

### Publications of the Week

## Analysis of Antibiotic Exposure and Development of Acute Graft-vs-Host Disease Following Allogeneic Hematopoietic Cell Transplantation

First Author: Armin Rashidi | Senior Author: Stephanie Lee (*pictured*)  
 JAMA Network Open | UW and Fred Hutch



Are antibiotics and antibiotic exposure timeframes associated with acute graft-vs-host disease (aGVHD) after allogeneic hematopoietic cell transplantation (allo-HCT)? In this cohort study including 2023 patients and using three orthogonal approaches applied to antibiotic use between seven days before and 30 days after allo-HCT procedures, several antibiotics and exposure timeframes were found to be associated with aGVHD disease rates. [Abstract](#)

## Metrologically Traceable Quantification of Three Apolipoprotein E Isoforms in Cerebrospinal Fluid

First Author: Huu-Hien Huynh | Senior Author: Andrew Hoofnagle (*pictured*)  
 Clinical Chemistry | UW



Researchers aimed to develop, validate, and standardize a new measurement procedure using liquid chromatography–mass spectrometry. Purified recombinant apolipoprotein E protein standards were thoroughly characterized and used to assign the concentration of a matrix-matched calibration material that contained each apoE isoform, which ensured the metrological traceability of results. [Abstract](#)

## The Unfolded Protein Response Components IRE1α and XBP1 Promote Human Coronavirus Infection

First Author: Jessica Oda | Senior Author: Susan Fink (*pictured*)  
 mBio | UW



Investigators found that the human coronaviruses HCoV-OC43 and SARS-CoV-2 both robustly activate the IRE1α–XBP1 branch of the unfolded protein response in cultured cells. Using IRE1α nuclease inhibitors and genetic knockdown of IRE1α and XBP1, they found that these host factors are required for optimal replication of both viruses. [Abstract](#)

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### Awards

## Eric Chudler's BrainWorks Receives a Northwest 2023 Emmy® Award

UW Department of Bioengineering



Congratulations to UW Bioengineering's Dr. Eric Chudler (*pictured*), and his team at the UW on winning a 2023 Northwest Regional Emmy Award for the program, "BrainWorks – Vision and the Brain." BrainWorks takes viewers on a journey inside the human brain and aims to educate children about the wonders of neuroscience. The program won an Emmy in 2017 for "BrainWorks: Exercise and the Brain" in the Science and Health – Program/Special category. [Read More](#)

## UW Bioengineering Awards 2023

UW Department of Bioengineering



The UW Department of Bioengineering recognizes the commendable contributions of notable faculty, staff, and students to the department and the broader university community over the past year. This includes undergraduate student Alan Levinson (*pictured, left*), studying cardiovascular tissue engineering research, and graduate student Karam Khateeb (*pictured right*), working across multiple disciplines. [Read More](#)

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### Local News

## Why 2,400 University of Washington Researchers Are Now on Strike

The Seattle Times



About 2,400 University of Washington researchers went on strike after failing to reach agreements on their respective contracts after months of negotiations. The strike will "effectively grind research to a halt," organizers said, given that striking postdoctoral researchers and research scientists and engineers are responsible for much of the work that grants UW its distinction as a top research institution. [Read More](#)

## A New, Custom-Built Microscope Is Capturing Stunning Views of the Brain

Allen Institute



Using technology originally designed for defect detection in electronics manufacturing, the newly built "ExA-SPIM" microscope is showing scientists the mouse brain as it's never been seen before. EXA-SPIM, the brainchild of scientist Dr. Adam Glaser (*pictured*), is a one-of-a-kind microscope built for capturing images of the entire mouse brain at incredible resolution. [Read More](#)

## Tardigrades Provide Key Ingredient to Remove the Cold Chain for Biologics — Trehalose

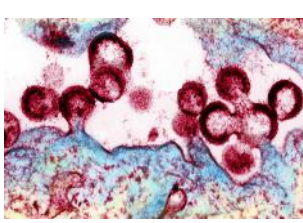
The Access to Advanced Health Institute



Vaccines are difficult to access in some areas because of the complex, expensive cold chain required to store and distribute the life-saving health solutions. Researchers are studying novel formulations of vaccines, to improve the stability of vaccine drug products to reduce the cold chain requirements, ensuring equitable access to vaccines. The sugar called trehalose, found in tardigrades, is a key ingredient in stabilizing vaccines. [Read More](#)

