Office of Innovation
and Entrepreneurship

Fiscal Year 2022 Impact Report

POWERING INVENTION IGNITING PROGRESS

University of Pittsburgh

Director's Message

Fiscal year 2022 was transformative for the University of Pittsburgh innovation and entrepreneurship ecosystem. As Pitt innovators continued to translate their ideas and discoveries into new products, services and companies at a brisk pace, several major pieces of innovation infrastructure were announced, progressed or came online, both on campus and in the region. These historic investments promise to accelerate Pitt-developed innovations on the path to market, generating economic growth and opportunity.

To lead off, the Richard King Mellon Foundation announced the biggest single-project donation in its 74-year history—$100 million—to build the Pitt BioForge, a biotech research and development facility along the Monongahela River at Hazelwood Green. The facility will produce cutting-edge cell and gene therapies and other treatments applying the most advanced research manufacturing capabilities. Included in the development will be space for industry partners to collaborate alongside Pitt researchers and startups. The development is a critical missing link for accelerating the growth of the region's life sciences sector.

Coming fully online this year is The Assembly, Pitt's new 250,000-square-foot research facility in Bloomfield near the Hillman Cancer Center. This will leverage the University's research and clinical expertise in the exciting fields of immunotherapy and cancer research. The facility's developer, Wexford Associates, is so excited about the potential of this space that it developed an additional 100,000-square-foot facility for industry partners to work in proximity to Pitt and UPMC researchers and clinicians. We are excited for the translational research this new facility will enable.

Also nearing completion is the UPMC Mercy Pavilion in the Uptown neighborhood between Downtown and Oakland. The nine-story, 410,000-square-foot vision restoration facility will serve patients who need physical rehabilitation and those who have vision impairment or diseases of the eye. The facility also will include a collaborative space for clinicians, researchers, educators and industry partners.

This is the first of three new research hospitals UPMC is developing in Pittsburgh's innovation corridor and is centered on the research program of José-Alain Sahel, chair of Pitt's Department of Ophthalmology, and Gwendolyn Sowa, director of the UPMC Rehabilitation Institute and chair of Pitt's Department of Physical Medicine and Rehabilitation.

As with the Pitt BioForge, here again the foundation community stepped forward to accelerate the pioneering translational research at Pitt. The Hillman Foundation awarded $20 million to the Eye & Ear Foundation of Pittsburgh, which supports Pitt's Departments of Ophthalmology and Otolaryngology.

At Pittsburgh International Airport, a new advanced manufacturing research and development park is under construction. Under the name Neighborhood 91, this site will allow Pitt engineering faculty and students to collaborate on additive manufacturing initiatives alongside industry partners.

Within Pitt, we continued to provide resources for innovation and entrepreneurship. We thank Chancellor Patrick Gallagher for reauthorizing the Chancellor's Gap Fund to provide critical bridge funding for innovations that have commercial potential but require additional experiments or prototype development to attract investors or industry partners.

For promising life science startups, the LifeX life sciences accelerator transformed into a "capital growth company" with the addition of a pre-seed investment fund to provide early-stage funding for the critical period in between company launch and the achievement of market or clinical milestones.

In an exciting development for student innovators, the Office of Innovation & Entrepreneurship's Big Idea Center operating unit moved into a new space on Forbes Avenue this summer to serve as the hub for Pitt student innovation. Additionally, the Big Idea Center began making the first investments into student startups through its Big Idea Advantage Fund, a donor-supported investment fund to assist Pitt students in launching their own companies. The Office of Industry and Economic Partnerships, meanwhile, enjoyed a very productive year. Industry partnerships are a key approach for Pitt innovators to turn their research into life-enhancing and lifesaving new products and services, and the past year has witnessed several new collaborations, such as those with Orange Grove Bio and Novartis.

For the Institute for Entrepreneurial Excellence, the year produced 60 new companies launched with its guidance. Its Small Business Development Center provided services to more than 400 small businesses, including programs for minority-, women-, and veteran-owned businesses.

The progress of the Pittsburgh innovation ecosystem is getting noticed. Startup Genome, a leading policy advisory and research organization for public and private entities committed to accelerating the success of their startup ecosystems, reported in May 2022 that Pitt had jumped 10 spots in its ranking of the top 100 emerging global startup ecosystems, from 23rd to 13th. In North America, it ranked Pitt as the fifth highest emerging ecosystem.

