

2026

Annual Report

**Connecting the world
to MIT technology.**

Where the Charles River meets curiosity, MIT research becomes breakthroughs that serve humanity.



Image courtesy of the MIT Institute Office of Communications

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From the Executive Director

What a year it has been. From the banks of the Charles River to boardrooms, hospitals, and laboratories around the world, MIT-born inventions and technologies continued to do what they do best: contribute to changing lives. And right here at the TLO, we had a front-row seat to all of it.

The numbers tell one part of the story. MIT researchers and Lincoln Laboratory scientists submitted 688 invention disclosures. Thirty-one new companies launched with MIT intellectual property at the foundation of their businesses. MIT was also recognized once again as the top single-campus U.S. university for U.S. patents granted in calendar year 2025.

Impressive as each those numbers are, they do not capture the full picture. Behind each of those numbers are researchers, entrepreneurs, licensees, and members of our team working through the uncertainty and complexity of moving an innovation toward real-world impact. This report shares some truly exceptional examples.

From my perspective, a defining story of FY2026 was the evolution taking place within our own office. We welcomed new colleagues across operations, intellectual property portfolio management, transactions and licensing, and business development. This growth was not an end in itself, but a very deliberate strategic investment supported by the Institute. It was about giving the Institute, through the TLO, the capacity, expertise, and tools needed to support increasingly complex inventions and to help our researchers and stakeholders navigate the commercialization path ahead.

FY2026 also marked an important development in our longstanding partnership with MIT Lincoln Laboratory, which established its own dedicated Technology Transfer Office. The TLO and the Lincoln Laboratory TTO are now working in close coordination, bringing together specialized expertise and a shared commitment to the responsible stewardship of MIT's intellectual property.

Of course, technology transfer has never been a straight or predictable path. Moving a discovery from the laboratory toward practical application requires patience, judgment, and persistence. It also requires trust. Researchers trust us to understand their discoveries and ambitions. Companies and entrepreneurs trust us to work through difficult questions constructively. And MIT trusts us to make thoughtful decisions that advance innovation while protecting the interests of the Institute and the public.

I am particularly proud of how the TLO team continued to serve our community during a year of significant change. Our colleagues approached new challenges with flexibility and thoughtfulness while remaining focused on the people, relationships, and possibilities at the heart of this work.

We still have plenty of work ahead of us. We will continue improving our operations, strengthening our outreach, and making the experience of working with the TLO clearer and more responsive. Our goal is not simply to do more. It is to serve our community better and help each MIT discovery find the path that gives it the strongest opportunity to make a difference.

To every faculty member, researcher, inventor, entrepreneur, licensee, colleague, and collaborator who engaged with us this year, thank you. FY2026 was truly remarkable, and I look forward to what we will accomplish together.



Lesley Millar-Nicholson
Executive Director
Technology Licensing Office



Mission Statement

In the spirit of MIT's mission to advance knowledge, the TLO moves innovations and discoveries from the lab to the marketplace for the benefit of the public and to amplify MIT's global impact.

We cultivate an inclusive environment of scientific and entrepreneurial excellence, and bridge connections from MIT's research community to industry and startups, by strategically evaluating, protecting, and licensing technology.

"Technology itself does not decide what the future looks like. People do."

LISA SU
Commencement remarks prepared for the MIT Class of 2026



MIT’s Strategic Initiatives

The Climate Project at MIT

MIT’s bold response to the global climate crisis, this initiative aims to make the Institute a leading source of transformative solutions—technological, behavioral, and policy-based—within the next decade.

MGAIC – MIT Generative AI Impact Consortium

A collaborative effort that brings together researchers and industry leaders to develop responsible AI tools that enhance human capabilities across sectors like healthcare, education, and sustainability.

MIT HEALS – Health & Life Sciences Collaborative

A convergence of MIT’s top minds and external partners in biotech, pharma, and healthcare, focused on accelerating innovation and improving outcomes in human health.

MITHIC – The MIT Human Insight Collaborative

An initiative that bridges humanistic inquiry and scientific research to explore how human insight can inform and elevate solutions to today’s complex societal challenges.

MIT INM – Initiative for New Manufacturing

A cross-sector collaboration advancing next-generation manufacturing technologies and systems that boost productivity, create high-quality jobs, and revitalize U.S. industry and communities.

QMIT – The MIT Quantum Initiative

An Institute-wide effort that brings together quantum researchers and end users to apply quantum breakthroughs to consequential challenges in science, technology, industry, and national security.

CO₂ Adsorbents Based on MgO Nanoparticle Clusters Coated with Alkali-Metal Salts

Applications

This technology offers novel compounds and methods for carbon dioxide adsorption. It works by utilizing magnesium oxide (MgO) nanoclusters coated with alkali-metal salts to capture and store CO₂ from CO₂-emitting technologies and facilities. This method improves upon existing technologies by providing a more efficient and potentially more cost-effective solution for CO₂ capture and storage systems.

Technology

The manufacturing process begins with creating surfactant-coated MgO nanoclusters in a non-aqueous solvent. Subsequently, the clusters are coated with alkali-metal salts through a series of solution dispersions and evaporations, thereby enhancing their CO₂ adsorption capacity. When exposed to a gas stream containing CO₂, the coated nanoclusters adsorb the CO₂, effectively removing it from the stream through rapid uptake of large amounts at moderate temperatures.

Advantages

- Lower energy requirements compared to traditional CO₂ capture methods
- Scalability for large-scale implementation
- Versatility in application, as the technology can be used across various industries

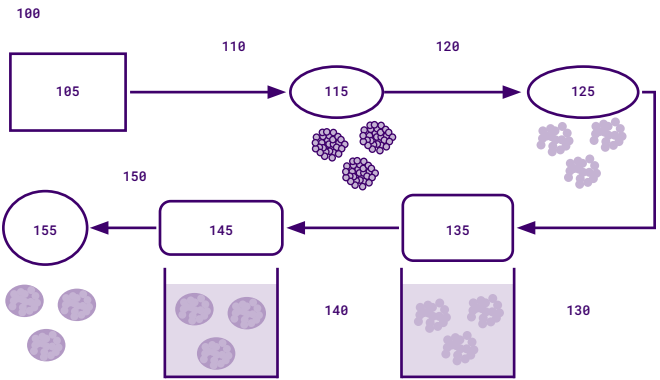


Fig.1, Patent 10,322,399

Shows a process for formation of a CO₂ adsorbent, according to one or more non-limiting embodiments.

Case Number: #18109

Department of Chemical Engineering
PI: T. Alan Hatton

This technology aligns with the goals of the Climate Project at MIT by advancing a potentially lower-energy, scalable approach to carbon capture that can reduce emissions from power plants, industrial facilities, and mobile sources. By enabling retrofits across existing CO₂-emitting systems, it supports practical, deployable climate solutions that can be adapted across industries and communities to help improve resilience and planetary well-being.

License →
patents.mit.edu

Branched Chain Fatty Acids Have Immune-Modulatory Effects

Applications

This technology offers a method of promoting an anti-inflammatory and immune-modulatory effects in both the brain and periphery. Branched-chain fatty acids are delivered in targeted formulations to promote anti-inflammatory pathways. This method modulates immune and disease-associated pathways in peripheral and brain tissues.

Technology

BCFAs, including isobutyric acid, isovaleric acid, and 2-methylbutyric acid, may be delivered as purified compounds, oral formulations, medical foods, dietary supplements, or through BCFA-producing microorganisms. Once administered, they modulate immune and inflammatory pathways across the gut, peripheral organs, and brain by suppressing disease-associated and pro-inflammatory signals while promoting anti-inflammatory and lipid/cholesterol homeostatic activity, supporting their potential as broadly applicable immune-modulatory agents..

Advantages

- Promotes anti-inflammatory responses across the gut, brain, and peripheral organs
- Improves immune balance and metabolic health
- Offers versatile delivery options
- Broad applicability across multiple disorders
- Supports coordinated cross-tissue immune modulation and therapeutic potential

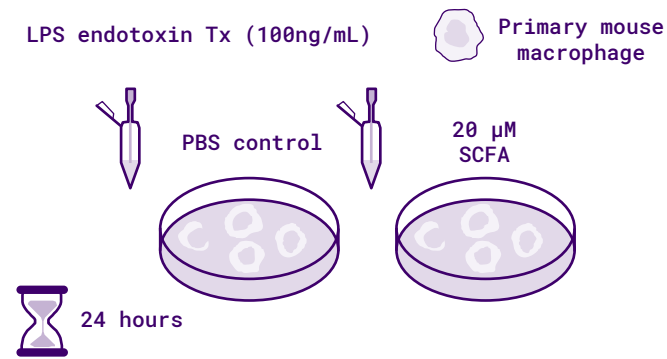


Fig.1A, Patent Pending

A diagram depicting in vitro experiment using wild-type primary mouse BMDMs

Case Number: #25569P

Department of Brain and Cognitive Sciences
PI: Li-Huei Tsai

This technology aligns with the goals of the MIT Health and Life Sciences Collaborative by advancing a novel immune-modulatory approach with potential applications across neurodegenerative, metabolic, cardiovascular, autoimmune, and infectious diseases. By targeting inflammation across the gut, brain, and peripheral organs, it reflects MIT HEALS’ mission to drive interdisciplinary, life-centered innovation that can improve human health and inform new therapeutic strategies.

