

Publications of the Week

Computationally Designed mRNA-Launched Protein Nanoparticle Immunogens Elicit Protective Antibody and T Cell Responses in Mice

First Author: Grace Hendricks (*pictured*) | Senior Author: Neil King
Science Translational Medicine | Institute for Protein Design, Howard Hughes Medical Institute, and UW



Messenger RNA (mRNA) vaccines and computationally designed protein nanoparticle vaccines were both clinically derisked and licensed for the first time during the COVID-19 pandemic. These vaccine modalities have complementary immunological benefits that provide strong motivation for their combination. Here, researchers demonstrate proof of concept for genetic delivery of computationally designed protein nanoparticle immunogens. [Abstract](#) | [Press Release](#)

Selective Presynaptic Inhibition of Leg Proprioception in Behaving *Drosophila*

First Author: Chris Dallmann | Senior Author: John Tuthill (*pictured*)
Nature | UW



Controlling arms and legs requires feedback from the proprioceptive sensory neurons that detect joint position and movement. Here, using calcium imaging in behaving *Drosophila*, researchers find that the axons of position-encoding leg proprioceptors are active across a range of behaviours, whereas the axons of movement-encoding leg proprioceptors are suppressed during walking and grooming. [Abstract](#)

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Awards

Early Career Research Grants

UW Medicine



Dr. Jared Mayers (*pictured*), UW Assistant Professor of Pulmonary, Critical Care and Sleep Medicine, has recently been awarded two early career research grants. He has been awarded the V Foundation V Scholar Grant and the Edward Mallinckrodt, Jr. Foundation Grant for his work on pulmonary microbiome in lung cancer and on a metabolomics pipeline to uncover new microbial targets in infection. [Read More](#)

Ratner Earns NIH Tech Transfer Grant to Improve Dialysis for Patients

UW Department of Bioengineering



Dr. Buddy Ratner (*pictured*) and his colleagues at the medtech startup Kuleana, a spin-out from UW Bioengineering, earned a Small Business Innovation Research award to make kidney dialysis less expensive, more efficient, and more portable for patients. The two-year \$1.6 million grant is supported by the National Institutes of Health. [Read More](#)

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Local News

Nishant Velagapudi – From Capstone to CTO

UW Department of Bioengineering



UW alumnus Nishant Velagapudi (*pictured*) shared his experience at an AI-based medtech company with 2025 capstone students, and he described the bioengineering mindset that UW Professor Christopher Neils helped him refine. As Chief Technology Officer of Perimatics, Nishant Velagapudi has a simple rule for his team: “The same problem should never stump us twice.” [Read More](#)

From Datasets to AI Data Dreams with Refik Anadol

Allen Institute



What does it mean for buildings to dream? For data to become pigment? Recently named to the TIME100 AI list, Refik Anadol is redefining the aesthetics of data and machine intelligence. His groundbreaking work transforms vast datasets into immersive “data paintings”. He is now the Allen Institute’s artist-in-residence, exploring how art and science together can unlock new perspectives, accelerate discovery, and inspire the future. [Read More](#)

The Science Behind the Nobel Prize

Institute for Systems Biology



The pioneering work of Drs. Mary Brunkow (*pictured*) and Fred Ramsdell began with a mysterious mutant mouse known as “scurfy”. Scurfy mice showed hallmarks of severe autoimmune disease. This mutant led the researchers to identify the *FOXP3* gene and unlock how regulatory T cells prevent autoimmune disease. Today, these discoveries now point to new treatments in cancer and autoimmunity. [Read More](#)

Dr. Susan Kaech Named Next Leader of Allen Institute’s Immunology Moonshot

Allen Institute



The Allen Institute announced the appointment of Dr. Susan Kaech (*pictured*) as Executive Vice President for its Immunology moonshot: a major research initiative focused on decoding the immune system as the foundation for human health and disease. Dr. Kaech is a decorated and experienced leader in the field of immunology who currently leads the NOMIS Center for Immunobiology and Microbial Pathogenesis at the Salk Institute for Biological Studies. [Read More](#)

Frogs Help Fred Hutch Find the Shape of Small Things

Fred Hutch



Frogs have made significant contributions to Fred Hutch science over the years, but *Xenopus laevis* has been absent from the menagerie for about two decades. Dr. Yasuhiro Arimura (*pictured*) brings frogs back to Fred Hutch after a long absence to study the structure of DNA-linked molecular complexes that change during the cell cycle and malfunction in cancer and other diseases. [Read More](#)

Oncology Insights with Petros Grivas - Episode 1

Fred Hutch



Dr. Petros Grivas (*pictured*) at Fred Hutch has launched his new podcast aimed at exploring the latest developments in cancer care and research. He emphasizes the importance of learning from colleagues, engaging with patients, and fostering community partnerships. The podcast will feature different guests and cover a range of topics, including innovative treatments, clinical trials, and educational initiatives in oncology. [Read More](#)

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📅 Upcoming Events in Seattle

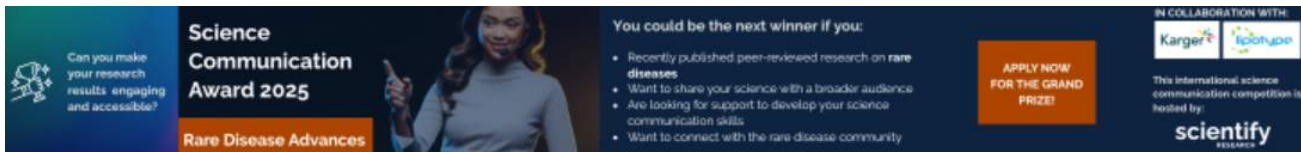
November 5 12:00 PM	Career Development Workshop Online
November 6 4:30 PM	From Bench to Breakthrough: Seattle Life Sciences Networking Night CoLabs @ 222 Fifth
November 6 5:30 PM	SpaceVision 2025 The HUB Seattle
November 7 6:00 PM	Theater of Thought Film & Panel Allen Institute
November 18 5:30 PM	Immunology to Change Lives Seattle’s Sunset Club

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📁 Science Jobs in Seattle

Clinical Research Coordinator II Seattle Children’s
Research Scientist II/III, DNA Synthesis GenScript
Clinical Laboratory Technician 2, HMC Transfusion Services Lab UW
Scientist I, ML/Modeling for Synthetic Biological Design Allen Institute
Research Technician I/II, Ghajar Lab Fred Hutch

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