In closing, I extend my sincere gratitude to the staff of the Office of Innovation & Entrepreneurship and its constituent units. Through a period of disruption and uncertainty, they have continued to serve Pitt faculty and students and regional small business owners with diligence, courtesy, professionalism and respect. Their work to inspire and enable Pitt innovators to achieve impact for their ideas and discoveries is remarkable.

Evan Facher
Vice Chancellor for Innovation and Entrepreneurship
Director, Innovation Institute

Innovation Institute

FY 2022 by the Numbers

Invention Disclosures
334

Patents Issued
105

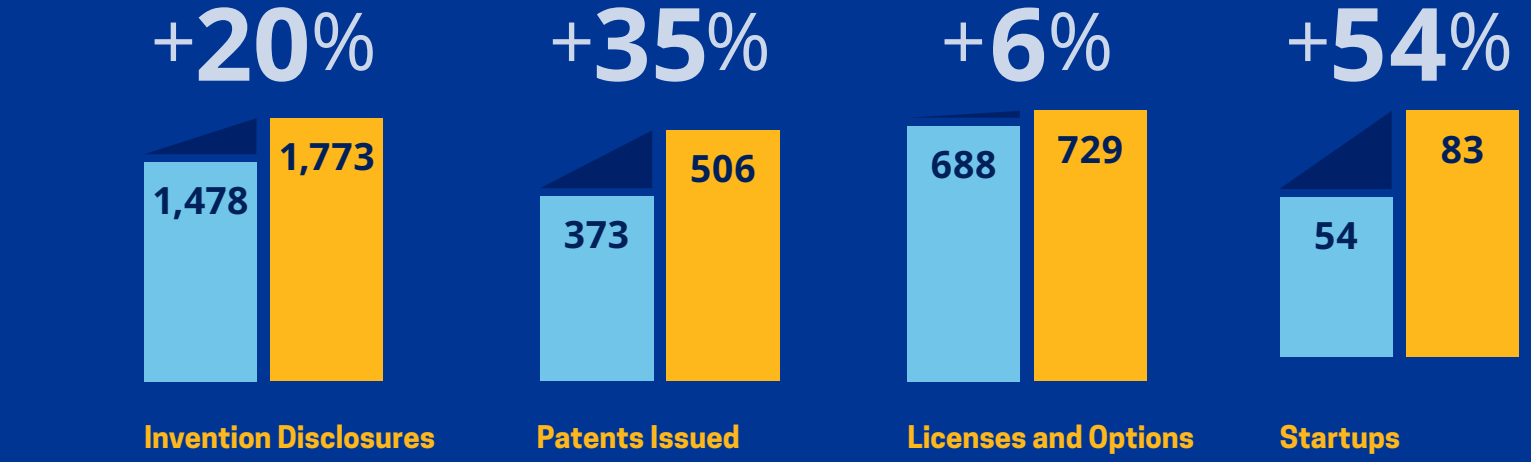
Revenue
$12.19M

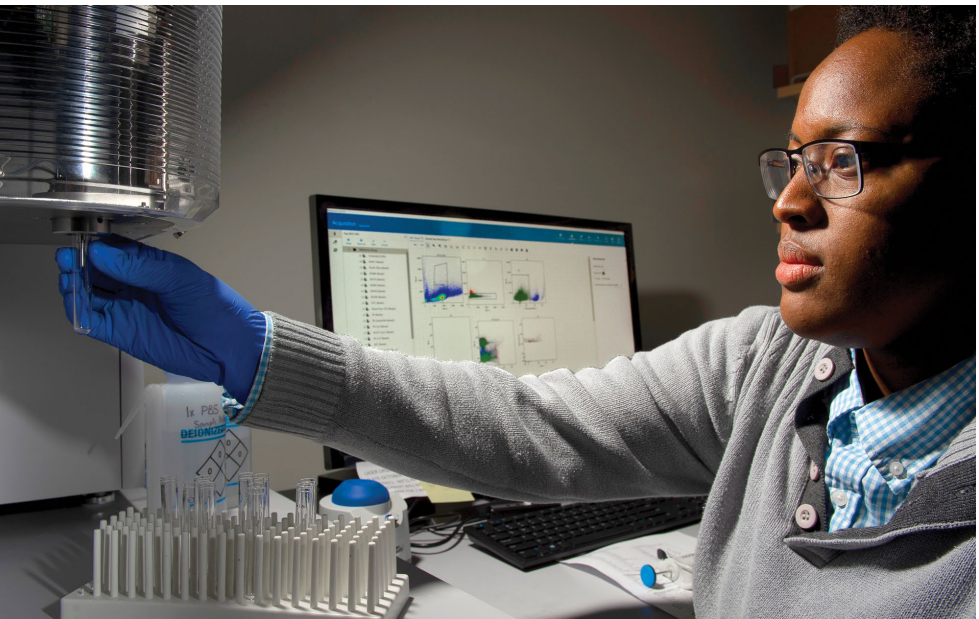
Startups
11

Licenses and Options
164

Five-year Comparison

FY'13–17 vs. FY'18–22





Chancellor's Gap Fund Renewed

The Chancellor's Gap Fund was reauthorized in fiscal year 2022 to provide critical bridge funding for research projects that have demonstrated strong commercialization potential but require key proof-of-concept experiments or other data or prototypes in order to attract interest from potential investors or industry partners. The fund provides grants ranging from $25,000 to $75,000 based on what is needed to advance the project through a significant milestone. A total of $263,000 was awarded in this cycle.

Innovation teams receiving awards in the current cohort are as follows:

PACE-RTP: Perception-Action Coupling Evaluation for Return to Play
Rapid and reliable method for measuring sports-related concussion

Principal Investigator: Chris Connaboy, School of Health and Rehabilitation Sciences

Youbiotics
Personalized probiotics for weight management

Principal Investigator: Steven Little, Swanson School of Engineering

Reusable and Self-sterilizing 3-D HEPA Metal Filters
3-D-printed porous metal filter for use in air filtration applications in masks and room- or building-based air filtration

Principal Investigator: Markus Chmielus, Swanson School of Engineering

LiDIA: Listening, iDentification and Instant Amplification
Device for greatly broadening the identification of hearing loss that is currently untreated

Principal Investigator: Catherine Palmer, School of Health and Rehabilitation Sciences

Pitt Faculty Recognized by National Academy of Inventors

