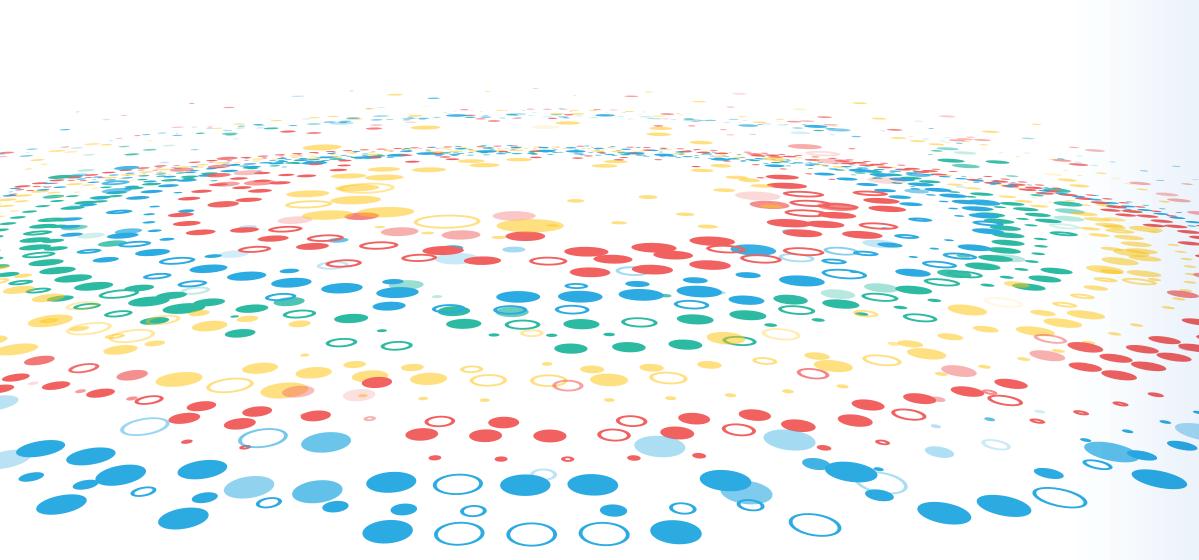
Highlights 2022

Brandeis

BRANDEIS INNOVATION



Brandeis BRANDEIS INNOVATION

It has been a remarkable year here at Brandeis Innovation! I am pleased to share with you our 2022 Highlights which features our technology transfer and programming activities. Throughout the year we continued to refine our programs and services to better support the Brandeis community of inventors, entrepreneurs, students, staff and faculty.

Highlights of the year for Brandeis Innovation include:

- Sixteen new licenses secured for technologies created at Brandeis
- Nearly \$4 million in licensing revenue received
- Over 20 new projects launched by our Spark, Sprout and I-Corps teams
- Two teams accepted into the MassChallenge 2022 Boston cohort
- One team earned a spot in the NSF I-Corps National Teams program
- Several teams went on to win prestigious startup challenges.

Our teams have proven that they can compete with the best and brightest in the startup community.

Throughout all of this success, it is the people that make Brandeis Innovation special. From those who have donated their time to mentor our teams, to the faculty, staff and students who continue to develop groundbreaking technologies and innovations, we are grateful for all that you do. We are excited to keep working with all of you to create an even more supportive and dynamic environment for innovation and entrepreneurship at Brandeis.

Thank you for your support, and we look forward to working together in the coming year!

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



From those who have donated their time to mentor our teams, to the faculty, staff and students who continue to develop groundbreaking technologies and innovations, we are grateful for all that you do.

randeis University is a research leader in the natural, social, physical, and information sciences. Our unique strength is our collaborative spirit. Brandeis is where Nobel Prize-winning biologist Michael Rosbash and Jeffrey Hall, professor emeritus of biology, cracked the genetic code of circadian rhythms, found in almost all life. It's where Professor Suzanne Paradis, a neuroscientist, is developing therapeutics for treating epileptic seizures. And where Professor Wendy Cadge collaborated with academics from various institutions to develop training modules for healthcare providers to become spiritual generalists.



Intellectual Property (IP) created by Brandeis University's research programs have powered several successful startups, including:

A History of Innovation

• Syntonix, acquired by Biogen and spun off as Bioverativ[™], later acquired by Sanofi, developer of two FDA-approved hemophilia drugs: EloctateTM and AlprolixTM;

• ThermaGenix, creator of PCR additives to enable better sequencing sample prep;

• RC Analytics, providing data analytics solutions for organizational performance optimization;

• Dexela, producer of Complementary Metal-Oxide-Semiconductor X-ray detection technologies, acquired by PerkinElmer;

• ArQule[®], pioneer in small molecules for biomarker-defined oncology and rare disease therapeutics.

