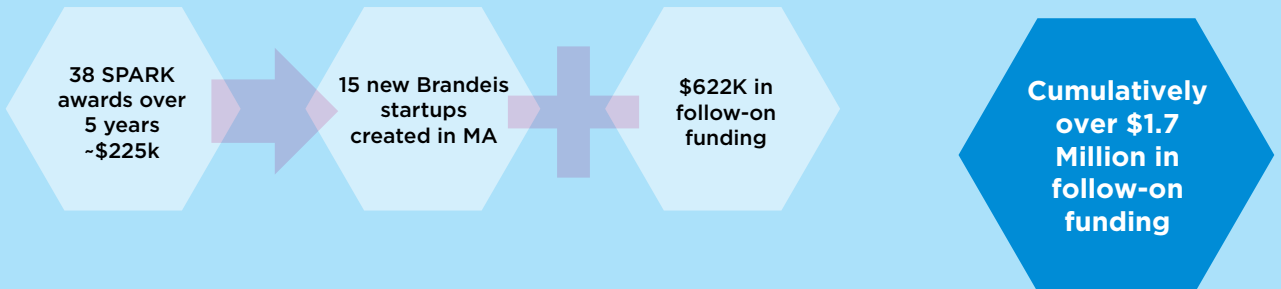
## 56

teams took part in SPROUT since 2011



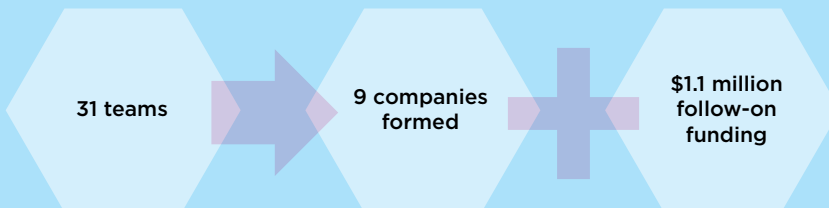
## 38

teams completed the SPARK program since 2015



## 31

teams successfully completed the Brandeis NSF I-Corps program since 2017



## A Look Into Our Brandeis Innovation Ecosystem



Brandeis offers a range of opportunities for students to engage in interdisciplinary research and innovation.

Brandeis prides itself on its highly collaborative innovation ecosystem. Our four schools provide diverse interdisciplinary entrepreneurship and innovation offerings, equipping our students with the needed knowledge and competencies. Brandeis Innovation and our MakerLab further enhance the collaborative spirit, providing incubation, experiential knowledge creation and research translation support.

# Innovation at Brandeis

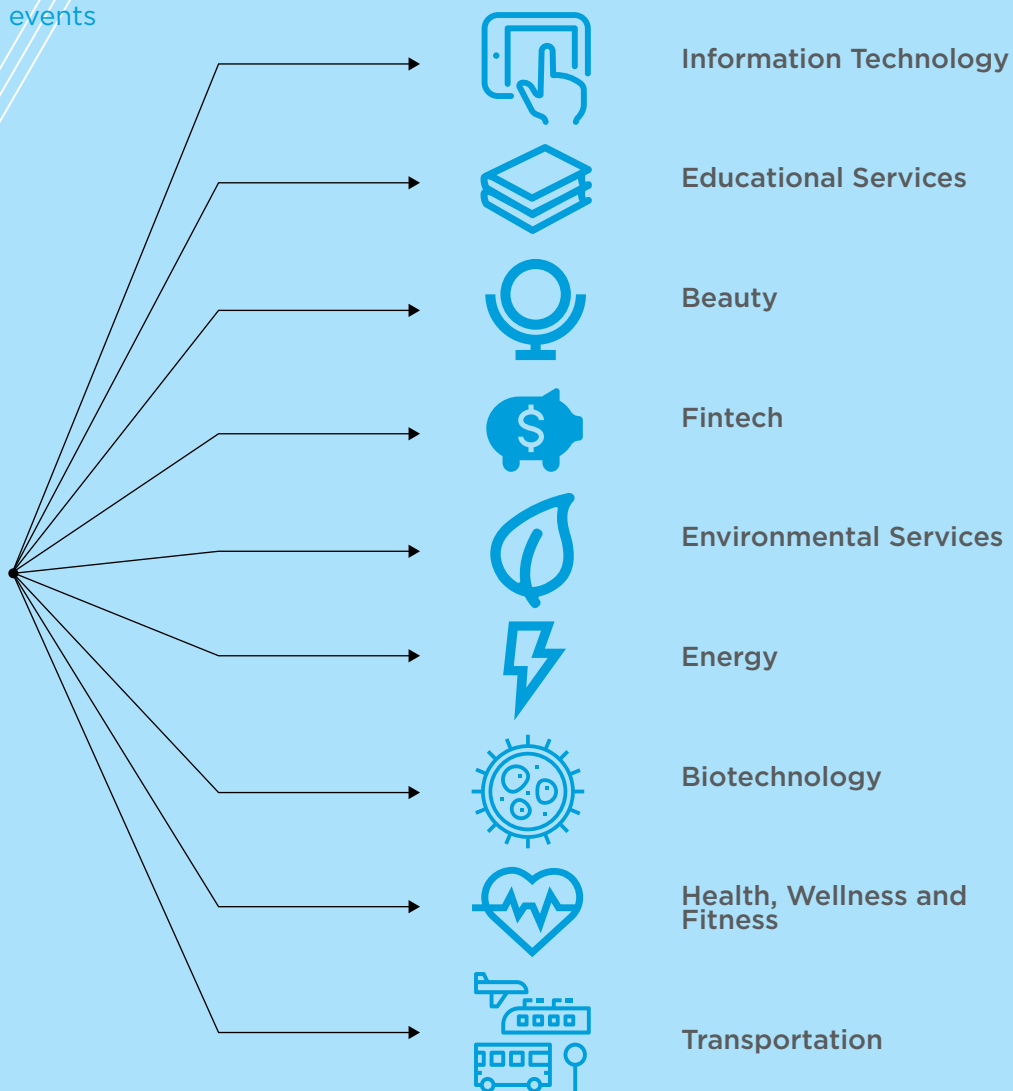
**\$123,176** in pre-seed funding to 23 projects and startups

**2,185+** individuals participated in campus-wide innovation activities

**24+** courses igniting entrepreneurship and innovation

**40+** innovation events

## Impacted Sectors





## Brandeis Innovation

(Home of the Office of Technology Licensing & Hassenfeld Family Innovation Center)

Brandeis Innovation is a focal point for innovators (and would-be innovators) in the Brandeis community and a collaboration point for the formation and gestation of interdisciplinary research and entrepreneurial teams. Brandeis Innovation is comprised of the Office of Technology Licensing (OTL) and the Hassenfeld Family Innovation Center (HFIC). By offering training, mentorship, pitch competitions, and commercialization assistance, Brandeis Innovation fosters innovation among our undergraduate and graduate students, post-doctoral fellows, faculty, and staff.