License →
patents.mit.edu

Methods for Support Removal in Stereolithographic Additive Manufacturing

Applications

The technology presented improves additive manufacturing processes by introducing optimized techniques for removing support structures during the fabrication of 3D objects. Additive manufacturing finds applications in various industries, including medicine, product design, aerospace, and cinematography.

Technology

Each of the removal methods proposed in this technology works by modulating the properties at the interface between the support structures and 3D objects. In one embodiment, light intensity is varied between the two regions, creating strength differences that allow for separation. Other approaches include adding a notch to concentrate separation at a specific location or using different materials for the support and object, such as materials that cure at different wavelengths or swell differently in solvent. By altering mechanical properties at the interface, this technology enables optimized removal of support structures while preserving the desired functionality and high surface quality of the 3D object.

Advantages

- Efficient removal of support structures significantly reduces if not eliminates manual labor.
- Part functionality and high surface quality of parts is preserved.
- Removed need for polishing and sanding.
- The manufacturing of 3D objects is more time efficient.

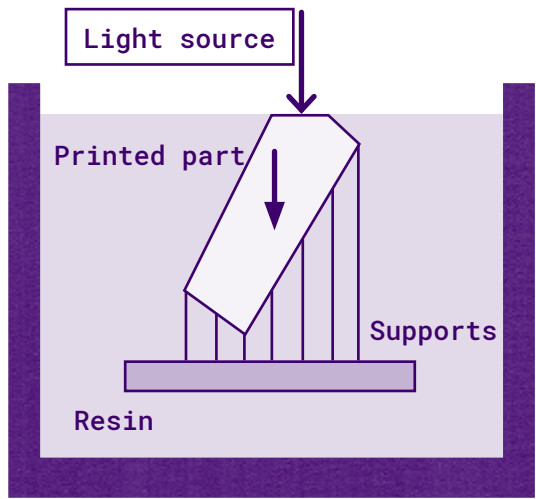


Fig.1, Patent 11,884,004

Cross sectional view of an inverted SLA printer assembly, illustrating an object being printed

Case Number: #20638

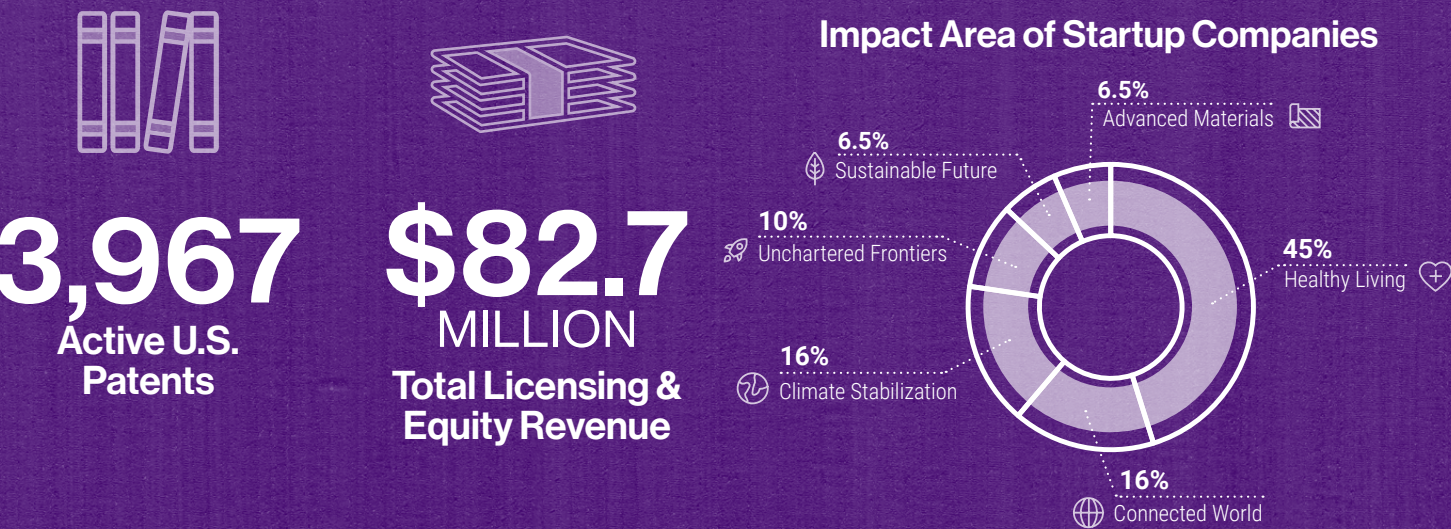
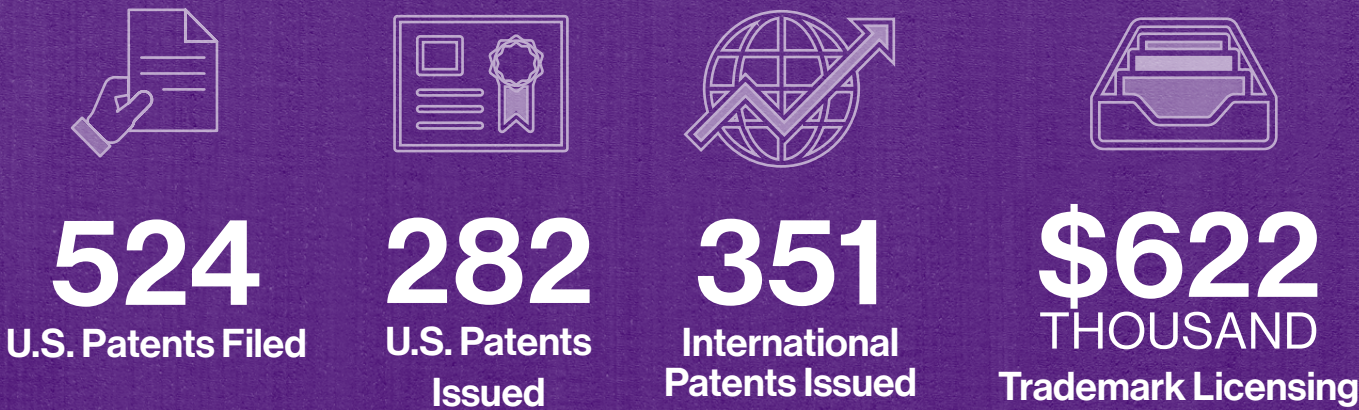
Department of Mechanical Engineering
PI: Anastasios John Hart

This technology aligns with the goals of the MIT Initiative for New Manufacturing (INM) by advancing more efficient, scalable, and high-quality additive manufacturing methods that reduce manual labor and improve production workflows. By enabling cleaner support removal and preserving part functionality, it supports INM’s mission to transform manufacturing through breakthrough technologies that enhance productivity, resilience, and innovation across industries.

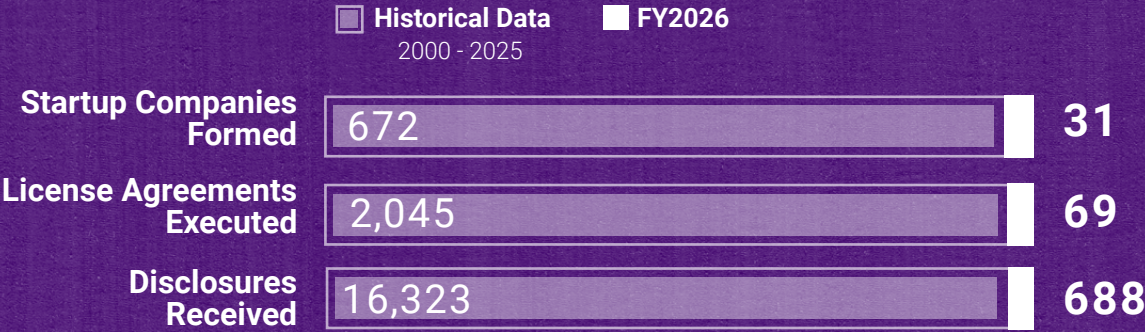
License →
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FY2026
Fact Sheet

Moving innovations and discoveries from the lab to the marketplace for the benefit of the public and to amplify MIT's global impact.



