Volume 5.27: July 18, 2022

Publications of the Week

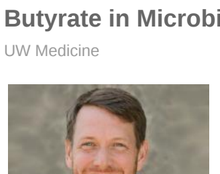
Analysis of the HVTN 702 Phase IIb-III HIV-1 Vaccine Trial in South Africa Assessing RV144 Antibody and T Cell Correlates of HIV-1 Acquisition Risk

First Author: Zoe Moodie *(pictured, left)* | Senior Author: Juliana McElrath *(right)*
The Journal of Infectious Diseases | Fred Hutch and UW

The ALVAC/gp120 + MF59 vaccines in the HIV Vaccine Trials Network (HVTN) 702 efficacy trial did not prevent HIV-1 acquisition. The authors sampled 60 HIV-1–seropositive cases and 60 matched seronegative noncases among 1893 HVTN 702 female vaccinees and measured HIV-specific $CD4^+$ T cell and binding antibody responses two weeks after the fourth and fifth immunizations. **Profile | Abstract**

A Slow Dynamic RNA Switch Regulates Processing of microRNA-21

First Author: Matthew Shortridge | Senior Author: Gabriele Varani *(pictured)*
Journal of Molecular Biology | UW and Neoleukin Therapeutics



MicroRNAs are non-coding RNAs which post-transcriptionally regulate the expression of many eukaryotic genes, and whose dysregulation is a driver of human disease. The authors report the discovery of a very slow conformational rearrangement at the Dicer cleavage site of pre-miR-21, which regulates the relative concentration of readily- and inefficiently-processed RNA structural states. **Abstract**

View All Publications

Awards

ISB Honors Researchers Who Give Back to STEM Education

Insitute for Systems Biology (ISB)

Since 2019, ISB has recognized STEM professionals with awards for their partnership and contributions to ISB Education. Dr. Serdar Turkarslan *(pictured, left)* is the recipient of the JoAnn Chrisman Award for Distinguished Service to STEM Education, and Dr. Christian Diener *(right)* was awarded the Dr. Christine Schaeffer Award for Exemplary Service to STEM Education. **Read More**

View All Awards

Local News

DNA Typewriter Taps Out a Record Inside Cells

Howard Hughes Medical Institute

While developing a new system for recording within cells, geneticist Dr. Jay Shendure *(pictured)* and his team decided to give it a test run by using it to encode text. “We have accomplished something that’s analogous to writing,” Dr. Shendure says. “We can create thousands of symbols, which we call barcodes, and we can capture them in order.” **Read More**

Butyrate in Microbiome Abates a Host of Ills, Studies Find

UW Medicine

In his clinical research and his new blog, *Gut Bites*, Dr. Chris Damman *(pictured)* explores how nourishing gut bacteria with the right foods will generate the necessary short-chain fatty acids that protect against, or reduce, symptoms in a variety of conditions. Recent studies have found that butyrate or butyrate-producing microbes protect against or are associated with less severe symptoms from a long list of chronic inflammation-related conditions. **Read More**

Fred Hutch and Amazon Collaborating on Clinical Trial to Test Vaccines against Cancer

GeekWire

Fred Hutch is leveraging Amazon’s machine learning expertise to collaborate on an early-stage clinical trial testing an anti-cancer vaccine in patients with certain types of breast cancer or melanoma. The trial was posted on a government clinical trial database in October and will explore the safety of the vaccine, which will be personalized for patients with late-stage melanoma or metastatic breast cancer that does not have the marker HER2. **Read More**

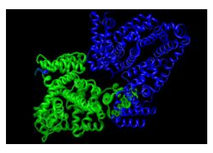
Bugs vs. Drugs: How Our Microbiomes Can Explain Our Response to Statins

Institute for Systems Biology (ISB)

Statins are one of the most prescribed drugs in the developed world and have proven to be effective in lowering cholesterol levels and decreasing the risks of heart attack and stroke. However, like antibiotics, there is a flip side to their use. ISB Assistant Professor Dr. Sean Gibbons *(pictured)* talked about the science behind statins in ISB's most recent Research Roundtable virtual presentation. **Read More**

Spinning Out Science Startups: UW’s Institute for Protein Design Brings Research beyond Ivory Tower

GeekWire



The Institute for Protein Design (IPD) is an innovation factory. Since launching a decade ago, the UW institution has grown to about 200 researchers and spun out eight startups wielding protein-design software to forge new drugs, vaccines, and enzymes. IPD spinouts have collectively raised more than $1 billion and helped fuel a biotech boom in Seattle, where they have all landed. **Read More**

Seattle’s Life Sciences Boom

Axios

Seattle remains a major hub for talent in life sciences research — a burgeoning industry that faces an intense labor crunch nationwide amid rapid growth — according to a recent report published by the investment management firm Coldwell Banker Richard Ellis (CBRE). Seattle came in number nine in CBRE's ranking of life sciences clusters, based on cities' jobs, local wages, cost of living, and other factors. **Read More**

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Upcoming Events in Seattle

July 19 — 9:00 AM
2022 Viruses & Vaccines Seminar Series — July
Online

July 25 - 26 — 8:30 AM
2022 Allen Institute Modeling Software Workshop
Allen Institute

July 27 — 9:00 AM
2022 OpenScope Applicant Webinar
Online

July 28 — 4:00 PM
Life Science Washington HR Connect Summer Gathering
Life Science Washington

July 30 — 8:00 AM
2022 IPCR Symposium
Fred Hutch Pelton Auditorium

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Science Jobs in Seattle

Postdoctoral Research Associate
Benaroya Research Institute at Virginia Mason

Clinical Research Assistant
Seattle Children's

Research Technician II-III
Fred Hutch

Principal Scientist, Bioanalytical Development
Bristol Myers Squibb

Senior Research Scientist
Adaptive Biotechnologies

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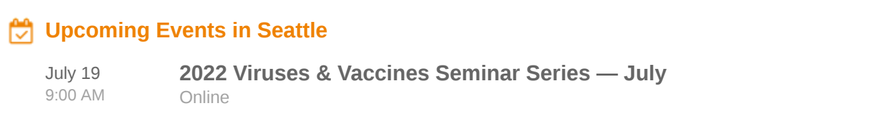

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