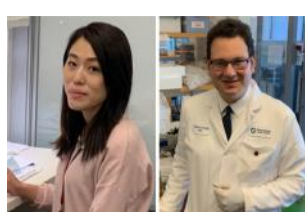


Publications of the Week

Regulation of Neuroendocrine Plasticity by the RNA-Binding Protein ZFP36L1

First Authors: Hsiao-Yun Chen (pictured, left) and Yavuz Durmaz | Senior Author: Matthew Oser (right) Nature Communications | Dana-Farber Cancer Institute, Brigham and Women's Hospital, Harvard Medical School, and the Broad Institute



Some small cell lung cancers (SCLCs) are highly sensitive to inhibitors of the histone demethylase LSD1. The authors identify ZFP36L1 as an LSD1 target gene that controls the SCLC neuroendocrine phenotype and demonstrate that modulating mRNA stability of lineage transcription factors controls neuroendocrine to non-neuroendocrine plasticity. Abstract

Elucidating the Path to Plasmodium Prolyl-tRNA Synthetase Inhibitors That Overcome Halofuginone Resistance

First Author: Mark Tye | Senior Author: Ralph Mazitschek (pictured) Nature Communications | Massachusetts General Hospital, Harvard University, Northeastern University, and the Broad Institute



In recent years, aminoacyl-tRNA synthetases, including prolyl-tRNA synthetase, have emerged as attractive targets for malaria chemotherapy. The authors describe the development of a single-step biochemical assay for Plasmodium and human prolyl-tRNA synthetases that overcomes critical limitations of existing technologies and enables quantitative inhibitor profiling with high sensitivity and flexibility. Abstract

View All Publications

Awards

Hopi Hoekstra Is a 2022 Explorers Club Lowell Thomas Awardee

Harvard University Department of Molecular and Cellular Biology



Dr. Hopi Hoekstra (pictured) has been named to the Explorers Club as a recipient of the 2022 Lowell Thomas Award, which this year honors professionals who display excellence in Conservation Genetics. Dr. Hoekstra studies how organisms adapt to novel environments, using wild mice as a model. She has traveled the globe as part of her work studying animals living in extreme habitats. Read More

UMass Chan Clinician-Scientist Tammy Nguyen Named Wylie Scholar for Research on Nonhealing Diabetic Foot Ulcers

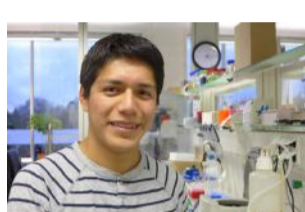
UMass Chan Medical School



The nonprofit Vascular Cures has awarded Dr. Tammy Nguyen (pictured) the 2022 Wylie Scholar Award for her research project exploring how the diabetic immune system contributes to nonhealing ulcers. She wants to understand why nonhealing foot ulcers develop in the diabetic population and how amputations can be prevented. Read More

Awards & Recognitions: August 2022

Harvard Medical School (HMS)



Three HMS postdoctoral fellows, including Dr. Manuel Osorio Valeriano (pictured), have been awarded fellowships by the Damon Runyon Cancer Research Foundation. The Damon Runyon Fellowship recognizes exceptional postdoctoral scientists conducting basic and translational cancer research in the laboratories of leading senior investigators. Read More

Templeton Foundation Supports Yukiko Yamashita's Pioneering Work on Germline Immortality

Whitehead Institute



Whitehead Institute Member Dr. Yukiko Yamashita (pictured) has received a grant from the John Templeton Foundation to explore the importance of maintaining ribosomal DNA repeats in the "immortality" of germ cells, which pass the genome on to an organism's progeny. Dr. Yamashita's work on this fundamental question of life could open whole new paths for mitigating the cell-aging process — and could lead to new treatments for cancer, which may hijack the germline's mechanism of immortality. Read More

View All Featured Awards

Local News

How to Make Injured Neurons Survive

Harvard University Department of Molecular and Cellular Biology



In new work, Drs. Joshua Sanes (pictured) and Zhigang He looked globally at gene expression patterns that affect survival and regeneration. In one of two companion papers, they used their transcriptomic approach to learn how three interventions discovered by the He lab act. Their analysis converged on three gene expression programs activated by injury. Read More

Rushdy Ahmad on Addressing Unmet Needs with the Wyss Diagnostics Accelerator

Wyss Institute



When Dr. Rushdy Ahmad (pictured) was growing up in Bangladesh, he was confronted with poverty and suffering all around. He has spent years searching for a place and position where he could use his scientific training to help alleviate some of that pain. Rushdy finally found that opportunity as the Staff Lead of the Wyss Diagnostics Accelerator. Read More