Select Brandeis Products in the Market

Partnering with Brandeis University means tapping into our deep expertise in functional foods, neuroscience, research reagents, chemistry, therapeutics, materials science, AI, and data analytics. We have a wide variety of IP and technologies available for licensing. Our diverse portfolio has a strong track record in the market, with 54 active licenses, including:

- Sanofi EloctateTM(ELOCTA® in EU) and AlprolixTM: two FDA-approved hemophilia therapeutics Corazonas Heartbars: Utilizes non-esterified plant sterols to lower cholesterol and promote cardiovascular health
- Conagra Smart Balance[®], Earth Balance[®], BestlifeTM: All use a Brandeis developed 1:1 blend of saturated and polyunsaturated fats to improve cholesterol ratios
- **Bruker FluoroType STI:** an innovative fluorescence-based test system, can be used for the fast and reliable diagnostics of sexually transmitted diseases.
- Bruker Fluoro Type® SARS-CoV-2 varID Q: a multiplex PCR test for detection and quantification of SARS-CoV-2 and simultaneous identification of four different S gene mutations of SARS-CoV-2.
- Thermagenix ThermaStopTM, ThermaGoTM and ThermaStop-RTTM: Simple, Universal, easy-to-use reagents that improve product yield and specificity in PCR amplifications.
- **NoCow Energy Bars:** made with coffee flour, a nutritional that preserves the caffeine and antioxidants of coffee
- Spiritual Generalist Training for Healthcare Clinicians: an educational tool to train healthcare providers to be spiritual generalists
- **RC Survey Tool:** for the assessment of organizational relationship coordination for driving higher performance outcomes.

During 2022, Brandeis Innovation engaged stakeholders with training, events and mentorship:



"Brandeis Innovation provides a bridge between Brandeis" innovators and the global innovation community."

Rebecca Menapace

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





We support the University's investigators with a full range of intellectual property, commercialization, and business development services through the Office of Technology Licensing and our Virtual Incubator. Our acceleration and grant programs also foster new entrepreneurial activity among students, faculty and staff.

We accelerate innovation at Brandeis by:

- Funding new ventures and innovations through our Spark, Sprout, and I-Corps programs.
- Determining commercialization pathways for inventions born at Brandeis by evaluating inventions, securing IP protection, and developing pathways to commercialization.
- Developing significant revenue streams for the University through structuring licensing deals for profitability and equitable distribution of income.
- Supporting development of industry-academic collaborations, partnerships, funding options and materials sharing.
- Maintaining long-term relationships with licensees, assuring compliance with agreement terms and distributing any income generated by licenses.
- Ensuring compliance with the University's IP and other research commercialization policies.
- Mentoring and training Brandesian entrepreneurs through our Virtual Incubator.
- Creating opportunities for visibility through our events and outreach.

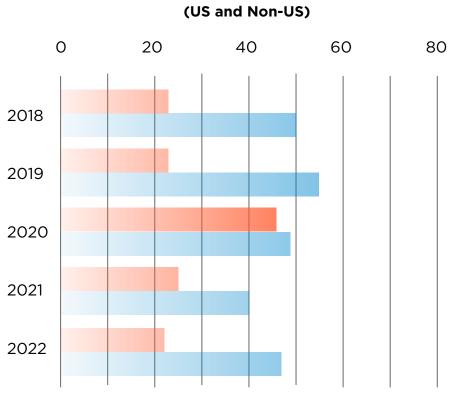
2022 Tech Transfer by the Numbers

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Royalties Generated

(\$ millions)



(US and Non-US)

Inventions Disclosed and

47 Inventions Disclosed 🛑 22 Patents Granted Worldwide

2022 Tech Transfer by the Numbers





47 Invention Disclosures

22 Patents Issued





22 Non-Disclosure Agreements



54 Active Licenses

Annually, on Average, Brandeis Innovation Funds







6 Teams **14 Participants** Up to \$100,000

8 Teams **25 Participants** Up to \$50,000

8 Teams **28 Participants** Up to \$35,000

Missionable, launched by **Douglass Guernsev MBA** '22 and Varun Edupungati MBA '23, creates verified action tokens that mission driven organizations can use to thank donors. Verified action tokens are gaining traction as a new way to digitally verify that an individual has taken a certain action. Providing donors and other who engage with mission driven organizations with unique verified action tokens will increase engagement and create new utility in badging systems. The team started out in fall of 2021 as a project in the Heller Startup Challenge, a hackathon-style weekend in which social entrepreneurs build out ideas for their startups. Fiscal year 2022 saw them reach

Profile in Innovation: Missionable



Douglass Guernsey MBA '22



models, making connections to mentors, and training in pitching their companies to incubators and investors.

