

Publications of the Week

**Mutations in *RABL3* Alter KRAS Prenylation and Are Associated with Hereditary Pancreatic Cancer**

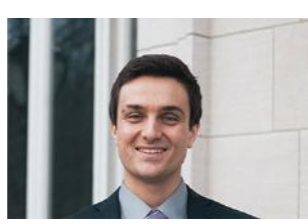
First Author: Sahar Nissim | Senior Author: Wolfram Goessling (*pictured*)  
Nature Genetics | Dana-Farber Cancer Research Institute and Harvard University



Pancreatic ductal adenocarcinoma is an aggressive cancer with limited treatment options. Approximately 10% of cases exhibit familial predisposition, but causative genes are not known in most families. The authors performed whole-genome sequence analysis in a family with multiple cases of pancreatic ductal adenocarcinoma and identify a germline truncating mutation in a member of the RAS oncogene family-like 3 (*RABL3*) gene. [Abstract](#)

**The Landscape of Genetic Content in the Gut and Oral Human Microbiome**

First Author: Braden Tierney | Senior Author: Aleksandar Kostic (*pictured*)  
Cell Host and Microbe | Joslin Diabetes Center and Harvard Medical School



Despite substantial interest in the species diversity of the human microbiome and its role in disease, the scale of its genetic diversity, which is fundamental to deciphering human-microbe interactions, has not been quantified. The authors conducted a cross-study meta-analysis of metagenomes from two human body niches, the mouth and gut, covering 3,655 samples from 13 studies. [Abstract](#)

[View All Publications](#)

Awards

**Sanae ElShourbagy Ferreira, PhD, awarded the AAAS Science & Technology Policy Fellowship**

BU School of Medicine



Dr. Sanae ElShourbagy Ferreira (*pictured*) has been awarded the American Association for the Advancement of Science (AAAS) & Technology Policy Fellowship for 2019-20. As part of the program, Dr. Ferreira will be at the National Institute of Health in the Office of the Director as part of the Environmental influences on Child Health Outcomes Program. [Read More](#)

**Tina Liu Wins Women World Award**

Wyss Institute



Tina Liu (*pictured*) has been honored as a Gold Winner of the Women World Awards in the category of Female Executive of the Year for her contributions to developing a novel technology to make gene therapies safer and more effective. The Women World Awards are the world's premier business awards for female entrepreneurs, executives, employees, and the organizations they run. [Read More](#)

[View All Awards](#)

Local News

**Bayer Buys Cambridge Cell Therapy Startup BlueRock at \$1B Value**

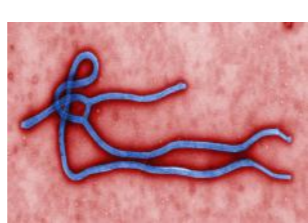
Boston Business Journal



Drug giant Bayer Inc. has doubled down on one of its previous investments, announcing a deal to acquire BlueRock Therapeutics that values the Cambridge startup at \$1 billion. The German drugmaker confirmed this week that it will pay \$240 million upfront and \$360 million in milestone payments for the cell therapy startup, which is developing treatments for Parkinson's disease, heart failure and other conditions. [Read More](#)

**Existing Anti-Parasitic Drug Could Offer a Treatment for Ebola**

Boston Children's Hospital



Amid the worsening Ebola outbreak in the Congo, now threatening to spill into Rwanda, a new study suggests that an existing, FDA-approved drug called nitazoxanide could potentially help contain this deadly, highly contagious infection. In meticulous experiments in human cells, the drug significantly amplified immune responses to the virus and inhibited Ebola replication. [Read More](#)

**An Emerging View of RNA Transcription and Splicing**

MIT News



A team led by Whitehead Institute scientists including Dr. Richard Young (*pictured*), has helped expand how condensates have become increasingly recognized as major players in controlling genes with the discovery that condensates play a role in splicing, an essential activity that ensures the genetic code is prepared to be translated into protein. The researchers also reveal how a critical piece of cellular machinery moves between different condensates. [Read More](#)

**Pet Imaging Shows If PD-1 Cancer Immunotherapy Is Working**

Boston Children's Hospital



PD-1 is a protein on our T cells that normally keeps the T cells from running amok. In a mouse model of colorectal cancer, Dr. Hidde Ploegh (*pictured*) and colleagues used very small antibody fragments, known as nanobodies, that home in on CD8+ T cells (also known as killer T cells), the main immune cells that are activated when PD-1 is inhibited. The nanobodies carry radioactive tags that show up on PET imaging. [Read More](#)

