Volume 8.41: October 19, 2026

Publications of the Week

Comprehensive Lineage Tracing Maps the Landscape of Cell Fate Decisions in Mouse Embryogenesis

First Authors: William Colgan and Luke Koblan | Senior Author: Jonathan Weissman *(pictured)*
Cell | Whitehead Institute, Harvard University, and MIT

A comprehensive cell fate map of mammalian embryogenesis has remained out of reach given the scale, cellular diversity, and non-deterministic nature of development *in utero*. Here, researchers used PEtracer to continuously install heritable genetic marks as development progresses, reconstructing lineage trees that resolve ~75% of cell divisions across >1.4 million cells from 16 replicate embryos. **Abstract | Press Release**

In Vivo Engineering of CAR Natural Killer Cells for Immunotherapy Using Ligand-Directed Lipid Nanoparticles

First Authors: Yuang Chen, Julia Monkovic, and Haseeb Mughal | Senior Author: Daniel Anderson *(pictured)*
Nature Biotechnology | Boston Children's Hospital and MIT

Targeted lipid nanoparticles (LNPs) offer a nonviral approach for in vivo cell engineering but efficient programming of natural killer (NK) cells remains underexplored. Here, researchers developed NK cell-targeted LNPs (NtLNPs) using engineered biparatopic NK cell ligands to drive receptor-specific uptake and mRNA delivery. They establish NtLNPs as a modular immunotherapy system. **Abstract | Press Release**

View All Publications

Awards

Allon Klein Named 2026 Schmidt Science Polymath

Harvard Medical School

Dr. Allon Klein *(pictured)*, Professor of Systems Biology, has been named a 2026 Schmidt Science Polymath. The award provides up to $2.5 million over five years for researchers to pursue questions beyond their established areas of research. Dr. Klein has focused on understanding how cells acquire and change fates during development and in adult tissues. **Read More**

Dr. Joyce Liu Wins Prestigious Award From the National Cancer Institute

Dana-Farber Cancer Institute

Dr. Joyce Liu *(pictured)* of Dana-Farber Cancer Institute is the recipient of the 2026 Michaele C. Christian Oncology Drug Development Award and Lectureship from the National Cancer Institute. The prestigious honor awarded annually recognizes individuals who have made significant contributions to the development of novel investigational agents for cancer therapy. **Read More**

Three Broad Researchers Honored by NIH's High-Risk, High-Reward Program

Broad Institute

Drs. Erin Chen *(pictured)* and Sam Peng have each been awarded the NIH Director's New Innovator Award, one of the National Institutes of Health's (NIH) most prestigious awards for early-career researchers. Dr. JT Neal has been granted an NIH Director's Transformative Research Award for research that could create or overturn fundamental scientific paradigms. **Read More**

Two Dana-Farber Researchers Receive Prestigious New Innovator Award From the National Institutes of Health

Dana-Farber Cancer Institute

Dr. Xin Gu *(pictured)* and Nicholas Polizzi of Dana-Farber Cancer Institute have received New Innovator Awards from the National Institutes of Health High-Risk, High-Reward Research program. The prestigious award supports early career investigators pursuing highly innovative research with the potential for broad impact on biomedical and behavioral science. **Read More**

Dr. Mehrdad Jazayeri Receives Robert A. Wurtz Award in Systems Neuroscience

McGovern Institute

Dr. Mehrdad Jazayeri *(pictured)* has received the 2026 Robert A. Wurtz Award in Systems Neuroscience for his efforts to understand how neural circuits support cognition and behavior. The Robert H. Wurtz Award and Lecture in Systems Neuroscience recognizes advancements in neural research, including discoveries deciphering how brain circuits generate vision and guide behavior. **Read More**

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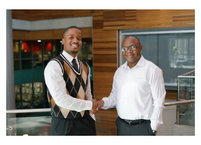
Local News

Ndhlovu Lab Finds Natural Killer Cells Are Kept Away from HIV's Hiding Places in Lymph Nodes

Ragon Institute



Antiretroviral therapy can keep HIV at undetectable levels in the blood, but it does not clear the virus from the body, where infected cells can escape both treatment and the body's own defenses. A major reason is that HIV persists in lymph nodes A new study from Mali Mlaba *(pictured, left)* the lab of Dr. Zaza Ndhlovu *(right)* shows that natural killer cells are largely kept out of these reservoir sites. **Read More**

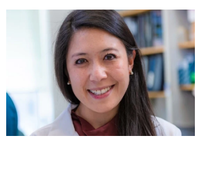
Drug Combination That Reduces Oxygen Levels in Tissues Improves Parkinson's Symptoms in Mice

Broad Institute

In a new paper, Broad Institute researchers led by Dr. Vamsi Mootha *(pictured)* reported that two small molecule chemicals that reduce oxygen delivery to cells improved symptoms of neurodegeneration in a mouse model of Parkinson's disease. The scientists had previously found that excess oxygen in the brain is associated with neuronal death in Parkinson's and that reducing oxygen that mice breathe could help reverse symptoms. **Read More**

Novel Antibody-Drug Conjugate Demonstrates Durable Responses in Patients With Platinum-Resistant Ovarian Cancer

Dana-Farber Cancer Institute



An investigational antibody-drug conjugate demonstrated clinically meaningful and durable responses in patients with platinum-resistant ovarian cancer, including patients whose tumors had low or no expression of folate receptor alpha, according to findings from the Phase I/II RAINFOL-01 clinical trial. Dr. Elizabeth Lee *(pictured)* is the lead investigator on the study. **Read More**

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Upcoming Events in Boston

October 18-21 8:00 AM	**The Medtech Conference 2026**	Boston Convention and Exhibition Center
October 29 6:00 PM	**Discovery After Dark**	Broad Institute
November 4 9:00 AM	**Comparative Neuroscience: Lessons from Biodiversity**	Singleton Auditorium
November 5 6:00 PM	**Living Water: A Lo-TEK Experience**	MIT Museum
November 12 6:00 PM	**After Dark: Decoding Whales and Dolphins**	MIT Museum

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Science Jobs in Boston

Associate Scientist II, Bioanalytical Sciences
Alnylam

US Medical Director, Transplantation Kidney
Sanofi

Associate, QC Analytical Flow Cytometry, A2 Shift, Cell Therapy
Bristol Myers Squibb

Regulatory Coordinator, Lymphoma
Dana-Farber Cancer Institute

Research Assistant III
Boston Children's Hospital

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