



Publications of the Week

Synthetic Control of Implanted Engineered Liver Tissue Growth

First Author: Amy Stoddard (*pictured*) | Senior Author: Christopher Chen
Science Advances | The Wyss Institute, Boston University, Koch Institute, Broad Institute, and MIT



Despite the promise of engineered tissue implants for the treatment of organ failure, scaling of these constructs to sizes of therapeutic relevance remains a barrier to clinical translation. Here, researchers propose a strategy to circumvent this limitation: to instead implant a small-scale construct and then induce it to grow *in situ* after its engraftment into a host. [Abstract](#) | [Press Release](#)

Inertial Sensing of Water Content in Tumor Spheroids

First Authors: Georgios Katsikis (*pictured*) and Jennifer Yoon | Senior Author: Scott Manalis
Science Advances | Koch Institute, Dana-Farber Cancer Institute, Harvard Medical School, Brigham and Women's Hospital, and MIT



Cellular water content governs the concentration of all biomolecules inside a cell, thereby influencing the physical and functional properties of the cell. However, measurements of water content in physiologically relevant cell culture models remain largely unavailable, particularly in 3D models such as tumor spheroids and organoids. Here, researchers achieve such measurements using an industrial-grade capillary steel tube. [Abstract](#)

[View All Publications](#) ➔

Awards

Professor Michael Laub and MIT Alumni Named 2025 AAAS Fellows

MIT News



MIT's Dr. Michael Laub (*pictured*) as well as 21 MIT alumni have been elected as fellows of the American Association for the Advancement of Science. Dr. Laub, the Salvador E. Luria Professor in the MIT Department of Biology, studies the biological mechanisms and evolution of how cells process information to regulate their own growth and proliferation. [Read More](#)

Dr. Sophie Claudel Awarded American Kidney Fund Grant

Boston University Chobanian & Avedisian School of Medicine



Dr. Sophie Claudel (*pictured*) has received a 2026 research grant from the American Kidney Fund's Clinical Scientist in Nephrology Program, which funds early-career nephrologists dedicated to improving diagnosis, treatment and outcomes for people living with chronic kidney disease. Dr. Claudel is a nephrology fellow at Boston Medical Center. [Read More](#)

[View All Awards](#) ➔

Local News

Forging Paths to Healing, From Immunology to the Biomedical Pipeline

Harvard Medical School



Dr. Leonard Nettey (*pictured*) almost missed out on one of the most meaningful opportunities of his life. Nettey was early in his MD-PhD training in immunology in the Harvard-MIT Program in Health Sciences and Technology when asked to help lead a national nonprofit that would empower more Black students to pursue careers in health care and biomedical science. [Read More](#)

New Findings Uncover a 3D DNA Switch in Brown Fat That Could Fight Obesity and Diabetes

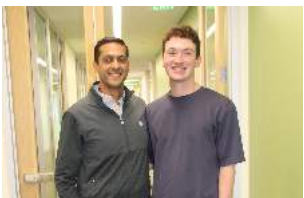
Joslin Diabetes Center



Unlike the white fat that accumulates just under our skin, brown fat burns calories and glucose to generate heat. Researchers led by Dr. Yu-Hua Tseng (*pictured*) at Joslin Diabetes Center have identified a molecular switch that controls whether brown fat can turn on its calorie-burning properties, and they have also shown that the same mechanism operates in human tissue. [Read More](#)

Gaiha Lab Identifies T Cells With Robust Expansion Capability That Help a Rare Group of People Naturally Control HIV After Treatment Interruption

Ragon Institute



A small number of people living with HIV are able to durably suppress the virus after stopping antiretroviral therapy, a phenomenon that has long interested researchers searching for a functional cure. A new study from Charles Crain (*pictured, right*) and Dr. Gaurav Gaiha's (*left*) lab at the Ragon Institute helps explain why, and points to a specific type of immune cell that could be the key to designing better therapies. [Read More](#)