Growth Through FY2026

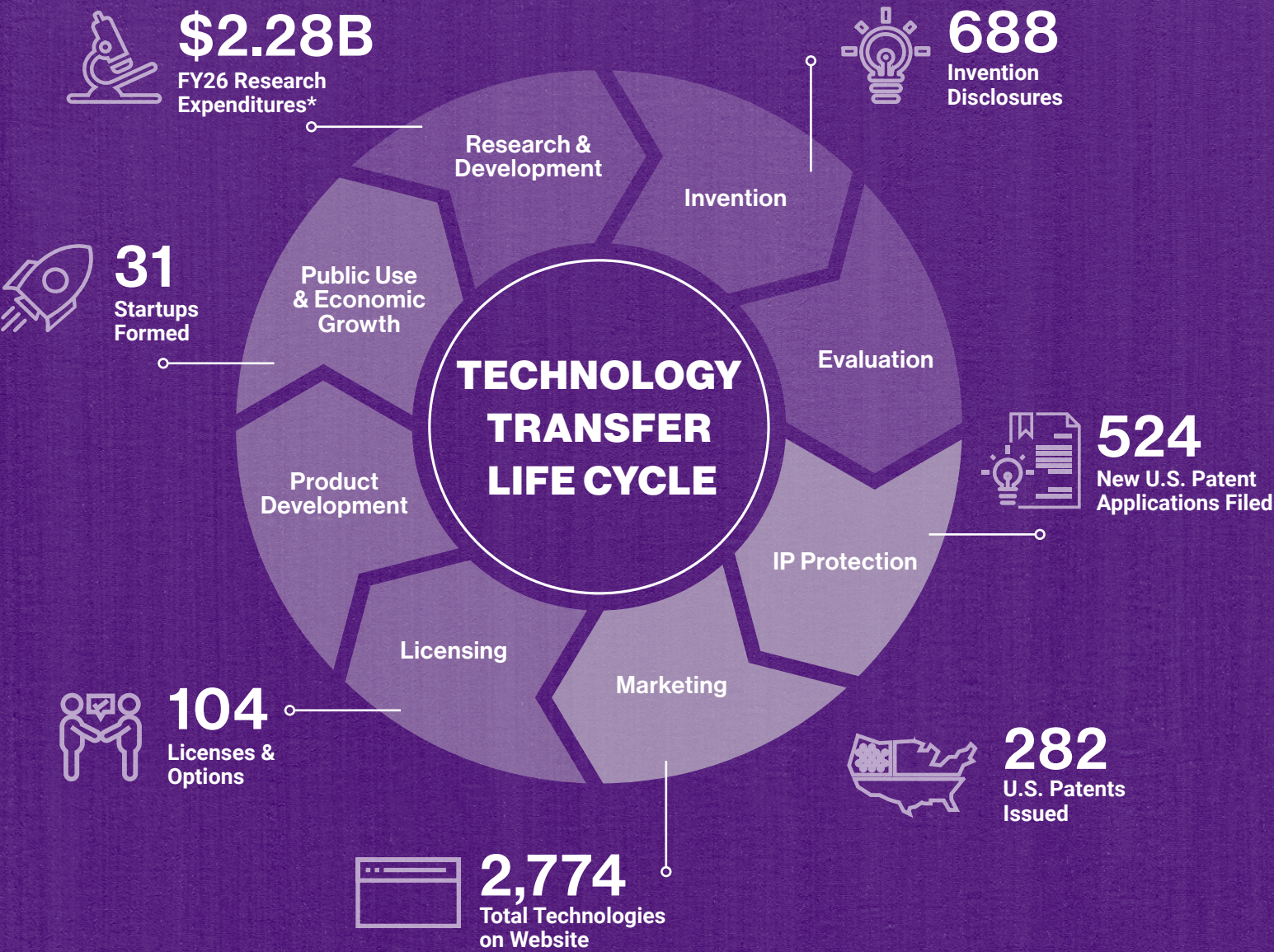


Data current as of August 1, 2026. © Massachusetts Institute of Technology

FY2026
Technology Transfer Life Cycle

Benefiting Society and The Economy

Every year university research yields discoveries with commercial potential. Technology transfer professionals manage the complex process of shepherding ideas from the lab to the marketplace—from evaluating and protecting discoveries to commercializing the inventions through new and existing companies.



Data current as of August 1, 2026. © Massachusetts Institute of Technology
*Research expenditures reflect MIT FY26 and Lincoln Laboratory FY25 data.
Infographic design used by permission of AUTM (autm.net).

Atlantic Quantum Joins Google Quantum AI

MIT-founded startup Atlantic Quantum has joined Google Quantum AI, marking a significant milestone in the pathway from federally funded research and MIT discovery to technology licensing, startup growth, and commercial impact.

Atlantic Quantum's roots trace back to research performed by Professor William Oliver and collaborators across MIT's quantum ecosystem, including the Research Laboratory of Electronics and MIT Lincoln Laboratory. With participation from the MIT Technology Licensing Office, the company gained access through non-exclusive licenses to a portfolio of MIT inventions related to superconducting quantum systems, supporting its formation and development in one of the world's most technically challenging fields.

Founded in 2022 by a team of scientists and engineers, Atlantic Quantum has worked to advance superconducting qubit technology. While most people will never use a quantum computer directly, the computing power may enable scientific simulations and discoveries at fast pace, including medical cures and clean energy technologies. . Atlantic Quantum develops scalable, fault-tolerant quantum computers by combing high-coherence fluxonium qubits with a modular cryogenic chip stack. .

Google Quantum AI has stated that Atlantic Quantum's technology will help advance its superconducting qubit roadmap and accelerate progress toward practical quantum computing applications. By joining one of the world's leading quantum computing efforts, Atlantic Quantum brings MIT inventions into a global platform focused on solving problems that are currently beyond the reach of conventional computers.

"Atlantic Quantum is a strong example of the innovation pathway we work to support at MIT," said Deirdre Zammit, the TLO's Associate Director of Licensing.



The team at Atlantic Quantum
Image courtesy of The Engine²

"This began with federally funded research that advanced fundamental science. MIT researchers transformed those discoveries into technologies with commercial potential, and technology licensing helped provide a path for a startup company to build on that work. But licensing is one step along a much longer road. From there, a company needs to enable reliable and repeatable technology performance, validate product-market fit, and integrate the technology with other solutions, clearing performance benchmarks and technical qualification requirements before it can scale for commercial production. Along the way, the company also needs to build supply chains, secure capital and customers, and recruit the talent to carry the work forward. It's a reminder that breakthroughs like these don't happen overnight. They depend on sustained investment in research, strong partnerships, and the infrastructure that helps move discoveries from the lab into the marketplace."

Non-Exclusively Licensed Technologies

The licensed technologies were developed with sponsorship from agencies including the U.S. Air Force through MIT Lincoln Laboratory and the Army Research Office. Together, these contributions reflect the importance of sustained investment in early-stage science and engineering, particularly in fields like quantum computing, where commercial outcomes often depend on extended development timelines and deep technical expertise.

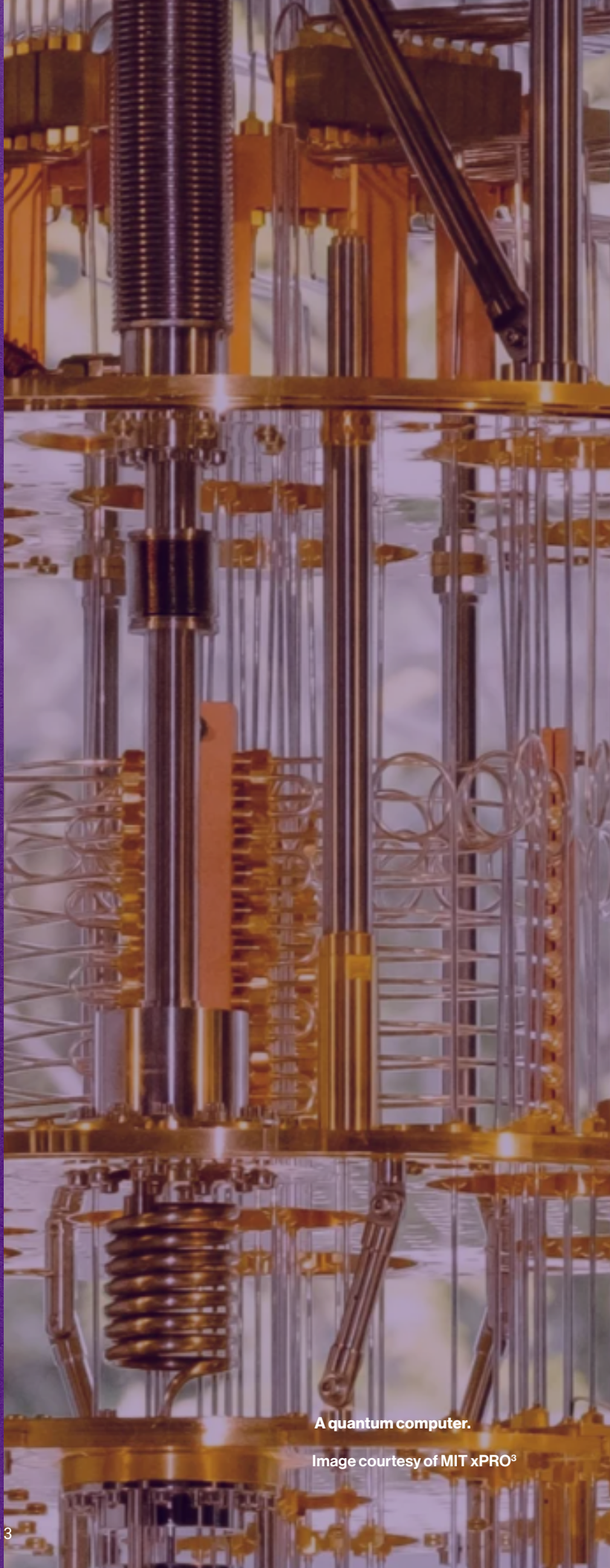
#18087L | Low Loss Superconducting Integrated Circuits (LLSICs)
Sponsored by the Air Force (Lincoln Lab)

#18282L | Cryogenic Qubit Integration
Sponsored by the Air Force (Lincoln Lab)

#23328 | Real-Time Closed-Loop Feedback for Active Noise Canceling in Superconducting Qubits
Sponsored by the Army, Army Research Office

#23935 | Method for Scalable Control of Scalable Quantum Bits using Baseband Pulsing
Sponsored by the Air Force (Lincoln Lab), Army Research Office

#24063 | ZZ Reduction via Third-Order Dispersive Interactions
Sponsored by the Air Force (Lincoln Lab), Army Research Office



A quantum computer.