William "Buddy" Clark and Steven R. Little, both faculty members at the University of Pittsburgh Swanson School of Engineering, were selected as fellows of the National Academy of Inventors (NAI), the highest professional distinction accorded to academic inventors. They are the ninth and 10th Pitt faculty members to be selected as NAI fellows since its inaugural class in 2015.

Clark is professor of mechanical engineering and materials science and is cofounder of Diamond Kinetics, a Pittsburgh-based company that produces data-driven bat swing and throwing sensors and analytical software for baseball and softball training. The company's products are used by many of the teams in Major League Baseball and sold directly to consumers at Dick's Sporting Goods. The company employs approximately 30 people on Pittsburgh's North Shore, near PNC Park.

Little is a Distinguished Professor and William Kepler Whiteford Professor of Chemical and Petroleum Engineering in addition to being the department chair. He has appointments in the Departments of Bioengineering, Immunology and Ophthalmology and the McGowan Institute for Regenerative Medicine. Little is cofounder of the Pitt spinout company Qrono Inc., which is developing therapies that change the way cancer tumor cells and immune cells interact in a way that enables immune T cells to infiltrate metastatic tumors.

NAI also selected three University of Pittsburgh faculty members to be among the 83 academic inventors in the 2022 class of NAI Senior Members. They are Antonio D'Amore, research assistant professor of surgery and bioengineering; Cecelia Yates, associate professor in the School of Nursing; and Maliha Zahid, assistant professor of developmental biology.

Pitt Startups on the Move

Diamond Kinetics

Spun out of the lab of Swanson School of Engineering Professor William “Buddy” Clark, Diamond Kinetics designs sensors embedded in the handles of baseball and softball bats and in balls to allow players to measure multiple performance metrics. It announced earlier in 2022 it had become the youth development platform of Major League Baseball (MLB). In this role it will work to make player development fun for kids by offering a digital gamification platform to challenge themselves, compete with friends while interacting with MLB clubs, Statcast data and other partners.

