

Publications of the Week
Shifting Mutational Constraints in the SARS-CoV-2 Receptor-Binding Domain During Viral Evolution

 First Author: Tyler Starr (*pictured*) | Senior Author: Jesse Bloom
 Science | Fred Hutch, UW, and Howard Hughes Medical Institute


SARS-CoV-2 has evolved variants with substitutions in the spike receptor-binding domain (RBD) that impact its affinity for ACE2 receptor and recognition by antibodies. These substitutions could also shape future evolution by modulating the effects of mutations at other sites. The authors performed deep mutational scans to measure the effects on ACE2 binding of all single amino-acid mutations in the Wuhan-Hu-1, Alpha, Beta, Delta, and Eta variant RBDs. [Abstract](#)

Guselkumab Provides Sustained Domain-Specific and Comprehensive Efficacy Using Composite Indices in Patients with Active Psoriatic Arthritis

 First Author: Laura Coates | Senior Author: Philip Mease (*pictured*)
 Rheumatology | Swedish Medical Center/Providence St. Joseph Health and UW


The authors evaluate the efficacy of guselkumab for the treatment of active psoriatic arthritis (PsA) utilizing composite indices. They found that treatment with guselkumab provided robust and sustained benefits across multiple PsA domains through one year, indicating that guselkumab is an effective therapy for the diverse manifestations of PsA. [Abstract](#)

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Awards
Burroughs Wellcome Fund Announces The 2022 Career Awards for Medical Scientists

Burroughs Wellcome Fund



The Burroughs Wellcome Fund's Board of Directors announced the 2022 award recipients for the Career Awards for Medical Scientist program. Among the awardees is Dr. Jay Sarthy (*pictured*) at Fred Hutch. The Career Awards for Medical Scientists provides \$700,000 awards over five years for physician-scientists, who are committed to an academic career, to bridge advanced postdoctoral/fellowship training and the early years of faculty service. [Read More](#)

Yazdan Awarded AHA Funding for Innovative Stroke Treatment

UW Department of Bioengineering



With a promising approach to drive brain repair and recovery following a stroke, UW neuroengineer Dr. Azadeh Yazdan (*pictured*) has earned the American Heart Association (AHA) Career Development Award. Dr. Yazdan's neural engineering technologies and new brain stimulation-based therapies have the potential to help restore function and movement in people who have had a stroke – something that happens every 40 seconds in the United States. [Read More](#)

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Local News
Construction Begins at New 197K Square-Foot Life Sciences Building in Seattle Near Space Needle

GeekWire



Ground recently broke at a new 197,000 square foot life sciences building under construction in Seattle at the foot of the Space Needle, slated for completion in early 2024. The space will help ease the high demand for lab space in a sector that has expanded rapidly over the last few years. Twenty-five life sciences companies in Seattle are looking for a home and lab vacancy rates are at 6.6%, according to real estate firm Coldwell Banker Richard Ellis. [Read More](#)

Washington Research Foundation Donates \$1.65 Million to Support UW and WSU Graduate Students

UW Graduate School



Vascular dysfunction. Ice melt in Antarctica. Chronic liver disease. UW graduate students are finding solutions to these problems — and many more — with the support of Washington Research Foundation. And thanks to the foundation's most recent gift, emerging scientists at the UW and Washington State University (WSU) will be supported for years to come. [Read More](#)

BBI Faculty Conversations: Dr. Manu Setty

Brotman Baty Institute (BBI)



BBI was recently joined by Member Dr. Manu Setty (*pictured*), Assistant Professor in the Herbold Computational Biology Program at Fred Hutch. They discuss how he became interested in his area of computational biology research, some examples of his recent work in single cell, his BBI Catalytic Collaborations grants, and where he sees his work heading long term. [Read More](#)

'I Wouldn't Be an Engineer Without It': UW Program Supports Underserved STEM Students

GeekWire



A UW program to support STEM students from low-income and underserved backgrounds is now nine years old. The Washington State Academic RedShirt program (STARS) takes a cue from college sports, where "redshirting" enables an extra year of eligibility for athletes. Students sign up for an extra year at UW, strengthening their skills before diving into core math and science classes. The program also goes beyond academic support, said Executive Director Sonya Cunningham (*pictured*). [Read More](#)

Kubota Vision Announced End of Phase III Clinical Trial of Emixustat in Patients with Stargardt Disease

BioSpace



Kubota Vision announced the completion of the Phase III clinical trial investigating emixustat hydrochloride in patients with macular atrophy secondary to Stargardt disease. The study was a multi-center, randomized, double-masked, and placebo-controlled Phase III clinical study in which subjects were randomly assigned to emixustat 10 mg or placebo once daily for 24 months. [Read More](#)

Q&A: Highlights of the 2022 Mutational Scanning Symposium from the Meeting Organizer and Keynote Speakers

Brotman Baty Institute



The fifth annual Mutational Scanning Symposium was held June 13, 14, and 16 in Toronto and online. Organizer Dr. Fritz Roth and keynote speakers Drs. Clare Turnbull and Doug Fowler (*pictured*) offer their observations and insights of the event and suggestions for the 2023 symposium to be held in the U.K. "I had many excellent conversations with younger scientists. Engagement in the virtual content was also really fantastic," said Dr. Fowler. [Read More](#)

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Upcoming Events in Seattle

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|---------------------|--|
| July 9
12:00 PM | Odessa Brown Children's Clinic Community Open House
3939 S. Othello Street |
| July 12
4:00 PM | Research Roundtable with Dr. Sean Gibbons
Online |
| July 12
4:00 PM | BIG HART Seminar: IHART Panel
Online |
| July 14
9:00 AM | Jacob Green Charity Golf Classic
The Golf Club at Newcastle |
| July 14
11:00 AM | ISCRM Fellows Mini-Symposium 2022
Orin Smith Auditorium |

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Science Jobs in Seattle

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- Research Technician II**
Seattle Children's
- Research Associate III, Experimental Immunology**
Allen Institute
- Postdoctoral Research Fellow, Tumor Dormancy & Metabolism**
Fred Hutch
- Associate Scientist, Cellular Phenotype, Cell Therapy**
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