- The Office of Technology Licensing serves researchers, inventors, entrepreneurs and industry. We provide support and infrastructure to Brandeis investigators for technology development, commercialization and the development of products. We provide industry with cutting-edge technologies for licensing, as well as research collaborations.
- The Hassenfeld Family Innovation Center provides a hub for innovation across the Brandeis campus. The center engages students, faculty, researchers, alumni and staff. It promotes collaboration and discovery through research, grants and partnerships, including our signature programs, I-Corps, SPARK and SPROUT.



## Library Research, Technology and Innovation/MakerLab

RTI, as part of the Brandeis Library, focuses on 4 emerging toolsets: Digital Fabrication, 3D Scanning, Extended Reality, and Robotics. RTI works with tools to bring a design from the digital world to the physical world and vice versa, to make the industrial design conversation approachable. They make traditional engineering tools accessible to subject matter experts to apply in their fields.

They build foundational digital literacy and playfully built mastery, so that the Brandeis community can have the autonomy to explore and express their inner most curiosity. RTI's creative spaces enable students, faculty, staff and alumni to improve the world by creating things with their hands, hearts and minds. By doing this, they contribute to the university's mission of excellence in teaching, learning and research.

Over the course of FY'19, the Brandeis Maker Lab started providing increased support to the Brandeis community through an Automation Lab and Digital Scholarship Lab.



## Brandeis International Business School

By teaching rigorous business, finance and economics, connecting students to best practices and immersing them in international experiences, Brandeis International Business School prepares exceptional individuals from around the globe to become principled professionals in companies and public institutions worldwide. Brandeis International Business School has a worldwide reputation for academic excellence offering five graduate programs and two accelerated graduate programs, as well as opportunities for undergraduates.

## Brandeis

THE HELLER SCHOOL  
FOR SOCIAL POLICY  
AND MANAGEMENT

### Heller School for Social Policy and Management

Heller is the only graduate school where the idealism of a social justice mission meets the rigor and prestige of a top-ranked policy school: Heller is consistently ranked in the top 10 for social policy and top 20 for health policy and management. Heller provides a leading community of scholars committed to progressive social policy and development, at a school specifically founded to advance careers committed to social change.

Heller offers a variety of competitions, workshops and classes to give every student the opportunity to pursue a social venture, develop a plan and get feedback from professionals. Whether pursuing an MBA or not, students learn how to bring a business idea to life.

## Brandeis

SCHOOL OF ARTS  
AND SCIENCES

### School of Arts and Sciences

The School of Arts and Sciences is the undergraduate core of the university. The school comprises 22 departments and 26 interdepartmental programs, which offer 44 majors and 51 minors. Interdepartmental programs provide a structured, intellectually coherent opportunity to explore areas of study that are interdisciplinary in scope. The range of departments and interdepartmental programs offers students and faculty the opportunity and formal structure needed to explore fields in depth and across disciplines. The structure and offerings of the college encourage and inspire students and faculty to pursue a true liberal arts education through degrees and continuing research endeavors.

The Graduate School of Arts and Sciences at Brandeis University is a center for pioneering investigation embedded in the cooperative environment of a student-centered, medium-size research university. The school is driven by academic excellence, reverence for learning, and inclusivity, all values of the Jewish tradition.

## Brandeis

GRADUATE  
PROFESSIONAL STUDIES

### Brandeis Graduate Professional Studies

Brandeis Graduate Professional Studies extends the benefit of a Brandeis University graduate education to a diverse professional population. Part of the Rabb School of Continuing Studies, GPS offers online, part-time master's degrees in today's in-demand fields such as Robotics Software Engineering, Strategic Analytics, and Digital Innovation for FinTech. Courses are led by industry experts who deliver individualized support and up-to-date professional insights. They partner with innovation leaders across industries representing global interests.

## Student Learning/Living Experience



Brandesians have extensive options for collaborative, impactful work.

Training for budding entrepreneurs, start-up incubators, classes in 3D robot design – they're all part of a transformed teaching and learning experience that is one of the goals of A Framework for the Future, in which innovation is a spark that animates student life inside and outside the classroom.

Brandeis offers a solid foundation in innovation for both undergraduate and graduate students across disciplines. Interdisciplinary and individualizable, programs include degrees and concentrations, classes, experiential learning, student clubs, immersion programs, startup competitions, hackathons, field trips, a virtual incubator and a range of other programs.

## Innovation Resources Across the Student Learning/Living Experience By the Numbers



Four innovation-focused graduate degrees and growing

Over 20 courses with a core innovation-skills component each academic year



Three Maker spaces devoted to STEM innovation, including a leading-edge MakerLab

Immersion programs in Israel and China to expose students to global innovation practices and hands-on experiences



Over 12 student clubs dedicated to key innovation sectors, ranging from robotics to coding

## Degrees/Concentrations

*The International Business School offers a wide range of opportunities for students to innovate both in and out of the classroom.*



Photo: Mike Lovett

### **International Business School Strategy and Innovation Concentration**

The Strategy and Innovation Concentration in the International Business School MBA Program teaches students concepts and methods useful in strategic planning and in driving innovation across a range of industries. Students design their curriculum from a broad range of courses and get involved in consulting projects or startup competitions. Career options in this field include management consulting, business development and general management. Graduates can also use these skills to start their own business or work in entrepreneurial ventures. Companies that have hired Brandeis International Business School graduates in these areas include startups and established firms including McKinsey & Company, Amazon, Dell EMC and BlueSnap.

Learn more: <https://www.brandeis.edu/global/academics/mba/curriculum/strategy-innovation.html>

*Prof. Carole Carlson (right), Director of the Heller MBA program, and Joel Pugh, (left) MBA '20, organizer of the Heller 3-Day Startup Challenge. Prof Carlson and her students have been instrumental in forwarding social innovation programs at Brandeis.*



Photo: Mike Lovett

### **Heller Social Impact MBA (Social Entrepreneurship and Impact Management Concentration)**

The Social Entrepreneurship and Impact Management MBA prepares students to lead successful social impact initiatives across a broad range of contexts that include founding an organization with a social mission or working on corporate social responsibility agendas.

Learn more: <https://heller.brandeis.edu/mba/>

*Neil Simister, Director and  
Susan Lovett, Assistant Director.  
The Professional Science Master's  
Program prepares students for  
work in the rapidly-growing  
biotechnology sector.*



Photo: Mike Lovett

### **The Professional Science Master's Program in Biotechnology**

The program combines the teaching of current concepts in biology and business with training in professional skills and ethics. These elements are the foundations of careers in the biotechnology and pharmaceutical industries. The biology segment emphasizes hands-on learning in project laboratories and internships. Business courses foster team approaches to problem solving. Skills seminars focus on writing, on analyzing and presenting data, and on oral communication. Students are individually advised and mentored, and counseled on their career goals and opportunities. The program includes two years of in-residence courses at Brandeis University and a summer internship.

Learn more: <https://www.brandeis.edu/gsas/programs/biotech.html>

*Prof. Pito Salas' course in software  
entrepreneurship is among the  
many interdisciplinary classes in  
the MS in Computer Science for  
Non-Majors*



Photo: Mike Lovett

### **Master of Science in Computer Science for Non-Majors**

Recognizing the high demand for training in computer science, Brandeis created an innovative master's program for majors in the sciences and humanities who wish to transition to the thriving computer industry. Students of the master's in computer science for non-majors have access to the department's dedicated, research-driven computer science faculty, to the thriving high-tech cities of Boston and Cambridge, and to a growing network of alumni who have found careers in the high-tech, high-demand, high-salary fields in both academia and industry.

