

Publications of the Week

Pleiotropic Mutations Can Rapidly Evolve to Directly Benefit Self and Cooperative Partner Despite Unfavorable Conditions

First Author: Samuel Frederick Mock Hart | Senior Author: Wenyng Shou *(pictured)*
eLife | Fred Hutch



The authors report that win-win mutations can rapidly evolve even under conditions unfavorable for cooperation. Specifically, in a well-mixed environment they evolved engineered yeast cooperative communities where two strains exchanged costly metabolites lysine and hypoxanthine. Among cells that consumed lysine and released hypoxanthine, *ecm21* mutations repeatedly arose. [Abstract](#)

Rapid Adaptation to Human Protein Kinase R by a Unique Genomic Rearrangement in Rhesus Cytomegalovirus

First Author: Stephanie Child | Senior Author: Adam Geballe *(pictured)*
PLOS Pathogens | Fred Hutch and UW



Researchers showed that knockout of protein kinase R (PKR) in human cells or treatment with the eIF2B agonist ISRIB, which overcomes the translational inhibition resulting from PKR activation, augmented rhesus CMV (RhCMV) replication in human fibroblasts (HF), indicating that human PKR contributes to the inefficiency of RhCMV replication in HF. Serial passage of RhCMV in HF reproducibly selected for viruses with improved ability to replicate in human cells. [Abstract](#)

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Awards

New Awards to Spur Innovation, Commercialization in Life Sciences Research

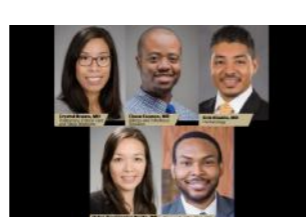
Fred Hutch



Fred Hutch and the Washington Research Foundation have announced a new collaborative funding program designed to spur innovative life science and technology research at the Hutch and speed the process of commercialization toward patient impact. Dr. Taran Gujral *(pictured)* is the first recipient of the program, supporting his research on a novel approach for identifying therapeutics for people with idiopathic pulmonary fibrosis. [Read More](#)

UW Medicine Announces Inaugural Diversity Academic Development Scholar Awards

UW Medicine



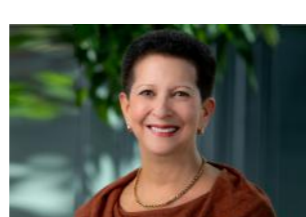
Established in 2020, the Department of Medicine Diversity Academic Development Scholar Awards (DADSA) were developed to promote and foster the transition of meritorious underrepresented minority trainees to the roles of junior faculty and principal investigator. Demonstrating strong commitment to departmental diversity, equity and inclusion efforts, the inaugural awards have been presented to five recipients *(pictured)*. [Read More](#)

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Local News

Seattle Life Science Funding Expected to Be Big in 2021

Puget Sound Business Journal



Washington's record funding last year is expected to continue, if not grow, in 2021. Last year, Washington state life science companies brought in about \$2.7 billion, according to Life Science Washington. "All signs point to another banner year in life science investing, particularly in areas of scientific research in which our region excels," said Leslie Alexandre *(pictured)*, President and CEO of Life Science Washington. [Read More](#)

How Will Healthcare and Scientific Research Be Different in a Post-Pandemic World?

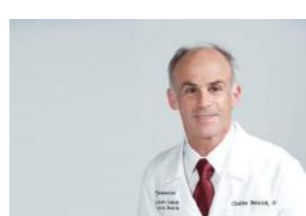
Institute for Systems Biology (ISB)



COVID-19 vaccines are one of the most pressing issues facing healthcare systems, both in the US and around the world. Appropriately, they were a major topic of discussion at a recent ISB-Town Hall Seattle science series event featuring two leaders in healthcare and science: Providence President and CEO Dr. Rod Hochman and ISB President and Professor, Dr. Jim Heath *(pictured)*. [Read More](#)

Q&A with Dr. Charles Bernick on the Promise of Anti-Amyloid Drugs

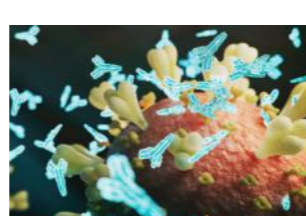
UW Memory and Brain Wellness Center



In January of 2021, Eli Lilly & Company announced that the TRAILBLAZER-ALZ Phase 2 clinical trial of donanemab slowed cognitive decline in people with early Alzheimer's disease. Dr. Charles Bernick *(pictured)*, Director of Clinical Trials for the UW Memory and Brain Wellness Center, spoke about the results and his perspective on emerging disease-modifying therapies for early Alzheimer's disease. [Read More](#)