Winning a spot in the prestigious MassChallenge global incubator, over the summer of 2022, Missionable continued to refine their business plan, do further research on their target markets, and build their product. They also developed a marketing plan in the MBA class of Christina Inge, MS, Brandeis Innovation's Online Infrastructure Manager.

a series of milestones. They applied to the Spark program, winning a covered spot in the Brandeis Virtual Incubator program at the SparkTank pitch competition in February 2022. The Spark program provided the team with funding and support in developing their business Graduating from Brandeis with a proven prototype, a business plan, and go-to-market strategy, as well as a growing network, Missionable was poised for success.

"Participating in Spark was a catalyst for our growth. It's wonderful how Spark works as part of the overall Brandeis innovation ecosystem, fitting in with other supports such as startup competitions, courses, and clubs, to accelerate startup growth."

Douglass Guernsey

Profile in Innovation: Dan Perlman '68



Dan Perlman, Researcher and Inventor

As far as innovative inventions go, you'll be hard pressed to find such an interesting, diverse portfolio as Dan Perlman's. With over a 100 US and international patents (published and pending), Dan's work spans decades of research and development. Among his vast range of creations are laboratory and consumer products, which include the well-known brand Smart Balance and the Corazonas-branded snack products. Dan's career began in molecular and cellular biology. After graduating with his Bachelor's from Brandeis in 1968, his research took him to the University of Wisconsin and MIT before he arrived back at Brandeis University in 1978.

During this time, Dan's research focus began to evolve towards areas of applied food science. For example, research into healthier natural fats brought Dan to collaborate with Dr. KC Hayes (Professor Emeritus of Biology (Nutrition)), leading to the creation of the Smart Balance blend products.

Following the success of his work in healthy fats, which led to patents and robust sales, Dan's work expanded towards dietary fibers and essential vitamins e.g. Vitamin E, as well as plant sterols. With his findings , he aims to incorporate these healthier nutrients into more consumer food products, namely processed foods.

Dan is a foodie at heart. Combined with his scientific acumen, it is clear to see where Dan's motivation and passion for his research comes from.

Challenges & Opportunities – The Food Industry

Developing products and innovating in the field of human nutrition is far from a simple process, something which Dan is most familiar with as a research scientist and inventor. The challenges associated with developing products can be numerous and varied, particularly when it comes to a scientist's funding. While demonstrating affordable, healthier ingredients could be incorporated into food products, Dan's research shows it can be done affordably as well. Examples include the addition of Omega-3 to peanut butter, plant sterols to the cholesterolreducing Corazonas snack bars and most famously, healthy fats to the Smart Balance fat blend products for improving blood cholesterol.

Although his research has very much been within the processed food space, Dan's work has also ventured into other areas and applications within the food industry. For example, Dan has used coffee beans to develop parbaked coffee bean flour where bakeries have tested and successfully baked a variety of pastries such as muffins, croissants and Tuscan bread. While being nutritionally rich in antioxidants, the added benefit of natural caffeine provides a viable alternative for caffeine consumption other than drinking coffee.

Dan's design of a drip-free glass wine bottle arose from the countless times he noticed red wine always dripping from conventional designs. After experimenting by cutting and grinding existing glass bottles, he was able to take his final design and come up with the drip-free wine bottles. Brandeis has pending and issued patents on this design and is available for licensing.

Learnings & Experiences

His keen eye and inquisitive mind sometimes enables him to effectively take different technologies and bring them together. Innovation is a journey that Dan has always relished, with the challenge and enjoyment to create things of a practical nature. They're experiences that Dan is eager to pass onto others.

Today, Dan continues to innovate and helps other inventors at Brandeis evaluate the feasibility of their inventions.

He intends to continue pushing his technologies towards successful market adoption. In particular, his focus on nutrition certainly has a promising outlook with the way the food industry landscape is shifting towards health. Right now, he is exploring producing higher Omega-3 levels in farm-raised fish by improving their diet.

With more opportunities for innovation and commercialization, there is no doubt the future continues to look bright for Dan, both as a scientist and as a consumer.