**CureVac and Yale Team Up for mRNA-Based Lung Therapies**

BioSpace



Germany-based CureVac has entered a Collaboration Research Agreement with Yale University to focus on lung therapies. Yale researchers led by Dr. Geoff Chupp will conduct discovery research on targets associated with pulmonary diseases at the Schepens Eye Research Institute of Massachusetts Eye and Ear Hospital, then turn over the candidates to CureVac for preclinical and clinical development. [Read More](#)

**Tissue Model Reveals Role of Blood-Brain Barrier in Alzheimer's**

MIT News



Beta-amyloid plaques disrupt many brain functions and can kill neurons. They can also damage the blood-brain barrier. MIT engineers have developed a tissue model that mimics beta-amyloid's effects on the blood-brain barrier, and used it to show that this damage can lead molecules such as thrombin, a clotting factor normally found in the bloodstream, to enter the brain and cause additional damage to Alzheimer's neurons. [Read More](#)

**Exercise Associated with Benefit to Patients with Advanced Colorectal Cancer**

Dana-Farber Cancer Institute



Patients with metastatic colorectal cancer who engaged in moderate exercise while undergoing chemotherapy tended to have delayed progression of their disease and fewer severe side effects from treatment, according to the results of a new study led by Dr. Jeffrey Meyerhardt (*pictured*). The analysis hinted at a possible lengthening of survival in patients who reported greater physical activity, but the data were not statistically significant. [Read More](#)

**Bug Buddies: Engineered Bacteria Create Friendlier Microbial Neighborhoods**

Harvard Medical School



In a new study conducted at Harvard Medical School, the Wyss Institute for Biologically Inspired Engineering, and Brigham and Women's Hospital, scientists reported that they were able to successfully manipulate four different strains of bacteria in a consortium so that their interactions became beneficial rather than antagonistic, and their respective numbers became more balanced in environments of varying complexity, including the guts of living mice. [Read More](#)

**Calling Life Science Innovators: Don't Miss Your Chance for a "Golden Ticket" to LabCentral**

BioSpace



Novo Nordisk, a global healthcare company committed to discovering, creating and co-creating innovation to solve healthcare challenges for people living with diabetes and other serious chronic diseases, is issuing an open call for promising start-up companies to submit non-confidential proposals for a Novo Nordisk-sponsored LabCentral "Golden Ticket." [Read More](#)

[View All Articles](#) | [Submit an Article](#)

**Upcoming Events in Boston**

- August 21 12:00 PM **HCBI Lunch and Learn Lecture Series**  
Biological Laboratories
- August 22 1:30 PM **MassBio Backyard Bash with World Series Trophies**  
300 Technology Square
- September 3 10:00 AM **Bridging the Gap Symposium**  
GSAS Harvard Biotech Club
- September 6 8:45 AM **2nd Annual Dana-Farber Chemical Biology Symposium**  
Jimmy Fund Auditorium
- September 9 7:00 AM **AI Applications for Drug Discovery and Development**  
Boston Convention and Exhibition Center

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

**STEMCELL Jobs**

- Product and Scientific Support Representative (Cambridge, MA)**  
[STEMCELL Technologies](#)
- Scientific Inside Sales Representative (Cambridge, MA)**  
[STEMCELL Technologies](#)
- Scientific Sales Representative, Cell Separation Products (Cambridge, MA)**  
[STEMCELL Technologies](#)
- Senior Business Analyst (Vancouver, BC)**  
[STEMCELL Technologies](#)
- Senior Quality Assurance Specialist (Vancouver, BC)**  
[STEMCELL Technologies](#)

[View 97 Other STEMCELL Jobs](#)

**Other Science Jobs in Boston**

- Research Associate/Senior Research Associate, Bioconjugates**  
Magenta Therapeutics
- Life Sciences Client Partner**  
Cognizant
- Scientist, Sterility Assurance**  
Johnson & Johnson
- Biochemist**  
Broad Institute
- Associate Director, Publications - Hematology**  
Takeda

[View 41 Other Science Jobs](#) | [Submit a Job](#)

[Live webinar by Dr. Ashley Watson on genome editing of stem and primary cell types.](#)

Submit your articles and events by reaching out to us at [info@scienceinboston.com](mailto:info@scienceinboston.com).

BROUGHT TO YOU BY



**STEMCELL Technologies**  
Products | Services

**STEMCELL's Science Newsletters**  
Free Weekly Updates on Your Field

**The Stem Cell Podcast**  
Interviews and Updates on Stem Cell Science