Learn more: <https://www.brandeis.edu/computer-science/graduate/12-course-masters.html>

## Courses and Curricula Supporting Innovation

### Brandeis International Business School



#### **BUS 230A 1: Entrepreneurship**

Instructor: Charles Reed

Addresses the fundamentals of starting and growing a business, including entrepreneurial finance and financial management. The major assignment is a team project to construct a business plan for a startup company using actual data.

#### **BUS 231A: Entrepreneurial Finances and Business Plans**

Instructor: Charles Reed

Introduces techniques for preparing business plans and explores the process of using a business plan to acquire funding. Requires students to prepare a business plan for a new venture and to present this plan in front of a critical audience.



#### **BUS 232F: Digital Fabrication with Robotics**

Instructor: Ian Roy

The goal of this course is for students to walk away with the ability to imagine a design and produce it in physical reality. Students will learn the fundamental underlying technologies in digital fabrication, 3D scanning, 3D design, and robotics.



#### **BUS 259F: Digital Marketing**

Instructor: David Shaby

Introduces students to important concepts and techniques of online marketing. Students will have first-hand experience applying these concepts and techniques by building a website themselves to market a product or service.



#### **BUS 261A: Managing Technology and Innovation**

Instructor: Benjamin Gomes-Casseres

Focuses on skills and strategies needed to develop businesses based on new technologies. The course explores innovation and technology management, strategy, marketing, financing, and performance of new ventures in entrepreneurial or existing firms.

#### **BUS 263A: Strategy and Innovation**

Instructor: Benjamin Gomes-Casseres

Fast-moving and intensive study of the most important concepts and techniques in business strategy, with special emphasis on the process of innovation. The course is organized in three parts: fundamental frameworks in competitive strategy, how businesses create new value by combining assets in M&A and partnerships, and how business and industries innovate.



### **BUS 269F: Building Sustainable Business**

Instructor: Mitch Tyson

A commitment to corporate sustainability affects business practices, values, and culture. This course examines the influence of corporate sustainability on internal operations, supply chain management, employee engagement, product development, market communications, strategic planning, corporate compliance, and investor relations.



### **BUS 295A: Field Projects (Social Innovation)**

Instructor: Gene Miller

Students work in teams on projects for external sponsors. This course provides an opportunity for students to apply their skills and knowledge to solving real-world problems under the supervision of a faculty member.

### **BUS 297C: Leadership Internships in Social Impact Organizations**

Instructor: Gene Miller

Provides an opportunity for students to individually assume high level strategic, tactical and/or leadership assignments in social impact organizations. Students may become a non-voting board fellow as part of their assignment and/or may be providing board level strategic and tactical consulting.



### **FIN 240A: Venture Capital and Entrepreneurial Finance**

Instructor: Debarshi Nandy

Emphasizes financial decision making skills for entrepreneurs. The structure will follow the firm's life cycle, with modules on contracting, valuation, and financial planning in the entrepreneurial context, raising capital, security choice, and the structure and valuation of exit decisions.

## **Heller School for Social Policy and Management**



### **HS 228A: Social Entrepreneurship**

Instructor: Carole Carlson

This course explores how entrepreneurship has become a driving force in the social enterprise sector, provides tools for developing and evaluating new ventures.. The course also teaches hands-on social venture business plan development tools.

### **HS 234F: International Social Entrepreneurship**

Instructor: Carole Carlson

Students learn how entrepreneurship has become a driving force in the social enterprise sector, provides tools for developing, evaluating and gaining stakeholder support for new mission-driven ventures, and explores the blurring line between for-profit and non-profit social initiatives and their role in sustainable development.



### **HS 343F: Health Care Entrepreneurship**

Instructor: Abdullah Baaj

Students learn how, in health care organizations, entrepreneurial leaders must not only execute with discipline and manage resources and risks, but must also focus on continuously exploring new opportunities and actively assembling the resources (people, partners, knowledge, capital, and other elements) to pursue those opportunities and create value.



### **HS 347A: Healthcare Technology and Information Systems**

Instructor: Darren Zinner (Spring 2019); Cindy Thomas (Summer 2019)

Discusses the role of science and technology in health care settings. Through case studies of technology companies (pharmaceutical, biotech, medical device, and information technology), the class examines how firms manage the creation, development, adoption, and spread of medical innovations in the context of a cost-constrained marketplace.

## **Faculty of Arts and Sciences**



### **COSI 119A: Autonomous Robotics Lab**

Instructor: Pito Salas

Learn fundamentals of autonomous robots software. Learn and understand Robot Operating System (ROS), and foundational algorithms such as SLAM.

### **COSI 165A: Software Entrepreneurship**

Instructor: Pito Salas

The focus of the course is on software-based IT enterprises and the specific challenges and opportunities they present. Learn the “Lean Startup” process in this course with a significant hands-on focus.



### **HSSP 107B: Health Care Technology: Evaluating Emerging Medical Services, Drugs and Devices**

Instructor: Cindy Thomas

An overview of the role of medical technology in the U.S. health care system, with a focus on the impact of prescription drugs on the health care system, their promise for the future, and inherent risks.

## Graduate Professional Studies



### **RMGT 160: Managing Change and Innovation**

Instructor: Ann Conway

Students research, evaluate and apply appropriate change management processes and innovative solutions to achieve strategic objectives and competitive advantages.



### **RPJM 130: Demystifying Agile Project Management**

Instructor: Stephen Gentile

This course covers characteristics and delivery frameworks for agile project management, exploring how agile methods differ from traditional project management and how to recognize projects that may be suitable for agile techniques.



### **RUCD 101: User Experience Design**

Instructor: Sarah Pagliaccio

This course introduces students to user-centered design (UCD) and its associated methodologies, including user research, interaction design, and usability testing.



### **RUCD 150: Design Ideation and Prototyping**

Instructor: Deb Michalides

This course seeks to provide students with practical interaction design and problem-solving skills. Students will be exposed to a toolkit of methods for every stage of the design process. Throughout the course, students will practice divergent and convergent thinking necessary to solve real world design problems within the context of a collaborative and user-centered process.

## Justice Brandeis Semester Program



### **Health, Law & Justice**

Instructors: Professors Sarah Curi and Alice A. Noble

Through the lens of social justice, students investigate (1) the American health-care system and the goals and impacts of the Affordable Care Act; and (2) key bioethical debates, particularly those surrounding patient/doctor relationships, treatment choices, reproductive rights, and end-of-life care. Recently, Health, Law & Justice won a national award for being “Creative and Innovative.” Past Health, Law and Justice students consistently report gaining invaluable experience, confidence, and connections as they navigate their post-Brandeis careers.