Image courtesy of MIT xPRO³

Cognito Advances a New Approach to Alzheimer’s Therapy

Cognito Therapeutics’ recent \$105 million Series C financing highlights how long-term investment in MIT research, paired with strategic technology licensing, can help move a scientific insight toward a potential new treatment for patients with Alzheimer’s disease.

The company is built on pioneering research from the MIT laboratory of Professors Li-Huei Tsai, which investigated how disruptions in gamma brain waves may contribute to neurodegenerative disease. The MIT Technology Licensing Office helped translate those discoveries beyond the lab. Through an exclusive license, Cognito gained access to MIT technologies related to gamma wave oscillation, combined sensory stimulation, and neuroprotection. The licensed portfolio includes inventions developed with NIH support, along with additional support from the Belfer Family Foundation and the University of Texas MD Anderson Cancer Center. This licensing framework provided the foundation for Cognito to develop the technology into a clinical-stage platform.

Alzheimer’s disease affects millions of people worldwide, and despite decades of research, treatment options remain limited. To address that challenge, Cognito is advancing Spectris, a physician-prescribed, at-home therapeutic platform designed to support coordinated brain network activity through non-invasive visual and auditory stimulation. Unlike traditional Alzheimer’s therapies that target a single protein or pathway, Spectris is being developed to engage the brain’s sensory pathways and potentially preserve cognition and independence while reducing the burden on patients and caregivers.

The company’s oversubscribed Series C round will support Cognito as it prepares topline results from its pivotal HOPE study, potential regulatory filing, broader expansion of the Spectris platform into additional

neurodegenerative indications. The financing represents an important transition point for the company as it moves from clinical development toward potential commercialization.

Cognito’s progress illustrates why sustained support for foundational research matters, particularly in areas like neurodegenerative disease where patient need is urgent. Federal funding helped make the early discoveries possible; MIT inventors advanced them into protectable technologies; and TLO licensing helped create a pathway for a startup to attract investment, build clinical evidence, and translate those discoveries into real world impact.

“The technologies that have the greatest potential to improve people’s lives often begin as fundamental scientific discoveries,” said Ragan Robertson, TLO Senior Licensing and Business Development Officer. “Those discoveries require patience, sustained investment, and partners willing to advance them over many years. Cognito reflects what’s possible when that long-term commitment extends from the research laboratory through clinical development.”



Cognito’s Spectris AD headset
Image courtesy of Cognito Therapeutics⁴

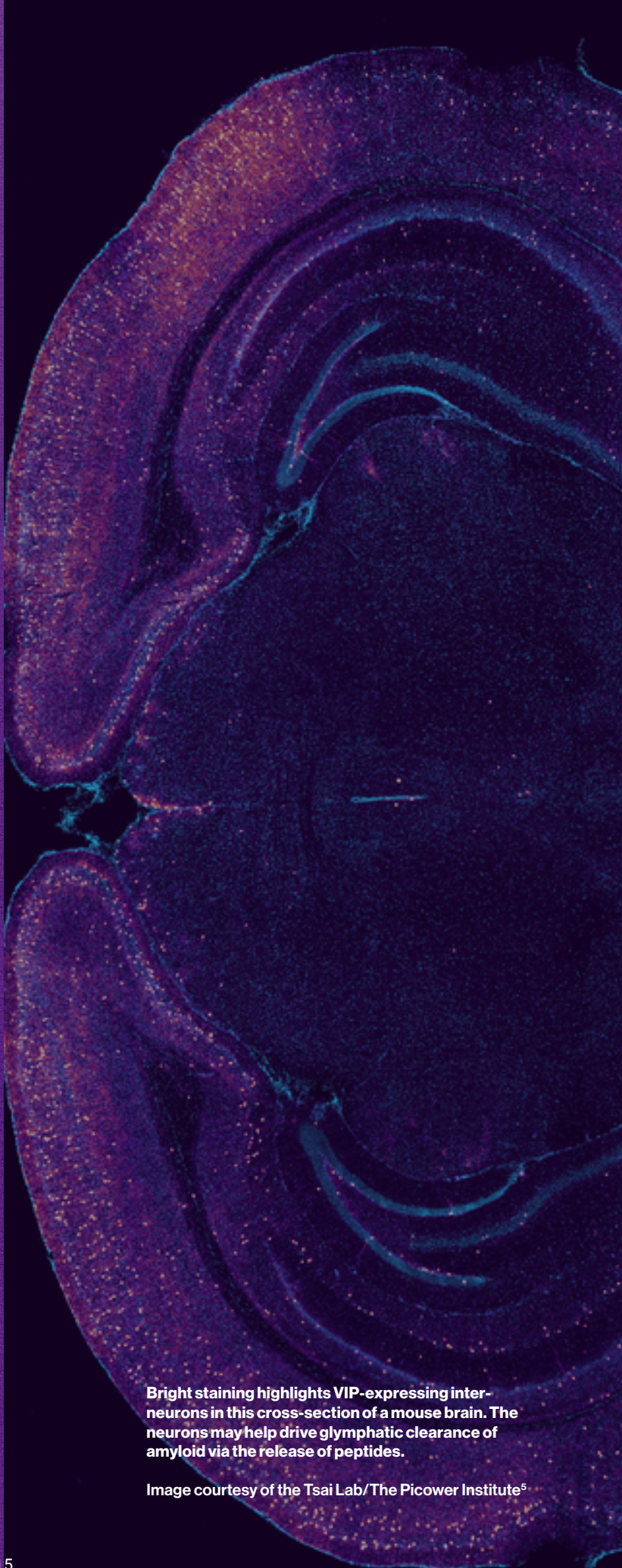
Exclusively Licensed Technologies

The licensed technologies were developed with sponsorship from the National Institutes of Health, with additional support from the Belfer Family Foundation and the University of Texas MD Anderson Cancer Center. Together, these contributions underscore the importance of sustained investment in foundational biomedical research, particularly in complex areas like Alzheimer’s disease and neurodegeneration, where progress often depends on long development timelines, rigorous clinical validation, and strong partnerships that can help translate early scientific discoveries into potential therapies for patients.

#18119P | Using Gamma Wave Oscillation to Reduce Alzheimer’s Pathology
Sponsored by NIH

#19699 | Neuroprotective Effects of Combined Sensory Stimulation
Sponsored by NIH

#20070 | Gamma Entrainment Binds Higher Order Brain Regions, Improves Cognitive Function, and offers Neuroprotection
Sponsored by NIH, Belfer Family Foundation, University of Texas-MD Anderson Cancer Center



Bright staining highlights VIP-expressing inter-neurons in this cross-section of a mouse brain. The neurons may help drive glymphatic clearance of amyloid via the release of peptides.

Image courtesy of the Tsai Lab/The Picower Institute⁵



The TLO headquarters at 255 Main St., Cambridge.

Strengthening TLO Organizational Capability and Efficiency

Building the Operational Infrastructure Behind Innovation

For Nichole Straub, new Associate Director of Operations at the MIT TLO, Aristotle's idea of excellence becoming a habit, reflects how strong operational systems help innovation move from discovery to impact. At the TLO, operations are not simply about process or efficiency. They create the clarity, consistency, and continuity that allow inventors, licensing professionals, licensees, and prospective licensees to do their best work - through structured workflows, proactive communication, and disciplined deadline management that keeps every innovation moving forward."

"Strong operational systems are the foundation that allows the TLO to consistently protect and advance MIT's innovations," Straub explains. "When every disclosure is handled with precision, every deadline is met, and every inventor can trust that their technologies are in good hands, we are creating the conditions for innovation to move forward to impact. For licensees and prospective licensees, that same infrastructure creates a reliable, transparent experience that helps technologies move toward real-world impact."

That same discipline strengthens the TLO organization itself. By embedding institutional knowledge in shared systems, documented practices, and clear workflows, the TLO ensures that colleagues can support one another, new team members can contribute quickly, and critical work does not depend on any one individual.

During fiscal year 2026, the TLO reinforced this foundation by welcoming new colleagues across operations, portfolio management, IP transactions, and licensing and business development. Together, these investments expanded the expertise, coordination, and resilience needed to support MIT's evolving research enterprise and to drive impact.

Welcoming FY26 New Colleagues

Nichole Straub, *Assistant Director of Operations*

Alan Leung, *IP Portfolio Manager*

Leo Takaoka, *IP Portfolio Manager*

Kevin McGough, *IP Transactions Officer*

Erin Mihealsick, *Licensing & Business Development Associate*

Cam Judkins, *Licensing & Business Development Associate*

Michael Lu-Diaz, *Licensing & Business Development Associate*

Ojas Mehta, *Senior Licensing & Business Development Officer*

Ragan Robertson, *Senior Licensing & Business Development Officer*

"If you can't describe what you are doing as a process, you don't know what you're doing."

W. Edwards Deming
American composer and economist

Stewardship at Scale: Evolving MIT’s Technology Transfer Partnership with Lincoln Laboratory

For more than four decades, the MIT Technology Licensing Office (TLO) has served as the steward of MIT-owned intellectual property, including innovations developed at MIT Lincoln Laboratory. Through this longstanding partnership, technologies arising from federally funded research have been protected, managed, and transferred to government agencies, industry, startups, and other organizations capable of translating them into national security, commercial, and public benefit.

