



NWRTC

Northwest Regional
Technology Center
@PNNL



OPPORTUNITIES

Events current at time of publication. Have a virtual resource or event to share? Email us!

- March 17-21 – [National Emergency Management Association Mid-Year Forum](#)
- March 25-28 – [IWCE Conference](#)
- April 2-4 – [Partners in Emergency Preparedness](#)
- May 28-31 – [Texas Emergency Management Conference](#)
- July 21-25 – [33rd Pacific NorthWest Economic Region Annual Summit](#)
- July 22-25 – [National Homeland Security Conference 2024](#)

CONTACT

Want to know more? Visit us at pnnl.gov/projects/nwrtc. 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.

COMBATTING ILLICIT OPIOIDS WITH SCIENCE AND TECHNOLOGY

Synthetic opioids, such as modified fentanyl analogs, can be up to 100 times more potent than fentanyl itself and therefore more dangerous to first responders who encounter them in the field. The Department of Homeland Security's (DHS) Science and Technology Directorate (S&T) is working with partners at every government level on opioid detection and curtailing the illicit flow of fentanyl into the country.



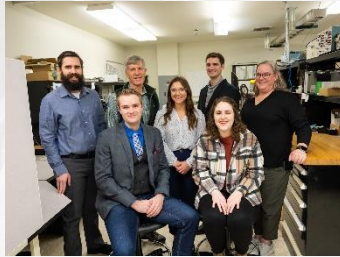
In the feature article "[Knowledge Is Power in the Fight Against Synthetic Opioids](#)," DHS S&T highlights how the Chemical Security Analysis Center and others are working together to identify and assess chemical threats like fentanyl. For example, the center conducted a comprehensive survey of government-tested handheld field detection technology for various synthetic opioids. DHS S&T's National Urban Security Technology Laboratory (NUSTL) then partnered with PNNL to work with manufacturers to expand these devices' libraries and test the devices in the field, per ASTM standards, in detecting substances in pure form, mixtures or dilutions, and trace amounts. The results of that work are available in a publicly accessible report: [Performance Assessment of Field-Portable Instruments and Assays for Fentanyl and Fentanyl-Related Compounds Test Report](#).

"The more we understand about these emerging substances and the equipment we use to detect them—the greater protection and safety we can deliver to the first responder community encountering this threat," said Kristin Omberg, PNNL senior technical advisor and acting director of homeland security programs. [Read the PNNL article to learn more.](#)



TEAM EVALUATES FIREFIGHTER SAFETY EQUIPMENT

For firefighters, the self-contained breathing apparatus, or SCBA, delivers life-saving protection from harmful gases in the air. PNNL partnered with NUSTL and the Fire



Department of the City of New York (FDNY) to conduct a multiphased evaluation of five SCBA devices. The team evaluated how the equipment would function in the complex environments faced by firefighters in a large metropolitan area.

Their resulting study, laboratory testing, and final presentation provided critical information to senior leadership at FDNY to inform a multimillion-dollar acquisition decision. At an award ceremony on December 12, the NUSTL-PNNL team was awarded the DHS S&T Science and Engineering Award for their contributions to improving the operational readiness and safety posture of the firefighter community by conducting a rigorous evaluation of commercially available SCBAs. [Read the staff accomplishment to learn more.](#)

PARTNERING FOR CYBERSECURITY, ENGINEERING CAREERS IN HYDROPOWER

As the nation works to modernize the electric grid, hydropower—like other technologies—is increasingly relying on digital control systems and creating an urgent need to train and recruit the next generation of cybersecurity experts focused on technology and governance. PNNL recently extended the [Training](#)

[Outreach and Recruitment for Cybersecurity in Hydropower](#) (TORCH) program to the University of Texas at El Paso (UTEP).



UTEP is the first university to implement TORCH, a program funded by the Water Power Technologies Office within the Department of Energy. TORCH creates opportunities for students to form their education and support a career path in hydropower. If you are interested in learning how PNNL can bring TORCH to your institution, contact [Penny McKenzie](#) or [Chelsea Gonzales](#) or [read the PNNL article to learn more.](#)

WATCH NOW: SHAPING THE FUTURE OF HOMELAND SECURITY

Grab some popcorn and check out [a short video that highlights NWRTC's impacts and a few of our collaborators](#) from across the nation—including our center's founder and PNNL alum Steve Stein. We hope you'll enjoy this snapshot of how our center came to be, how it has evolved, and how we look forward to continued growth and opportunity.



For more information, contact Director Ann Lesperance (ann.lesperance@pnnl.gov | (206) 528-3223) or Deputy Director Rachel Bartholomew (rachel.bartholomew@pnnl.gov | (509) 371-6906) or visit pnnl.gov/projects/nwrtc.

PNNL-SA-195226