### **App Development and Marketing**

Instructors: Grace Zimmerman and Tim Hickey

This program teaches the fundamental concepts behind the design, development, testing and deployment of web and mobile apps. Throughout this 9-week program, students will deepen their understanding of software development and marketing through the creation of a working prototype of a web and mobile app and crafting a product launch marketing campaign for their app.

## Learning Outside the Classroom

### MakerLab

Unlike other makerspaces, the Brandeis MakerLab is organized around a social justice vision that emphasizes broad access to innovation expertise and technologies as well as the positive impact that innovation can make in the world. The MakerLab enjoys very broad involvement from the Brandeis community, including students, faculty researchers, and staff members. Also particularly notable is the MakerLab's vibrant and effective culture of tinkering and beta-testing that enables rapid and effective innovation. This approach has captured the imagination of a growing cohort of faculty members, who are enhancing their courses by integrating maker elements in consultation with expert Library staff. Every day, members of the expanding Brandeis maker community pursue technology projects that develop new forms of culture and craft in a collaborative setting.

### Automation Lab

The Automation Lab is a robotics and embedded systems workspace where faculty, students, staff, researchers and other Brandeis community members can come to rapid-prototype electronic sensor data collection and actuation systems with rentable gear, step-by-step guides, and back-end equipment. They serve all ability levels—whether one is an electronics guru and wants to test out a sensor for their research, or if they have no electronics background and want to start by taking one of the weekly intro to soldering trainings.

### Digital Scholarship Lab

The Digital Scholarship Lab brings together students and faculty to pursue humanistic research questions through digital tools, methods, and practices. Current endeavors include undergraduate work on the Homer Multitext Project and support for the digitization efforts of the Artifact Research Collection interns. The lab is also home to the Mouliana Project which is seeking to employ the best technological and scientific methods to the practice and teaching of archaeology. Individuals or groups with ideas for projects or that are looking for digital resources are welcome to stop by or email.

### Hassenfeld Family Innovation Center: Student Startup Champions

The Startup Champions are Brandeis students that enable the development of an entrepreneurial ecosystem within Brandeis and beyond. Selected students have the opportunity to participate in formulating an innovation strategy for Brandeis, while gaining hands on experience working with early stage startups. Startup Champions proactively support the development of the startups, record their needs, and ensure that all Brandeis entrepreneurs have adequate assistance. This on-campus role, funded by the Hassenfeld Family Innovation Center, has proven to generate internship and job opportunities for Brandeis students who undertake the position.

## Office of Technology Licensing Spotlight: Startup Champions



**Abhishek Kulkarni, BS '18/MS '19**

Abhishek currently works as a software engineer at TripAdvisor. He graduated from Brandeis with a masters in computer science and a bachelors in computer science and economics.

“The startup champion role has helped me to appreciate what it takes to turn an idea into a real world company. It also gave me the opportunity to connect with passionate peers and established entrepreneurs I otherwise would not have had a chance to know.”



**Leana Silverberg, BS '18/MS '19**

Leana Silverberg came to the Office of Technology Licensing's (Office of Technology Licensing) SPROUT program her freshman year wanting to work on a startup

idea. Now, she's a rising tech innovator. A 2019 MassChallenge semifinalist, Leana has participated in the I-Corps program, pitched technologies born in Brandeis labs at VentureCafe BIOConnect, and engaged with biotech professionals across the globe.

“Participating in Brandeis Innovation programs has been life-changing.”



**Yating Wang, MS '19**

Yating gained her bachelor's degree in Finance and Accounting from the University of Washington - Seattle. She graduated from Brandeis with a Master of Science in Business Analytics. Now she is working at Charles River Development (a State Street company) as a product specialist.

“I took the startup champion role in 2018 soon after I attended Brandeis for my master's degree. I got the opportunity to know and help innovators on-campus. More importantly, I learned the workflow of startups and what entrepreneurship means.”



**William Kannengieser, BS '21**

Wil's majors are Business and History with a minor in Mathematics. He has interned at Masschallenge and a startup.

“The positions that I have held at the Brandeis innovation center have given me a chance to grow and learn to a degree that most do not get the chance to until after they graduate. This position is one of the formative experiences of my life.”

## Selected Student Clubs

### Tech Fest

Tech Fest is a celebration of tech related projects, where Brandeis Community members share the projects they have been working on all year. From individuals pulling all-nighters working on projects they're passionate about, to club members working together at weekly meetings, TechFest welcomes all tech-related projects.

### TAMID

Brandeis TAMID offers experiential learning through business in Israel. Beginning with an interactive classroom curriculum, the program soon progresses to give members hands-on experience with companies in the heart of the startup nation.

### Deis Robotics

The primary goal of Deis Robotics is to provide students with the opportunity to learn about numerous aspects of mechanical engineering, electrical engineering, and computer science in order to design and build fully operational machines. The club seeks to unify the student body through its interest in technology.

### Brandeis International Business School Entrepreneurship and Innovation Lab

The Entrepreneurship and Innovation Lab strives to bring students together who are interested in entrepreneurship and innovation on the Brandeis campus. It provides a platform for those students to learn, network and grow.

### International Business School Experiential Learning and Field Projects

Students at the International Business School participate in Experiential Learning by either completing an internship, a field project, or taking an approved course. Across the school, 72% of students participated in an internship and 51% participated in a Field Project for the 2018–2019 school year.

Field Projects are increasingly popular. Students learn to work in teams and apply their academic skills to a real-world problem for an external partner. Students work remotely on a project designed in collaboration with the partner, under the supervision of a faculty member. The Project Partners find that the projects add tremendous value to their companies. “The conduct of the student team, their depth of research and fast pace was truly exemplary,” said Nathan Stevenson, CEO & Founder of ForwardLane – a leading AI FinTech startup that participated in a Spring 2019 field project. “I was impressed by how much work the student team put into the project and the quality of results achieved. Their ability to learn and adapt to this iterative approach of engagement is a testimony to the students’ commitment, to Prof. Hamza Adburezak’s guidance, and Brandeis International Business School.”

## International Business School Global Initiatives

### Hassenfeld Immersion Trip – China:

29 Brandeis International Business School graduate students representing 9 countries went on the Hassenfeld Immersion Trip to China (Hong Kong and Shenzhen) in January 2019. Company visits included Nielson, Alibaba, Maxim's, Chou Tai Fook, HSBC, Ping An Insurance, Foxconn, DJI Enterprise, Dorabot, and KPMG.

### Hassenfeld Immersion Trip – Israel:

30 Brandeis International Business School graduate students representing 7 countries went on the Hassenfeld Immersion Trip to Israel in May 2019. Company visits included: Dell EMC, Magma Ventures, KPMG, Israel-Asia Center, OrCam, MassChallenge Israel, MEET (Middle East Entrepreneurs of Tomorrow), and RSA. This trip also featured team projects with MBA students at Ben-Gurion University's Guildford Glazer Faculty of Business & Management to evaluate a start-up business case.

Prior to the trip, 43% had an interest in founding or working for a start-up; another 20% said they might be interested; post-trip, 50% of students planned to get more involved in entrepreneurship-related activities at International Business School, 60% said that they will pursue working in a start-up post-graduation, and 34% are thinking about starting their own companies one day.