"I've always had my eye out looking for products, how one could either incorporate it into something else or improve it."

- Dan Perlman, Researcher and Inventor

Meet the Current I-Corps Teams



I-CORPS

In 2017, Brandeis University received a grant from the **National Science Foundation** (NSF) to create an I-Corps[™] site. The I-Corps program prepares scientists to extend their focus beyond the university laboratory, accelerating the economic and societal benefits of basic research. Brandeis is one of 10 I-Corps sites in New England. Working with select teams, we provide training, resources and funding for innovative startups developed by Brandeis students, faculty and staff.

CancerFighters+

Nathan Wong, Post-Doctoral Student, **Biochemistry | Liam Flynn, Undergraduate,** Chemistry | Frank Asamoah, Brandeis International Business School, MBA | Aliyu Alghali, Undergraduate, Chemistry | Alena Thotam, Undergraduate, Communicative Sciences and Disorders, Hampton University

PI: Prof. Thomas Pochapsky

Cancer Fighters+ is an ambitious group of researchers, business strategists, and students of medicine working together to address unmet needs in the treatment of cancers such as breast cancer and prostate cancer! Their focus is to identify clinically significant Cytochromes P450 that technology developed in the Pochapsky laboratory can target, and then bring this impressive new tool to industry partners to enable its development into a novel therapeutic. They hope to bring selective, effective treatments to market that minimize side effects for patients, leading to simplified care and increased quality of life!

Palm to Calm

Shayna Mazel, PhD Candidate, Heller **Cierra Matthews, Undergraduate, Sports** Sciences and Wellbeing, Hampton University Sonam Deki, Heller MA student (SID with a concentration in gender studies) | Manny Glinsky, Undergraduate, Neuroscience and Philosophy

Professor Kenneth C. Haves is the main inventor of palm fruit juice (PFJ) from Brandeis & has held a patent outlining PFJ's prevention of diabetes and related metabolic imbalances since 2016. PFJ is a cost-effective source for dietary phenolics which are known to delay or prevent the onset of serious cardiovascular and metabolic diseases through their anti-inflammatory and antioxidant effects. PFJ is generated as the water-soluble byproduct in the palm oil production process & can be used as a functional ingredient into foods for humans, pets and farm animals. It can also be further concentrated and delivered in pill, powder, gel or liquid formulations.

TeamLift

Riste Lazarov, Teamlift Intern | Meri Ushitkova, Teamlift Intern | Peizhao Li. PhD Candidate. **Computer Science | Jingnu An, Masters** Candidate, Computer Science | Yizheng (Darren) Deng. Brandeis International **Business School, MSF**

environment.

TeamLift is building the missing infrastructure for the skills economy through the first skills wallet. The skills wallet is a validated representation of a user's skills and abilities on the blockchain. TeamLift has built superior human-centric AI that turns passive unstructured data from meetings, emails, productivity tools into real-time validated skills. Instead of relying on self-reported experience or skill assessments, the skills wallet serves as a ledger of what people have actually done. TeamLift's tech is disrupting a process that is costly and highly manual and simply has no space in the dynamic post-covid work

NextZyme

Michael Sennett, PhD Candidate, Biochemistry and Biophysics | Roshni Ray, Undergraduate, Neuroscience | Lah Soukkaseum, Heller, MA, Sustainable International Development **Guilherme Gatti, Postdoc, Biology**

NextZyme is a sustainable biotechnology company that upcycles single-use plastics into new plastic material. The PET, polyurethane, and polyamide plastics industry is expected to grow 10% from a \$29 billion dollar industry to \$32 billion dollar industry in 2025, and yet the production of a key starting material, benzene, has declined by half in the past 20 years. We can meet this market demand by giving single-use plastics a second life by engineering proteins to efficiently degrade polymers into their pure monomeric form and then upcycle those monomers into new polymer materials.



I-CORPS benefits

Support Research

The Office of Technology Licensing provides support in the form of mentor introductions and training sessions.



Customer Discovery Funding

Up to \$3,000 is provided to each team for expenses related to customer discovery and equipment or materials.

Eligibility for Future NSF Funding

Teams that successfully complete I-Corps training become eligible to apply to the NSF I-Corps Teams Program to receive additional support—in the form of mentoring and funding (up to \$50,000)—to accelerate the translation of knowledge derived from fundamental research into emerging products and services that can attract subsequent third-party

Faculty Spotlight: Aida Wong



Aida Wong, PhD., Nathan Cummings and Robert B. and Beatrice C. Mayer Chair in Fine Arts, and Professor of Fine Arts, and East Asian Studies

Aida Wong has always been interested in the connections among art, literature, and social impact. Her work as a professor of art history at Brandeis spans disciplines such as Chinese calligraphy, fashion design, and transcultural modernism.