Apollo Neuroscience

Apollo Neuroscience announced earlier this year that it raised $15 million in Series A funding at a valuation over $100 million. Apollo was developed by David Rabin and Greg Siegle, assistant professor of psychiatry, and psychiatry resident David Rabin. It is now selling a wellness wearable device that helps users relax, sleep and focus by delivering vibrations that trains the nervous system to bounce back from stress.

Epistemix

Epistemix, based on the research of Donald Burke, former dean of the Pitt School of Public Health, and John Grefenstette, former professor of Biostatistics and Health Policy and Management, raised a $5 million seed funding round earlier in 2022 as it seeks to expand markets for its agent-based models that can help empower organizations to make better decisions. The company’s platform, FRED, makes powerful modeling accessible and affordable for data scientists, modelers, analysts, and researchers.

New Pitt Startups

Avista Therapeutics
Next-generation gene therapies for blindness

BioSystics
Platform captures, manages, analyzes, shares and computationally models complex data sets from in vitro experimental models, animal models and human clinical data, creating actionable knowledge and predicting biological outcomes that will accelerate and optimize basic biomedical research, drug discovery/development and preclinical trials as well as cosmetic, industrial and environmental chemical testing

GeneXGen
New generation of immune suppressive therapies for improving the safety of CRISPR-based gene therapy

HENY
Early stage startup building a decentralized biobank to empower patients, incentivize research collaboration and unlock the future of precision medicine

Legal Triage
This novel platform helps individuals to navigate legal summaries impacting volunteer participation in preparing for or responding to disasters. The content is searchable by profession and jurisdiction so users can identify the provisions that impact them specifically.

MDR Therapeutics LLC
Platform-based vaccine technology that elicits first-in-class bacterial-specific mucosal immune responses, including both T cell and B cell responses, providing dual levels of protection against pneumonia

OK2StandUp
Fall-prevention systems for residential and in-home care

Painimation
Technology-based pain assessment tool to help patients communicate their pain experience and provide clinicians with the information needed to accurately diagnose and treat pain symptoms

Push2Spin
Medical devices for plastic surgery, beginning with a device that reduces the time needed to process fat for use in cosmetic and reconstructive surgeries

Reach Neuro
Medical device solutions to fight chronic disability

Remplir Bio
Novel immunotherapeutic treatments for cancer that alter the metabolism of immune cells; agents alter the way that immune cells “see” their local environment, resulting in increased immune activity in cancer

Synhale
Developer of drugs designed to address the molecular origins of pulmonary arterial hypertension; novel technology is based on recent discoveries regarding the profound metabolic alterations that drive molecular origins of pulmonary arterial hypertension, which is a deadly and mysterious disease of the blood vessels of the lung

Big Idea Center

In Fiscal 2022, the Big Idea Center engaged with nearly 1,000 student participants in its programming. It was also a year of new beginnings, which included welcoming a new director, putting the finishing touches on a new hub for student innovators and entrepreneurs, and the University's new Big Idea Advantage Fund making its first investments in four student-led startups.

Rhonda Schuldt Named Big Idea Center Director

In August 2021, Babs Carryer, the Big Idea Center's Founding Director, retired, and Rhonda Schuldt was tapped to lead its next era.

Rhonda previously served as an entrepreneur in residence at the Big Idea Center, was the Innovation Coordinator at another university, led an incubator for family and children service organizations to meet unmet community needs, directed public-private regional economic revitalization initiatives to strengthen Southwestern Pennsylvania's economy, founded several businesses, and had executive leadership positions in technology startups.

Under Rhonda's leadership, the Big Idea Center is reimagining its operations, programming, and outreach efforts to serve not only students who want to create the next big startup, but also any students who are curious to learn the innovation process, which is applicable to careers at startups or Fortune 500 companies, and from nonprofits and volunteer opportunities to other personal endeavors.

The Big Idea Center Completes Construction on New Space in the Heart of Oakland

On June 1, 2022, Chancellor Patrick Gallagher welcomed major donors, community partners, and student innovators into Pitt's new hub for student innovation and entrepreneurship. Located at the corner of Forbes Avenue and Meyran avenues, in the heart of Oakland, the new Big Idea Center facility is a reflection of Pitt's commitment to supporting student innovators and fostering a culture of innovation and entrepreneurship across campus. The 5,500 square-foot space includes a Saxbys student-run coffee shop in its open lounge area, multiple meeting rooms, a multi-purpose room, state of the art A/V equipment and multiple convening spaces to stimulate creative collisions and inspiration.