### The Robin '66 & Gary '66 Jacobs Israel Internship Program

In the Summer of 2019, interns from Brandeis secured positions at 4 Israeli start-ups:

- KOVRR <https://www.kovrr.com/>
- N-Frnds <http://www.nfrnds.com/>
- The Floor <https://www.crunchbase.com/organization/the-floor>
- I Know First <https://iknowfirst.com>

## Student Spotlight



### Ariel Xie, MS '20 | 2019 Israel Cohort

"It is an eye-opening experience that let me know how exactly technology is changing the world and the opportunities existing around the world. We should think out of the box and be open to global opportunities. (The) Hassenfeld trip is like an after-class program where I can learn things that I have not learned in class, the speaker and the textbook. I am lucky to get the chance to experience all of this."

# Supporting Research, Creativity and Collaborative Innovation



Brandeis supports strong interdisciplinary collaboration through a range of global programs.

Innovation is the byword for Brandeis scholars and researchers whose collaborations to navigate challenges and solve problems – in technology, in business, and in society – are key to A Framework for the Future.

Research at Brandeis is extraordinarily collaborative and interdisciplinary. Brandeis researchers produce new knowledge, new laboratory techniques, new technologies and therapeutic modalities, even whole new fields of research.

- Our National Science Foundation-funded Materials Science Research and Engineering Center is opening new directions in materials science research.
- The Provost Research Award has supported 11 projects with \$300,000, ranging from anthropology and biology to music and physics.
- Our hackathons and startup weekends have engaged 350+ students.
- Brandeis is one of only 10 National Science Foundation I-Corps sites in New England.

## Supporting Research, Creativity and Collaborative Innovation: By the Numbers

The collaborative nature that distinguishes Brandeis enables bridging the gap between academia and industry. Translating basic research is a long-term process and a massive collaborative effort. Fortunately, Brandeis has all the needed ingredients as well as programs in place to support the process.



**SPROUT, I-Corps  
& Provost  
Research Awards  
\$400K**

SPROUT, I-Corps and the Provost Research Awards provided \$400K in funding.

Our NSF I-Corps program supported 10 teams and equipped 40+ Brandeis researchers and students with the needed innovation skills and knowledge.



Brandeis's collaborative nature extends well beyond campus through our ongoing MassChallenge collaboration and the links that the Asper Center creates with Israel, China, and India.

## Stimulating Cutting-Edge Research

### SPROUT

The SPROUT program – run by the Office of Technology Licensing and funded by the Provost's Office, Office of Technology Licensing and Hassenfeld Family Innovation Center – is designed to encourage and support entrepreneurial activity within the Brandeis community for students, postdocs, faculty and staff in the Division of Science. The awards are intended to help bring research and entrepreneurial ambitions to life by unlocking the commercial potential of research through opportunities to communicate with industry. This program focuses on projects that seek solutions to the world's most challenging public health and environmental challenges.

Grants range from \$1,000 to \$25,000 with higher amounts going toward more advanced research with strong potential to be patented, licensed or commercialized. Applications for SPROUT open in the Spring semester of every year.

To learn more about the SPROUT program, please visit: <https://www.brandeis.edu/innovation/grant-programs/sprout/index.html>

### SPROUT By the Numbers:



**7 Teams**

7 Teams completed  
the program

\$93,500 awarded by  
Brandeis University for  
Spring 2019 Cohort

**\$93.5k**

## Materials Research Science and Engineering Center (MRSEC)

The Brandeis MRSEC seeks to create new materials that are constructed from only a few simplified components, yet capture the remarkable functionalities found in living organisms. In addition to opening new directions in materials science research, these efforts will elucidate the minimal requirements for the emergence of biological function. This challenging endeavor draws upon our expertise in diverse and complementary experimental and theoretical techniques that span the physical and life sciences.

For more information: <https://www.brandeis.edu/mrsec/>

## Profile in Innovation



### Assistant Professor Grace Han

SPROUT winner Assistant Professor of Chemistry Grace Han and her lab are working on interdisciplinary projects at the intersection of fabrication and chemistry. Her work showcases the innovative spirit of Brandeis, where disciplinary barriers do not prevent the development of creative solutions to many of the world's practical challenges.

The Han lab has developed two novel technologies that may one day transform multiple industries: the first is a photo-switchable adhesive, with applications in both industrial and consumer uses. Grace and her team identified novel molecules that respond to light by changing structure. Another technology keeps engine oil warm in freezing conditions, without the use of electric heaters, which are the current practice. Whether creating better adhesives or reducing vehicles' carbon footprints, Grace combines multiple disciplines - chemistry, fabrication, and business - to solve challenges. This typically Brandesian approach is winning notice nationally, and promises many more breakthroughs to come.

## Provost Research Award

The Provost Research Award selection committee made eleven awards, totaling nearly \$300,000, to support projects in a broad spectrum of disciplines. Projects encompassed the fields of anthropology and biology, music and physics, united by a shared commitment to conduct early-stage inquiry on a topic of compelling originality and promise.

## Cross-Boundary Collaboration

### National Science Foundation I-CORPS

The I-Corps program, housed at Brandeis Innovation, prepares scientists to extend their focus beyond the university laboratory, accelerating the economic and societal benefits of basic research. The Brandeis I-Corps program focuses on equipping Brandeis researchers with innovation skills and knowledge. The program is also open to business students, fostering cross-departmental collaboration. Teams that successfully complete the Brandeis I-Corps program become eligible to apply to the NSF I-Corps National Program and receive additional customer discovery support (up to \$50,000).

To learn more about the I-Corps program, please visit: <https://www.brandeis.edu/innovation/grant-programs/icorps/index.html>

### NSF I-Corps™ By the Numbers



1 Startup is generating revenue (GreenLabs)

6 I-Corps teams (Fall 2018)

4 I-Corps Fellowship teams (Summer 2019)



66.67% startups still active (current and past participants)

1 patent issued; 3 patents pending; 1 item of Intellectual Property remained as a trade secret.



## Brandeis Innovation's Mentoring Program

The Brandeis Innovation Mentoring Program connects aspiring Brandeis entrepreneurs to experienced business professionals, startup founders, investors and thought leaders. Over the course of FY '19, 55 active mentors supported Brandeis entrepreneurs as they were undergoing the transition from an idea or project to an actual enterprise. Brandeis mentors are Brandeis alumni who are motivated to give back and build the next generation of successful Brandeis alumni. Some of the current mentors are Brandeis friends, supporters, and local industry experts who are inspired by Brandeis's mission of using business and technology for scalable scientific and social impact.

In addition to mentoring, Brandeis mentors and volunteers come on campus for innovation and entrepreneurship guest lectures, review funding applications and provide industry insights to Brandeis teams or judge on-campus startup competitions.

## Mentor Spotlight



### Eyal Ron, PhD '88

Years of success as an entrepreneur have taught Eyal Ron a lot about what makes for a successful startup. Currently a Managing Partner at Sensei Ventures, Eyal started his journey as a STEM innovator at Brandeis, where he earned his PhD in Chemistry in 1988. He went on to postdoctoral studies at MIT, then to roles as a Principal Investigator in the pharmaceutical industry. Soon, he was founding his own venture, one of several successful companies he has launched in the biotech sector. He has, over the past 20-plus years, led several biotechnology startups to acquisition.

