UPCOMING EVENTS

- November 17-19 – 2019 Economic Leadership Forum, Seattle, WA
- November 18-21 – Chemical and Biological Defense Science & Technology Conference, Cincinnati, OH
- November 20 – Cybersecurity for Defense Contractors, Seattle, WA
- January 28-30 – 2020 American Society for Microbiology Biothreats, Arlington, VA

CONTACT

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

SAVER ASSESSES FIRST RESPONDER IN-SUIT COMMUNICATIONS EQUIPMENT

Photo: DHS S&T

When responding to hazardous material incidents, first responders often wear personal protective equipment that can affect their ability to communicate. In August 2019, the Department of Homeland Security (DHS) Science and Technology Directorate's (S&T) National Urban Science and Technology Laboratory (NUSTL) partnered with PNNL and local first responders to evaluate in-suit communications (ISC) products to aid in procurement decisions and assess performance under different operational scenarios.

The team conducted a System Assessment and Validation for Emergency Responders (SAVER) field assessment at the City of Seattle Joint Training Facility in Seattle, Washington. Six fire service responders served as subject matter expert evaluators to assess pre-selected ISC equipment in four operational scenarios. NUSTL and PNNL surveyed the participants to gather their feedback about how the ISC equipment performed in terms of usability, capability, deployability, maintainability, and affordability.

Managed by DHS S&T, the SAVER program assists emergency responders in making procurement decisions. The SAVER program conducts assessments and validations on commercial equipment and systems and provides those results along with other relevant equipment information to the emergency responder community.

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The assessment results will be shared in the NUSTL In-Suit Communications Assessment Report to be released to the national first responder community later this year. Learn more in the DHS S&T Snapshot "S&T's NUSTL Assesses In-Suit Communications Equipment," which includes a video featuring PNNL's Rich Ozanich and representatives from local first responder organizations.

ARCTIC ASSEMBLY CONVENES WORLDWIDE AUDIENCE

The annual Arctic Circle Assembly convened October 10-13 in Reykjavik, Iceland, where more than 600 speakers from around the globe discussed the future of the Arctic.

Proclaimed the largest annual international gathering on the Arctic, the assembly is attended by heads of state and government, ministers, members of parliaments, scientists, entrepreneurs, business leaders, and environmentalists. PNNL's Jill Brandenberger and representatives from the Los Alamos and Sandia national laboratories attended and presented on a new partnership with the University of Alaska Fairbanks, focused on Alaska resilience and Arctic security.

"Together, we are looking a little farther North in the Northwest and focusing on bringing research strength to the national concerns in Alaska and the Arctic," said Jill.

Visit http://www.arcticcircle.org to access videos, photos, and the program from this year's event.

ARCTIC CIRCLE

BRAVE EXPLORES FIRST RESPONDER HEALTH, SAFETY

The PNNL research investment known as BRAVE—Biomedical Resilience and Readiness in Adverse Operating Environments—is drawing on a broad network of collaborators, data, and resources to explore first responder health on a biological level. The two-year project will analyze extensive measures of molecular activity to create new ways to monitor and predict the effects of stressors on the body.

"We are helping to keep safe those who keep us safe," said Justin Teeguarden, BRAVE principal investigator.

BRAVE comprises several efforts to study how genetics and a range of environmental factors come together to influence responder readiness and health, including working with:

- The exercise physiologist at a California fire department to collect samples of saliva, blood, and urine from firefighters who volunteered to be part of a study.
- Scientists at Washington State University's Sleep and Performance Research Center to review more than 800 potential biomarkers to watch what happens when the body's usual sleep rhythms are disrupted.
- The U.S. Air Force, to learn more about toxic substances that first responders can encounter.

Read the web feature for details.

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