From Lemur Gut Health to COVID-19, Amanda Perofsky Studies Infectious Diseases

Northeastern Global News



What do Madagascar's lemurs and the COVID-19 pandemic have in common? The answer is Dr. Amanda Perofsky (*pictured*). A research Assistant Professor in Public Health and Health Sciences at Northeastern University's Network Science Institute, Dr. Perofsky focuses on understanding and predicting how infectious diseases like flu, COVID-19 and respiratory syncytial virus spread and evolve. [Read More](#)

Mapping 'Neighborhoods' in Aggressive Childhood Brain Tumors

Boston Children's Hospital



The third-most common kind of childhood brain tumor, supratentorial ependymoma, is an aggressive cancer that often returns after surgery and radiation therapy. By learning more about the makeup of these tumors, Boston Children's researchers led by Dr. Mariella Filbin (*pictured*) hope to better understand how to treat them and prevent recurrence. [Read More](#)

Vitamin D May Help Prevent Diabetes, Depending on Your Genes

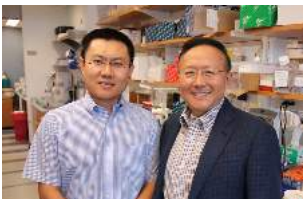
Tufts Now



A new study finds that vitamin D may help delay or prevent type 2 diabetes progression, but only in people with certain genetic variations. The study from Dr. Bess Dawson-Hughes' (*pictured*) lab found prediabetic adults with certain variations in the vitamin D receptor gene had a 19% lower risk of developing diabetes when taking a high daily dose of vitamin D. [Read More](#)

UMass Chan Licenses Gene Therapy for Maple Syrup Urine Disease to Plowshare Therapies

UMass Chan Medical School



A gene therapy designed by UMass Chan Medical School researchers to correct mutations that cause two different genetic forms of maple syrup urine disease has been licensed to the biotech company Plowshare Therapies. Drs. Dan Wang (*pictured, left*) and Guangping Gao (*right*) co-authored the study that shows a treatment delivered to animal models by adeno-associated virus vector prevented newborn death. [Read More](#)

Harnessing the Power of AI to Fight Lyme Disease

Tufts Now



Tufts University researchers are using AI and machine learning to more quickly identify potential narrow-spectrum antibiotics to prevent and treat Lyme disease. The work, led by Drs. Maha Farhat (*pictured, left*) and Linden Hu (*right*) has already identified several hundred unique compounds that kill *Borrelia burgdorferi*, the bacteria that causes Lyme disease. [Read More](#)

[View All Local News](#) ➔ | [Submit an Article](#) ➔



Upcoming Events in Boston

May 13 2:30 PM	2026 Connors-MGB Research Collaborative Symposium Marshall A. Wolf Conference Center
May 18 8:30 AM	HCMPh Center Annual Symposium Harvard T.H. Chan School of Public Health
May 21 5:30 AM	2026 Yang ICoN Center Symposium: Self-Organization and Emergence in Development Singleton Auditorium
May 28 7:00 PM	AI and the Future of Cancer Treatments Museum of Science
June 3 8:30 AM	Better Together: A Pharma & Biotech EHS Forum Museum of Science

[View All Events](#) ➔ | [Submit an Event](#) ➔



Science Jobs in Boston

Scientist I Nova Biomedical
Research Assistant I Harvard University
Research Technician, Bygrave Lab Tufts University
Research Technician, Hahn Lab Dana-Farber Cancer Institute
Clinical Laboratory Process Development Associate I Broad Institute

[View 90 Other Science Jobs](#) ➔ | [Submit a Job](#) ➔



Submit your articles and events by reaching out to us at info@scienceinboston.com.

BROUGHT TO YOU BY



STEMCELL Technologies

Products | Services

STEMCELL Science News

Free Regular Updates on Your Field

The Stem Cell Podcast

Interviews and Updates
on Stem Cell Science