



Publications of the Week

Am80-Lipid Nanoparticles Serve as an Enteric Mucosal Adjuvant Following Parenteral Immunization with Inactivated Polio Vaccine

First Author: Behnaz Eshaghi | Senior Author: Robert Langer and Ana Jaklenec (*pictured*)
Science Advances | Koch Institute, Ragon Institute, Harvard Medical School, Beth Israel Deaconess Medical Center, and MIT



The inactivated polio vaccine elicits strong systemic immunity but fails to induce the mucosal IgA responses required to fully block poliovirus transmission, a critical step toward complete eradication. To address this limitation, researchers developed a clinically translatable and scalable nanoparticle-based intestinal mucosal adjuvant by encapsulating Am80 within nanoparticles. [Abstract](#) | [Press Release](#)

Long-Lasting Gut Microbiome and Fecal Metabolome Alterations After Colorectal Adenoma Removal and Their Relationship to Colorectal Cancer

First Author: Ana Nogal (*pictured*) | Senior Author: Mingyang Song
Cell Host & Microbe | Dana-Farber Cancer Institute, Brigham and Women's Hospital, Massachusetts General Hospital, Broad Institute, and Harvard Medical School



Although the gut microbiome is implicated in colorectal cancer, microbiome and metabolome alterations along the adenoma-carcinoma sequence remain unclear. Here, researchers profile stool metagenomes obtained from 354 women 12.1 ± 4.8 years following adenoma resection and from their 1:1-matched controls, as well as stool metabolomes from 184 pairs. [Abstract](#) | [Press Release](#)

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Awards

Ten From MIT Accept 2026 Fulbright Awards

MIT News



Ten MIT affiliates — including undergraduates, graduate students, and alumni — have accepted Fulbright grants to conduct research in countries across the world. This year's awardees include Jessica Chomik-Morales, Stella Gassman, Chen Li, Liam Moser, Lilia Ould-Hammou, Bryan Sperry, Sophie Thompson, Claire Underwood, Sophie Vulpe, and Josephine Wang (*pictured, left to right, top to bottom*). [Read More](#)

Dr. Gaurav Gaiha Named the 2026 Giammaria and Sabrina Giuliani MGB Research Scholar

Ragon Institute



Mass General Brigham (MGB) has officially named Ragon faculty member Dr. Gaurav Gaiha (*pictured*) as the 2026 Giammaria and Sabrina Giuliani MGB Research Scholar, as part of the inaugural class of MGB Research Scholars. This award recognizes work that represents the very best of innovation, rigor, and promise across the MGB research community. [Read More](#)

Harvard Hero Dominic Mao Turns Big Ideas Into Opportunities for Students

Harvard University Department of Molecular and Cellular Biology



Dr. Dominic Mao (*pictured*), Assistant Director of Undergraduate Studies and a lecturer in the Life Sciences, was recognized as a Harvard Hero for his extraordinary contributions to students, education, and the broader Harvard community. The annual Harvard Heroes program honors employees who consistently go above and beyond their formal job responsibilities to make a lasting impact across the University. [Read More](#)

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Local News

Enzymes That Assemble Into Droplets Can Speed Up Cellular Reactions

MIT News



In a new study, MIT researchers have shown that droplet formation is critical for controlling the function of a class of enzymes called kinases. "Many biological molecules have this propensity to spontaneously separate. We were really interested in asking, if we have these kinases forming droplets, what is the consequence of that in the context of signaling?" says Dr. Lindsay Case (*pictured*), senior author of the study. [Read More](#)

RAS(ON) Inhibitor Doubles Median Overall Survival in Results of Phase 3 Trial for Patients with Metastatic Pancreatic Cancer

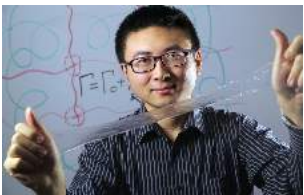
Dana-Farber Cancer Institute



A shift in the way people think about and treat pancreatic cancer could be on the horizon based on positive results from the pivotal randomized phase 3 RASolute 302 trial comparing daraxonrasib to chemotherapy as second-line therapy for patients with metastatic pancreatic cancer. Dr. Brian Wolpin (*pictured*), Director of the Hale Family Center for Pancreatic Cancer Research, led the study. [Read More](#)

Ultrasound-Based Pacemaker Noninvasively Steadies the Heart

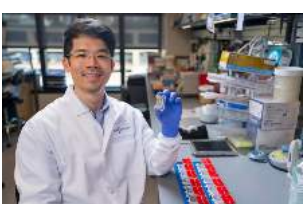
MIT News



MIT engineers have developed a noninvasive pacemaker that stimulates the heart using ultrasound. The design could one day provide a surgery-free alternative to traditional cardiac implants. Dr. Xuanhe Zhao (*pictured*) and his colleagues have published their results in a study appearing in the journal *Nature Biomedical Engineering*. [Read More](#)

Dr. David Chou on Keeping People Safe From Radiation on Earth and Beyond

Wyss Institute



Dr. David Chou's (*pictured*) work is literally out of this world! In addition to identifying radiation countermeasures for use on Earth, he is part of the AVATAR (A Virtual Astronaut Tissue Analog Response) project, which aims to understand how humans respond to the health risks inherent to spaceflight. As a physician-scientist, he's equally excited about developing therapeutics and contributing to humanity's future beyond our planet. [Read More](#)

Beyond Average-Based Medicine: HIE as a Blueprint for Data-Informed Care

Boston Children's Hospital



Historically, outcome prediction in medicine has followed a familiar formula: run a clinical trial, publish the results, guide care based on averages. The model has served for decades, despite its limits. Researchers at Boston Children's are challenging this model by using big data to reimagine how outcomes are predicted, starting with hypoxic-ischemic encephalopathy (HIE), a brain injury caused by oxygen deprivation at birth. [Read More](#)

Researchers Publish First Complete Connectome of Fruit Fly Brain and 'Spinal Cord'

Harvard Medical School



In a first, a large, international team led by multiple labs at Harvard Medical School and Princeton University has published a complete wiring diagram of all the connections between neurons in the central nervous system of an adult fruit fly. The work, published in *Nature*, allows researchers to begin to study how the brain and body interact to carry out complex behaviors such as walking and flying. [Read More](#)

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Upcoming Events in Boston

June 16
4:00 PM

2026 Edward M. Scolnick Prize Lecture in Neuroscience with Liquan Luo
Singleton Auditorium

June 16
5:30 PM

ChemBio in the PUB 2026
Flat Top Johnny's

June 18
9:00 AM

Koch Institute Symposium 2026
Huntington Hall

June 18
6:30 PM

BioConnect Boston | Biotech & Life Sciences Networking Event
Time Out Market Boston

June 18
7:00 PM

The Correction of Misinformation | Binge Thinking
First Street Market

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Science Jobs in Boston

Scientific Inside Sales Representative, Immunology
STEMCELL Technologies

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MIT

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Strand Therapeutics

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Research Associate, ID Virology
Moderna

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