

**Publications of the Week**
**Neutrophil Extracellular Traps (NETs) Are Increased in the Alveolar Spaces of Patients with Ventilator-Associated Pneumonia**

 First Author: Carmen Mikacenic | Senior Author: Christian Lood (*pictured*)  
 Critical Care | Centre for Lung Biology and UW


Although a role for neutrophil extracellular traps (NETs) in bacterial pneumonia and acute respiratory distress syndrome is emerging, a comprehensive evaluation of NETs in the alveolar space of critically ill patients has yet to be reported. The authors evaluated whether markers of NET formation in mechanically ventilated patients are associated with ventilator-associated pneumonia. **Abstract**

**The Vaginal Microbiome of Transgender Men**

 First Author: Gabrielle Winston McPherson | Senior Author: Dina Greene (*pictured*)  
 Clinical Chemistry | Capitol Hill Medical and UW


Hormonal changes influence the composition of vaginal flora, which is directly related to the health of an individual. Transgender men prescribed testosterone experience a vaginal hormone composition that differs from cisgender women. No previous clinical studies have evaluated the influence that testosterone administration has on the vaginal microbiome. **Abstract**

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**Awards**
**CARE Announces Grant Awards to Accelerate Breakthroughs in Cancer Research**

Andy Hill CARE Fund



The Andy Hill Cancer Research Endowment (CARE) has announced grant awards totaling \$1.15 million to leading research scientists advancing cancer research. Dr. James Heath has been awarded \$750,000 to work on proactive cancer immunotherapies for initial and recurrent disease, and Dr. Andre Lieber (*pictured*) has been awarded \$400,000 to improve outcomes for women with recurrent ovarian cancer by improving the efficacy of a particular chemotherapy drug. **Read More**

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**Local News**
**New Seattle Startup Emerges from UW to Develop Cancer-Fighting Protein Three Decades in the Making**

GeekWire



For 30 years, scientists have been trying to unleash the promise of interleukin-2 (IL-2), a powerful protein that fights cancer but is highly toxic. Researchers at UW, including Daniel-Adriano Silva (*pictured*) may finally have done it, and they're launching a startup to make a commercial version. Currently, IL-2 is approved for the treatment of melanoma and renal cell carcinoma, where it cures 5 to 10 percent of patients. **Read More**

**'DeepSqueak' Helps Researchers Decode Rodent Chatter**

UW Medicine



Two scientists at the UW School of Medicine have developed a software program called DeepSqueak, which detects rodent vocalizations by taking an audio signal and transforming it into an image, or sonogram. By reframing an audio problem as a visual one, the researchers could take advantage of state-of-the-art machine vision algorithms developed for self-driving cars. **Read More**

**Making Research Funding More Efficient**

UW Department of Biology



UW Professor of Biology Dr. Carl Bergstrom believes that, with professors vying for such a small pool of funds, the grant-application process has become a competition not over who has the best ideas, but who is the best at writing grant applications. He uses the economic theory of contests to illustrate how this competitive system has made the pursuit of research funding inefficient and unsustainable. **Read More**

**For Cells, Keeping Quiet Is a Cinch**

Fred Hutchinson Cancer Research Center



A key step in putting normal life on hold is cinching DNA into regular loops, according to new work by researchers at Fred Hutchinson Cancer Research Center, including senior author Dr. Toshio Tsukiyama (*pictured*). The researchers identified the protein that yeast cells use to tighten DNA and shut off most genes during quiescence: condensin. **Read More**

**Bristol-Myers Squibb's \$74B Acquisition of Juno Parent Celgene Puts Seattle Biotech World on Alert**

GeekWire



Things are a little on edge in Seattle's biotech scene after the announcement that pharmaceutical giant Bristol-Myers Squibb intends to buy Celgene, the parent company of Juno Therapeutics. The \$74 billion cash-and-stock buyout has the potential to accelerate the development of new treatments in areas such as cancer immunotherapy, Juno's expertise, but the long-term effect on biotech employment in the Seattle region is less clear. **Read More**

**Gift Creates Karalis Johnson Retina Center at UW Medicine**

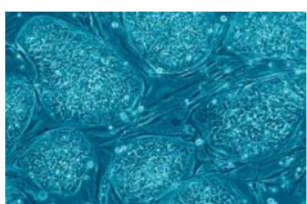
UW Medicine



Angie Karalis Johnson (*left*) has a dream that a cure for the progressive eye disease known as age-related macular degeneration will one day happen because of research advances at UW Medicine. To help realize this dream, Karalis Johnson has made a significant donation to the UW Medicine Eye Institute to establish the new Karalis Johnson Retina Center. **Read More**

**Former Juno Execs Unveil Sana, a New Cell Engineering Biotech That's Reportedly Raising More Than \$800M**

GeekWire



Former Juno Therapeutics executives Hans Bishop and Steve Harr have launched Sana Biotechnology, a startup focused on cell therapy, gene therapy and gene editing. The company said that it will create medicines across a range of areas, including modifying cells both inside and outside the body as well as immunological treatments to improve the reception of donor cells. **Read More**

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**Interesting Articles**
**Scientists Despair as US Government Shutdown Drags On**

Nature News



As the shutdown hits the two-week mark with no end in sight, its effects on science have begun to compound, leaving many government researchers weary, worried and demoralized. The National Science Foundation has suspended reviews of grant proposals indefinitely, and is likely to delay panels scheduled to judge applications for postdoctoral fellowships in early January. **Read More**

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**Upcoming Events in Seattle**

- January 16 6:00 PM Tech Careers for STEM Graduates**  
 Fred Hutchinson Cancer Research Institute
- January 17 4:00 PM Aus-Trial-1a Phase I Clinical Trials Down Under**  
 Courtyard Seattle Downtown
- January 17 5:00 PM Life Science Industry Networking Event**  
 Agora Conference Center
- February 2 8:30 AM Women in Science Engineering Conference**  
 UW Student Union Building (HUB)
- February 25 - 26 9:00 AM Training in Multi-Disciplinary Team Science**  
 Seattle Children's Sand Point Learning Center

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 Adaptive Biotechnologies
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 Bloodworks Northwest
- Speciman Processing Technician**  
 UW Department of Pathology
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