She is the Nathan Cummings and Robert B. and Beatrice C. Mayer Chair in Fine Arts, and Professor of Fine Arts, and East Asian Studies, teaching courses to Brandeis undergraduates and graduate students in subjects as diverse as painting, the art of the Ming Dynasty, and Fashion History of China. In addition, her research interests address the intersection of fashion and activism. Combining her research and teaching interests, Aida addresses the ways in which art, fashion, identity, and community intersect and function together.

So, it's no surprise that she decided to take her interdisciplinary interests and spin them into a fashion activism startup. Her journey to entrepreneurship as a faculty member shows the power of an idea combined with support from an innovation community. Aida's goal is to fight bigotry and empower people using the power of Chinese calligraphy. To that end, she has created Callimode, a range of jewelry designs that express messages of community, strength, and pushing back against racism. Starting with a necklace made from sustainable gold, and expanding into other sustainable jewelry offerings, including a pair of earrings. Each piece of jewelry offers a message. The earrings spell out "racial harmony" in semi-cursive script, while a necklace says "no color boundaries" in Chinese clerical calligraphy. The necklaces also allude to the Buddhist "realm of formlessness" free of all illusions and divisions.

Her vision is of a whole line of wearable art in real gold and precious stones. The goal is to align political activism with consumers' daily lives through fashion. "Jewelry is something that we can wear on different occasions to see friends, attend a conference or cocktail party, etc., and not just when we are out, picketing and marching," notes Aida. "When people see calligraphy, they usually want to notice the content. So calligraphy jewelry are natural conversation starters; they are truly statement jewelry" The orignal name of the brand, ZZZi Jewelry, has an even deeper meaning: it is a reference to the Chinese character for word, and the specific focus of the name is on using communication to spread love. "I think of my designs as love speech, and we all need more love," says Aida.

Aida got her start in entrepreneurship through the Brandeis Innovation Spark program, in which she won a top prize in the 2021 cohort. After being in touch with the Innovation program for years, including inviting Brandeis Innovation team members to speak to her classes on numerous occasions, Aida decided to take the plunge and explore doing a startup herself. She applied, was accepted, and won funding at the annual SparkTank pitch competition. That started her on the path to receiving the support to make Callimode a reality.

Through Spark, she was able to receive funding, help with identifying her target market, marketing advice, training in business strategy, and connections with industry experts in the Brandeis mentorship network.

It was the network of support that Aida found vital in her journey. "The Spark mentors and administrators, who all have entrepreneurial experience, are some of the most supportive people I know," notes Aida, adding that "I'm still discovering new challenges every day. But I know I can turn to the Spark team continuously for advice." Through focused training on identifying target markets and honing a value proposition, Aida and the other Spark participants were able to supercharge their progress in entrepreneurship. For her, it has been especially rapid progress. Callimode continues to grow, launching new products in Fall '22, and beyond. Aida continues not only to raise awareness through her love speech artwork, but also contribute to social impact in more direct ways: 5% of each sale is donated to non-profit organizations supporting antiracism and Asian communities.

Doing well, doing good, and thriving as a creative professional are all possible in entrepreneurship, Aida says. Creative startups often don't fit the profile of many incubators and accelerators, but the Spark program offers strong support to startups in all disciplines, including the creative arts. The key is to meld a business approach with a social mission and a creative vision. Aida's advice to creative entrepreneurs? "I would say just keep your eye on the goal. And keep getting advice and be open minded."

"For me, it's about shifting gear from thinking academically to strategizing for marketing and designing an e-commerce website. Spark not only makes that possible with the seed funding, it supercharges the process and one never feels alone groping in the dark. Without Spark, I would never have become a business owner within five months of my first pitch."

– Aida Wong



Sprout

The Sprout Program, funded by the Provost's Office and the Office of Technology Licensing (OTL), is designed to encourage and support entrepreneurial activity within the Brandeis community for students (graduate and undergraduate), postdocs, faculty and staff in the Division of Science. The awards are intended to help bring innovative research and entrepreneurial ambitions to life.