New Sensors Quickly Spot Coronavirus Proteins and Antibodies

UW Medicine



UW scientists have created a new way to detect the proteins that make up the pandemic coronavirus, as well as antibodies against it. They designed protein-based biosensors that glow when mixed with components of the virus or specific COVID-19 antibodies. This breakthrough could enable faster and more widespread testing in the near future. The research appeared in the journal *Nature*. [Read More](#)

Evotec Subsidiary Expands mAb Contract with the US DOD

Genetic Engineering & Biotechnology News



Officials at Evotec have reported that the US Department of Defense (DOD) awarded its Seattle-based subsidiary, Just – Evotec Biologics, an agreement worth \$28.6 million for the production of monoclonal antibodies (mAbs) for use in the development of a treatment and/or prophylaxis for COVID-19. DOD will have access to manufacturing capacity for anti-SARS-CoV-2 mAbs and priority access to future biomanufacturing capacity over a seven year period. [Read More](#)

HIV Antibody Trial Results Offer 'Proof of Concept'

Fred Hutch



A large international study has shown that it is possible to prevent some HIV infections with infusions of a particularly potent broadly neutralizing antibody, but it will likely take a combination of different and more potent proteins to block all strains of the shape-shifting virus. Dr. Larry Corey *(pictured)*, former President and Director of Fred Hutch, was protocol chair of the Antibody Mediated Prevention trials and reported the first results. [Read More](#)

Sana Biotechnology Files IPO Plans to Raise \$323M

Puget Sound Business Journal



Sana Biotechnology, co-founded by Steve Harr *(pictured)*, plans to raise approximately \$323 million in an initial public offering (IPO), according to documents filed with the Securities and Exchange Commission. The Seattle-based biotech is looking to sell 15 million shares at a price range of \$20 to \$23 per share. [Read More](#)

UWARN Partners Unite Globally to Study COVID Variants

UW Medicine



The recent recognition of new SARS-CoV-2 variants, first detected in South Africa, Brazil and the UK, has become an urgent global concern. United World Antiviral Network (UWARN) partners are joined by global collaborators including Dr. Tulio de Oliveira *(pictured)* at the UW School of Medicine and School of Public Health to understand the variants' potential to override protection from vaccinations or prior COVID-19 infections. [Read More](#)

New Study from the Benaroya Research Institute at Virginia Mason Finds "COVID-19 Immune Landscape Is Dynamically and Reversibly Correlated with Disease Severity"

Benaroya Research Institute at Virginia Mason (BRI)



Researchers at BRI led by President Jane Buckner *(pictured, middle)* have published findings in *The Journal of Clinical Investigation* concluding that the selection of immune interventions for COVID-19 should be based on disease presentation and early disease trajectory. This is due to the profound differences in the immune response in those with mild to moderate disease, and those with the most severe disease. [Read More](#)

BBI Faculty Conversations: Dr. Tim Cherry

Brotman Baty



Brotman Baty Institute member, Dr. Tim Cherry *(pictured)*, discusses his work and the field of precision medicine. He is Assistant Professor at the UW School of Medicine in the Department of Pediatrics, Division of Genetic Medicine and a Principal Investigator at Seattle Children's Research Institute in the Center for Developmental Biology and Regenerative Medicine. [Read More](#)

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Upcoming Events in Seattle

February 8 - 12 8:00 AM	Transplantation & Cellular Therapy Online
February 11 4:00 PM	CFAR Seminar - The AMP Trials Online
February 23 9:00 AM	Progress on the Pandemic: A Year of Tackling COVID-19 Online
February 24 10:00 AM	Open for (Neuro)Science Tutorials: New from the Allen Cell Types Database Online
March 30 - 31 8:00 AM	Life Science Innovation Northwest Online

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Science Jobs in Seattle

- Postdoctoral Scholar, Skin Immune Responses**
UW Medicine
- Staff Scientist, Director of Antibody Technology Core**
Fred Hutch
- Scientist I, Biorealistic Modeling of Reconstructed Cortical Tissue**
Allen Institute for Brain Science
- Research Scientist III**
Seattle Children's Research Institute
- Scientist, Cell Therapy Upstream Process Development**
Bristol Myers Squibb

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