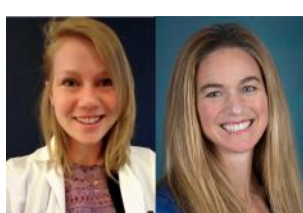


Publications of the Week

**MBNL1 Drives Dynamic Transitions between Fibroblasts and Myofibroblasts in Cardiac Wound Healing**

First Author: Darian Bugg (pictured, left) | Senior Author: Jennifer Davis (right)  
Cell Stem Cell | Institute for Stem Cell & Regenerative Medicine and UW



Dynamic fibroblast to myofibroblast state transitions underlie the heart's fibrotic response. Because transcriptome maturation by muscleblind-like 1 (MBNL1) promotes differentiated cell states, the authors investigated whether tactical control of MBNL1 activity could alter myofibroblast activity and fibrotic outcomes. They suggest MBNL1 is a post-transcriptional switch, controlling fibroblast state plasticity during cardiac wound healing. [Abstract](#) | [Press Release](#)

**Cryo-ET of Env on Intact HIV Virions Reveals Structural Variation and Positioning on the Gag Lattice**

First Author: Vidya Mangala Prasad | Senior Author: Kelly Lee (pictured)  
Cell | UW



Human immunodeficiency virus-1 (HIV-1) envelope glycoprotein (Env) mediates viral entry into host cells and is the sole target for neutralizing antibodies. However, Env structure and organization in its native virion context has eluded detailed characterization. The authors used cryo-electron tomography (cryo-ET) to analyze Env in mature and immature HIV-1 particles. [Abstract](#)

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Awards

**Fred Hutch Announces 2022 Harold M. Weintraub Graduate Student Award Recipients**

Fred Hutch



Fred Hutch has announced the 2022 recipients of the annual Harold M. Weintraub Graduate Student Award, which recognizes outstanding achievement in graduate studies in biological sciences. This year's thirteen recipients come from across the US and internationally, with one recipient from Austria. Among them is Sarah Valente (pictured), who completed their PhD in molecular and cellular biology at Fred Hutch. [Read More](#)

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Local News

**BBI Funds 'Entirely Novel Approach' to Studying Pediatric Leukemia**

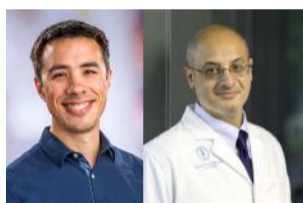
Brotman Baty Institute (BBI)



BBI's Dr. Scott Furlan (pictured) is a physician-scientist who serves as an Assistant Professor at Fred Hutch and in the Department of Pediatrics at UW. He is the Lead Principal Investigator of a \$150,000 BBI grant, awarded in January of this year, to measure acute myeloid leukemia residual disease and to predict more accurately the cancer's relapse. [Read More](#)

**New Therapeutic Strategy Turns a Cancer's Advantage into Its Downfall**

Fred Hutch



In a proof-of-principle study recently published in *Nature Biotechnology*, a collaborative team led by Dr. Robert Bradley (pictured, left) at Fred Hutch and Dr. Omar Abdel-Wahab (right) at Memorial Sloan Kettering Cancer Center describes a new strategy, tested in mice and lab dishes, that uses lab-designed molecules to insert a kill switch into cancer cells — but leaves healthy cells unscathed. [Read More](#)

**3D Heart Printing: Big Impact for Little Hearts**

Seattle Children's



For pediatric surgeons who use 3D-printed hearts of the children they operate on, their impact can be huge. And for surgeons-in-training, this technology can allow them to learn new and rare procedures on a realistic-looking organ. Seattle Children's surgeons have been using 3D-printed hearts for a few years, in some cases, to figure out the best way to perform a procedure on a child. [Read More](#)

**AI-Designed Protein Awakens Silenced Genes, One by One**

UW Medicine



By combining CRISPR technology with a protein designed with artificial intelligence, it is possible to awaken individual dormant genes by disabling the chemical "off switches" that silence them. Led by Dr. Shiri Levy (pictured), a postdoctoral fellow at the UW Institute for Stem Cell and Regenerative Medicine, researchers from UW Medicine describe this finding in *Cell Reports*. [Read More](#)

**DoD gives \$1.1M to Seattle startup that will help find new antibodies against COVID-19 variants**

GeekWire



A-Alpha Bio, led by founders David Younger (pictured, left) and Randolph Lopez (right), will support research into new therapies for COVID-19 variants in a collaboration with Lawrence Livermore National Laboratory, powered by a \$1.1 million sub-contract awarded to the biotech company by the U.S. Department of Defense (DoD). Data from the project will be used to refine models for predicting which antibody sequences are likely to stick tightly to current variants and ones that may arise in the future. [Read More](#)

**Red Light, Green Light: Precise Cell Targeting with Co-LOCKR**

Fred Hutch



Healthy cells might display protein A or protein B on their surface, whereas cancer cells display both. A therapy that targets these markers one at a time would kill both intended and unintended targets. But a therapy that only acts on cells displaying both proteins? Bingo. The labs of Cancer Consortium members Dr. David Baker, Dr. Stan Riddell (pictured), and Dr. Suzie Pun contributed to a new technology published in *Science*, called "Co-LOCKR", that addresses this problem. [Read More](#)

**AltPep Receives FDA Breakthrough Device Designation for SOBA-AD, a Simple Blood Test for the Detection of Alzheimer's Disease**

BioSpace



AltPep, a privately held biotechnology company developing early disease-modifying treatments and detection tools for amyloid diseases, announced the US FDA granted the company Breakthrough Device designation for its SOBA-AD diagnostic in development for Alzheimer's disease. The long-term potential for the SOBA-AD assay lies in its ability to detect disease early, even before symptoms arise. [Read More](#)

**2021-22 School Year ISB Education Highlights**

Institute for Systems Biology (ISB)



Each month throughout the 2021-2022 academic year, the ISB highlights some of the top projects their team is working on. Their February highlights include reaching key benchmarks on their project, "Networks, Measures & Scaling Up", such as developing a theoretical framework to accompany their "ISB Model for Science/STEM Education". [Read More](#)

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**Upcoming Events in Seattle**

- March 9 12:00 PM **Biostatistics Seminar Series – Design and Analysis Strategies with "Secondary" Use Data**  
Online
- March 9 4:00 PM **Brain Awareness Week 2022**  
Online
- March 12 9:30 AM **STEAM Power 2022: Virtual Workshop**  
Online
- March 13 4:00 PM **Hansje Brinker Guild Beer & Bitterballen Event**  
Queen Anne Beerhall
- March 21 8:00 AM **Global Oncology Lecture Series**  
Online

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**Science Jobs in Seattle**

- Postdoctoral Research Fellow, Cancer Prevention**  
Fred Hutch
- Research Associate III, Multimodal Analysis of Primate Brain Cell Types**  
Allen Institute
- Principal Scientist Cell Therapy Engineering, Non-Viral Delivery & Gene Editing**  
Bristol Myers Squibb
- Senior Clinical Trials Manager, Clinical Operations, Oncology**  
Gilead Sciences
- Associate Director/Director, Quality Assurance**  
Chinook Therapeutics

[View 53 Other Science Jobs](#) | [Submit a Job](#)

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