



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.

SCIENCE LEADERS EXPLORE BIOTHRREATS, ARTIFICIAL INTELLIGENCE, ENVIRONMENT

UPCOMING EVENTS

- March 31-April 3 – [2020 Preparedness Summit](#), Dallas, TX
- April 7-9 – [2020 Partners in Emergency Preparedness Conference](#), Lynnwood, WA
- June 18 – [Infrastructure Security and Resilience Forum](#), Seattle, WA
- July 12-15 – [45th National Hazards Workshop](#), Broomfield, CO
- July 19-23 – [30th Pacific Northwest Economic Region Annual Summit](#), Big Sky, MT

CONTACT

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

Under the theme “Envisioning Tomorrow’s Earth,” PNNL researchers and professional staff recently joined forward thinkers in science, engineering, policy, and education at the annual meeting of the American Association for the Advancement of Science, held this year in Seattle, Wash.

Throughout the four-day event, PNNL experts led scientific symposia on topics ranging from biothrreats and artificial intelligence to water security and clean energy. Discussions focused on progress and obstacles toward a safer, more secure, and prosperous world.



A symposium organized by PNNL’s Kristin Omberg and Karen Taylor focused on novel ways to assess the biological landscape for rapid risk profiling and mitigation. The two scientists [believe machine learning can connect the functions of different pathogens](#) to help diagnose and prepare for future biological threats.

During the session, PNNL biochemist Katrina Waters talked about the application of machine learning to better understand infection potential and mortality. For diseases such as Ebola, Waters said data can be used to predict whether a patient can be expected to recover without major intervention.

See the [PNNL web feature](#) for highlights from this and other presentations on bio-inspired catalysis, artificial intelligence, and earth science.

SEATTLE FORUM TO EXPLORE INFRASTRUCTURE SECURITY

On June 18, 2020 the U.S. Department of Homeland Security Cybersecurity and Infrastructure Security Agency and Port of Seattle Infrastructure Security and Resilience forum will convene public and private critical infrastructure owners and operators to discuss security and resilience concepts and share best practices for protecting the nation's critical infrastructure. Topics include:

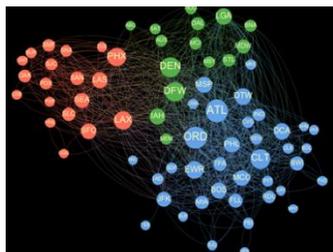


- Cyber Workforce Education and Development
- Layered Protective Measures
- 5G Benefits and Risks to Implementation
- Information Communications Technology Supply Chain Risk Management
- Cyber Incident Response Planning and Lessons Learned.

To register, visit the [event website](#). The forum will be held at the Bell Harbor International Conference Center.

GRAPH TOOL TACKLES COMPLEX ANALYTICS PROBLEMS

A research team led by computer scientists at PNNL has developed a new graph tool, called Ripples, that can solve a complex graph analytics problem like airport disruption analysis in less than one minute on a supercomputer. The research team, which includes researchers from Northeastern University and the Department of Transportation's Volpe National Transportation Systems Center, has [made the method available for the research community on Github](#). See the [PNNL web feature](#) for details.



SEATTLE BIDS FAREWELL TO TWO LEGACY LEADERS

The NWRTC team would like to acknowledge the recent retirement of two long-time Seattle emergency management leaders, **Assistant Chief A.D. Vickery** of the Seattle Fire Department (SFD) and **Barb Graff** of the Seattle Office of Emergency Management (OEM).

Asst. Chief Vickery served more than 50 years with SFD—in fact, he was [honored in 2016](#) as the longest-serving firefighter in Seattle. Under his leadership, we have partnered with SFD on many efforts, including first responder technology assessments and preventative radiological/nuclear detection drills. In his [retirement speech](#), he highlights experiences from his five decades of service and shares his confidence for future operations. He is succeeded in his role by Chief William Barrington. We look forward to continuing our partnership with SFD under his leadership.

Barb has retired after serving 15 years as the Seattle OEM Director. In this role, she helped lead the city's disaster and emergency preparedness, including efforts to partner with the community to prevent, prepare for, and respond to disasters—no small feat! Barb has been a great partner to PNNL, welcoming our team to the OEM to share the city's efforts and capabilities. We second the many kind words Eric Holdeman shared about Barb's impact on his [Disaster Zone blog](#).

We have enjoyed the opportunity to partner with these experienced leaders and their organizations over the last decades and wish them the best on their future endeavors.

For more information, contact Director Ann Lesperance (ann.lesperance@pnnl.gov | (206) 528-3223), or Deputy Directors Ryan Eddy (ryan.eddy@pnnl.gov | (509) 372-6622) and Rob Jasper (robert.jasper@pnnl.gov | (509) 371-6430), or visit nwrtp.pnnl.gov.

PNNL-SA-151771