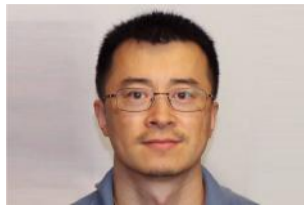


Publications of the Week
Ultrapotent Human Antibodies Protect against SARS-CoV-2 Challenge via Multiple Mechanisms

 First Author: M. Alejandra Tortorici | Senior Author: David Veesler (pictured)
 Science | UW


Researchers report the isolation and characterization of two ultrapotent SARS-CoV-2 human neutralizing antibodies (S2E12 and S2M11) that protected hamsters against SARS-CoV-2 challenge. Cryo-electron microscopy structures showed that S2E12 and S2M11 competitively blocked ACE2 attachment and that S2M11 also locked the spike in a closed conformation by recognition of a quaternary epitope spanning two adjacent receptor-binding domains. [Abstract](#) | [Press Release](#)

De Novo Induction of Lineage Plasticity from Human Prostate Luminal Epithelial Cells by Activated AKT1 and C-Myc

 First Author: Oh-Joon Kwon | Senior Author: Li Xin (pictured)
 Oncogene | UW and Fred Hutch


Researchers showed that the TACSTD2^{high} human prostate luminal epithelia cells highly express SOX2 and are relatively enriched in the transition zone prostate. They demonstrated *de novo* neuroendocrine differentiation of the human prostate luminal epithelial cells induced by constitutively activated AKT1 and c-Myc and revealed an impact of cellular status on initiation of lineage plasticity. [Abstract](#)

[View All Publications](#)
Awards
Four UW Medicine Scientists Earn High-Risk, High-Reward Awards

UW Medicine



UW Medicine's Drs. David Veesler, Yasemin Sancak, Andrew Stergachis and Daniel Stetson have received 2020 High-Risk, High Reward research grants from the NIH. They will explore bat immunity to viruses lethal in humans, how mitochondria are perturbed in common disorders, how gene regulation issues lead to disease and immune cell 'self' sensors, respectively. [Read More](#)

Phase Genomics Lands \$3.9M in Grants to Improve Testing for Chromosomal Abnormalities

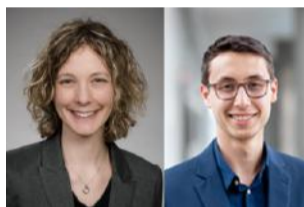
Phase Genomics via GeekWire



Phase Genomics announced receiving two National Institutes of Health grants totaling \$3.9 million. This will fund projects focused on chromosomal abnormalities that cause problems with fertility and reproduction and with diseases such as cancer. CEO and co-founder of Phase Genomics, Ivan Liachko (pictured), says this can transform a huge field of cytogenetics. [Read More](#)

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Local News
Stevens Lab Unveils Novel System for Regulating Gene Expression with Heat

Institute for Stem Cell & Regenerative Medicine (ISCRM), UW



In a breakthrough for tissue engineering, a research team from UW's ISCRM has shown that heat can be used to turn on selected genes in 3D tissue models. Daniel Corbett (pictured, right), a PhD student in the lab of Dr. Kelly Stevens (pictured, left), was the lead author of the study. They developed a cutting-edge system designed to recreate gene expression patterns found in the liver. [Read More](#)

New Brave Fellowship Powers Dr. Alyssa Webster's Race for New Leukemia Cures

Fred Hutch



Dr. Alyssa Webster (pictured), inaugural recipient of the Brave Fellowship, a new research fellowship at Fred Hutch, says running helped her navigate the challenges during graduate school training. She is currently working on developing drugs for the treatment of acute myeloid leukemia, more commonly known as AML. [Read More](#)

An Automated Pipeline for Understanding How the Brain Is Wired

Allen Institute for Brain Science



To truly understand the brain, we need a roadmap of how it's wired. The gold standard for studying the cellular architecture and the connectivity of brain cells is what scientists call serial-section electron microscopy. This type of imaging requires cutting brain samples into ultra-thin slices, taking pictures with an electron microscope and sandwiching them together to create a 3D picture of brain cells and their connections. [Read More](#)

Monoclonal Antibodies Could Fill the COVID-19 Treatment Gap until Vaccines Arrive — But at a Cost

Seattle Times



While the "warp speed" dash to develop a vaccine against the coronavirus gets most of the world's attention, monoclonal antibodies are the focus of another scientific race that could help bring the pandemic under control. Many experts hope antibody drugs will serve as a bridge until vaccines are widely available — which is not likely to be before next spring or summer. [Read More](#)

Seattle Startup HDT Bio Raises \$3M to Support Development of COVID-19 Vaccine

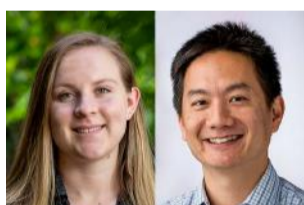
GeekWire



Seattle-based biotech company HDT Bio, led by CEO Steve Reed (pictured), closed a seed round totaling roughly \$3 million to support work on its COVID-19 vaccine candidate HDT-301. Researchers from HDT Bio and UW published a rapid-release paper in *Science Translational Medicine* reporting on promising early results from the vaccine as tested in mice and non-human primates. [Read More](#)

The Secret Signals Tumor Cell Clusters Use to Drive Metastasis

Fred Hutch



A Fred Hutch team, including Dr. Kevin Cheung and Emma Wrenn (pictured), has discovered a secret space between the cells of tumor microscopic clusters where the signal to grow is co-opted and miscommunicated to other cells. They're now working on new ways to block that signal — call it growth factor "fake news" — in order to stop metastasis in its tracks. [Read More](#)

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Upcoming Events in Seattle

October 15 - 16 9:15 AM	Harnessing Our Inner Ecology to Track and Treat Disease Online
October 19 3:00 PM	Women in Bio-Seattle: Panel Discussion with Leading COVID-19 Researchers Online
October 23 7:30 AM	Washington State Life Science Summit Online
October 28 7:00 AM	Women in Bio-Seattle: Virtual Networking Online
November 5 - 6 9:00 AM	BCREGMED & ISCRM Cascadia Corridor Research Symposium Online

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Science Jobs in Seattle

- Assistant Investigator, Alzheimer's Disease Research**
Allen Institute for Brain Science
- Staff Scientist**
Benaroya Research Institute at Virginia Mason
- Research Associate II**
Adaptive Biotechnologies
- Senior Process Development Engineer, Synthetic Biology**
A-Alpha Bio
- QC Associate, Cell Biology**
Bristol Myers Squibb

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Free Wallchart: SARS-CoV-2 Structure and Life Cycle

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