In fiscal year 2026, that partnership evolved. MIT Lincoln Laboratory established a dedicated Technology Transfer Office (TTO) and assumed delegated responsibility for the day-to-day management of new Laboratory-developed intellectual property and technology transfer activities. The TLO’s role as the steward of MIT’s intellectual property remained unchanged; the TLO continues to provide institutional governance under MIT’s Intellectual Property Policy, manage legacy Laboratory inventions, oversee campus-derived and jointly developed technologies, maintain compliance with federal and institutional requirements, and provide strategic portfolio oversight across the Institute.

A Model Built for Scale

MIT Lincoln Laboratory operates as a federally funded research and development center (FFRDC), conducting mission-driven research on behalf of the U.S. government under a unique contractual and regulatory framework. Technology transfer at the Laboratory extends well beyond traditional commercialization. Depending on sponsor objectives and mission needs,

Laboratory technologies may transition through commercial licenses; sponsor-directed transfers; Cooperative Research and Development Agreements (CRADAs); open-source releases; standards activities; government collaborations; or other mechanisms designed to maximize national security, public, and economic impact.

As the Laboratory’s research portfolio expanded across artificial intelligence, autonomous systems, secure communications, sensing technologies, biotechnology, advanced materials, photonics, and space systems, so too did the volume and complexity of its technology transfer activities. The evolution of the operating model enables the TTO to provide dedicated operational expertise aligned with the Laboratory’s mission and sponsor requirements while preserving MIT-wide stewardship through the TLO.

“The evolution was possible through highly collaborative discussions, recognition of a changing environment and the ability to share decades of knowledge and experience from TLO with an office dedicated to Lincoln Laboratory inventions’ says Lesley Millar-Nicholson, Executive Director of the TLO. “The question wasn’t whether the TLO should step back. It was: How do we enable the TTO to operate with greater agility while the TLO focuses on the oversight and portfolio management that require a broader sponsor and institutional perspective”

Evidence of Continued Momentum

Fiscal year 2026 marked the first year under the evolved operating model. During the year, the TTO reported:

- 154 new technology disclosures received
- 36 US patent applications filed
- 12 US patents issued
- One joint invention agreement, one license, and two option agreements executed
- 9 CRADAs executed
- 34 transfers of Laboratory technologies to industry under a government-use license, 27 transfers to government sponsors, 5 transfers to other FFRDCs, and 1 transfer to a hospital
- 13 Test Agreements executed (Test Agreements govern the use of Lincoln Laboratory test facilities, ensuring access and usage align with mission, policies, and operational requirements to support national and economic security. When an interested party is ready to test or validate its technology but necessary facilities are unavailable in the private sector, it can enter into a test agreement that allows the technology to be tested in the Laboratory’s state-of-the-art facilities. All test data belong to the customer.)

The Federal Laboratory Consortium recognized AI-GUIDE, a handheld catheterization tool developed by Lincoln Laboratory in partnership with Massachusetts General Hospital to help avoid fatal hemorrhaging in prehospital settings, with a 2025 Excellence in Technology Transfer Award. The TLO is managing the out-licensing of this technology to a spinout company.

Seven technologies developed at Lincoln Laboratory, either wholly or with collaborators, earned 2025 R&D 100 Awards. Presented annually since 1962, the R&D 100 Awards recognize the 100 technology products judged by a panel of technology experts and industry professionals to be the most significant new developments of the year. The Laboratory’s 2025 award-winning technologies are saving lives, advancing computing, and enhancing communications.

These results demonstrate continuity for Laboratory researchers while the TLO and TTO refined their shared operating model. Together, the offices continue to provide unified stewardship of MIT intellectual property while expanding the Laboratory’s capacity to transition federally funded innovations to the organizations best positioned to deliver mission, economic, and societal impact.



Lincoln Laboratory personnel operate a protected tactical waveform modem and collect data to ensure a resilient, anti-jam communications system works in flight.

Image courtesy of Lincoln Laboratory⁶

Ikigai Labs Joins Celonis to Advance Enterprise AI

Ikigai's acquisition by Celonis highlights the role of MIT technology licensing in moving federally supported computing research into enterprise-scale applications. Through an exclusive license from the MIT Technology Licensing Office, Ikigai gained access to MIT intellectual property that helped form the foundation of its decision intelligence platform and supported the company's growth in the rapidly evolving enterprise AI market.

The licensed technology, developed with support from the National Science Foundation and the Army Research Office, reflects the value of sustained investment in foundational computing research. The invention describes a method for executing graph-based programs across distributed computing environments by associating computing units with nodes in a graph and creating communication channels that mirror the graph's topology. This approach supports the coordination of complex computations across connected data structures—capabilities that are increasingly important for AI-driven forecasting, simulation, and decision-making.

Founded by MIT Professor Devavrat Shah and Vinayak Ramesh, Ikigai developed AI-powered tools to help analysts and operations teams automate data-intensive workflows across business, finance, analytics, inventory, and supply chain operations. By joining Celonis, Ikigai's decision intelligence, simulation, and forecasting capabilities will become part of the Celonis Platform and its Celonis Context Model, a real-time representation of business operations designed to give enterprise AI the context needed to reason, decide, and act reliably.

The combination brings together Celonis' process intelligence technology with Ikigai's AI decision intelligence, enabling customers to move beyond

hindsight analytics toward predictive and prescriptive decision-making grounded in enterprise context. For MIT, the acquisition represents another example of the pathway from sponsored research to licensed intellectual property, startup formation, and commercial scale. As part of the transaction, Celonis will gain rights to use MIT technology that Ikigai licensed from MIT.

Ikigai's trajectory demonstrates how licensing can help early-stage university technologies attract investment, support company formation, and ultimately reach global customers through established commercial platforms.

"Ikigai shows how foundational computing research can become part of the infrastructure for the next generation of enterprise AI," said Kevin Hogan, TLO Senior Licensing and Business Development Officer. "It also serves as a reminder that public investment in research, paired with effective technology transfer, can create lasting economic and technological impact."

About Celonis

Celonis is a global leader in process intelligence, helping organizations understand and improve how their businesses run. Its platform uses process mining, AI, and real-time business contexts to identify inefficiencies, optimize workflows, and support better decision-making across enterprise operations. By giving companies greater visibility into their processes, Celonis helps customers improve performance, reduce costs, and drive operational transformation.

Exclusively Licensed Technology

The licensed technology was developed with sponsorship from the National Science Foundation and the Army Research Office. Together, these contributions underscore the importance of sustained investment in foundational computing research, particularly in areas like distributed computing and enterprise AI, where commercial impact often depends on long-term technical development, scalable system design, and the ability to translate early research advances into platforms that support real-world decision-making at enterprise scale.

#20258 | Computing with PubSub
Funding from the NSF and Army Research Office

Photo by Igor Omilaev on Unsplash⁷

Celebrating Licensees: Reaching New Milestones

The journey from invention development to commercialization is fraught with pitfalls and challenges, making every step forward a noteworthy achievement. Transitioning from the lab to the marketplace requires persistence, innovation, and strategic vision. Join us in celebrating the remarkable progress and achievements our life science and physical science licensees have made over the past year, leveraging their MIT intellectual property to transform cutting-edge research into real-world solutions.

Ayar Labs

Ayar Labs closed a \$500 million Series E financing round, bringing its total funding to \$870 million and raising its valuation to \$3.75 billion. The funding will accelerate high-volume production and deployment of Ayar Labs’ co-packaged optics solutions, which are designed to overcome interconnect bottlenecks and improve power efficiency for next-generation AI infrastructure.

BTG Positioning Systems

BTG Positioning Systems completed its strategic acquisition of MIT licensee GPR, Inc., making BTG the licensee of MIT created- radar-based localization technology for high-precision positioning. The acquisition strengthens BTG’s leadership in autonomous vehicle and crane positioning for container terminals while expanding its technology portfolio and supporting new applications in markets such as mining and logistics.

Cognito Therapeutics

Cognito Therapeutics closed an oversubscribed \$105 million Series C financing round to support advancement of its Spectris™ platform, a non-invasive, at-home therapeutic approach designed to treat Alzheimer’s disease through visual and auditory neurostimulation. The funding will support the upcoming pivotal HOPE study readout, preparation for potential regulatory submission and commercialization, and expansion of the platform into additional neurodegenerative indications.

Kano Therapeutics

MIT startup Kano Therapeutics Inc., founded on technology from the lab of Professor Mark Bathe, achieved its first commercial sale of a research-use-only single-stranded DNA product. The milestone advances Kano’s platform for producing longer, cleaner, and more cost-effective ssDNA, with the long-term goal of enabling pharmaceutical partners to use optimized ssDNA for targeted gene editing and gene therapy applications.



Commonwealth Fusion Systems’ new fusion power plant is expected to come online in the early 2030s and generate about 400 megawatts of clean, carbon-free electricity — enough to power large industrial sites or about 150,000 homes.

Image courtesy of Commonwealth Fusion Systems®

Commonwealth Fusion Systems

Commonwealth Fusion Systems (CFS) reached two major commercialization milestones for its first 400 MW ARC fusion power plant in Chesterfield County, Virginia, signing power purchase agreements with strategic investors Eni and Google, including an agreement with Eni valued at more than \$1 billion and Google’s first commercial commitment to fusion energy.