Meet the Current Sprout Teams

Assessing emotion regulation ability through a portable mental health care system

Tong Lin, Robert Sekuler, Xiaodong Qu; **Jennifer Gutsell (PI)**

Mood disorders and their treatments have been widely researched using neurophysiological methods such as (electroencephalography) and fMRI (functional magnetic resonance imaging). However, laboratory contexts do not reproduce everyday experiences. Laboratory research is also limited in sample diversity. For example, it is hard to recruit lower-income homebound older adults to the laboratories.

Using neural signals from mobile EEG in combination with machine learning (such as EEG-Based Emotion Classification) to assess emotions can provide reliable data on mood and mood dysregulation, opening the way to effective remote therapy for mood disorders. This invention aims to implement a multisensory system in a mobile health care app that assesses and tracks users' emotion regulation ability.

Expansion of cytochrome p450 inhibitors

Thomas Pochapsky (PI), Nathan Wong, Liam Flynn, Eric Jiang

This invention adds to the catalog of highly specific inhibitors developed for Cytochromes P450s in the Popchapsky lab by pursuing new target CYPs that bear clinical importance. By synthesizing inhibitors to significant targets for certain cancerrelated targets, the team aims to develop new drugs with reduced side effects.

Optical-controlled reusable nano-porous material for water purification

Grace Han (PI), Xiang Li, Sungwon Cho

According to a 2007 World Health Organization (WHO) report, 1.1 billion people lack access to clean drinking water supply; 88% of 4 billion annual cases of diarrheal disease are attributed to unsafe water and inadequate sanitation and hygiene, while 1.8 million people die from diarrheal disease each year. In addition, treatment of oil spills and organic solvent pollution is an important issue for environmental science and technology.

This project is a wastewater treatment device that can complement the conventional pollutant adsorption methods for industrial and household applications by using state-of-the-art nanoporous materials that are capable of adsorbing organic pollutants and releasing them upon light irradiation. It makes wastewater treatment easier, more flexible, and more costeffective.

CapGun Genomics

Paul Garrity (PI), Willem Laursen, Rachel Busby

Sterile Insect Technique (SIT) is a powerful, cost-effective, and environmentally friendly strategy for controlling and even eradicating invasive species, crop pests, and vectors of disease. In SIT, sterile males are released into the environment to seek out and mate with wild females of the same species. A major bottleneck in implementing SIT is the difficulty of generating large numbers of sterile males (currently done using the irradiation method) that are otherwise competitive for mating. Genetic engineering can specifically inactivate genes required for fertility, leaving animals otherwise healthy and competitive

develop the tool further.

Leveraging phosphatase synergy for tissue specific p38 inhibition

Ramasamv

p38 MAP Kinase regulates inflammation and is a major target for drug development for conditions including autoimmune diseases, myocardial ischemia, and cancer. Existing inhibitors of p38 have failed clinically because of on-target toxicity, indicating that tissue- and process-specific p38 inhibitors are needed. Previous efforts have focused on identifying inhibitors that are specific to particular downstream targets of p38 or particular upstream activating mechanisms. Here, we take an alternative approach, leveraging the native inactivation mechanism of p38 by protein phosphatases. This project exploits synergy between pharmacological p38 inhibition and inactivation by tissue- or condition-specific phosphatases to identify beneficial p38 inhibitors to potentially treat a myriad of diseases.

NextZyme

Sharma

Biotechnology companies have proposed to deal with plastic constituent PET monomers, rather than mechanical recycling waste by using enzymes to degrade PET plastic into its

for mating. However, identifying and propagating mutant strains at scale remains challenging, particularly for sterile phenotypes. To address this limitation, this project is a simple generalizable strategy to create and identify sterile individuals at scale. The lab has already successfully created identifiable sterile male and female individuals (among fruit flies and mosquitos) capable of inducing mating refractoriness in wild counterparts and plans to

Niels Bradshaw (PI), Emily Stadnicki, Prem

Douglas Theobald (PI), Michael Sennett, Cris

into PET pellets or flakes. PET monomers carry a higher market value than pellets or flakes; unfortunately, current enzymes are unable to degrade solid, highly crystalline PET without expensive preprocessing, accounting for half the cost of biochemical recycling. Nature has evolved enzymes to break down a wide variety of materials, including PET. While the enzyme is sufficient for nature, it is not suitable for industrial applications. Drawing inspiration from nature, this technology allows prediction of alternative enzymes to those found in nature, allowing for better breakdown of plastics in the waste stream.