Kuzneski Innovation Cup Now Part of Big Idea Center's Lineup of Programs

Previously housed under the Innovation Institute, the Kuzneski Innovation Cup, sponsored by Andy and Laurie Kuzneski, transferred to the Big Idea Center in Fall 2021. This change was a result of reimagining the competition as an opportunity to support a broad representation of Pitt students with fledging ideas and to encourage more students to step in with early ideas and advance and foster their innovative and entrepreneurial passions. A record 19 teams entered into this year's competition, in which Andy and Laurie ultimately chose 5 winning teams to share in the $25,000 total prize pool.

Pitt Student Innovators and Entrepreneurs Excel

FlowCellutions Wins Trifecta of Pitt Student Competitions

The FlowCellutions student team, composed of founder Becca Segel of Pitt along with Priscilla Prem of Pitt and Maya Bhat of Carnegie Mellon University, is developing a new type of battery tester aimed at advancing sustainable energy solutions. The FlowCellutions team began its journey at the Big Idea Center in fall 2021, taking first place in the center's Fall Blitz and winning the top prize in the Kuzneski Innovation Cup and the grand prize in the spring 2022 Randall Family Big Idea Competition.

Pitt Student Entrepreneurs Awarded $350,000 in Rice Business Plan Competition

In April 2022, Pitt student team Hoth Intelligence won not one, not two, but four prizes at the Rice Business Plan Competition, totaling an impressive $350,000. Out of 54 teams, Hoth placed second overall—the highest any Pitt team has placed in this prestigious and extremely competitive competition.

Hoth Intelligence is a biotechnology startup founded by Pitt School of Medicine PhD candidates Jonathan Cohen and Andrew Liu. The business creates augmented reality software that allows health care providers to "see into" a patient during procedures in which physicians typically are operating without being able to see inside the person.

Big Idea Center Startup HEARTio's Award-winning Year in Pittsburgh and Beyond

HEARTio is a digital diagnostic startup consisting of cofounders Utkars Jain and Adam Butchy, both Pitt Swanson School of Engineering alumni, along with Pitt College of Business Administration alumnus Michael Leasure. The business uses artificial intelligence in conjunction with an electrocardiogram to help clinicians identify cardiovascular disease more quickly, more accurately and at a fraction of the cost.

In March 2022, Jain and Butchy were recognized among the Pittsburgh Business Times' 30 Under 30. This accolade honors young business leaders throughout Western Pennsylvania. That same month, HEARTio won the $50,000 grand prize at the Baylor University New Venture Competition. Within the past year, the team has partnered with Allegheny Health Network to conduct a clinical study involving at least 20,000 patients and is working toward U.S. Food and Drug Administration approval.

Big Idea Center Startup Trek Gum Receives Mellon Foundation Investment

Trek Gum, a plant-based, plastic-free chewing gum company founded by Pitt Swanson School of Engineering graduate Emily Siegel, won an investment from the prestigious Richard King Mellon Foundation, one of the 50 largest foundations in the world, in its first-ever Social Impact Investment Pitch Competition. This competition is a novel effort to identity and support for-profit companies with a public purpose that aligns with the foundation's strategic plan.

Big Idea Advantage Fund Makes Its First Investments in 4 Student Startups

Funded by donors who have stepped forward to accelerate the growth of student innovation and entrepreneurship at Pitt, the Big Idea Advantage Fund launched in spring 2021 and made its first investments in student startups Fall of 2021.

The second round of Big Idea Advantage Fund applications arrived in the spring 2022 and investment offers to an additional 4 teams is currently underway. Moving forward, the Big Idea Center has implemented a rolling application process for investment consideration and is raising its next round to support even more student-founded startups.

Office of Industry and Economic Partnerships

The Office of Industry and Economic Partnerships (OIEP) serves as a one-stop shop for industry and venture capital firms seeking to partner with Pitt on sponsored research, technology licensing and new venture creation.

During the last year, the OIEP business development team interacted with more than 300 companies and 75 venture capital firms, exploring hundreds of opportunities for research and technology transfer. Within Pitt, OIEP is facilitating a culture shift aimed at helping researchers to better connect and collaborate with industry. OIEP also plays a role in helping to bring industry partners to major federally funded research programs, such as the $10 billion U.S. Department of Defense/Defense Health Agency Omnibus IV opportunity for which Pitt was selected in fiscal year 2022.