## A-Alpha Bio Announces Collaboration with Gilead to Advance Next-Generation HIV Therapeutic Options

A-Alpha Bio via Cision



A-Alpha Bio, a synthetic biology and machine learning company that measures and engineers protein-protein interactions, has announced a collaboration with Gilead Sciences that aims to advance the design of HIV therapies. A-Alpha Bio will leverage its platforms to characterize binding affinities between potential therapeutic proteins and various viral protein variants that Gilead may incorporate into potential future long-acting combination HIV therapy options. [Read More](#)

## Lee Hood & Nathan Price On the Future of Medicine

Armchair Expert



World-renowned biologist Dr. Lee Hood (*pictured*) and Dr. Nathan Price are the authors of "The Age of Scientific Wellness: Why the Future of Medicine Is Personalized, Predictive, Data-Rich, and in Your Hands". Lee and Nathan join the Armchair Expert to discuss how artificial intelligence is changing the medical industry, how infectious disease has impacted our world, and the effectiveness of prescriptions. [Read More](#)

## Dr. Jennifer Hadlock Promoted to Associate Professor

Institute for Systems Biology



The Hadlock lab is an interdisciplinary team that aims to accelerate translational research by integrating clinical data into systems biology at scale. Dr. Jennifer Hadlock's (*pictured*) goal is to improve the lives of people with immune-mediated inflammatory diseases such as rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis, and others. [Read More](#)

## Allen Institute Teams Up with AWS to Build First-Ever Map of the Brain

CNBC



Just as the periodic table is foundational to chemistry and the Human Genome Project revolutionized modern genetics, researchers at the Allen Institute for Brain Science have teamed up with Amazon Web Services (AWS) to create what could become a "transformative" new resource for the field of neuroscience. AWS announced its technology will support the Allen Institute as it builds a map of the human brain, called the Brain Knowledge Platform. [Read More](#)

## PNRI Mourns the Loss of David J. Galas, PhD

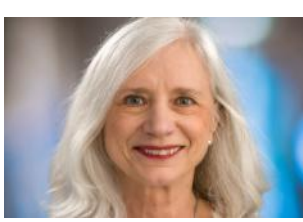
Pacific Northwest Research Institute (PNRI)



Pacific Northwest Research Institute mourns the loss of Dr. David J. Galas (*pictured*), who passed away on May 27, 2023, after a hard-fought battle with cancer. Dr. Galas was a world-renowned expert in molecular biology and genetics whose long and distinguished career led to contributions in the fields of physics, mathematics, and biology. [Read More](#)

## Many Long COVID Patients Suffer from Persistent Inflammation, Study Finds

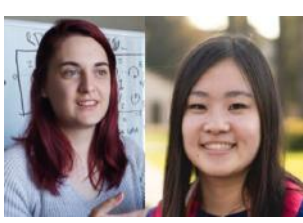
Allen Institute



Looking at proteins circulating in the blood, scientists found a set of molecules associated with inflammation that were present only in a subset of patients with long COVID and were not seen in those who recovered from their disease. The researchers, including Dr. Juliana McElrath (*pictured*), published an article describing their findings in the journal *Nature Communications*. [Read More](#)

## BioE Graduates Gain Hands-On Experience in Cardiovascular Science and Engineering

UW Department of Bioengineering



Five UW graduate students were selected for the 2022/2023 Bioengineering Cardiovascular Training Program. The five trainees— Savannah Bifulco (*pictured, left*), Ariana Frey, Kerry Kao, Casey Kiyohara (*right*), and Hao Zhou – will participate in a one or two-year program to enrich their research and support the future of cardiovascular-related research and technology development in the United States. [Read More](#)

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### 📅 Upcoming Events in Seattle

June 21 - 23 8:00 am	<b>2023 Neuropixels and OpenScope Workshop</b> Allen Institute
June 25 8:30 am	<b>Defeat Multiple Myeloma 5K</b> Magnuson Park
June 28 5:30 pm	<b>Summer Nights Happy Hour</b> Pacific Science Center
July 7 12 pm	<b>Alliance of Angels Panel: Trends and Capital Raising for Life Science Startups</b> The Pacific Northwest Mission Acceleration Center
July 13 8:30 am	<b>2023 Allen Institute Modeling Software Workshop</b> Allen Institute

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### 📁 Science Jobs in Seattle

- Senior Staff Scientist**  
Fred Hutchinson Cancer Center
- Senior Scientist, Analytical Development**  
Zymeworks
- Postdoctoral Scholar, Neurology**  
University of Washington
- Associate Director, Cell Therapy**  
Bristol Myers Squibb
- Senior Research Associate, Vector Biology**  
Umaja Biopharma

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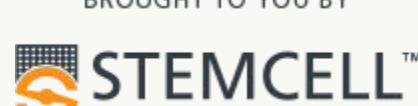
**Information Drives Progress**  
 Scientific resources to support your hematopoietic research



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