

Publications of the Week

needLR: Long-Read Structural Variant Annotation with Population-Scale Frequency Estimation

First Author: Jonas Gustafson | Senior Author: Danny Miller (*pictured*)  
Bioinformatics | Brotman Baty Institute, Howard Hughes Medical Institute, and UW



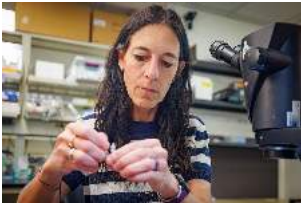
More than half of individuals with a suspected genetic disorder remain undiagnosed after comprehensive clinical genetic testing. Here, researchers present needLR, a structural variant (SV) annotation tool that can be used for filtering and prioritization of candidate pathogenic SVs from long-read sequencing data using population allele frequencies, annotations for genomic context, and gene–phenotype associations. [Abstract](#)

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Awards

Fred Hutch Senior Staff Scientist Honored by Genetics Society of America

Fred Hutch



A senior staff scientist at Fred Hutch, Dr. Irini Topalidou (*pictrued*), is the first winner of the Genetics Society of America Mentorship Award who isn't a principal investigator or faculty member. She is the second overall winner of the annual award, which acknowledges “excellence in their contributions to the mentorship of geneticists at any career stage.” [Read More](#)

Cary Paine Honored as Teacher of the Year

UW Medicine



Dr. Cary Paine (*pictured*), Associate Professor of Clinical Practice of Nephrology, was selected as the 2026 Nephrology Teacher of the Year. This is the first time he has received this honor. Selected by the nephrology fellows, this award recognizes an exceptionally dedicated and skilled teacher for nephrology trainees. Paine is the Director of the Nephrology Fellowship Program and Medical Director of Dialysis Services at UW Medical Center Montlake. [Read More](#)

Dr. Philip Vutien Receives Research Mentorship Award

UW Medicine



Dr. Philip Vutien (*pictured*), Assistant Professor of Gastroenterology, is the inaugural recipient of the Research Mentorship Award. Selected by the graduating class of Gastroenterology Fellows, this award recognizes faculty who are dedicated to mentoring and supporting fellowship research. Dr. Vutien's research focuses on advanced liver disease. [Read More](#)

UW's ISCRM–MoIES Pilot Awards Fuel Cross-Disciplinary Innovation

The Molecular Engineering & Sciences Institute (MoIES)



The Institute for Stem Cell and Regenerative Medicine (ISCRM) and MoIES awarded two UW faculty-led teams Pilot Fellowship Funding. These awards are intended to launch new collaborations between the two institutes to develop technologies that will address the root causes of disease. Dr. Julie Mathieu (*pictured*) is leading one of the projects. [Read More](#)

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Local News

MSS 2027 Symposium is Returning to Its Seattle Roots

Brotman Baty Institute



The annual Mutational Scanning Symposium (MSS), hosted by the Atlas of Variant Effects Alliance, is returning to its roots for its 10<sup>th</sup> anniversary. “The annual symposium has become the premier gathering space for exchanging ideas on mutational scanning methodologies and applications,” says Dr. Doug Fowler (*pictured*) from the Brotman Baty Institute. [Read More](#)

BRI's Bernard Khor, MD, PhD, Joins DSC Board of Directors

Benaroya Research Institute



Benaroya Research Institute (BRI) faculty member Dr. Bernard Khor (*pictured*) was recently appointed to the Board of Directors at the Down Syndrome Center of Puget Sound (DSC). DSC offers more than 20 programs and services to individuals with Down syndrome and their families to empower, educate, and support them through every stage of life. [Read More](#)

Contagious Cancer Likely Crossed an Ocean, Triggering Severe Outbreak in Pacific Northwest Clams

Pacific Northwest Research Institute



Researchers have identified a severe outbreak of a rare contagious cancer in soft-shell clams in Washington state's Puget Sound and found evidence that the disease was recently introduced to the Pacific Northwest from Atlantic Coast populations. “Because this outbreak was identified at an early stage, it provides a rare opportunity to study how resistance to a transmissible cancer may evolve in a natural population,” says Dr. Michael Metzger (*pictured*). [Read More](#)

Dfam and Repbase Unite to Create a Fully Open Resource for Transposable Element Research

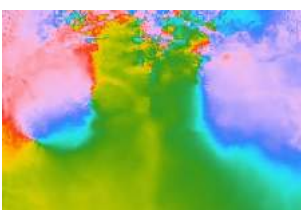
Institute for Systems Biology (ISB)



For more than three decades, researchers studying genomes have relied on foundational resources such as Repbase and, more recently, Dfam, to identify and classify transposable elements — the mobile DNA sequences that shape genome structure, evolution, and function. Now, Dfam and Repbase are coming together under a single, fully open framework. The work is described in a new paper from Dr. Robert Hubley's (*pictured*) lab at ISB. [Read More](#)

Scishots: Amber Waves of Brain

Allen Institute



New research from the University of Washington, with contributions from the Allen Institute, reveals that brain activity is shaped by the physical architecture of neural wiring. The connection patterns determine the shape of the circular, electrical wave patterns that surge throughout the brain. The study used specially engineered mice neurons from the Allen Institute that glow when stimulated to fire an electrical pulse. [Read More](#)

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Upcoming Events in Seattle

|                          |                                                                                        |
|--------------------------|----------------------------------------------------------------------------------------|
| July 27<br>7:00 PM       | <b>Science on Tap</b><br>Ravenna Brewing Co.                                           |
| August 13<br>4:30 PM     | <b>Life Science Washington Annual Summer Social 2026</b><br>188 E Blaine St            |
| Sept. 10 - 11<br>8:00 AM | <b>Cascadia Mucosal Biology Symposium</b><br>Allen Institute                           |
| Sept. 15 - 16<br>8:00 AM | <b>Emerging Connectomics of Thalamus and Striatum Workshop</b><br>Allen Institute      |
| Sept. 23 - 25<br>8:00 AM | <b>Stem Cell &amp; Developmental Biology Early Career Symposium</b><br>Allen Institute |

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Science Jobs in Seattle

|                                                                       |
|-----------------------------------------------------------------------|
| <b>Intern, Research</b><br>Fred Hutch                                 |
| <b>Education &amp; Engagement Specialist III</b><br>Allen Institute   |
| <b>Histotechnician</b><br>Labcorp                                     |
| <b>Clinical Research Coordinator II, ASPIRE</b><br>Seattle Children's |
| <b>Research Study Assistant</b><br>UW                                 |

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