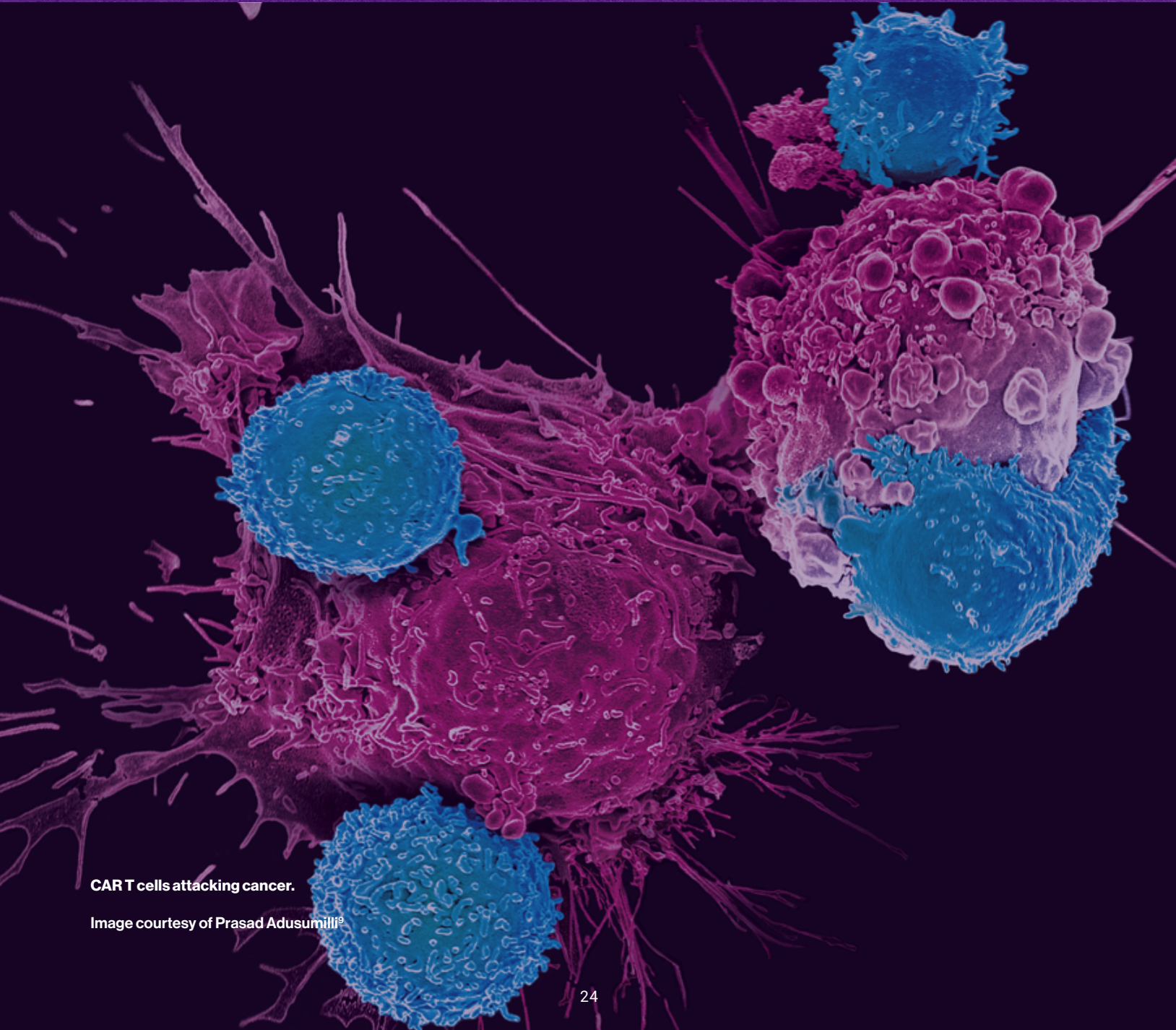
“This will be a watershed moment for fusion. It sets the pace in the race toward commercial fusion power plants. The ambition is to build thousands of these power plants and to change the world.”

Dennis Whyte
CFS co-founder, Hitachi America
Professor of Engineering at MIT

Kelonia Therapeutics

Kelonia Therapeutics initiated a Phase 1 clinical trial in Australia for KLN-1010, an investigational in vivo gene therapy designed to generate anti-BCMA CAR-T cells directly within patients after a single infusion, without the need for preparative chemotherapy or individualized CAR-T manufacturing. This clinical advancement is supported by early patient data showing MRD-negative responses and FDA IND clearance to expand the inMMycAR™ trial to U.S. clinical sites.

MIT licensee Kelonia Therapeutics also entered into a strategic collaboration with Johnson & Johnson to advance novel in vivo CAR-T cell therapies using its proprietary iGPS® gene delivery platform, including a sublicense to MIT-licensed intellectual property. Kelonia also entered into a definitive agreement to be acquired by Eli Lilly and Company for up to \$7.0 billion, further validating its approach to making CAR-T therapies more accessible by generating therapeutic cells directly in vivo and expanding Lilly's genetic medicine capabilities.



CAR T cells attacking cancer.

Image courtesy of Prasad Adusumilli⁹

Orna Therapeutics

Orna Therapeutics entered into a definitive agreement to be acquired by Eli Lilly and Company for up to \$2.4 billion, including upfront and milestone-based payments. The acquisition will advance Orna's engineered circular RNA and lipid nanoparticle platform, including its lead in vivo CAR-T program, ORN-252, which is designed to treat B cell-driven autoimmune diseases by enabling patients' bodies to generate therapeutic immune cells directly in vivo.

Syntis Bio

Syntis Bio closed an oversubscribed \$33 million Series A financing round, led by Cerberus Ventures, and secured up to \$5 million in non-dilutive NIH funding to advance its SYNT™ oral therapeutic platform. The funding will support Phase 1 development of its lead obesity program, SYNT-101, and initiation of Phase 1 studies for SYNT-202, an oral enzyme therapy for the rare pediatric disorder homocystinuria.

Syntis Bio also dosed the first patient in its Phase 1/1b SYNTIETY-1 clinical trial of SYNT-101, a once-daily oral therapy for obesity designed to transiently redirect nutrient absorption in the small intestine and mimic key metabolic effects of gastric bypass surgery. The trial will evaluate safety, tolerability, pharmacodynamics, pharmacokinetics, and metabolic markers in healthy volunteers and overweight or obese patients.

Vivex Corporation

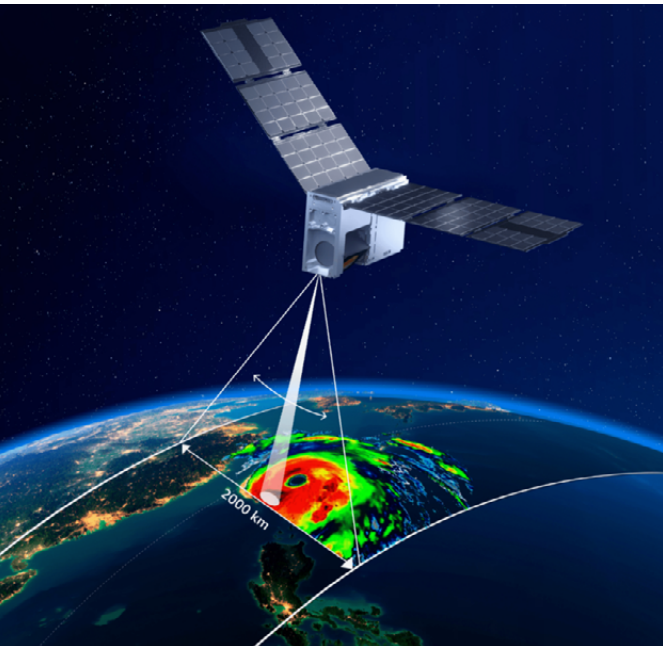
MIT-founded Vivtex Corporation entered into a partnership with Novo Nordisk to develop next-generation oral biologic medicines for obesity, diabetes, and associated comorbidities using Vivtex's proprietary gastrointestinal screening, formulation, and AI-enabled drug-delivery platform. Under the agreement, Vivtex will license select oral drug-delivery technologies to Novo Nordisk and is eligible to receive up to \$2.1 billion in upfront consideration, research funding, and milestone payments, plus tiered royalties on future product sales.

Outokumpu

Outokumpu is investing approximately \$45 million in a new pilot plant in New Hampshire to scale its proprietary technology for producing carbon-free chromium materials, including enriched ferrochrome and high-purity chromium metal. Planned to be operational in the first half of 2027, the pilot plant will demonstrate the scalability and industrial feasibility of the process by scaling up from 1 kg to 1 ton of daily production. This will support Outokumpu's broader strategy to commercialize sustainable specialty metals for high-value markets such as aerospace, defense, and energy.

Tomorrow.io

Tomorrow.io announced a \$175 million equity financing led by Stonecourt Capital and HarbourVest to accelerate deployment of DeepSky, its AI-native weather satellite constellation designed to expand global atmospheric sensing and improve real-time forecasting and decision-making. Tomorrow.io's fundraising follows the company's deployment of a 13-satellite constellation and will support continued growth of its space infrastructure and intelligence platform that supports aviation, logistics, energy, insurance, and public sectors.



