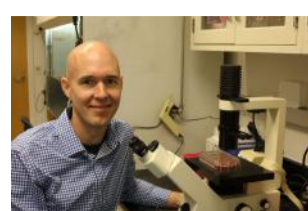


Publications of the Week

Engineering a Niche Supporting Hematopoietic Stem Cell Development Using Integrated Single-Cell Transcriptomics

 First Author: Brandon Hadland *(pictured)* | Senior Author: Irwin Bernstein
 Nature Communications | Fred Hutch and UW


To identify the signals responsible for hematopoietic stem cell (HSC) formation, the authors used single-cell RNA-sequencing to simultaneously analyze the transcriptional profiles of aorta-gonad-mesonephros region (AGM)-derived cells transitioning from hemogenic endothelium to HSCs, and AGM-derived endothelial cells which provide signals sufficient to support HSC maturation and self-renewal.

[Profile](#) | [Abstract](#)

A Phase I/II Trial Combining Avelumab and Trabectedin for Advanced Liposarcoma and Leiomyosarcoma

 First Author: Michael Wagner *(pictured)* | Senior Author: Seth Pollack
 Clinical Cancer Research | UW, Fred Hutch, and Seattle Cancer Care Alliance


Leiomyosarcoma (LMS) and liposarcoma (LPS) frequently express PD-L1 but are generally resistant to PD-1/PD-L1 inhibition. The authors evaluate the safety and efficacy of trabectedin with anti-PD-L1 antibody avelumab in patients with advanced LMS and LPS. Although the trial did not meet the primary objective response rate endpoint, progression-free survival compared favorably to prior studies of trabectedin, warranting further investigation. [Abstract](#)

Cutting Edge: Effect of Disease-Modifying Therapies on SARS-CoV-2 Vaccine-Induced Immune Responses in Multiple Sclerosis Patients

 First Author: Yevgeniy Yuzepolskiy | Senior Author: Estelle Bettelli *(pictured)*
 The Journal of Immunology | Benaroya Research Institute at Virginia Mason and UW


SARS-CoV-2 mRNA vaccines have been very effective in immunocompetent individuals, but whether multiple sclerosis (MS) patients treated with modifying therapies are afforded the same protection is not known. The authors determined that dimethyl fumarate caused a momentary reduction in anti-spike (S)-specific antibodies (Abs) and CD8 T cell response. MS patients treated with B cell-depleting or sphingosine 1-phosphate receptor agonist therapies lack significant S-specific Ab response. [Abstract](#)

[View All Publications](#)
Awards

UW Sophomore Alex Mallen and Junior Sharlene Shirali Selected for the Goldwater Scholarship

UW



Congratulations to UW sophomore Alex Mallen *(pictured, left)*, a computer science major, and junior Sharlene Shirali *(right)*, a neuroscience major, whom the Goldwater Foundation honored with its undergraduate scholarship for students studying the natural sciences, mathematics, and engineering. They join 417 undergraduate students selected for the award from a pool of 1,242 students nominated by 433 institutions across the country. [Read More](#)

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Local News

UW Medicine to Get Up to \$5.3M for TB Research Center

UW Medicine



UW Medicine is expected to receive up to \$5.3 million over the next five years to establish a new research center to advance tuberculosis (TB) research. The goal of the Seattle Tuberculosis Research Advancement Center will be to develop the next generation of TB researchers by funding and mentoring new investigators, supporting lab and clinical research, and facilitating collaboration between research institutions within and outside of the university. [Read More](#)

Fred Hutchinson Cancer Research Center, Seattle Cancer Care Alliance, Seattle Children's and UW Medicine Complete Restructure of Partnership

Fred Hutch



Fred Hutchinson Cancer Research Center, Seattle Cancer Care Alliance, Seattle Children's, and UW Medicine have completed the restructure of their longtime relationship and the formation of Fred Hutchinson Cancer Center, a unified adult cancer research and care center. "The formation of Fred Hutchinson Cancer Center will help us redefine cancer research and care," said Kathy Surace-Smith. [Read More](#)

Online Simulations Offer Scientists New Views inside Cells

Allen Institute



The Allen Institute for Cell Science's Simulanium Viewer, described in a publication in *Nature Methods*, aims to bring together disparate views of cells and molecules and to enable visualization of computational renderings of living systems. "A lot of computational biology approaches — just like in any other scientific specialty — can be esoteric, or at least require special skills to use," Dr. Graham Johnson *(pictured)* said. "The types of models that Simulanium supports can be visualized just a mouse-click away." [Read More](#)

AVM Biotechnology Awarded \$1.6 Million Phase II SBIR Grant to Study AVM0703's Potential to Reverse Type 1 Diabetes

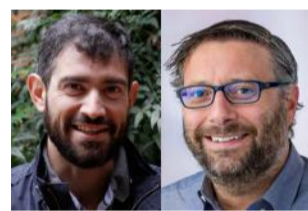
BioSpace



AVM Biotechnology announced that it has been awarded a Phase II Small Business Innovation Research (SBIR) grant. This \$1.6 million award from the National Institute of Diabetes and Digestive Kidney Disease will allow the company to pursue additional research in the use of AVM0703 as a monotherapy and combination therapy to reverse recent onset and established Type 1 Diabetes. [Read More](#)

How Zinc Boosts the Immune System

Fred Hutch



Zinc's immune-boosting properties are well-established, but we're still untangling how it works. In a recent study published in *Blood*, Fred Hutch scientists reveal two different ways the mineral supports immunity. "This study adds to our knowledge of what zinc is actually doing in the immune system," said Dr. Jarrod Dudakov *(pictured, right)*, who led the work with Dudakov Lab research associate Dr. Lorenzo Iovino *(left)*. [Read More](#)

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Upcoming Events in Seattle

- | | |
|------------------------|--|
| April 16
4:30 PM | Sk8 to Elim8 Cancer
Sno-King Ice Arenas |
| April 19
2:00 PM | Exploring Family Connections Using DNA
Online |
| April 20-21
7:00 AM | Life Science Innovation Northwest 2022
Online |
| April 25
8:00 AM | Global Oncology Lecture Series – Julie R. Gralow
Online |
| April 26
10:00 AM | The Virtual Science Lab: Does Organelle Shape Matter?
Online |

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Science Jobs in Seattle

- Statistical Research Associate III-IV**
Fred Hutch
- Postdoctoral Research Associate**
Benaroya Research Institute at Virginia Mason
- Scientist II, Computational Neuroanatomy, Brain Science**
Allen Institute
- Research Technician II**
Seattle Children's
- Senior Scientist, Predictive Antibody Assays**
Seagen

[View 77 Other Science Jobs](#) | [Submit a Job](#)

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