

Publications of the Week

Longitudinal Humoral Analysis in RSV-Infected Infants Identifies Pre-Existing RSV Strain-Specific G and Evolving Cross-Reactive F Antibodies

First Authors: Nadège Nziza, Wonyeong Jung, and Maanasa Mendu | Senior Authors: Octavio Ramilo, Ascuncion Mejias, and Galit Alter (pictured) | Immunity | Ragon Institute



Respiratory syncytial virus (RSV) is among the most common causes of lower respiratory tract infection and hospitalization in infants. Antibody profiling against attachment (G) and fusion (F) proteins in children less than 2 years of age, with mild (outpatients) or severe (inpatients) RSV disease, indicated substantial age-dependent differences in RSV-specific immunity. [Abstract](#)

Nociceptor-Immune Interactomes Reveal Insult-Specific Immune Signatures of Pain

First Author: Aakanksha Jain (pictured) | Senior Author: Clifford Woolf | Nature Immunology | Boston Children's Hospital, Harvard Medical School, and Brigham and Women's Hospital



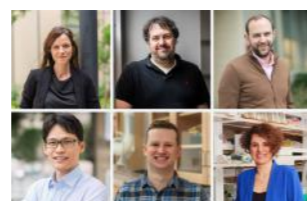
Inflammatory pain results from the heightened sensitivity and reduced threshold of nociceptor sensory neurons due to exposure to inflammatory mediators. However, the cellular and transcriptional diversity of immune cell and sensory neuron types makes it challenging to decipher the immune mechanisms underlying pain. This study lays the groundwork for identifying the neuroimmune axes that modulate pain in diverse disease contexts. [Abstract](#)

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Awards

Six BU Researchers Win Prestigious Early-Career Award to Advance Their Work

The Brink



Six Boston University researchers have received Faculty Early Career Development Program awards from the National Science Foundation to advance their work. Drs. Ana Fiszbein, Michael Albro, Jonathan Huggins, Rabia Yazicigil, Andrew Sabelhaus, and Wenchao Li (pictured, clockwise from top left) are this year's awardees. [Read More](#)

UMass Chan BRIDGE Fund Commits \$2M in Six Faculty Projects

UMass Chan Medical School



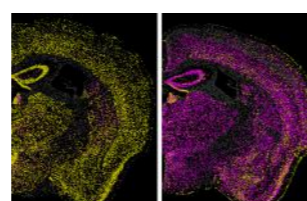
BRIDGE Innovation and Business Development at UMass Chan Medical School has committed nearly \$2 million in funding this year for six UMass Chan Medical School investigator-led research projects that hold promise for translation to clinical application and commercialization. Among the principal investigators for the awarded projects are Drs. Lauren Zingarelli, Paul Thompson, Sharon Cantor, Li Li, George Xixis, and Andrew Moomey (pictured, left to right). [Read More](#)

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Local News

A Therapy Candidate for Fatal Prion Diseases Turns Off Disease-Causing Gene

Broad Institute



Prion diseases lead to rapid neurodegeneration and death and are caused by misshapen versions of the prion protein in the brain. There are currently no treatments, but researchers from the Whitehead Institute for Biomedical Research and Broad Institute of MIT and Harvard have developed an approach that could one day be used to turn off the gene encoding this protein throughout the brain to treat or even prevent prion disease. [Read More](#)

Dr. Justin Scott on Engineering Proteins for Real-World Impact

Wyss Institute



The Humans of the Wyss series features members of the Wyss community discussing their work, what shapes them as professionals, and their ongoing collaborations. Dr. Justin Scott (pictured) is a passionate scientist working on a variety of projects from understanding and treating bacterial vaginosis to developing technology to clean drinking water in low-resource settings. [Read More](#)

Antibody-Drug Conjugate Highly Effective in Preventing Recurrence in Patients with Early Stage HER2+ Breast Cancer, Trial Finds

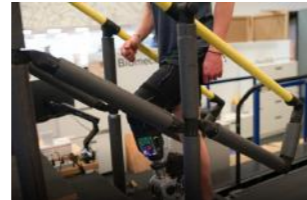
Dana-Farber Cancer Institute



A year of treatment with a medicine made of an antibody and chemotherapy drug has proven highly effective in preventing stage 1 HER2-positive breast cancer from recurring in patients. This study was conducted by a team of Dana-Farber Cancer Institute researchers and led by Drs. Sara Tolaney (pictured) and Paolo Tarantino. The results are published in the *Journal of Clinical Oncology*. [Read More](#)

A Prosthesis Driven by the Nervous System Helps People with Amputation Walk Naturally

McGovern Institute



Using a new type of surgical intervention and neuroprosthetic interface, MIT researchers, in collaboration with colleagues from Brigham and Women's Hospital, have shown that a natural walking gait is achievable using a prosthetic leg fully driven by the body's own nervous system. The surgical amputation procedure reconnects muscles in the residual limb, which allows patients to receive "proprioceptive" feedback about where their prosthetic limb is in space. [Read More](#)

Moderna Wins \$176M BARDA Award to Finance Bird Flu Work

Boston Cambridge Clotech Networks



Moderna received a significant boost from the federal government, snagging a \$176 million contract to help advance a bird flu vaccine. The award, which was granted by the Biomedical Advanced Research and Development Authority (BARDA), aims to support late-stage development of a pre-pandemic candidate targeting the H5 avian flu strain. [Read More](#)

Cartilage, Tendons, and More—in the Palm of Your Hand

Tufts Now



As a manufacturing technique, 3D printing is rapidly revolutionizing healthcare and medicine as it translates digital designs into customized devices, including hearing aids and teeth aligners. It's also a technology ripe for innovative ideas to improve patient care, as demonstrated by students in 3D Printing the Human Body, a School of Engineering class. [Read More](#)

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Interesting Articles

Novo Nordisk Bio Innovation Hub Innovation Call with LabCentral

Novo Nordisk



The application window for Novo Nordisk's innovation call with LabCentral is now open. Anchored with the Bio Innovation Hub, this is the sixth year that Novo Nordisk and LabCentral are working together to support the life sciences ecosystem in Boston. Apply by July 26 for a Golden Ticket to LabCentral in Cambridge and for other opportunities to work with the Novo Nordisk Bio Innovation Hub. [Read More](#)

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Upcoming Events in Boston

July 29

8:00 AM

Psychedelics Bootcamp 2024: Key Topics in Law, Medicine, Research, Regulations, and Advocacy

Harvard Medical School

July 31

12:00 PM

Plotting like a Pro: Data Visualization with ggplot2

Online

August 1

2:00 PM

Biotech in Boston: Leading the Way in Life Sciences

The Ritz-Carlton

August 19 - 22

8:00 AM

The Bioprocessing Summit 2024

Sheraton Hotel

September 18

8:30 AM

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

Singleton Auditorium

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Science Jobs in Boston

Administrative Coordinator, Immunology Cell Therapy

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Takeda

Senior Scientist, Toxicology

Apellis

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Boston College

Research Fellow, Vavvas

Mass General Brigham

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