

**Publications of the Week**
**Precise Genomic Deletions Using Paired Prime Editing**

First Authors: Choi Junhong (*pictured, back row, fifth from left*) and Will Chen (*front row, left*) | Senior Author: Jay Shendure (*front row, third from right*)  
Nature Biotechnology | UW and the Howard Hughes Medical Institute



Current methods to delete genomic sequences are based on CRISPR–Cas9 and pairs of single-guide RNAs (sgRNAs), but can be inefficient and imprecise. The authors describe a prime editing-based method, PRIME-Del, which induces a deletion using a pair of prime editing sgRNAs that target opposite DNA strands, programming not only the sites that are nicked but also the outcome of the repair.

[Profile](#) | [Abstract](#)

**An Endogenous Opioid Circuit Determines State-Dependent Reward Consumption**

First Author: Daniel Castro (*pictured, second row from bottom, left*) | Senior Author: (*top row, second from left*)  
Nature | UW and the Center for Neurobiology of Addiction, Pain, and Emotion



The authors report that endogenous  $\mu$ -Opioid peptide receptor regulation of reward consumption in mice acts through a specific dorsal raphe to nucleus accumbens projection. Their results isolate a fundamental endogenous opioid circuit for state-dependent consumptive behaviour and suggest alternative mechanisms for opiate modulation of reward.

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**Awards**
**Scientific American Honors Cancer Researcher Colin Pritchard**

UW Medicine



UW Medicine's Dr. Colin Pritchard (*pictured*), a leader in molecular diagnostics for cancer, has received the Catalyst for Precision Medicine Award from Scientific American. Dr. Pritchard, a Professor of Laboratory Medicine and Pathology at the UW School of Medicine, focuses on developing innovative molecular diagnostics for the detection of mutations that guide therapeutic decision-making.

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**MAF Senior Scientist Recognized for Contributions to Surface Science Community**

UW Molecular Engineering and Sciences Institute



Molecular Analysis Facility (MAF) staff member Dr. Dan Graham (*pictured*) was selected to receive the 2021 AVS Applied Surface Science Division Peter M. A. Sherwood Mid-Career Professional Award for innovation and leadership in the application of time-of-flight secondary ion mass spectrometry to organic and biological materials and for the development of practical multivariate analysis tools, which are widely used in the applied surface science community.

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**Local News**
**Now in Stunning, Whole-Brain Resolution: Neurons**

Allen Institute

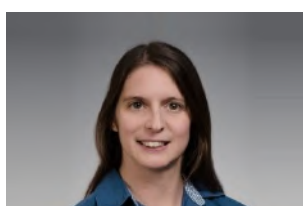


A new study led by researchers at the Allen Institute, in collaboration with Wenzhou Medical University and Southeast University in China, captured the detailed complete 3D shapes of more than 1,700 individual neurons in the mouse brain, the largest dataset of its kind to date. The paper debuted along with a package of other studies, through a large research collaboration brought together by the National Institutes of Health's BRAIN Initiative.

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**A Discussion about Diet and Brain Health Research with Dr. Angela Hanson**

UW Medicine Memory and Brain Wellness Center



The UW Medicine Memory and Brain Center interviewed geriatric physician and researcher Dr. Angela Hanson (*pictured*) about her work on diet, brain health, and genetic risk. She explains three currently enrolling studies at the UW Alzheimer's Disease Research Center: The Meal and Memory Study, the Lipid MRI Study, and the Metformin and Alzheimer's Disease Prevention Study.

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**Cell Therapy Startup Immusoft Lands Deal with Takeda Worth Potentially More than \$900M**

GeekWire



Cell therapy startup Immusoft will collaborate with pharma giant Takeda to develop treatments targeted to the central nervous system in a deal worth potentially more than \$900 million. Immusoft's technology involves engineering a patient's B cells to mass produce therapeutic proteins. "This advances our leadership position in B cells as biofactories for therapeutic protein delivery," said Immusoft CEO Sean Ainsworth (*pictured*).

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**Seal Rock Therapeutics Announces Completion of Single Ascending Dose Cohort in Phase I Clinical Trial of ASK1 Inhibitor SRT-015 for NASH**

Seal Rock Therapeutics



Seal Rock Therapeutics announced completion of the single ascending dose portion of its Phase I clinical trial of SRT-015, a next-generation, liver-selective inhibitor of Apoptosis Signal-regulating Kinase 1 (ASK1) for non-alcoholic steatohepatitis (NASH) and other liver diseases such as alcoholic hepatitis. This randomized, double-blind, placebo-controlled trial is evaluating SRT-015 in up to 96 healthy volunteers to assess safety, tolerability and pharmacokinetics.

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**Faraday Pharmaceuticals Announces First Patient Enrolled in Phase II Study for ICU-Acquired Weakness**

Faraday Pharmaceuticals



Faraday Pharmaceuticals announced the enrollment of its first patient in a Phase II study of FDY-5301 ("loocyte ICU"). FDY-5301 is an elemental reducing agent being developed by the company for the prevention and treatment of ICU-acquired weakness and other muscle related conditions. loocyte ICU is designed to evaluate the efficacy, pharmacokinetics, and safety of FDY-5301 in major trauma patients admitted to the ICU where the need for ventilation is anticipated.

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**Upcoming Events in Seattle**

October 26 7:00 PM	<b>Forensic Report: Case 1886, Death of Dr. Henry Jekyll</b> Online
October 27 10:00 AM	<b>Revealing the Mammalian Motor Cortex: BICCN Flagship Release</b> Online
October 27 1:30 PM	<b>More than a Gut Check: Behind-the-Scenes with Startup Leaders Breaking New Ground in the Microbiome Industry</b> Online
October 28 10:30 AM	<b>Allen Institute Distinguished Seminar Series: Andrea Gomez</b> Online
November 4 6:00 PM	<b>The Promise of the Human Microbiome</b> Online

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**Science Jobs in Seattle**

- Research Assistant, Machine Learning**  
Fred Hutch
- Postdoctoral Fellow, Adoptive Cell Therapy**  
Seattle Children's
- Director of R&D, Innovation & Partnerships**  
A-Alpha Bio
- Laboratory Technician II, Chemical Process and Analytical Development**  
Seagen
- Associate Scientist, Oncology**  
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