Eyal now shares his deep expertise in startups with Brandeis' next generation of innovators. As

a longtime mentor to biotech startups in the SPROUT and I-Corps programs, Eyal works closely with teams to refine their ideas, identify the target markets for their inventions, and grow as leaders. His guiding principles are to be willing to keep trying, keep learning, and keep discovering. He imparts his philosophy of entrepreneurial resilience and growth to new generations of Brandesians. His dedication has paid off in successful spinoffs, such as EMetNanotech, which grew out of our SPROUT and I-Corps programs with his mentorship. Eyal's experience, empathy, and ability to help teams focus on what matters is an exemplar of alumni involvement that makes a true difference.

## Fostering Connectivity: Innovation Events

### HackMyPhD

Hack My PhD, organized by Brandeis Innovation, is a one day event that congregates I-Corps Fellows, other PhD students and postdocs, and experienced entrepreneurs who have successfully utilized their doctoral degree skills in both the academic and non-academic space. Through a day of inspiring stories, actionable advice, and informative sessions, participants understand what an entrepreneurial path entails and specific steps to undertake to pursue that path.

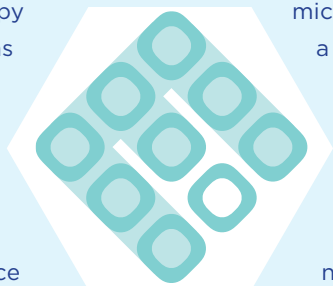
Over the past three years, the program has seen 295 participants from multiple disciplines, and from both academia and industry. The event has met with overwhelming positive feedback from attendees: over 99% of participants surveyed would highly recommend the event to colleagues.

Learn more about the Hack My PhD program here: <https://www.hackmyphd.com/>

## Innovation Spotlight

### PicoCell

Cryo-electron microscopy (cryo-EM) is emerging as the preferred method to determine 3D protein structures in biomedical research and drug discovery. The method's importance was acknowledged with the 2017 Nobel Prize in Chemistry. Before a protein's structure can be analyzed, proteins must be frozen in a thin layer of ice. Problems associated with this "sample preparation" are widely considered the major bottleneck to realizing the full potential of cryoEM. Former Brandeis postdoctoral researcher Joel Meyerson developed a new way to prepare samples for this



microscopy technique while a postdoctoral researcher at Brandeis. This was the start of a team effort, bringing together innovators across Brandeis, culminating in a new startup.

Joel and his team received a SPROUT grant, as well as funding through the I-Corps program. Working with mentors including Eric Furfine, PhD '87 and Eyal Ron, PhD '88, the team analyzed the commercial potential of their project. Eventually, they were joined by an undergraduate Brandeis Innovation Startup Champion, Leanna Silverberg, MS '19, who assisted with market research, and Rong Zhou,

PhD '16, a Licensing Associate in the Office of Technology Licensing, who lent technical and IP expertise. This interdisciplinary team effort paid off: EMet NanoTech, the startup founded to commercialize the technology, was one of two Brandeis teams selected for the highly-competitive NSF National I-Corps program. This win was followed by the startups' selection as one of 100 Masschallenge 2019 Finalists. As the cryo-electron microscopy prep system continues to attract global interest from scientists and investors, it stands as a case study proving that, at Brandeis, innovation is a team sport.

### **Heller Startup Challenge**

The Heller Startup Challenge is a three-day social enterprise initiative, open to Heller students as well as other students from across Brandeis. The challenge gives students an opportunity to put their ideas to the test. Participants form or join teams around an idea to solve a pressing social issue, develop a business plan with the help of a mentor, learn from peers with different skill sets and pitch their plan at the end of the weekend.

### **Hult Prize at Brandeis**

This international year-long student competition to sustainably solve the world's most pressing social challenges offers a \$1 million prize to student teams from around the globe. The Hult Prize at Brandeis enables Heller teams to develop their ideas for expedited entry into the Hult Challenge, and is the culmination of a semester full of entrepreneurship, offering students a chance to pitch ideas refined through feedback at previous events. To meet the requirements of the Hult Prize, students are challenged to scale up their ideas to maximize global impact.

### **Codestellation**

Codestellation is an annual hackathon held at Brandeis University and organized by BITMAP (Brandeis Initiative for Machines, Apps and Programming). On November 10–11, 2018, the hackathon took place as an opportunity to get together with others who share the passion for building and creating technology for a weekend and create something great.

Learn more about 2018's Codestellation: <http://www.codestellation.io/2018/index.html>

### **Innovate 128 Pitch Competition**

Innovate 128 brings together the best startup talent from the colleges and universities that line the 128 corridor. One startup from each school competes in a throw down for the best “rocket pitch” with each given three minutes to sell judges on why they should invest. Other startups from area colleges also have a chance to show their goods at a showcase event, demonstrating the breadth and depth of the local innovation ecosystem.

Learn more: <http://innovate128.com/>

### **DeisHacks**

Hosted by the Brandeis MakerLab partnered with the Brandeis International Business School, Deis Hacks is an evolution of the Printathon and Codestellation hack-events with a community engagement twist. Instead of having a single hackathon challenge, this event's theme fuses design thinking, digital fabrication and social impact to work on real world solutions for non-profit companies. Each hackathon team selects a design challenge from Waltham's diverse non-profit community they find compelling to focus on.

Learn more: <http://deishacks.com/>

Photos: <https://www.flickr.com/photos/brandeisInternational Business School/albums/72157702893350662>

## MassChallenge Profile in Innovation: Galen Karlan-Mason, BA '16, MBA '17, GreenChoice



When he first came up with the idea of creating a better way to find sustainable, healthy food, Galen

Karlan-Mason had no intention of becoming a social entrepreneur. He had just earned his undergraduate degree in International and Global Studies and Business at Brandeis and was completing his MBA at Brandeis International Business School. He did, however, intend to transform his interest in sustainability into a career. Where he imagined that career was in real estate, an industry undergoing a green transformation in response to climate change and other global challenges.

He had an idea, though, one to which he kept returning: what if it were easier to make sustainable food choices? With encouragement from his International Business School professors, Galen started an entrepreneurial journey that led to the International Business School 3-Day Startup Challenge, the SPARK program, and then an I-Corps Fellowship. Now, his startup, GreenChoice, is a MassChallenge Providence Finalist. It has been featured in the Boston Globe as well as national publications. His success story shows how innovations born in the classrooms of Brandeis are making an impact nationally.



## Global Collaboration

### **MassChallenge Collaboration**

The Hassenfeld Family Innovation Center and the Brandeis International Business School collaborate closely with MassChallenge, a global non-profit startup accelerator and competition with a focus on high-impact, early-stage entrepreneurs. Each year, a couple of the most promising Brandeis entrepreneurs get referred to MassChallenge and have the chance to compete to take part in the prestigious accelerator program.

