

Publications of the Week

Enteric Tuft Cell Inflammasome Activation Drives NKp46⁺ILC3 IL22 via PGD2 and Inhibits *Salmonella*

First Author: Madeline J. Churchill | Senior Authors: Elia Tait Wojno (*pictured*) and Isabella Rauch
Journal of Experimental Medicine | UW



To distinguish pathogens from commensals, the intestinal epithelium employs cytosolic innate immune sensors. Activation of the NAIP–NLRC4 inflammasome initiates extrusion of infected intestinal epithelial cells upon cytosolic bacterial sensing. Researchers observed that NAIP–NLRC4 inflammasome activation in tuft cells leads to an antibacterial response with increased IL-22 and antimicrobial protein levels within the small intestine. [Abstract](#)

In Vivo Functional Screens Reveal *KEAP1* Loss as a Driver of Chemoresistance in Small Cell Lung Cancer

First Authors: Lauren Brumage and Scott Best | Senior Author: David MacPherson (*pictured*)
Science Advances | Fred Hutch and UW



Exquisitely chemosensitive initially, small cell lung cancer (SCLC) exhibits dismal outcomes owing to rapid transition to chemoresistance. Elucidating the genetic underpinnings has been challenging owing to limitations with cellular models. As SCLC patient-derived xenograft (PDX) models mimic therapeutic responses, the authors perform genetic screens in chemosensitive PDX models to identify drivers of chemoresistance. [Abstract](#) | [Press Release](#)

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Awards

Meet the 2025 Tietze Award Winners

UW Institute for Stem Cell & Regenerative Medicine (ISCRM)



ISCRM faculty members Drs. Smita Yadav (*pictured*) and Nobuhiko (Nobu) Hamazaki have received prestigious awards from the John H. Tietze Foundation Trust that will help fuel promising research underway in their labs. With funding from the 2025 John H. Tietze Stem Cell Scientist Award, Dr. Smita Yadav and her lab will develop neuronal and 3D brain organoid models to understand how lysosomal function in neurons is affected by TBCK mutations. [Read More](#)

Microsoft's AI for Good Lab Invests in 20 State Change-Makers

425Business



Microsoft's AI for Good Lab has announced 20 Washington state grantees who will receive a combined \$5 million in assistance over the next two years for what the lab called game-changing organizations and projects helping solve today's challenges and paving the way for a better future. The University of Washington's Institute for Protein Design is one of the grant recipients. [Read More](#)

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Local News

Study Turns Up New Clues, New Questions in the Search for the Roots of Consciousness

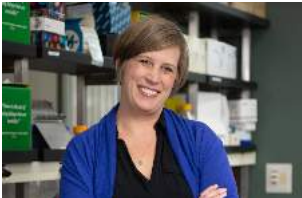
GeekWire



Seven years after they started, neuroscientists from the Allen Institute have published the results of a landmark study that was designed to determine which theory of human consciousness came closest to the mark — and those results are decidedly mixed. The bad news is that neither of the leading theories held a clear advantage in explaining how consciousness arises. The good news is that researchers picked up new clues about where to look. [Read More](#)

Autoantibody Reversion: A Mystery That Could Help Prevent T1D

Benaroya Research Institute



Scientists can predict who will develop type 1 diabetes (T1D) with almost 100% accuracy. They use a blood test to look for five specific proteins called autoantibodies. People who have two or more of those autoantibodies have a nearly 100% chance of developing T1D. For years, Dr. Cate Speake (*pictured*) has wondered: What about the tiny percentage of people who don't develop T1D? [Read More](#)

User-Friendly 3D-Printed Device Will Allow Researchers to Model Human Tissue with Increased Control and Complexity

UW Institute for Stem Cell & Regenerative Medicine



Advances in 3D tissue engineering have helped biomedical researchers design and test therapies for a wide range of diseases with increasing speed and accuracy. Now, a new easily adopted device, developed by a team of UW investigators co-led by Dr. Ashleigh Theberge (*pictured*), will enable scientists to create models of human tissue with even greater control and complexity. [Read More](#)

Finding the Root Cause of Lupus

Benaroya Research Institute



Lupus is a complex and little-understood autoimmune disease. Symptoms can be anything from a rash, to joint pain, to kidney problems. These symptoms may come and go or mimic other diseases. Many people wait years for a diagnosis that explains their symptoms and even longer for an effective treatment. Dr. Steven Ziegler (*pictured*) and his team started by building a lab model to study the altered protein and the role it plays in lupus. [Read More](#)

New Inverted Light-Sheet Microscopy Platform for Research and Clinical Applications

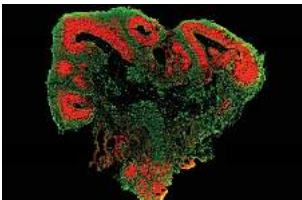
BusinessWire



ZEISS and Alpenglow Biosciences have announced a new partnership to jointly develop an inverted light-sheet microscope and bioinformatics pipeline tailored specifically for clinical applications. Alpenglow is a Seattle-based biotech specializing in open-top light-sheet microscopy, data processing, and AI-driven analysis for biopharma and clinical applications. [Read More](#)

Researchers Gain Insights into the Brain's 'Dimmer Switch'

UW Medicine



A small cluster of cells deep within our brains, called the locus coeruleus, affects how awake and attentive we are, how we respond to stress, how we cope with anxiety and fear, and how we create memories and learn. A new study in mice shows that a small group of cells next to the locus coeruleus, called peri-LC neurons, appear to play a key role in regulating its information-processing. [Read More](#)

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Interesting Articles

Allen Institute 2025 Next Generation Leader Applications Are Now Open

UW Office of Research



Applications are now open for the 2025 cohort of The Next Generation Leaders (NGL) program at the Allen Institute. The NGL program recognizes and supports emerging and diverse early career researchers in bioscience. The program is designed to foster professional development, ideation, creativity, and collaboration to make a broad, transformational impact on the future of science at the Allen Institute. [Read More](#)

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📅 Upcoming Events in Seattle

May 20 8:30 AM	Stuart and Molly Sloan Precision Oncology Institute AI Symposium Fred Hutch
May 21 9:00 AM	8th Northwest Nature and Health Symposium Intellectual House
May 29 7:00 PM	Science After Dark Pacific Science Center
May 30 8:00 AM	MapMySections: Data Challenge Online
June 16 8:00 AM	Open Science in Undergraduate Education Symposium Allen Institute

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📁 Science Jobs in Seattle

- Clinical Laboratory Coordinator**
UW
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Fred Hutch
- Senior Therapeutic Area Specialist, Cardiovascular Community**
Bristol Myers Squibb
- Director, Center for Data Driven Discovery**
Allen Institute
- Research Associate I**
Adaptive Biotechnologies

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