

Publications of the Week

Expression of the Vesicular GABA Transporter Within Neuromedin S⁺ Neurons Sustains Behavioral Circadian Rhythms

First Author: Ivana Bussi | Senior Author: Horacio de la Iglesia *(pictured)*
 Proceedings of the National Academy of Sciences | UW and Fred Hutch



Circadian timekeeping requires intercellular communication among suprachiasmatic nucleus (SCN) neurons, and multiple signaling pathways contribute to SCN network coupling. Here, researchers show that the deletion of the gene that codes for the Gamma-aminobutyric acid (GABA) vesicular transporter *Vgat* from neuromedin-S (NMS)⁺ neurons — a subset of neurons critical for SCN function — causes arrhythmia of locomotor activity and sleep. [Abstract](#)

A Standard Workflow for Community-Driven Manual Curation of *Strongyloides* Genome Annotations

First Author: Astra Bryant *(pictured)* | Senior Author: Elissa Hallem
 Philosophical Transactions of the Royal Society B | UW



Advances in the functional genomics and bioinformatics toolkits for *Strongyloides* species have positioned these species as genetically tractable model systems for gastrointestinal parasitic nematodes. However, a recent phylogenetic analysis of the receptor-type guanylate cyclase gene family in two *Strongyloides* species highlights the potential for errors in a large percentage of current *Strongyloides* gene models. [Abstract](#)

[View All Publications](#)

Awards

WRF Gives \$250,000 Grant to Support Andrés Barría's Investigation of ROR2 Receptor As Target in Treating Alzheimer's and Other Disorders

Washington Research Foundation (WRF)



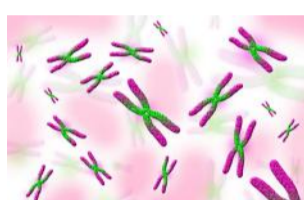
WRF has awarded \$250,000 to enable Dr. Andrés Barría *(pictured)* to screen for new compounds that could be further developed for the treatment of neurological disorders and synaptopathies including Alzheimer's disease and schizophrenia. Dr. Barría used a previous grant of \$50,000 from WRF in 2021 to develop high-throughput screening assays that will be used in this work. [Read More](#)

[View All Awards](#)

Local News

Untangling the Kinetochores

Fred Hutch



A complex network of molecular checks and balances ensures that chromosomes end up exactly where they should. Central to this network is an enormous multi-molecular machine called the kinetochore. Dr. Changkun Hu wants to better understand how kinetochore components assemble to create a working kinetochore, and how this process is orchestrated. [Read More](#)

Q&A with Suzie H. Pun, New Director of MoIES

Molecular Engineering & Sciences Institute (MoIES)



Dr. Suzie Pun *(pictured)* is the new Director of the Molecular Engineering & Sciences Institute (MoIES). Dr. Pun has been a major part of MoIES since it opened in 2009 — contributing to the growth of research collaborations and the Ph.D. program. In a Q&A, Dr. Pun details how she intends to approach her new role and grow the Institute. [Read More](#)

Clarivate Announces Highly Cited Researchers 2023

UW Medicine



Forty-one scientists affiliated with the UW School of Medicine are on the 2023 roster of Clarivate's Highly Cited Researchers. Analysts at Clarivate's Institute for Scientific Information identify the Highly Cited Researchers based on data from the Web of Science citation index. The list includes Drs. Trevor Bedford *(pictured)*, Helen Chu, and Riza Daza. [Read More](#)

The Hidden Heroes in Your DNA: Retrocopies and Their Role in Fighting Viruses

Pacific Northwest Research Institute (PNRI)



In the world of genetics, there's a fierce battle that's been raging for millions of years— the struggle between viruses and our immune system. "Within our DNA, new hidden copies of our genes, called retrocopies, may offer an unexpected advantage in the battle against viruses," states PNRI Assistant Investigator, Dr. Rick McLaughlin *(pictured)*. [Read More](#)

Seattle Children's Spins Out BrainChild Bio, a Startup Developing Therapies for Incurable Brain Cancers

GeekWire



Seattle Children's is spinning out BrainChild Bio, a biotech startup tackling cancer in the central nervous system with an initial focus on treatments for children. The clinical-stage company is launching from Seattle Children's Therapeutics, an innovation hub within the pediatric hospital. BrainChild Bio will take with it about 18 research and development employees from Seattle Children's Therapeutics. [Read More](#)

PNRI's Hagopian Lab: A 25-Year Legacy

Pacific Northwest Research Institute (PNRI)



PNRI says farewell to Dr. William Hagopian *(pictured, front left)* who, as PNRI's Director of Diabetes Programs, is moving on from PNRI after spearheading research on type 1 diabetes for more than 25 years. One of his lab's most impactful achievements is partnering with six other research laboratories worldwide in the TEDDY Study, "The Environmental Determinants of Diabetes in the Young." [Read More](#)

UW Medicine Offers Breakthrough Alzheimer's Drug

UW Medicine



UW Medicine's Memory and Brain Wellness Center treated its first patient with the new Alzheimer's drug, lecanemab, on December 1st. The drug has been shown to reduce cognitive decline in patients with early Alzheimer's disease. Doug Davidson *(pictured, left)*, of Mount Vernon, Washington, was the first patient to receive the intravenous drug at UW Medicine. [Read More](#)

Seattle Hub for Synthetic Biology Plans to Transform Cells into Tiny Recording Devices

GeekWire



The Allen Institute, the Chan Zuckerberg Initiative, and UW have launched a collaboration called the Seattle Hub for Synthetic Biology, with the goal of using genetically modified cells to capture a DNA-based record showing how they change over time. Dr. Jay Shendure *(pictured)*, a Professor of Genome Sciences at UW Medicine, will be Executive Director of the Seattle Hub for Synthetic Biology. [Read More](#)

Phase Genomics Advances Breakthrough Cytogenomics with the Element AVITI System for Acute Myeloid Leukemia

The Healthcare Data



Phase Genomics, led by Dr. Ivan Liachko *(pictured)*, announced the presentation of new data from the proximity ligation sequencing-based OncoTerra cytogenomics platform on the leading-edge AVITI next-generation sequencing system. The platform offers a revolutionary leap toward rapid risk stratification for acute myeloid leukemia. [Read More](#)

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

Upcoming Events in Seattle

- | | |
|------------------------|--|
| December 15
7:00 PM | Mad Science
Here-After |
| January 20
9:00 AM | SEP School Year Workshop: Elephants & Cancer
Fred Hutch |
| January 24
2:00 PM | Biomedical Entrepreneurship and Its Unique Challenges
Online |
| January 31
8:00 am | Seattle BioTech & Bagels Morning Virtual Meetup
Online |
| February 8
2:00 PM | Biomedical Business Models and Funding Sources
Online |

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

Science Jobs in Seattle

- Scientist I, Barcoded Connectomics**
Allen Institute
- Assistant Professor, Department of Pediatrics**
The Center for Child Health, Behavior, and Development, UW
- Production Chemist I**
BioPlex
- Research Scientist I, Viral Production and Stem Cell Therapies**
Seattle Children's
- Research Associate II, Protein Chemistry**
Actalent

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

How to Communicate Your Science to the Public

Webinar by Dr. Kristina McBurney & Leanna Bedell

WATCH NOW >

Submit your articles and events by reaching out to us at info@scienceinseattle.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