### **Asper Center for Global Entrepreneurship**

The Asper Center for Global Entrepreneurship serves as the International Business School's platform to examine and understand the key trends affecting entrepreneurship across cultures and borders. The Center supports multiple entrepreneurial courses, seminars, conferences, internships, business plan competitions, field visits, and meetings with global entrepreneurs. Below is an overview of events supported by the Asper Center during FY '19.

- **MassChallenge Israel Awards:** The MassChallenge Israel Awards took place on October 17, 2018. Brandeis International Business School oversees the relationship with MassChallenge, a start-up accelerator. Programming, networking, mentoring, internships and immersion experiences all combine to engage students, faculty, staff, and alumni in the global innovation ecosystem.
- **Artificial Intelligence: China, Israel and India:** This event was an evening of networking and programming to focus on artificial intelligence. A panel discussion featured representatives from AI startups in China, Israel and India who talked about their ventures and global AI landscape.
- **Innovation in Israel: Economy & Society:** Presented by the Asper Center for Global Entrepreneurship at Brandeis International Business School and the Schusterman Center for Israel Studies, this two-day event invited experts about the roots and future direction of Israel's innovation economy and its societal impact.

## Honoring Our Founding Values



Giving aspiring innovators the chance to develop their ideas and watch them grow and flourish – an opportunity they might not get through other channels – resonates with our founding values. Brandeis, which began as a place of opportunity for those shut out from opportunities elsewhere, maintains a commitment to justice, inclusion, and shaping citizens with the skills and tenacity to repair the world.

## Honoring Our Founding Values: By the Numbers



Engaged with 2,000+ members of the Boston technology and social enterprise community

Provided \$100,000+ to Brandeis community members for social, sustainable and academic innovations



75 individuals received funding for their impactful projects and startups

Nearly 200 employers visited the campus to recruit students eager to make an impact on the world



Innovative and impactful projects, technologies and programs are frequently displayed on campus and throughout the Boston area at pitch events, showcases, and other innovation/venture events. Further, the university itself consistently supports creative thinkers on campus with funding for innovation in teaching, sustainability, and social impact fellowships while offering programs for those not matriculated at Brandeis to take advantage of its vast academic resources before, during and after they reach traditional college age. Finally, to ensure its students are positioned to find meaningful work after graduation, Brandeis career services works closely with 100s of corporations, government entities, healthcare companies and NGOs, among others, to visit campus and meet the diverse talent pool of undergraduate and graduate students. Brandeis is proud to show the impact its students, faculty and staff make as they strive to undertake the university's founding values to make a positive difference locally and globally.

## Launching Ventures with Local and Global Social Impact

### SPARK

Funded by the Hassenfeld Family Innovation Center, SPARK offers a compelling value proposition for Brandeis Innovators looking to develop entrepreneurial skills, gain knowledge from mentors, and to accelerate their startup ideas.

The SPARK Program is designed to encourage and support entrepreneurship within the Brandeis community, including students (graduate and undergraduate), postdocs, faculty and staff. SPARK applicants are encouraged to participate in Lean LaunchPad training as they develop their innovative ideas with the help of customer discovery and validation processes. The SPARK Program is industry agnostic, focusing on startups with potential for high impact.

Each year, \$50,000 in SPARK funding is divided among the most promising projects. The amount of funding is commensurate with the scope of the project and is distributed based on achievement of project milestones. Applications for SPARK open in the Fall semester every year.

To learn more about the SPARK program, visit: <https://www.brandeis.edu/innovation/grant-programs/spark/index.html>

### SPARK By the Numbers:



**6 Teams**

6 Teams participated in the program

\$22,000 awarded  
by Brandeis  
University

**\$22k**

## Profile in Innovation



### **KaabTech | 2018-2019 SPARK Cohort**

KaabTech is a for-profit social enterprise that aims to finance and distribute solar-powered water pumps in rural Somalia. The vast majority of Somali farmers use inefficient engines powered by diesel for their irrigations. Diesel is too expensive for them and eats up much of their revenue. Furthermore, since there are no adequate roads connecting between villages and cities in Somalia, it takes a couple of days to bring diesel to the farm. Fortunately, the technology to solve this problem exists. It's called solar pumps. KaabTech aims to make this technology accessible and

affordable to Somali farmers by introducing flexible payment models, and utilizing an already existing distribution network used by SomLite, a solar lantern distribution enterprise currently operating in rural Somalia.



"Thanks to SPARK's mentorship and seed-funding, KaabTech is currently piloting a solar irrigation system in Somaliland with a consumer financing mechanism. We

look forward to benefiting from the resources available at SPARK as we scale our project and maximize our social impact."

–Abdishakur Ahmed, MA '20, Sustainable International Development, KaabTech

## Supporting Values-Driven Innovation

### **Provost Teaching Innovation Grant**

Grants to support innovation in teaching are funded by the Provost's Office and administered through the Center for Teaching and Learning. These grants are intended to promote excellence in teaching through the development of innovative instructional methods, new methods of assessing learning or the redesign of courses using technology. While each year has a particular focus, all proposals that address innovation in teaching, assessment, or course design are considered.

### **Brandeis Sustainability Fund**

The Brandeis Sustainability Fund (BSF) provides financial support for Brandeis undergraduate students willing to undertake projects and/or activities to improve Brandeis's environmental sustainability. Recognizing the importance of environmental stewardship for the future of Brandeis University and the larger global community, this fund provides a student driven funding mechanism that allows undergraduate engagement in the efforts to improve Brandeis's overall environmental legacy.

Learn more about the competition here: <https://www.brandeis.edu/sustainability/fund/>

## Our Generation Speaks

Our Generation Speaks (OGS) is a fellowship program and incubator based in the Heller School for Social Policy and Management where emerging leaders create high-impact ventures. The fellowship establishes a set of innovating enterprises that generate significant social and economic value, while creating a cohort of young Palestinian and Israeli community leaders who cooperate across ethnic and political lines to build shared prosperity within the region. Aged 21–31, OGS fellows establish ventures that all have a social impact component: whether they launch nonprofits or focus on job creation. Their array of active ventures include a company beta testing technology that measures the availability and sanitation of water in the West Bank through water tank sensors, a company that has secured half a million U.S. dollars in seed funding from institutional investors to enable costume household products to be available across building complexes, and a company that is decreasing the prevalence of disease in the Bedouin community by supplying genetic testing to over 1,000 individuals. After the 2019 fellowship, their fourth cohort, OGS will have over 100 alumni who will act as change agents in the region.

Learn how to get involved here: <https://www.ogspeaks.com/>

## Brandeis Shines in the Boston Innovation Ecosystem

### Innovation Showcase

Brandeis Innovation's Annual Showcase celebrates our SPROUT, SPARK, and I-Corps winners. Teams showcase their projects the Brandeis community and beyond. The event also aims to celebrate the creative endeavors of entrepreneurial individuals from the university community.

### Brandeis Mass Innovation Nights

On March 14, 2019, the Brandeis Innovation Center sponsored the first Mass Innovation Nights (MIN) event. MIN is a monthly event where local innovators and startups showcase their products to an audience of 100+ people. Their mission is to help local entrepreneurs get more visibility for their new products and to connect members of the local innovation community. The Brandeis event showcased solely companies and innovators with ties to Brandeis.