Tomorrow.io satellite gathering atmospheric data
Image courtesy of Tomorrow.io¹⁰

Celebrating New Startup Licensees

Every year, numerous startup companies license MIT technology and embark on a journey to create real-world impact. These startups are not just utilizing existing innovations; they are taking the cutting-edge technologies developed at MIT and pushing the boundaries of what’s possible through further development and application. This year’s showcase highlights the diverse array of startups that have harnessed MIT’s intellectual property to create new products, services, and solutions that address pressing global challenges.

We believe in pioneering a brighter, more sustainable future through groundbreaking innovation. Our impact areas are carefully curated to reflect the pressing challenges and immense opportunities of our times.



Healthy Living
Research advancements for healthier and happier lives.



Sustainable Future
Green choices for a brighter future.



Climate Stabilization
Mitigation and adapting for the effects of climate change.



Advanced Materials
Transforming industry using substances with unique properties or capabilities.



Connected World
Enabling global connectivity and communication.



Uncharted Frontiers
Emerging technologies and unexplored frontiers.

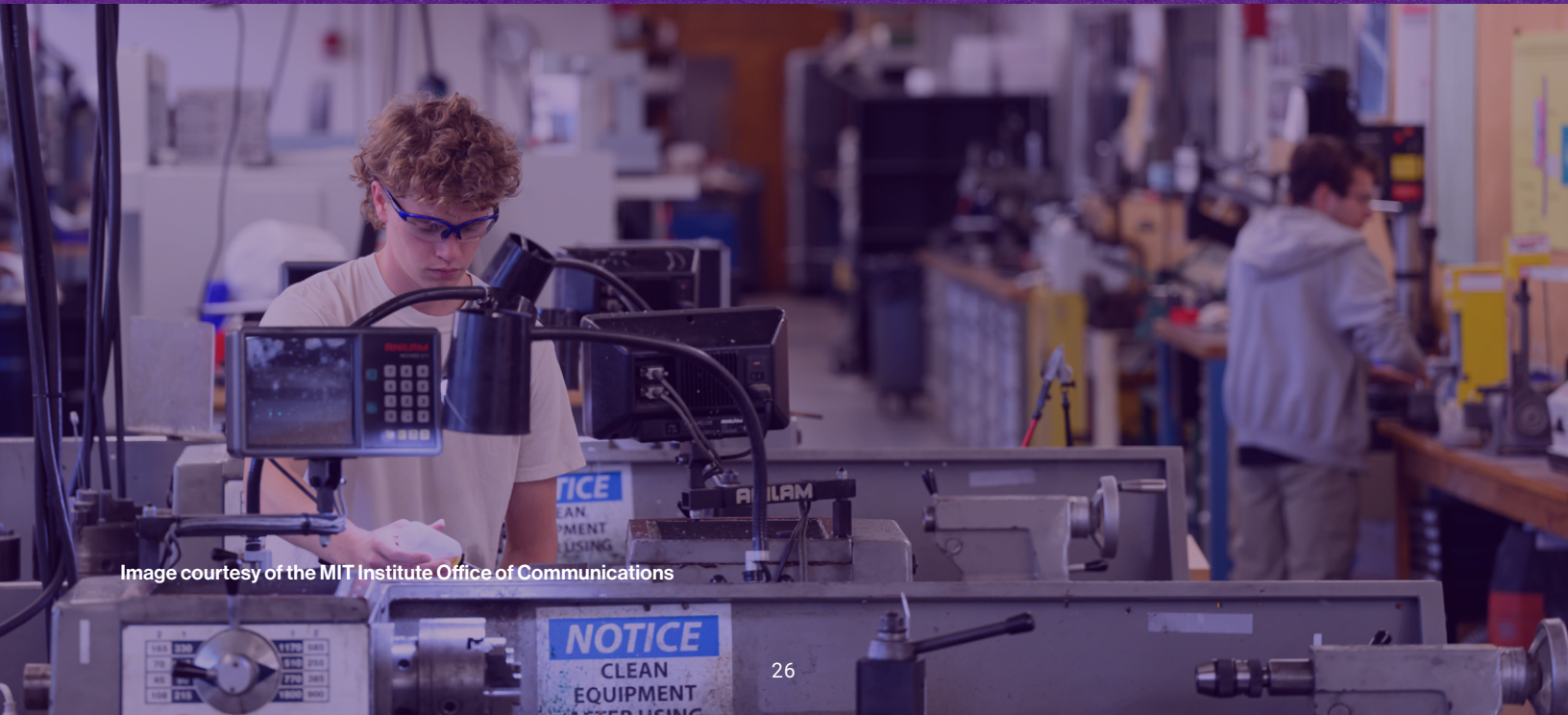


Image courtesy of the MIT Institute Office of Communications

Cambridge Terahertz



Cambridge Terahertz is developing compact terahertz radar imaging systems that combine high-frequency sensing and advanced signal processing to enable real-time concealed threat detection in schools, hospitals, government buildings, and other environments where security is paramount.

CoFlo Medical



CoFlo Medical is transforming the delivery of biologic therapies with a novel injection technology that enables the rapid administration of high viscous drugs, including monoclonal antibodies and long-acting formulations that expand patient access, lower health care costs, and improve treatment experience for patients.

G5 Labs



G5 Labs is developing a next-generation approach to software development that shifts the focus from writing code to defining system intent using natural language structured as a “system ontology.”

Magnendo



Magnendo is developing an AI-powered medical imaging platform that supports real-time gastrointestinal analysis, automated reporting, and improved diagnostic workflows for clinicians.

Matrisome Bio



Matrisome Bio is developing extracellular matrix-targeting cancer therapeutics that combine antibodies and small molecules to treat multiple cancer types with greater precision and reduced toxicity.

Mentix



Mentix is developing the Mantis Platform, an agentic multimodal knowledge workbench that maps complex information across data types so people and AI can reason, create, and transform knowledge with evidence and provenance in view.

Perceptra



Perceptra is developing compact optical sensing and AI-powered analytics tools that enable real-time chemical sensing useful for applications including bio-manufacturing and pharmaceutical monitoring.

RevelNext



RevelNext is developing next generation ostomy care products, including the patented Bag™ deodorizing lubricant. The technology is a novel lubricating coating which prevents “pancaking” and waste buildup, making pouch maintenance easier while improving comfort, hygiene and quality of life for ostomy users.

VectorWave



VectorWave is developing wireless communication and signal processing technologies that improve high-speed data transmission, connectivity, and network performance.

Vertical Semiconductor



Vertical Semiconductor is developing scalable vertical GaN power electronics that enable smaller, more efficient power converters for applications including data centers and grid infrastructure.

List only includes new startups who are licensees as of June, 2026.

Mapping MIT's Local Startup Impact

A key driver of Massachusetts' economic vitality and quality of life is the translation of MIT research into real-world products and services that benefit the public. One of the most powerful ways this happens is through startup formation: turning breakthrough ideas developed in MIT labs into companies that address critical global challenges and fuel local industry.

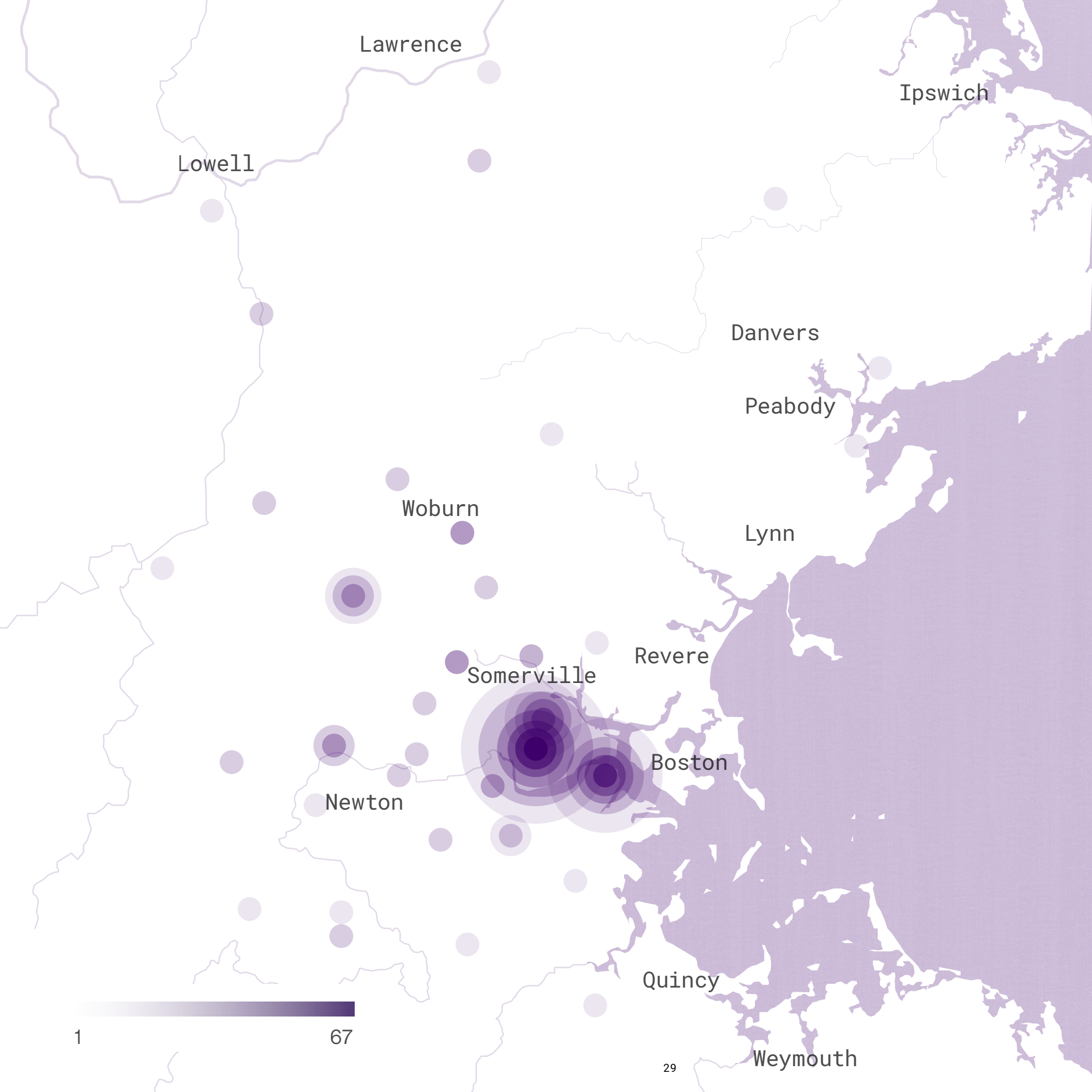
Today, approximately 200 active companies headquartered in Massachusetts are based on MIT-licensed technologies. Many originated just blocks from campus and have grown into anchor companies in their fields. Some have been acquired by larger firms, extending the reach of MIT innovation across the regional and national economy.

