



AROUND THE REGION IN HOMELAND SECURITY



OPPORTUNITIES

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

- September 14-17 – [Silicon Valley Innovation Program Demo Week](#)
- September 15 – [Synthetic Biology: Engineering a Sustainable 21st Century](#)
- October 15-22 – [International Association of Emergency Managers 69th Annual Conference 2021](#)
- November 17-18 – [Natural Disaster and Emergency Management Expo](#)

CONTACT

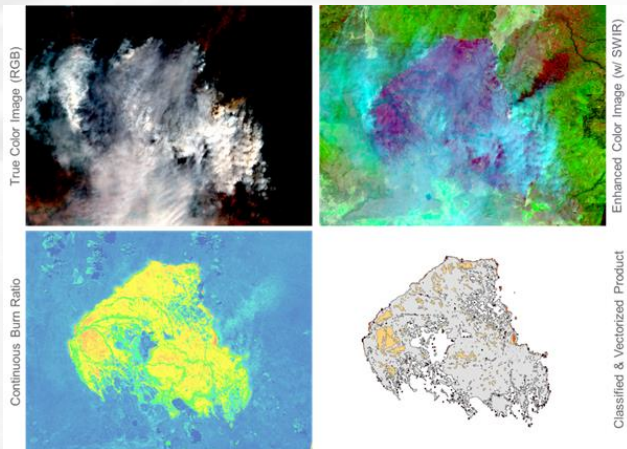
- Want to know more? Visit us at pnnl.gov/projects/nwrtc.
- Contact the NWRTC with questions and comments at nwrtc@pnnl.gov.

REMEMBERING 9/11: REFLECTING ON A LEGACY IN HOMELAND SECURITY

September 11, 2001 was a day that stopped America in its tracks. The two decades since have witnessed a transformation in homeland security and the work of first responders. In honor of this milestone, Pacific Northwest National Laboratory (PNNL) is holding [public events September 7–10](#) to remember and explore how science and technology developed before, during, and after that tragic day are making the United States and the world safer from large-scale terrorist events and natural disasters.

Events open to the public include:

- September 7, noon (PDT)—Virtual Panel: “Voices of the First Responder—Reflections on 9/11 to today.” PNNL leaders with first responders from Seattle, Kirkland, Bellevue, and New York City will explore the transformational effect the attack had on the development of improved, lifesaving tools for first responders. [Register](#).
- September 8, 5 p.m. (PDT)—Live Virtual Tour: “PNNL and National Security: 20 Years of Mission Impact.” Live public tour of PNNL facilities that have provided the U.S. Department of Homeland Security (DHS) with solutions in airport security scanning and radiation detection at U.S. ports of entry. [Register](#).
- September 10, 11 a.m. (PDT)—Virtual Panel: “PNNL and DHS—Perspectives on a 20-Year Partnership.” Former government officials and PNNL staff will reflect on the creation of DHS, its mission and vision, and the future of science and technology needed to support DHS and state, regional, and federal governments in the years to come. [Register](#).



CONNECTING DISASTER RESPONSE, ARTIFICIAL INTELLIGENCE

In the face of wildfires, floods, hurricanes, and other natural disasters, the toll of disasters on American livelihoods is astronomical. Andre Coleman and his team of researchers at PNNL are part of the [First Five Consortium](#), a group of government, industry, and academia experts committed to lessening the impact of natural disasters using technology.

Coleman and team are expanding PNNL's operational [Rapid Analytics for Disaster Response \(RADR\)](#) image analytics and modeling suite to mitigate damage to key energy infrastructure. Using a combination of image-capturing technology (satellite, airborne, and drone images), artificial intelligence, and cloud computing, the team works to improve the timeliness and quality of data for situational awareness, decision-making, and response.

The R&D 100 award-winning RADR software can quickly assess an array of post-disaster damage from hurricanes, floods, tornados, wildfires, and earthquakes. PNNL researchers developed RADR as a software suite that provides disaster managers, first responders, utilities, energy providers, and others with a damage assessment capability using image analytics.

Coleman and team's project originally started with the creation of a change-detection algorithm, which analyzes different types of satellite imagery and

determines what changed in the landscape after a storm. Since then, the team has added functionality such as infrared imaging and integration of publicly available and crowdsourced images from social media. Looking forward, the team seeks to further improve RADR response time, damage assessment, visibility, prediction capability, and data accessibility. To learn more, see the [web story](#).

ATKINSON APPOINTED AS LABORATORY FELLOW

David Atkinson was one of six PNNL staff members recently named laboratory fellow, one of PNNL's highest distinctions for scientific and engineering.



This award recognizes Atkinson for his significant scientific knowledge and skills to develop groundbreaking technologies, such as real-time atmospheric detection of explosive vapors at parts-per-quadrillion concentrations. His scientific reputation led to being selected by DHS as a senior advisor on the Screening at Speed program, a high-profile investment in the aftermath of 9/11. Atkinson joined PNNL in 2003 and he passed away in May of this year. His laboratory fellowship was awarded posthumously.

To read more about his accomplishments and those of the other new laboratory fellows, visit <https://bit.ly/3zb2e5e>.

On behalf of the NWRTC, I would like to recognize Dave Atkinson's well-deserved appointment to Laboratory Fellow and honor his numerous contributions to PNNL, homeland security, and our nation. Dave was a remarkable scientist, colleague, and friend to many and he will be missed.

- Ann Lesperance, NWRTC Director

For more information, contact Director Ann Lesperance (ann.lesperance@pnnl.gov | (206) 528-3223) or Deputy Director Richard Ozanich (richard.ozanich@pnnl.gov | (509) 375-4586) or visit pnnl.gov/projects/nwrtc. PNNL-SA-165902