

Publications of the Week

### Human T Cell Receptor Occurrence Patterns Encode Immune History, Genetic Background, and Receptor Specificity

First Author: William DeWitt | Senior Author: Philip Bradley *(pictured)*  
eLife | Fred Hutchinson Cancer Research Center



Statistical analysis of T cell receptor (TCR) repertoire sequencing data has the potential to decode disease associations from large cohorts with measured phenotypes. However, the repertoire perturbation induced by a given immunological challenge is conditioned on genetic background via major histocompatibility complex (MHC) polymorphism. The authors explore associations between MHC alleles, immune exposures, and shared TCRs in a large human cohort. [Profile](#) | [Abstract](#)

### Alveolar Macrophages Provide an Early *Mycobacterium tuberculosis* Niche and Initiate Dissemination

First Author: Sara Cohen | Senior Author: Kevin Urdahl *(pictured)*  
Cell Host & Microbe | Center for Infectious Disease Research, Seattle Children's Hospital, and UW School of Medicine



Various cell types, including alveolar macrophages (AM), neutrophils, and permissive monocytes, are known to be infected with *Mycobacterium tuberculosis* (Mtb). But initially infected cells, as well as those that mediate dissemination from the alveoli to the lung interstitium, are unknown. Using a murine infection model, the authors reveal that early, productive Mtb infection occurs almost exclusively within airway-resident AM. [Abstract](#)

[View All Publications](#) ➔

Awards

### Eisenman Receives \$7M NCI Outstanding Investigator Award

Fred Hutchinson Cancer Research Center



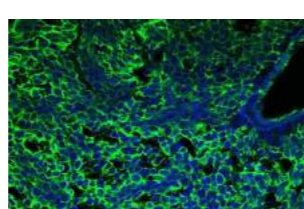
Dr. Bob Eisenman *(pictured)*, a molecular biologist at Fred Hutchinson Cancer Research Center, has received an Outstanding Investigator Award from the National Cancer Institute (NCI). The award is given to investigators pursuing projects of "unusual potential" in cancer research. Eisenman studies a specific family of molecules that turn on cellular growth genes. [Read More](#)

[View All Featured Awards](#) ➔

Local News

### Path to a Targeted Treatment for Small-Cell Lung Cancer?

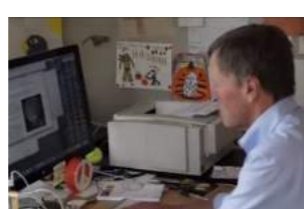
Fred Hutchinson Cancer Research Center



A study from researchers at the Fred Hutchinson Cancer Research Center has revealed how losing a specific gene — which happens in about 15 percent of small-cell lung cancer patients — accelerates tumor formation in mice. Excitingly, these tumors seem to be uniquely sensitive to a specific drug, which dramatically shrinks some tumors in mice with the mutation. [Read More](#)

### Steve's Deep Brain

BrainFacts.org via Youtube



Parkinson's patient Steve Gilbert *(pictured)*, an Affiliate Associate Professor in the Department of Environmental and Occupational Health Sciences at UW, helps viewers understand his disease and his choice of deep brain stimulation for treatment of his tremor. The video gives examples of ways that his tremor used to prevent him from some activities, and how his treatment has improved his daily life. [Watch Now](#)

### Halting Life-Threatening Allergies

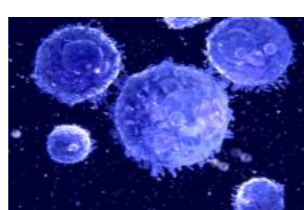
KSAT 12



The Center for Disease Control says that more than 50 million people in the U.S. suffer from allergies, and 15 million are allergic to foods which can be life-threatening. Now, researchers have a target for developing treatments and better diagnoses. Dr. Erik Wambre at the Benaroya Research Institute at Virginia Mason has identified the TH2A cell as a biomarker of allergic diseases. [Read More](#)

### Immusoft Receives \$3.5 Million Grant to Expand upon Its Cell Therapy Platform

Immusoft via Business Wire



Immusoft Corporation, a Seattle-based cell therapy company, has received a Phase II Small Business Innovation Research grant from the National Institute of General Medical Sciences, part of the National Institutes of Health. The grant, in the amount of just over \$3.5 million, will enable Immusoft to further advance its modified B cell approach to treating disease. [Read More](#)

### UW-Based Center Updates Name to Highlight Role of 'Neurotechnologies' in Healing the Brain and Spinal Cord

UW News



Building on seven years of research that helps patients with sensory and motor neurological disorders, the Center for Sensorimotor Neural Engineering is updating its name to the Center for Neurotechnology (CNT). The CNT, which is based at UW, changed its name to highlight the key role that neurotechnologies play in its mission. [Read More](#)

[View All Articles](#) ➔ | [Submit an Article](#) ➔

Interesting Articles

### Google Unveils Search Engine for Open Data

Nature



Google has unveiled a search engine to help researchers locate online data that are freely available for use. The company launched *Dataset Search*, saying that it is aimed at "scientists, data journalists, data geeks, or anyone else". Experts say that it fills a gap and could contribute significantly to the success of the open-data movement, which aims to make data openly available for use and re-use. [Read More](#)

[View All Interesting Articles](#) ➔ | [Submit an Article](#) ➔

### Upcoming Events in Seattle


- September 19 6:00 PM **Association for Women in Science Monthly Chapter Meeting**  
Fred Hutchinson Cancer Research Institute
- September 24 6:00 PM **Science on Tap: Breast Cancer and CRISPR**  
Ravenna Third Place Bookstore
- September 26 8:30 AM **From the Laboratory to Leadership**  
Agora Conference Center
- October 6 7:00 PM **In for the Hutch**  
Fremont Studios
- October 9 7:00 PM **Science in the City: Tuberculosis Treatment**  
Pacific Science Center

[View All Events](#) ➔ | [Submit an Event](#) ➔

### Science Jobs in Seattle

- Senior Director, Regulatory Affairs**  
Zymeworks
- Research Associate II, hIPSC**  
Allen Institute for Cell Science
- Postdoctoral Research Fellow**  
Fred Hutchinson Cancer Research Center
- Drug Safety Specialist**  
Juno Therapeutics
- Animal Care Technician II**  
Allen Institute for Brain Science

[View 50 Other Science Jobs](#) ➔ | [Submit a Job](#) ➔



**FACTS ABOVE CLAIMS.**  
Three scientists peer reviewed a life science vendor to get to the truth.

[SEE FOR YOURSELF >](#)

BROUGHT TO YOU BY