The Cambridge-Boston area has emerged as one of the world's most dynamic startup ecosystems, thanks in large part to MIT's research, talent, and longstanding support for entrepreneurship. With a dense network of research institutions, venture capital firms, accelerators, and established industry leaders, the region offers an unmatched environment for launching and scaling science- and technology-based ventures.

These startups do more than commercialize technology. They create high-quality jobs, attract investment, and help Massachusetts maintain its global leadership in innovation. Many are located in innovation districts throughout Cambridge, Kendall Square, Boston's Seaport, and beyond—integrating into the vibrant fabric of the state's economy.

MIT's influence on the startup ecosystem is not just local. It's catalytic. By licensing cutting-edge research and empowering entrepreneurial faculty, students, and researchers, the Institute helps seed the next generation of transformative companies. In doing so, MIT continues to strengthen the Commonwealth's economic resilience and global competitiveness.

The following map depicts local Massachusetts' companies with active startup licenses. Licenses includes agreements of the following type: License, Option, License by Agent, and Option by Agent.



Unexpected Inventions: A Fun Look at MIT Innovation

At the MIT Technology Licensing Office, we encounter a remarkable range of inventions, from world-changing breakthroughs to wonderfully unexpected innovations. Some technologies surprise us not just with their utility, but with their sheer originality. To celebrate this spirit of creative ingenuity, we’ve illustrated a few standout inventions with a lighthearted touch—because sometimes, the best way to showcase innovation is with a smile.

Explore more unexpected technologies at patents.mit.edu. If you see a patent you’d like us to turn into a cartoon for next year’s report, let us know!

DISCLAIMER: While these cartoons take a humorous approach, we recognize that the technologies they depict often address serious real-world needs and may offer meaningful benefits for patients, communities, industries, and society.



“I swear, it was this big—it had an internal actuation system and everything!”

“A Novel Actuation System for Fish-Like Swimming Robots”

This technology is an underwater robotic system that uses flexible fins to move through water, offering a simpler and potentially lower-cost alternative to conventional autonomous underwater vehicles. It works by accelerating a rotatable mass inside or on the robot’s body, creating a reaction torque that rocks the body and deforms the flexible fin, generating thrust in a fish-like motion. By enabling more efficient, agile, and affordable underwater robots, the technology could benefit society through improved ocean exploration, environmental monitoring, infrastructure inspection, and maintenance of underwater systems. (Case #19928)

“High Precision Coffee Machine”

This technology is a precision brewing system designed to improve the taste and consistency of brewed beverages such as coffee by controlling key brewing variables. It works by placing water and coffee grounds in a sealed cylinder with a plunger, filter, valve, and heating element, allowing the system to regulate temperature, pressure, immersion time, and extraction before expelling the brewed drink through the filter. By giving users greater control over the brewing process, it can produce higher-quality coffee more consistently while reducing variability and helping consumers, cafés, and specialty beverage makers better realize the flavor potential of their ingredients. (Case #14708K)



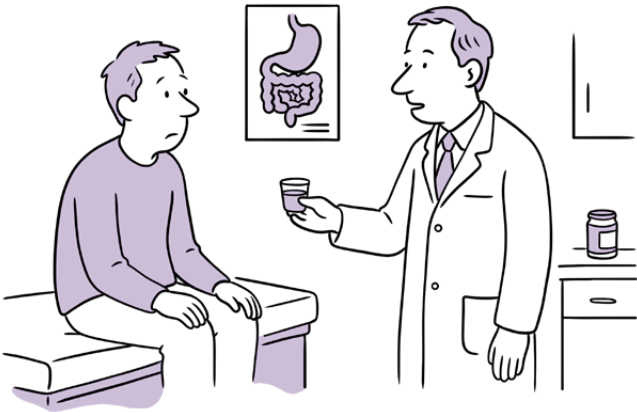
The holy grail of coffee snobbery.



Go ahead. Let them think it’s core strength.

“Drinkable, Tough Hydrogels for Gastrointestinal Applications”

This technology is a method for oral drug delivery involving the administration of pharmaceutically acceptable fluids to a patient in drinkable form. These fluids then partially or fully solidify within 15’ in the stomach to form a slow or sustained drug release article. This drinkable formulation allows for easier oral administration of drugs in a liquid format which transitions to a solid state within the stomach while encapsulating the active agent(s), optimizing drug release over time while providing protection against the harsh environment of the stomach. (Case #24642JQ)



“You’ll want to drink this now. In fifteen minutes, it’ll be a brick.”

IAP 2026: Advancing Intellectual Property Education

Independent Activities Period (IAP) is a four-week term each January when MIT faculty and students step away from regularly scheduled classes to pursue flexible teaching, learning, and independent research. IAP presents a valuable opportunity to share insights from the tech transfer ecosystem and connect the MIT community with expert researchers who have navigated commercialization pathways firsthand.

Innovation to Impact Speaker Series

This speaker series is designed to guide researchers through the process of turning breakthrough discoveries into real-world impact. Hosted by the TLO, each session highlights practical strategies and critical considerations for those exploring entrepreneurship.

All About Timing: Invention Disclosures and Patenting

Presented by Leo Takaoka
Intellectual Property Portfolio Manager

This session provided practical guidance on when and how to engage with the MIT Technology Licensing Office during the invention and patent process. The discussion covered what the TLO does, how invention disclosures are submitted and evaluated, and why early engagement can strengthen intellectual property outcomes. Key takeaways included the importance of filing before public disclosure, understanding the risks of the U.S. grace period and foreign patent rules, and ensuring an invention is sufficiently developed before filing to support stronger, broader patent claims. The session appealed to MIT researchers, students, postdocs, faculty, and startup founders seeking to protect their inventions and navigate patent timing.

Intellectual Property Ownership at MIT: Innovation & Collaboration

Presented by Caroline Basque
IPIA, JIA & Trademark Manager

This session provided an overview of intellectual property and how MIT’s IP policy applies to students, faculty, researchers, staff, and visitors. Speakers explained the main types of IP—patents, copyrights, and trademarks—and why protection matters for commercialization, sponsorship obligations, and public benefit. Key takeaways included when MIT owns IP, such as work tied to employment, sponsored research, MIT funding, UROPs, or certain research opportunities, and when exceptions may apply for theses, creative works, maker spaces, coursework, or approved entrepreneurship programs. The session appealed to MIT community members seeking clarity on ownership, collaboration, and commercialization.

Golden Speaker Series

The Golden Speaker Series features talks with members of the MIT community who have made significant contributions to innovation and entrepreneurship. Nominated by their TLO Licensing Officers, each speaker shares lessons learned from translating research into real-world solutions.

Open Source and Marine Autonomy with Michael Benjamin

This session examined MIT’s open-source marine autonomy platform, MOOS-IvP, and what it takes for academic software to gain real-world adoption. Mike Benjamin of MIT’s Marine Autonomy Lab discussed the project’s evolution, its use in autonomous surface and underwater vehicles, and the importance of documentation, training, community, and modular design alongside the code itself. Key takeaways included the value of reusable autonomy infrastructure, the role of open-source software in accelerating research and commercialization, and the licensing questions that arise when companies build proprietary tools on top of MIT-developed code. The session appealed to attendees interested in robotics, autonomy, open-source software, commercialization, and technology transfer.

Michael Benjamin is a principal research scientist at MIT in the Department of Mechanical Engineering. His research focus is on autonomy algorithms and software for unmanned marine vehicles. In 2005 he founded an open source project named moos-ivp.org comprising dozens of marine autonomy applications including the IvP Helm for autonomous decision making, and COLREGS autonomy on unmanned surface vessels. His software is used on many different types of unmanned marine vehicles around the world.

Watch the Recordings →
youtube.com/@mit_tlo



Images courtesy of the MIT Institute Office of Communications and MIT News



Image courtesy of the MIT Institute Office of Communications

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