Learn more about Mass Innovation Nights here: <https://mass.innovationnights.com>

### BeanTown Throwdown

The BeanTown Throwdown is an annual Boston tradition in which student startup teams from Boston's many colleges and universities pitch in front of hundreds of industry professionals, seeking recognition as the best student-led startups in Boston. Brandeis has competed in the Throwdown for two years. The first year Brandeis competed, SPARK participants WorkAround won first place against competitors from MIT, Harvard University, Northeastern University, and other leading institutions.

## VentureCafe

Brandeis' innovation programs have a longstanding, growing relationship with the Venture Cafe. The founding program of the Venture Cafe Foundation, Venture Cafe Boston is the city's leading venue for entrepreneurship programming, hosting over 250,000 visitors in its decade-long history. Their core programs are Thursday symposia called Cafe Nights; Brandeis has been at the forefront of several of the most successful Cafe Nights. 2018's International Business School-sponsored FinTech Night saw record attendance of over 750 participants, making it one of the largest Venture Cafe events to date. Brandeis Innovation staff have served as resident experts in the programs. Brandeis Innovation startup EMet NanoTech has pitched at the events' Shark Tank sessions, winning acclaim from judges. Several Brandeis faculty and postdoctoral scholars have presented their research at Venture Cafe's BIOConnect, the Foundation's biotechnology-focused conference.

## Innovation Career Events

### Career Fairs

#### **Computer Science Fair**

The Brandeis Computer Science Fair is the University's largest tech industry event of the year. This is an opportunity for students to meet leading employers that want to hire Brandeis students for full-time JOBS and internships, including Google, TIBCO, Kayak, IBM, Facebook, and many more! This event is co-sponsored by Computer Science, Computer Linguistics, Graduate School of Arts and Sciences Career Office, Hassenfeld Innovation Center, Hiatt Career Center, Maker Lab and Office of Technology Licensing.

#### **Biotech, Health & Science Meetup**

The Brandeis Biotech, Health & Science Meetup is an opportunity for students to meet, network and gain information from alumni, employer partners, faculty and staff who have expertise in the fields of Biotech, Health & Science. All undergraduate students are welcome regardless of major, class year or career goals.

#### **Just in Time Job & Internship Fair**

The Just In Time Job & Internship Fair is Brandeis University's largest end-of-year recruiting event. This event is an opportunity for students to meet over 50 employers (big and small) that want to hire Brandeis students for full-time jobs and internships in a variety of fields, including business, community impact, consulting, education, finance, government, healthcare, law, research, startups, technology and more.

## Community Impact & Education Fair

The Community Impact and Education Fair is Brandeis University's largest on-campus program designed to connect students, alumni, staff and faculty to local, national and international organizations who hire for opportunities that make a social impact. The breadth of opportunities range from volunteer positions, special projects and internships to post-graduation employment and public-service programs.

## Lifelong Learning

### BOLLI

BOLLI, the Osher Lifelong Learning Institute at Brandeis, is a vibrant year-round community of intellectually curious adults who enjoy exploring a wide-ranging academic curriculum that includes art, current events, drama, economics, film, history, language, literature, music, politics, sociology, and the natural sciences. BOLLI's full catalog is available here: <https://www.brandeis.edu/bolli/prospective-members/courses-programs/index.html>

### Precollege Programs

Precollege Programs at Brandeis offers rigorous academics for bright and curious high school students in a residential setting. Programs in 2019 included Queer Academics & Activism, a first-in-nation program, and Genesis, the university's signature Jewish youth leadership program, offering an award-winning public policy session and a pilot program in Environmental Studies.

### Summer School

For more than 40 years, the Summer School program at Brandeis University has made it possible for both Brandeis undergraduates and guest students to access the university's academic riches with on-campus courses offered in two five-week summer sessions.

In recent years, summer offerings have expanded include a selection of online courses offered over the full span of the ten-week summer session.

### Chaplaincy Innovation Lab

The Chaplaincy Innovation Lab is a think tank that supports research, teaching, and the provision of spiritual care in a range of settings. As the human spirit grows, changes and struggles, chaplains and spiritual care providers accompany us along the way, regardless of beliefs or who or where we are. The Chaplaincy Innovation Lab fosters research and its practical application to improve the provision of spiritual care for all. They host a wealth of data on the profession, provide practical tools for chaplains, and offer educational resources to advance the important work of spiritual care providers wherever it is needed.

## What's Next

We can and do dream big at Brandeis. We believe in our students and researchers. We look forward to the ideas born in our classrooms and the technologies devised in our labs making a mark in the world. This is already happening. In the last fiscal year alone, 12 startups were launched based on research conducted at Brandeis. We are dedicated to realizing that potential. We hope you can imagine that potential, too, and will partner with us to achieve it. One of the most effective ways to lend support is through a gift to Brandeis Innovation.

Your gift in support of innovation enables us to offer idea accelerators like our SPARK and SPROUT programs, which encourage and support entrepreneurship. These are just a couple of the many programs that are spawning new approaches to innovation at Brandeis – and which rely on supporters to move great ideas into action.

To support our efforts by making a contribution to our ongoing programs, please email [otl@brandeis.edu](mailto:otl@brandeis.edu). A gift in any amount made to Brandeis Innovation will have an immediate and powerful impact.

## Data Collection

Our methodology included both quantitative and qualitative data. We collected the data from our own and departmental primary sources, questionnaires, interviews, and historical data. Six discrete data collection methods and sources were utilized to ensure completeness and accuracy:

1. Publicly available primary materials: These consisted of departmental websites, course descriptions, and printed reports.
2. Brandeis Innovation historical data: This consisted of program applications, which contained the majority of self-reported data from SPROUT, SPARK, and I-Corps applicants. Such data included projects, industries, participant demographics, and inventions.
3. Non-public primary sources collected by department administrators: This consisted of event attendee reports, program participant counts, funding amounts and program strategies.
4. Interviews with seventeen (17) recent and past Brandeis Innovation program participants and stakeholders: These were conducted in person or via phone. A representative selection, as closely as possible, were chosen for these interviews. Participants selected included both recent and past grant recipients, and were drawn from both student and faculty, as well as, as near as possible, being drawn from disciplines proportionally representative of program disciplines as a whole.
5. Survey Data: A quantitative and qualitative survey was emailed to those participants in SPARK/I-Corps. The survey had a 39.34% response rate.
6. SPROUT Final Reports: Every year, recipients of SPROUT must complete a final report. These reports include data on project outcomes and the data are similar to that collected in the survey, which is why SPROUT recipients were not included in the above two surveys.

### Notes:

All quotes in this report are expressed verbatim from primary data collection, ie, the interviews and the surveys.

We hope that the documentation of data and testimonials from entrepreneurs that have been positively affected by these innovation-driven activities serve to the betterment of Brandeis as a leading knowledge institution. We will continue to collect data on an annual basis and foresee a future where Brandeis increasingly becomes a leader in ground-breaking innovation meeting the challenges of tomorrow.





**Brandeis** | INNOVATION