

Publications of the Week

Longitudinal Analysis Reveals Transition Barriers between Dominant Ecological States in the Gut Microbiome

First Author: Roie Levy | Senior Author: Nathan Price (pictured)  
PNAS | Institute for Systems Biology and UW



The authors quantitatively profiled 108 participants' molecular physiology over time, including genomes, gut microbiomes, blood metabolomes, blood proteomes and clinical chemistries. They presented a longitudinal analysis and showed that direct transitions between *Bacteroides*-dominated and *Prevotella*-dominated communities were rare, suggesting the presence of a barrier between these states. [Abstract](#)

Antibody and Cellular Responses to HIV Vaccine Regimens with DNA Plasmid as Compared with ALVAC Priming: An Analysis of Two Randomized Controlled Trials

First Author: Zoe Moddie | Senior Author: James Kublin (pictured)  
PLOS Medicine | Fred Hutch



The HIV Vaccine Trials Network evaluated DNA plasmid versus canarypox virus (ALVAC) primes. They found that DNA plasmid priming followed by protein boosting led to increased antibody and cellular immune responses when compared to a canarypox virus prime followed by matched protein boosting. Additional investigations are warranted to optimize DNA plasmid delivery methods. [Abstract](#)

[View All Publications](#)

Local News

The Most Common Organism in the Oceans Harbors a Virus in its DNA

UW



UW researchers have discovered that the bacteria that dominates seawater, known as *Pelagibacter* or SAR11, hosts a unique virus. The virus is of a type that spends most of its time dormant in the host's DNA but occasionally erupts to infect other cells, potentially carrying some of its host's genetic material along with it. [Read More](#)

Seattle Genetics Announces Positive Results from Exploratory Analyses of HER2CLIMB for TUKYSA™ (tucatinib) in Brain Metastases Patients with HER2-Positive Breast Cancer

Seattle Genetics



Seattle Genetics has announced positive results from exploratory analyses of intracranial efficacy, including survival, in patients with HER2-positive metastatic breast cancer who had stable or active brain metastases in the HER2CLIMB pivotal trial of TUKYSA™ (tucatinib). TUKYSA combination reduced risk of cancer progression in the brain by two-thirds, doubled response rate and reduced risk of death by nearly half compared to standard therapy alone. [Read More](#)

In Cancer, the Context 'Makes' the Mutation

Fred Hutch



Drs. David MacPherson and Bob Eisenman (pictured) have led a study at Fred Hutch which revealed how the same gene, *Max*, can restrain tumor growth or promote it, depending on its accompanying mutations. Using a human small-cell lung cancer model, they found that while *Max* co-pilots *Myc*-driven cancers, it throws a brake on tumors caused by other factors. [Read More](#)

CTI BioPharma Announces Enrolment of First Patient in COVID-19 PRE-VENT Phase 3 Clinical Trial

CTI BioPharma Corp.



CTI BioPharma Corp. has announced that it has enrolled the first patient in the Phase 3 PRE-VENT trial of pacritinib in hospitalized patients with severe COVID-19. PRE-VENT, a randomized, double-blind, placebo-controlled multicenter study, will compare pacritinib plus standard of care versus placebo and standard of care in 358 hospitalized patients with severe COVID-19, with and without cancer. [Read More](#)

Large-Scale Survey of Seattle-Area Kids Shows 1% Had Antibodies to the Coronavirus

The Seattle Times



About 1% of kids who visited a Seattle hospital in April had been infected with the novel coronavirus, according to the first large-scale survey for antibodies in children. The study also found most of the youngsters developed a robust immune response, an encouraging sign for a future vaccine. Adam Dingens (pictured) and fellow Fred Hutch colleagues have developed assays to further detail this response. [Read More](#)

Researchers Use Brain Imaging to Demonstrate Weaker Neural Suppression in Individuals with Autism

UW



A team of scientists at UW, with collaborators, report that differences in visual motion perception in autism spectrum disorder (ASD) are accompanied by weaker neural "suppression" in the visual cortex of the brain. This means that levels of activity in this region of the brain were higher than in participants without ASD. [Read More](#)

CSL Behring and Seattle Children's Research Institute to Advance Gene Therapy Treatments for Primary Immunodeficiency Diseases

BioSpace



Seattle Children's and global biotechnology leader CSL Behring have announced a strategic alliance to develop stem cell gene therapies for primary immunodeficiency diseases. David Rawlings (pictured), Director of Immunity and Immunotherapies at Seattle Children's, says the collaboration will accelerate research toward clinical trials, helping get innovations to the children who need them. [Read More](#)

Infectious Disease Research Institute Is Working on a Multiplier Effect for Coronavirus Vaccine

GeekWire



The Infectious Disease Research Institute (IDRI) is working with Houston's Baylor College of Medicine to multiply the doses of a potential COVID-19 vaccine by 30 to 100 times. If the project proceeds as planned, a vaccine candidate originally created to counter SARS could be repurposed to fight off COVID-19. IDRI's role is to determine whether adjuvants can be added to the vaccine to magnify its immunizing effect. [Read More](#)

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

Interesting Articles

Will the Pandemic Permanently Alter Scientific Publishing?

Nature



The COVID-19 crisis has underlined just how fast and open science publishing can be — when scientists want it that way. Researchers working on the pandemic are sharing preliminary results on preprint servers and institutional websites at unprecedented rates, embracing the kind of early, public sharing that physicists and mathematicians have practised for decades. [Read More](#)

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

Upcoming Events in Seattle

- June 8-12 8:00 AM **BIO Digital International Convention** Online
- June 15-18 9:00 AM **Career Development Workshop** Online
- June 24-27 8:00 AM **ISSCR 2020** Online
- July 16-17 8:00AM **2020 Life Science Innovation Northwest** Online
- July 16 8:00 AM **Glia in Health & Disease** Online

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

Science Jobs in Seattle

- Postdoctoral Research Fellow, Brain Tumor Dormancy/Metastasis**  
Fred Hutch
- Research Scientist**  
Seattle Children's
- Therapeutic Specialist, Inflammation**  
Gilead
- Clinical Scientist, Clinical Development, Tucatinib**  
Seattle Genetics
- Data Scientist/Computational Biologist**  
Bluebird Bio

[View 42 Other Science Jobs](#) | [Submit a Job](#)

STEMCELL TECHNOLOGIES Collaborating to Accelerate COVID-19 Research [WATCH NOW](#)

BROUGHT TO YOU BY



STEMCELL Technologies  
Products | Services

STEMCELL's Science Newsletters  
Free Weekly Updates on Your Field

The Stem Cell Podcast  
Interviews and Updates on Stem Cell Science