Pitt's investment in driving industry research collaborations is paying off. In FY'22, more than 400 industry partners invested more than $50 million across a spectrum of research at Pitt, a record for the University. OIEP developed and supported many of these collaborations, several of which are highlighted below.

Coeptis Therapeutics Enters into Exclusive Option Agreement with University of Pittsburgh

In May 2022, Coeptis Therapeutics, Inc., a biopharmaceutical company developing innovative cell therapy platforms for cancer, announced entry into an exclusive option agreement with the University of Pittsburgh for the rights to three chimeric antigen receptor T-cell technologies that offer the potential to address a range of hematologic and solid tumors. Among the initial cancer indications under development are preclinical programs targeting breast cancer and ovarian cancer.

Pitt and Duquesne Light Partner for a Powerful Future

To keep pace with the rapidly evolving technology of electric power systems, the University of Pittsburgh Energy GRID Institute and Duquesne Light Company announced in January 2022 that they are partnering to create a collaborative platform to advance and implement innovative solutions in support of a more secure, resilient and clean energy grid.

Pitt and Orange Grove Bio Establish Partnership

Orange Grove Bio, a preclinical drug investment and development firm, and the University of Pittsburgh announced in January 2021 the establishment of a collaboration designed to advance the development and commercialization of novel therapeutics by supporting the translation of scientific discoveries made by researchers at Pitt. The newly established partnership aims to cultivate the Pittsburgh biotech landscape by increasing entrepreneurship, education and scientific translation of promising technologies. These efforts will be focused in the areas of oncology and autoimmune and inflammatory diseases.

Covestro LLC and Pitt Establish Circular Economy Program

A new collaboration between the University of Pittsburgh and Covestro LLC takes aim at decreasing global waste and its impact on the environment and climate. The Covestro Circular Economy Program will enable students at the University of Pittsburgh to become experts in circular economy principles, informed by Covestro's successes in this area, and ultimately create circular, sustainable products and service solutions.

Institute for Entrepreneurial Excellence

By the Numbers

Clients
1,549

Consulting Hours
11,848

Capital
17.48 million

Businesses Started
61

Jobs Created
353

Jobs Supported
9,196

The Institute for Entrepreneurial Excellence (IEE) remains an important resource for entrepreneurs and small business owners throughout our region. As businesses' operations have generally returned to normal since the early stages of the pandemic, they were met with new complications—supply chain issues, hiring difficulties and inflation, to name a few—and IEE was there to help.

More than 1,500 regional businesses received assistance from IEE and more than 60 new businesses were launched with IEE's guidance in FY22. New programs were established in the past year, including the PantherlabWorks Concept to Commercialization program for new product entrepreneurs and Seeds for Growth, a product showcase with product-based business training.

In FY22, IEE and its Small Business Development Center held several specialized events designed to connect minority-, women- and veteran-owned businesses to contract opportunities and other regional resources. More than 400 small business owners attended at least one of these events, opening doors for their own business growth while further diversifying the Western Pennsylvania economic landscape.

IEE had 29 graduates—of which more than half were minority business owners—of its full-year Entrepreneurial Fellows Class (business training for leaders in companies with annual revenue in excess of $1 million) and 22 graduates of its Community Power to Prosper program (business training for entrepreneurs starting businesses in urban or disadvantaged neighborhoods).

Celebration of Innovation 2022

The University of Pittsburgh Office of Innovation & Entrepreneurship held its 2022 Celebration of Innovation on April 21, 2022. This event recognizes the achievements of Pitt faculty and student innovators who are seeking to improve people's lives through the commercialization of their ideas and discoveries. In addition to recognizing all faculty and students who submitted an invention disclosure, were issued a U.S. patent or had their innovation licensed, there were seven special awards presented.

Emerging Innovator

Kacey Marra,
Professor of Plastic Surgery and Bioengineering

The Emerging Innovator Award is presented to an early to mid-career Pitt faculty member who has been working toward achieving impact for their research through commercial translation and who has dedication to mentoring the next generation of innovators and entrepreneurs.