Engagement Analytics for Online Classrooms

Benjamin Gomes-Casseres, Pito Salas (Pls), Klodeta Janagi. Jason Fan. Daniel Harivanto. Yousuf Khan. Nikhil Nama. Rezarta Mvrtollari. Amanda Quaranto-Schulte

Teachers are perennially looking for ways to engage better with their students. We try different pedagogies learned by experimentation and from colleagues. But it's hard to know what is working and not working. With online learning, this concern takes on a new dimension. There are new opportunities for distraction, and it is harder for teachers to read the room. Engagement is critical because it affects learning success, student retention and completion, and the satisfaction of students (and alums). Better measurement and analysis of engagement can provide early-warnings to advisors, help with student retention, and improve the quality of online courses. Our technology offers a new level of reliable, objective, and detailed information about student engagement and participation in online synchronous courses. This information helps teachers engage students more equitably and effectively, and gives students actionable feedback on their performance.

From global warming to infectious disease, Brandeis innovators are creating breakthroughs that have the potential to *improve the* lives of millions around the world.

Rebecca Menapace

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

Faculty Spotlight: Jody Hoffer Gittell



Jody Hoffer Gittell, PhD., Professor at the Heller School for Social Policy and Management

From the classroom to the workplace, our way of living always involves some element of coordination and cooperation to accomplish our goals. How we work with others is an essential factor in determining the success of those collective efforts. Being able to measure and monitor these interactions, therefore, becomes important to optimizing workplace dynamics.

How people do their work together has always been of keen interest to Jody Hoffer Gittell, PhD., Professor at the Heller School for Social Policy and Management. Since childhood, Jody's interest in how people work together led her towards a career in academic research, studying workplace interactions and processes. Her learnings and experiences led to the development of her Relational Coordination (RC) theory – coordinating highly interdependent work through shared mutual values and based upon high quality relationships and communication.

Relational Coordination – Benefits and Initiatives

What sets Relational Coordination apart is its simplicity as a tool. By making relationships and communication highly measurable and being focused around collecting information from real people doing work, Relational Coordination accurately captures people's experiences within the workplace.

With the desire to broaden Relational Coordination's reach, Jody created the Relational Coordination Collaborative (RCC). By helping to translate RC's research into practice, RCC supports others in utilizing RC beyond Jody's own work as well as enabling others to connect with one another and share their findings.

While RCC's efforts focus on building a broader network of connections, the tool providing monitoring and analytics services was spun-out from Brandeis as Relational Coordination Analytics (RCA) in 2013– that helps clients optimize their organization's workplace interactions from learnings based on data captured within their work environment.

Among their measurement-related offerings includes the RC Survey instrument. Designed for any quality improvement or transformation initiative, it offers a simple, effective method to gather data, relaying the results in a highly visual, userfriendly way.

Impact and Challenges

Since RC's conception, the theory has been implemented across a wide range of industry sectors, from specialized healthcare, to commercial businesses, social services and education.

Jody's work with Relational Coordination, especially with RCC, has fulfilled her intention – bringing people together across multiple research areas and practices. Today, her work continues to evolve to address current shifts in the way people work. Besides navigating the RC-related challenges associated with client organizational interactions, her research findings within the healthcare sector revealed some significant correlations between relational coordination, work-life balance and burnout. As seen during the pandemic, the ability to work together serves as a protecting factor, creating resilience during times of crisis.

What's Next?

Looking forward, as she develops and scales her efforts, there's no doubt the future of our workplaces will feel the influence and potential impact from its ever-expanding reach across the world.

"I've always been interested in how people do their work together. That started by growing up on a farm, where I lived in a workplace and was involved on a daily basis as a small child. I took that interest throughout my schooling, in how people basically form a community together."

Jody Hoffer Gittell,
Professor at the Heller School for
Social Policy and Management



Spark

Brandeis' Spark Program is designed to encourage and support entrepreneurial activity within the Brandeis community. including students (graduate and undergraduate), postdocs, faculty and staff. The awards are intended to help bring ideas and entrepreneurial ambitions to life.

Meet the Current Spark Teams

The Farmer Foodie

Alison Elliott (Graduate student, MBA Social Impact, MA Sustainable International Development)

The Farmer Foodie LLC is an established brand tapping into the rapidly growing plant-based food market with a unique and healthy Mac & Cheeze. The product is plant-based, gluten free, and made with organic ingredients. It is boxed and shelf stable, and sold directly to consumers. The founder Alison Elliott, is a product and recipe developer and has four years of industry experience as an organic farm education manager. This is her initial product launch, featuring desirable flavors she plans to incorporate into future products.

