

Publications of the Week

**Monocyte Metabolic Transcriptional Programs Associate with Resistance to Tuberculin Skin Test/Interferon-γ Release Assay Conversion**

First Author: Jason Simmons (pictured) | Senior Author: Thomas Hawn  
Journal of Clinical Investigation | UW and Fred Hutch



After extensive exposure to *Mycobacterium tuberculosis* (Mtb), most individuals acquire latent Mtb infection (LTBI) defined by a positive tuberculin skin test (TST) or interferon-γ release assay (IGRA). To identify mechanisms of resistance to Mtb infection, the authors compared transcriptional profiles from highly-exposed contacts who resist TST/IGRA conversion and controls with LTBI using RNAseq.

[Abstract](#)

**Mesenchymal Stromal (Stem) Cell (MSC) Therapy Modulates miR-193b-5p Expression to Attenuate Sepsis-Induced Acute Lung Injury**

First Author: Claudia C. dos Santos | Senior Author: W. Conrad Liles (pictured)  
European Respiratory Journal | UW



Although mesenchymal stromal (stem) cell (MSC) administration attenuates sepsis-induced lung injury in pre-clinical models, the mechanism(s) of action and host immune system contributions to its therapeutic effects, remain elusive. The authors show that treatment with MSCs decreased expression of host-derived miR-193b-5p and increased expression of its target gene in lungs from septic mice. [Abstract](#)

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Awards

**Researchers Receive \$122 Million to Study Monthly HIV Pill**

UW Medicine Newsroom



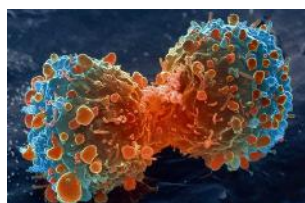
Dr. Connie Cetum (pictured) and UW researchers received a \$122 million grant to test the effectiveness of a once-a-month oral pill to prevent human immunodeficiency virus (HIV). The five-year grant will support the implementation of a Phase 3, randomized trial of islatravir. This pill is a nucleoside reverse transcriptase translocation inhibitor for the treatment and prevention of HIV-1 infection. [Read More](#)

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Local News

**Looking at Tumors through a New Lens**

Institute for Systems Biology



To improve immune checkpoint blockade treatment efficacy, researchers are looking for vulnerabilities in glioblastoma tissues, but this has been difficult so they developed a new way to study tumors. They have built mathematical models using machine learning-based image analysis and multiplex spatial protein profiling of microscopic compartments in the tumor. [Read More](#)

**Achieve Announces Completion of Target Enrollment in Phase 3 ORCA-2 Smoking Cessation Trial of Cytisinicline**

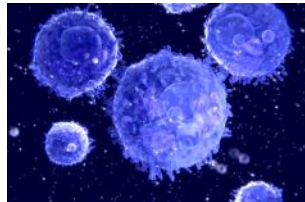
Achieve Life Sciences



Achieve Life Sciences has announced that the Phase 3 ORCA-2 trial of cytisinicline has reached its enrollment target of 750 adult smokers. The ORCA-2 trial is designed to evaluate the smoking cessation effectiveness, safety, and tolerability of 3 mg cytisinicline taken 3 times daily for either 6 or 12 weeks and will be compared with placebo. [Read More](#)

**Alpine Immune Sciences to Collaborate with Merck on Immuno-Oncology Study**

Alpine Immune Sciences



Alpine Immune Sciences has announced a clinical trial collaboration and supply agreement with Merck. This collaboration will evaluate the safety and efficacy of Alpine's ALPN-202, a first-in-class conditional CD28 costimulator and dual checkpoint inhibitor, in combination with Merck's anti-PD-1 therapy KEYTRUDA®, the first anti-PD-1 therapy approved in the United States. [Read More](#)

**Aurion Biotech Names Dr. Edward Holland Chief Medical Advisor**

Aurion Biotech



Dr. Edward Holland (pictured) has been named chief medical advisor of Aurion Biotech, whose mission is to cure blindness by developing a differentiated platform of advanced therapies to treat ocular diseases. Dr. Holland will work in advancing its lead candidate, cell therapy for the treatment of corneal endothelial disease, and in helping to expand the company's platform of advanced therapies. [Read More](#)

**BBI Faculty Conversations: Dr. Sarah Baxter**

Brotman Baty Institute (BBI)



BBI chats with Dr. Sarah Baxter (pictured), Acting Assistant Professor in the Department of Pediatrics at UW, and Attending Physician in Pediatric Rheumatology at Seattle Children's, on the focus of her work and how it relates to BBI's focus on precision medicine. Dr. Baxter's BBI project focuses on one of the most complex of immunological illnesses – systemic lupus erythematosus. [Read More](#)

**Computers Design Precise Genetic Programs**

Newswise



A change of instructions in a computer program directs the computer to execute a different command. Similarly, synthetic biologists are learning the rules for how to direct the activities of human cells. There are many iterations of trial and error that go into making a circuit that operates as intended. Now, synthetic biologists and Dr. Neda Bagheri (pictured) have teamed up. [Read More](#)

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Interesting Articles

**US House Backs Higher Spending Levels for NSF and DOE Science**

Science



In back-to-back votes, members approved two bills that would authorize massive spending increases at the National Science Foundation (NSF) and the Department of Energy's (DOE) Office of Science. One calls for more than doubling NSF's annual budget to \$17.9 billion by 2026, and the other would give the Office of Science a 63% boost, to \$11.1 billion, over the same 5-year period. [Read More](#)

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**Upcoming Events in Seattle**

- July 7  
12:00 PM  
**The Ins and Outs of Being a Good Research Mentee**  
Online
- July 13  
4:00 PM  
**Research Roundtable with Dr. Naeha Subramanian**  
Online
- July 15  
6:00 PM  
**Healing through Music**  
Online
- July 19  
12:00 PM  
**Introduction to Clinical Research Boot Camp 2021**  
Online
- July 22  
10:30 AM  
**Allen Institute Distinguished Seminar Series: Lin Tian**  
Online

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**Science Jobs in Seattle**

**Clinical Research Associate, Immunotherapy**  
Seattle Children's

**Scientist, AAV Gene Therapy**  
Allen Institute for Brain Science

**Staff Scientist, CAR T Cells**  
Fred Hutch

**Senior Principal Scientist, Cell Therapy Predictive Sciences**  
Bristol Myers Squibb

**Clinical Data Manager, Antigen Map Project**  
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