



Publications of the Week

In Vivo Prime Editing Rescues Alternating Hemiplegia of Childhood in Mice

First Authors: Alexander Sousa, Markus Terrey, and Holt Sakai | Senior Authors: Cathleen Lutz and David Liu (pictured) Cell | Harvard University, Massachusetts General Hospital, UMass Chan Medical School, Broad Institute, and MIT



Alternating hemiplegia of childhood (AHC) is a neurodevelopmental disorder with no disease-modifying treatment. Mutations in *ATP1A3*, encoding an Na^+/K^+ ATPase subunit, cause 70% of AHC cases. Here, researchers present prime editing and base editing strategies to correct *ATP1A3* and *Atp1a3* mutations in human cells and in two AHC mouse models. [Abstract](#) | [Press Release](#)

Integrative Analysis of Lung Adenocarcinoma Across Diverse Ethnicities and Exposures

First Authors: Shankha Satpathy (pictured), Natalie Clark, Yi-Ju Chen, Noshad Hosseini, Ya-Hsuan Chang, Yi Hsiao, Jonathan Lei, Francesca Petralia, and Jin-Shing Chen | Senior Authors: Sung-Liang Yu, Hsuan-Yu Chen, Alexey I. Nesvizhskii, Steven Carr, D.R. Mani, Marcin Cieslik, Yu-Ju Chen, and Michael Gillette Cancer Cell | Broad Institute and Massachusetts General Hospital



Lung adenocarcinomas (LUAD) are a pressing global health problem with enduring lethality and rapidly shifting epidemiology. This comprehensive proteogenomic analysis of LUAD tumors and matched normal adjacent tissues from 406 patients across diverse geographic and demographic backgrounds explores the impact of understudied driver mutations. [Abstract](#) | [Press Release](#)

[View All Publications](#) ➔

Awards

Camille Testard Named Branco Weiss Fellow for Trailblazing Research on Social Resilience to Ecological Disasters

Harvard University Department of Molecular and Cellular Biology



Harvard Junior Fellow Dr. Camille Testard (pictured) has been awarded the highly competitive Branco Weiss Fellowship – Society in Science, a prestigious five-year award that supports exceptional early-career researchers with bold, cross-disciplinary ideas. As a Branco Weiss Fellow, Dr. Testard will launch an ambitious new research program to investigate how animal societies adapt to ecological disturbances, bridging the fields of ecology and neuroscience. [Read More](#)

Dr. Samara Vilca Receives Burroughs Wellcome Fund Postdoc Diversity Enrichment Award

UMass Chan Medical School



Dr. Samara Vilca (pictured) is one of 30 postdoctoral researchers in the United States to receive the Burroughs Wellcome Fund Postdoctoral Diversity Enrichment Program Award, presented to postdocs pursuing careers in biomedical and medical research. The award aims to cultivate a diverse scientific workforce equipped to tackle the complex health challenges of the future. [Read More](#)

[View All Awards](#) ➔

Local News

Mapping Cells in Time and Space: A New Tool Reveals a Detailed History of Tumor Growth

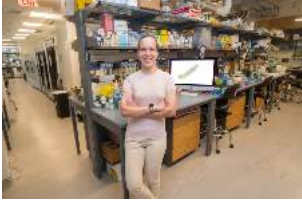
Whitehead Institute



Dr. Jonathan Weissman (pictured) and his colleagues have developed an advanced lineage tracing tool that not only captures an accurate family tree of cell divisions, but also combines that with spatial information: identifying where each cell ends up within a tissue. The researchers used their tool, PEtracer, to observe the growth of metastatic tumors in mice. [Read More](#)

Dr. Anastasia Ershova on Designing and Building with RNA and DNA

Wyss Institute



At the Wyss, Dr. Anastasia Ershova (pictured) is a scientist developing and fabricating nanostructures from DNA and RNA for use in therapeutics and diagnostics. She is working on a number of projects, all involving designing and building novel nucleic acid nanostructures for therapeutic and diagnostic applications. [Read More](#)

Study Finds Key Role for Non-Neural Brain Cells in Processing Vision

The Picower Institute



Cells called astrocytes are about as abundant in the brain as neurons, but scientists have spent much less time figuring out how they contribute to brain functions. A novel study led by Dr. Mriganka Sur (pictured) shows that one function appears to be maintaining the chemical conditions necessary for groups of neurons to team up to encode information. [Read More](#)

Curing Heart Attacks, Replacing Diseased Organs — Dr. Christopher Chen Is Engineering a Healthier Future

The Brink



Dr. Christopher Chen (pictured) is the Founding Director of Boston University's Biological Design Center, which aims to improve our understanding of how cells and biological systems work, and then find ways to control them for our benefit. His team has developed a new way of studying the heart by building a miniature replica of a heart chamber from a combination of nanoengineered parts and human heart tissue grown from stem cells. [Read More](#)

Dana-Farber Research Shows Promise for Targeted Therapies for Pediatric Gliomas

Dana-Farber Cancer Institute



A new study has found that 8.9% of children with glioma, the most common form of pediatric brain tumor, have alterations in the fibroblast growth factor receptor (FGFR) family of proteins, and that these gliomas may be sensitive to existing FDA approved inhibitors that broadly block FGFR. The research was published by Drs. Pratiti Bhandopadhyay (pictured) and Keith Ligon. [Read More](#)

Why Do Symptoms Linger in Some People After an Infection? A Conversation on Post-Acute Infection Syndromes

Bench Press



In recent years, doctors and scientists are increasingly studying long-lasting illnesses that begin after someone recovers from an infection. Two of the most well-known examples are long COVID and myalgic encephalomyelitis/chronic fatigue syndrome. In this Q&A, Dr. Anthony Komaroff (pictured) explains what causes these illnesses and how they might be treated. [Read More](#)

Phase 1 Clinical Trial of HIV Vaccine Starts in Africa to Evaluate Immune Responses to Highly Networked HIV T-Cell Epitopes

Ragon Institute



The Mutala Trust, ReiThera Srl (ReiThera), the Ragon Institute, and the International AIDS Vaccine Initiative have announced that the first doses of an investigational HIV vaccine candidate have been administered. The vaccine candidate, Gorilla Adenovirus Vected HIV Networked Epitopes Vaccine (GRAdHIVNE1), was first administered on July 28, 2025, at the Mutala Trust clinical trial site in Harare, Zimbabwe. [Read More](#)

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

📅 Upcoming Events in Boston

August 14
6:00 PM

After Dark: AI & Discovery
MIT Museum

August 17 - 20
11:00 AM

2025 Nucleate Summit
Cathleen Stone Island

August 18 - 21
8:00 AM

The Bioprocessing Summit 2025
Omni Hotel Boston at the Seaport

August 28
7:00 PM

Where Biology Ends and Bias Begins: A Conversation on the Science of Human Difference
Museum of Science

September 18
9:00 AM

The 2025 Aging Brain Initiative Symposium: The Neuro-Immune Axis and the Aging Brain
Singleton Auditorium

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

📁 Science Jobs in Boston

Research Scientist
Mass General Brigham

Associate Scientist
Takeda

Senior Group Leader, Immunology Program
Broad Institute

Principal Scientist, Translational Computational Biology, Neuroscience
Bristol Myers Squibb

BSL2 Research Technician, National Emerging Infectious Disease Lab
Boston University

[View 68 Other Science Jobs](#) ➔ | [Submit a Job](#) ➔

Article: To Postdoc or Not to Postdoc?
Decision-Making Tips



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 Weekly Updates on Your Field

The Stem Cell Podcast
Interviews and Updates on Stem Cell Science