Sowing Seas

Beck Hayes (Graduate student, MBA/SID), Ariel Wexler (Graduate student, MBA/SID)

Sustainable aquaculture is growing the crops of the future. By 2050, there will be 2 billion more people on the planet and food production will need to increase by nearly 50 percent. Addressing food security is critical to feed a growing planet. We are connectors with a mission to improve coastal community livelihoods in Latin America through vertical regenerative ocean seaweed and shellfish farming. We provide training, resources, and new channels within the flourishing global seaweed market for vulnerable fishermen, women, and youth. By building community-led collectives, we can offer alternative income streams for families with a new and innovative farming practice.

ZZZi design

Aida Wong (Faculty)

The concept is to create jewelry such as necklaces and earrings that bear original designs with Chinese calligraphy. While there are many "name" or "alphabet" jewelry on the market, similar items with Chinese characters that are not clichés (beyond words such as ai 愛 [love] or heping 和 平 [peace]) are rare, and even less common if the design is done in classical calligraphic sophistication. As a professor and practitioner of calligraphy, I imagine basing the jewelry on my own calligraphy with inspirational and "badass" expressions to challenge stereotypes. Proceeds would partly go to causes against anti-Asian racism.

Mission Driven NFT

Douglass Guernsey (Graduate student, Social Impact MBA), Varun Edupuganti (Graduate student, MS in Business Analytics)

We connect students, alumni and donors to the school's mission by creating unique, interactive NFTs to support fundraising campaigns. From digital research molecules, to jerseys, buildings, and awards, we work with artists to create beautiful and inspirational NFTs from the unique stories of our partners. Our platform is everything the university needs to create branded NFTs, from consultation to marketing to drop.

Development)

Tenant2Tenant is a nonprofit organization seeking to challenge the existing power dynamic between landlords and off-campus student tenants. Tenant2Tenant provides a platform to evaluate landlords, offers a consolidated place for resources, and connects students with their peers. Relationships with local universities enable us to reach vulnerable students in need of support, while creating a safe ecosystem to exchange information.

WrittenSpells

Sara Landa (MBA '22)

Google and other search engines are looking for sources of unique, relevant and recent content. To raise your domain ranking, you need to prove to search engines that you are a reputable source of content. Publishing articles frequently and consistently is the key to search engine positioning. However, publishing consistently can be a pain for businesses. They usually end up outsourcing their blog and having to deal and manage shady writers hired on Fiverr or Upwork who offer no guarantees of quality and who can disappear any minute. With WrittenSpells, there's no need to hire and manage overseas contractors that deliver dubious content. Our articles are guaranteed to be error free, on time, and completely unique.

Tenant2Tenant: Rebalancing Power in Favor of Tenants

Shiko Rugene (Graduate student, Social Impact MBA/MPP), Alton McCall (Graduate student, Social Impact MBA), Samuel Aronson (Graduate student. Social Impact MBA), Andy Mendez (Graduate student, Dual Social Impact **MBA & MA in Sustainable International**

Project Insulin

Eric Moyal (Graduate student, Graduate **Professional Studies: Masters of Science** in Strategic Analytics)

Project Insulin, Inc. is a Cambridge-based, tax-exempt non-profit organization that will develop a biosimilar insulin glargine and distribute it to patients at cost. Three pharmaceutical companies make 90% of the insulin produced today. Insulin glargine is 3x more expensive than it was 15 years ago despite no scientific breakthroughs in the same period. The burdensome cost of insulin has created a market where 1.3 million people in the United States are rationing their insulin. As a non-profit, each dollar donated can bring down the price of our insulin. Project Insulin will be the manufacturer and distributor, which will cut out the many intermediary organizations-allowing Project Insulin to enjoy the efficiencies of being a vertically integrated organization.

Each year our Spark participants never cease to amaze me with their intense desire to solve real world problems and ability to channel that intensity into groundbreaking, innovative ideas and solutions.

Rebecca Menapace

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

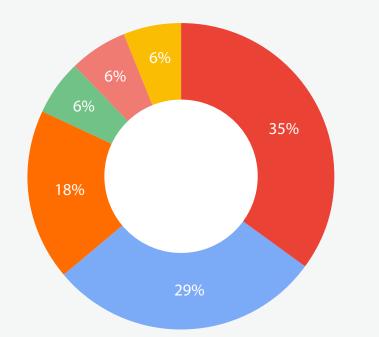
"We bring together interdisciplinary teams because it is diversity, in all its forms, that sparks the best thinking."

Rebecca Menapace

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

Diverse Projects, Common Goals

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