Kacey Marra is a pioneering innovator around the problem of repairing large-gap nerve injuries. She was inspired to do this work after receiving funding from the U.S. Department of Defense for her research and meeting soldiers who had suffered significant nerve damage from combat wounds.

Marra and her lab have demonstrated in animal studies the ability to restore up to 80% of nerve function in large-gap injuries through the application of a biodegradable tube containing a time-released protein growth factor. During her time at the University, she has submitted 23 invention disclosures to the Innovation Institute; has been issued six patents for her discoveries; and has had her innovations licensed six times, including in the formation of three startup companies. This puts her in the top handful of women innovators in the University's history.

Marra launched her own company, Nerve Repair Technologies, in 2018. She is presently raising a seed funding round and preparing to hire a CEO to help the company take its next steps toward an application to the U.S. Food and Drug Administration (FDA) to conduct clinical trials.

Student Innovators of the Year

HEARTio

The Student Innovators of the Year are Utkars Jain, Adam Butchy and Michael Leasure, founders of HEARTio. These PhD students are building a digital diagnostics company that brings the power of artificial intelligence to help emergency providers detect heart abnormalities more quickly, more accurately and at a fraction of the cost. Their many accomplishments include being granted breakthrough device status by FDA in fall 2019 and being awarded first place and $25,000 in the 2020 Liftoff Pittsburgh competition.

HEARTio also was named the Most VC Backable Startup at the regional Venture Capital Investment Competition in Chapel Hill, North Carolina, and was a finalist for the prestigious Rice Business Plan Competition in 2019. Its founders were finalists in the Pitt Big Idea Center's Randall Family Big Idea Competition in 2018. Most recently, they were among the inaugural recipients of an investment from the Big Idea Advantage Fund, a new investment fund established by alumni donors to assist Pitt student startups.

James “Chip” Hanlon Volunteer Mentor of the Year

John Inserra

The James “Chip” Hanlon Volunteer Mentor of the Year Award recognizes those who freely share their time and expertise working one on one with Pitt innovation teams to explore the commercial potential of their ideas or research. That so many alumni and friends of the University routinely step forward to provide this critical mentorship is a testament to the generous spirit of our university and our region. These volunteers reflect the spirit of the late James “Chip” Hanlon, who was one of the original entrepreneurs in residence when the Innovation Institute was formed in late 2013.

Following a successful career in sales and business development and consulting roles in health care and the life sciences, John Inserra embarked on a second career as a teacher, teaching business and computer and information technology at City Charter High School for seven years before launching his own consulting firm. He has mentored three teams through the First Gear program, with innovations ranging from developing a first-of-its-kind probiotic bacteria that can be trained to consume dietary fats for a novel approach to weight control and a program for helping children on the autism spectrum develop reasoning skill to developing a 3-D printing system for enhancing dental education.

Startup of the Year

LyGenesis

For more than a decade, Eric Lagasse has been researching the regeneration of organ tissue as part of the McGowan Institute for Regenerative Medicine. This kind of work at the McGowan Institute represents the progression of discovery from the pioneering organ transplantation work of the late Thomas Starzl.

Lagasse discovered that hepatocyte cells of the liver, when introduced into the lymph nodes, will grow functional liver tissue. In effect, the lymph nodes become bioreactors inside the body. This opens up the possibility of extending the lives of people suffering from end-stage liver disease, bridging them to a potential transplant or even eliminating the need for a transplant.

Lagasse engaged with Michael Hufford, an entrepreneur in residence at the Pitt Innovation Institute, to begin exploring the commercial potential of his discovery. Hufford, a veteran life sciences executive and two-time Pitt graduate who had several successful startup exits under his belt, was impressed with the solid preclinical work that Lagasse and his cofounder, Paolo Fontes, had done to lay a strong preliminary regulatory framework.

LyGenesis raised investments totaling $7 million as it performed additional preclinical work recommended by FDA. At the end of 2020, the company had raised another $11 million and announced it had been cleared to conduct a Phase 2a study of the safety, tolerability and efficacy of its first-in-class novel cell therapy for patients with end-stage liver disease.

LyGenesis is currently also in earlier stages of development of similar cell therapies for the pancreas, kidneys and thymus, and, most recently, it also has begun a program for the treatment of inborn errors of metabolism in infants that has demonstrated positive in vitro results.

