



UPCOMING EVENTS

- March 18-19, 2019 – [S&T Cybersecurity & Innovation Showcase](#), Washington DC
- March 26-29, 2019 – [Preparedness Summit](#), St. Louis, MO
- April 16-18, 2019 – [Partners in Emergency Preparedness Conference](#), Lynnwood, WA
- April 29, 2019 – [Idaho Cybersecurity 5th Annual Interdependencies Summit](#), Boise, ID
- May 29-30 – [2019 Emergency Management Leaders Conference](#), Phoenix, AZ

CONTACT

- Want to know more? Visit us on the web at <http://nwrtec.pnnl.gov>.
- Contact the NWRTC with questions and comments at nwrtec@pnnl.gov.

AROUND THE REGION IN HOMELAND SECURITY

The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by Pacific Northwest National Laboratory (PNNL), to support regional preparedness, resilience, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest.

PNNL, AVISTA TO TEAM ON TRANSFORMATIVE GRID TECHNOLOGY

Avista and PNNL announced they will enter an agreement to strengthen and expand their partnership at the frontiers of grid modernization.

“Avista and PNNL have a significant history and successful track record of collaboration and innovation in grid modernization, and we’re looking forward to expanding our work with Avista to new challenges and opportunities at the grid’s edge,” said Carl Imhoff, head of the Electricity Infrastructure market sector at PNNL. “Specifically, we’re collaborating on new projects that we believe will make our power grid more resilient, and that empower consumers with more information and choices in meeting their energy needs.”



The new agreement, announced at the Department of Energy’s [Innovation XLab Grid Modernization Summit](#) in Seattle last month, includes collaboration on new battery and thermal storage technologies, and the development and testing of transactive building controls for increased grid reliability and resiliency. Through the use of algorithms and analytics developed by PNNL, Avista will also be able to partner with its customers to coordinate service and help reduce load during peak demand.

Researchers from PNNL and Avista will create a testbed for advanced distribution management systems, including the open-source software Avista is currently developing with Duke Energy. Avista and PNNL also plan to work with local government agencies to develop a protocol and methodology for establishing a “Home Energy Score” to inform owners and buyers of a home’s potential energy performance.

See the [PNNL press release](#) for details.



BLOOD ANALYSIS PROVIDES CLUES ABOUT EBOLA, TREATMENT AVENUES

A detailed analysis of blood samples from Ebola patients in Sierra Leone is providing clues about the progression of the effects of the Ebola virus in patients and potential treatment pathways. [A manuscript](#) discussing the work, led by scientists at PNNL, was published in the Proceedings of the National Academy of Sciences. The findings point to a critical role for a molecular pathway that relies on the common nutrient choline, as well as the importance of cellular bodies known as microvesicles.

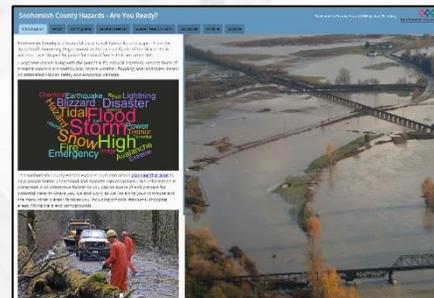
The results are based on the lipids, or fats, in the blood of people infected with Ebola, comparing the detailed lipid composition in patients who survived the illness to those who died and to people who were never infected. The study included blood samples from 11 patients who survived infection, nine who died, and 10 healthy volunteers. The patient samples were from people in Sierra Leone who were infected with Ebola during an outbreak from 2014 to 2016, an event that caused more than 11,000 deaths in West Africa.

Analyses of the lipids were performed using mass spectrometry instruments at the Environmental Molecular Sciences Laboratory, a user facility located at PNNL.

Read the [PNNL press release](#) for details.

SNOHOMISH COUNTY HAZARDS: ARE YOU READY?

Do you live in or regularly travel the Snohomish County area? The Snohomish County Hazard Viewer provides an interactive digital map to



better understand and plan for the most common natural hazards and risks in the area, including floods, earthquakes, severe weather, landslides, and wildfires. Each tab shares information on how hazards might impact the local area. Check out the [Snohomish County Hazard Viewer](#) online to learn more.

REPORT HIGHLIGHTS CYBERSECURITY, GRID SUMMIT

The final report from the 2018 Washington State Cybersecurity Summit is now available online: at <https://buff.ly/2H0u2l3>. The report summarizes the panel discussions from the invite-only event hosted by Snohomish County Public Utility District (SnoPUD) and PNNL in 2018 at the Seattle-Tacoma International Airport.



The summit brought together regional partners and industry leaders in engaging discussion around issues concerning cybersecurity and the nation's critical infrastructure. Participants explored how critical infrastructure providers can better share ideas and best practices. Key focus areas included information sharing, workforce development, and regional cybersecurity resources and capabilities.

See reports from previous summits at [SnoPUD website](#).

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