Multitude of Mutations Spells Susceptibility to Immunotherapy

Dana-Farber Cancer Institute



Non-small cell lung cancers that are most loaded with genetic mutations are most susceptible to immunotherapy drugs known as PD-L1 inhibitors, a new study led by Dr. Mark Awad (pictured) shows. The study can help doctors identify patients with the disease who are likely to benefit from the drugs, which foil tumors' ability to dodge an immune system attack. Read More

Clinical Trial, Meta-Analysis Find Diabetes Drugs May Benefit All Heart Failure Patients

Brigham and Women's Hospital



Researchers from Brigham and Women's Hospital, including Dr. Scott Solomon (pictured), have presented new evidence that drugs originally developed to treat type 2 diabetes may benefit a wide range of patients with heart failure. They showed that dapagliflozin, which had previously been shown to benefit patients with heart failure with reduced ejection fraction, is likely to also reduce cardiovascular death and hospitalization for patients with mildly reduced or preserved ejection fraction. Read More

A Sense of Place

Harvard Medical School



Researchers have made a major advance toward understanding the molecular mechanisms that are involved in the creation of spatial maps in the brain. The new study, conducted in mice, establishes that a gene called Fos is a key player in spatial mapping, helping the brain use specialized navigation cells to form and maintain stable representations of the environment. Read More

Proteogenomics Reveals Markers of Chemotherapy Resistance and Outcome in Triple Negative Breast Cancer

Broad Institute



Researchers at Baylor College of Medicine, the Broad Institute of MIT and Harvard, and Washington University in St. Louis have identified biological markers in triple negative breast cancer that are associated with resistance to chemotherapy treatment. The research team used an innovative analytic approach that they previously developed called microscaled proteogenomics. Read More

Fighting HPV Head and Neck Cancer One Blood Sample at a Time

Advances in Motion



The lab of Dr. Daniel Faden (pictured) at Massachusetts Eye and Ear has developed a liquid biopsy that is over 98% accurate for diagnosing human papillomavirus (HPV)-associated head and neck cancer. The team also used modeling to demonstrate that a liquid-biopsy-based approach may cost 36% less than standard methods and could arrive at a diagnosis 26 days earlier. Read More

These Neurons Have Food on the Brain

McGovern Institute



A gooey slice of pizza. A pile of crispy French fries. Ice cream dripping down a cone on a hot summer day. When you look at any of these foods, a specialized part of your visual cortex lights up, according to a new study led by Dr. Nancy Kanwisher (pictured). This newly discovered population of food-responsive neurons is located in the ventral visual stream, alongside populations that respond specifically to faces, bodies, places, and words. Read More

New Insights into the Mechanisms Behind Crohn's Disease Point to Potential Therapeutic Target

Massachusetts General Hospital



The structure of chromatin can affect gene expression, and certain chromatin "readers" are important for monitoring this structure often in response to environmental cues. Mutations within one such reader, called SP140, are associated with an increased risk of certain immune diseases, including Crohn's disease. New research led by Dr. Kate Jeffrey (pictured) provides insights into the mechanisms behind this link, pointing to potential therapeutic targets. Read More

View All Articles | Submit an Article

Upcoming Events in Boston

- September 8 5:00 pm Biomedical Informatics Entrepreneurs Salon: Lovina McMurchy, Movac Capital Online
September 13 12:00 pm Finding Funding for Alzheimer's Disease Research: Meet BrightFocus Foundation Online
September 15 - 16 8:00 am Forsyth Dentech 2022 Forsyth Institute and Online
September 15 12:30 pm 2022 Patient Advocacy Summit MassBioHub & Online
September 20 10:00 am Precision Medicine 2022: The New "Normal"? Joseph B. Martin Conference Center & Online

View All Events | Submit an Event

Science Jobs in Boston

- Scientific Inside Sales Representative STEMCELL Technologies
Field Application Scientist, Primary and Cultured Cells STEMCELL Technologies
Staff Scientist Health Effects Institute
Associate Scientist Bristol Myers Squibb
Post Doc Researcher, Single Cell Genomics Broad Institute

View 75 Other Science Jobs | Submit a Job

Free Wallchart: Small Molecules in Cancer Research. Includes STEMCELL Technologies logo and a 'REQUEST A COPY' button.

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

SCIENCE IN THE CITY is an official mark of McMaster University and it is used and registered by STEMCELL Technologies Canada Inc. in Canada with the consent of McMaster University.