Marlin Mickle Outstanding Innovator

Eric Beckman, Distinguished Service Professor and George M. Bevier Professor of Engineering

The Marlin Mickle Outstanding Innovator Award is given to a Pitt faculty member who has made an impact on the world through an extraordinary commitment to innovation commercialization.

Eric Beckman has a three-decade track record as an academic entrepreneur that includes the receipt of 39 U.S. patents, with many more pending, and having several startup companies launched based on his research. In 1997, the University licensed his metal solvent extraction technology to a new startup, Normex Inc. Then, in 2005, Northaven Specialty Chemicals was founded based on his monomer and polymer discoveries. In 2006, he cofounded Cohera Medical around his discovery of a resorbable surgical adhesive. He subsequently took a brief entrepreneurial leave of absence from Pitt to serve as Cohera's chief science officer.

In addition to the companies he founded, Beckman has worked effectively with several other companies, having coauthored patents with Lyondell Chemical; Bayer AG; PPG Industries, Inc.; and BASF AG.

Within a decade of his arrival at Pitt, he was named chair of the Department of Chemical and Petroleum Engineering. In this role, he received funding from the Heinz Endowments to create a sustainable entrepreneurship course, which he followed with a three-course innovation sequence. Beckman cofounded the Mascaro Center for Sustainable Innovation, with the mission of catalyzing sustainability innovation and education across the University and in the region. Most recently, Beckman has taken on the global problem of plastic waste.

With a grant from the John D. and Catherine T. MacArthur Foundation and NineSigma, in collaboration with Think Beyond Plastic, he is leading a team to develop innovations that can be marketable at scale to reduce the number of plastics that end up being burned or buried in landfills or make their way into the world's waterways and oceans.

More recently, Beckman has been instrumental in establishing a new collaboration with Covestro LLC and the Mascaro Center. The Covestro Circular Economy Program represents the first graduate-level circular design academic program in the United States to specifically address the challenge of global waste and material use by incorporating sustainable design into new products, from base materials and construction to packaging, delivery and life expectancy. In 2022, he was named a fellow of the National Academy of Inventors.

Small Business of the Year, Revenue of $1 Million or More

Eat'n Park Hospitality Group

Eat'n Park Hospitality Group has been family owned since the mid-1970s and is headed by Jeff Broadhurst, a second-generation business leader who took over as CEO from his father, Jim Broadhurst, in 2008. The restaurant has a business portfolio that is reliant on dining, and the pandemic put its core revenue streams in jeopardy. But Eat'n Park was able to pivot to online ordering and take-out dining with curb-side delivery, keeping customers and employees safe while remaining a strong presence in the communities they serve.

Community is truly at the core of everything Eat'n Park does. In the last year alone, it has supported more than 1,600 nonprofit organizations, including more than 20 United Way agencies, as well as food banks in every community in which Eat'n Park Hospitality Group does business. The company also celebrated the 43rd year of its Caring for Kids campaign to support children's hospitals in 14 states.

Small Business of the Year, Revenue of Less than $1 Million

Ashlé Taylor's Collection

Ashlé Hall began her Ashlé Taylor's Collection of natural hair products, designed especially for Black hair, in 2020. Her desire to start her business was borne from her work placing children in foster care as a caseworker with Allegheny County's Office of Children, Youth and Families after earning her bachelor's degree at Pitt's School of Social Work. In addition to having her products for sale on Pitt's campuses, she is continuing to expand their availability, with movement toward having her line in local and national stores. She also has collaborated with foster agencies across the state to include her products in their emergency bags for foster children and has pursued opportunities to have them available for hospital patients as well. Although running a business takes a great deal of focus and effort, Hall remains a full-time social worker and is still involved with social welfare organizations, keeping her rooted in the positive purpose that inspired her business.

The University of Pittsburgh Office of Innovation and Entrepreneurship inspires, educates and enables others to make an impact on society, improve the regional economy and transform their own careers. The office is composed of four units: the Innovation Institute, Office of Industry and Economic Partnerships, Big Idea Center and Institute for Entrepreneurial Excellence.

Innovation Institute

Intellectual property management; commercialization education, mentoring and funding; technology licensing and startup formation

Office of Industry and Economic Partnerships

Industry engagement and economic development

Big Idea Center

Student innovation and entrepreneurship

Institute for Entrepreneurial Excellence

Regional small business education, consulting and networking

University of Pittsburgh

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