

# HOMELAND

## Defense & Security Digest

The Latest From the Homeland Defense & Security Information Analysis Center // April 9, 2024

## TRAUMATIC BRAIN INJURY CENTER OF EXCELLENCE (TBICoE) PODCASTS

TBICoE offers various resources on brain health for service members, veterans, and healthcare professionals, including the following two podcast series:

“Clinical Updates in Brain Injury Science Today” highlights current research in traumatic brain injuries (TBIs) and is geared toward providing information to clinicians treating service members and veterans with TBIs.

“Picking Your Brain” highlights the impact of TBI on military readiness and covers topics like mental health burnout, blast exposure impacts, and overlapping symptoms.

Click here to learn more about these podcasts: [TBICoE Podcasts | Health.mil](#)

## DID YOU MISS OUR LAST WEBINAR?

“Novel Nuclear Forensics for the 21st Century”

[WATCH NOW!](#)

## NOTABLE TECHNICAL INQUIRY

**How can the "memory effect" of an incinerator's pollution abatement system be removed after it becomes contaminated with dioxins and furans?**

The Homeland Defense and Security Information Analysis Center (HDIAC) was asked to provide information on the removal of the “memory effect” from an incinerator’s pollution abatement system after it becomes contaminated with dioxins and furans. The overarching objective is to eliminate... [READ MORE](#)

## UPCOMING WEBINAR



### A Technical Review on Common Myths About Nuclear Energy

April 11, 2024  
12:00 PM – 1:00 PM

*Presenter(s): Robert Hayes, Ph.D.*

*Host: HDIAC*

This webinar will examine the various antinuclear claims that appeal to extreme radiological risk. The presentation will start with a review of radiation risk and ALARA. The social myths will include false narratives associated with Three Mile Island, Fukushima, and Chernobyl, along with the potential for... [READ MORE](#)

## FUTURE WEBINARS

### Tip of the Spear: The Next Generation of Brain...

April 12, 2024  
12:00 PM – 1:00 PM

### Never Deployed but Still at Risk: Substance Use...

May 14, 2024  
12:00 PM – 1:00 PM



GAO

## HIGHLIGHT

### DoD-Supported, Lifesaving Autoinjector to Combat Ultra-Potent Opioid Exposure Available Through DLA

FORT DETRICK, MD – Long approved for pain control in civilian and military medicine, synthetic opioids are substances that are created in a laboratory and act on the same targets in the brain as natural opiates like morphine and codeine. However, while developed with the best of intentions... [LEARN MORE](#)

## EVENTS

#### 23rd Annual Bio IT World Conference & Expo

April 15–17, 2024

Boston, MA & Virtual

#### DLA Supply Chain Alliance Conference & Exhibition

April 23–24, 2024

Columbus, OH

#### The 34th Annual National Radiological Emergency Preparedness Conference

April 28–May 2, 2024

Dallas, TX

#### Fundamentals of Explosives Short Course

April 29–May 1, 2024

Kingston, RI

#### The AsMA 94th Annual Scientific Meeting

May 5–9, 2024

Chicago, IL

#### The 18th Annual RadWaste Summit

June 3–5, 2024

Louisville, KY

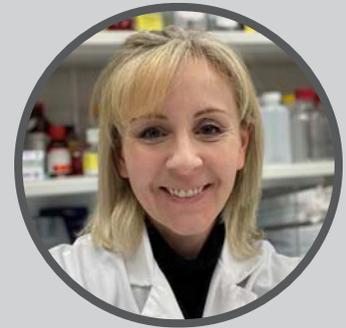
#### The 2nd Annual Nuclear Energy Security Summit

June 26–27, 2024

Washington, DC

#### Want your event listed here?

Email [contact@hdiac.org](mailto:contact@hdiac.org) to share your event.



## VOICE FROM THE COMMUNITY

### Mary Sproull, Ph.D.

*Research Scientist, National Institutes of Health (NIH)*

Dr. Mary Sproull works at NIH on medical countermeasure development for radiation injury and mass casualty medical management. Her research focuses on the development of biosimetry blood diagnostics to determine the presence and severity of radiation exposure in a mass casualty screening setting using proteomic biomarkers validated from animal research models. Her work and the work of other NIH scientists funded through the Radiation and Nuclear Countermeasures Program of NIAID support civil defense for future radiological/nuclear events.

## ARE YOU A SME?

If you are a contributing member of the information systems community and are willing to help others with your expertise, you are a subject matter expert (SME).

Join our team today.

**BECOME A SUBJECT  
MATTER EXPERT**

## ABOUT TECHNICAL INQUIRIES (TIs)

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### WHAT IS THE TI RESEARCH SERVICE?

- FREE service conducted by technical analysts
- 4 hours of information research
- Response in 10 business days or less

### WHO CAN SUBMIT A TI?

- U.S. government (federal, state, or local)
- Military personnel
- Contractors working on a government or military contract

### WHY UTILIZE THE TI RESEARCH SERVICE?

- Get a head start on your technical questions or studies
- Discover hard-to-find information
- Find and connect with other subject matter experts in the field
- Reduce redundancy of efforts across the government

To submit a TI, go to  
<https://hdiac.org/technical-inquiries>

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## RECENT HDIAC TIs

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- Is there a group coordinating the elimination of per- and polyfluorinated substances, also known as the "forever chemicals," in U.S. Department of Defense materiel?
- What information is available on using counter unmanned aerial systems within the homeland defense/security, consequence management, or civil protection spaces?
- How can non-lethal weapons be distributed and employed at the tactical, operational, and strategic levels?

## RECENT CSIAC & DSIAC TIs

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- What are the state-of-the-art use cases for augmented/virtual/extended reality in aviation maintenance?
- What data is available on initial penetration effects of secondary V50 ballistic limits for composite materials?
- What is the state of models addressing ablation for high-temperature materials?

## FEATURED NEWS

### Simulating the Fourth State of Matter to Harness Fusion

As you gaze into the night sky, stars look like tiny, glowing pinpricks shining through the dark. But inside those stars, reactions occur that produce staggering amounts of energy. All stars – including our sun... [READ MORE](#)

## RECENT NEWS



*Pixabay*

**NRC Endorses New Guidance for Advanced Reactor Licensing**

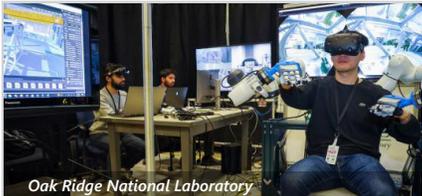
U.S. Department of Energy 



*U.S. Navy*

**DHS Releases First-Ever Indigenous Languages Plan to Strengthen Language Access**

U.S. Department of Homeland Security 



*Oak Ridge National Laboratory*

**Argonne's New Dual-Armed Telerobotic System for Hazardous Waste Cleanup...**

Argonne National Laboratory 



*Airman 1st Class Melody Bordeaux*

**Sandia Collaboration Produces Improved Microneedle Technology**

Sandia National Laboratories 



*NSF University Corporation*

**NRL Participates in International Campaign Investigating Polar Low Phenomena**

U.S. Naval Research Laboratory 



*U.S. Air National Guard*

**Explosive Ordnance Disposal Techs Pioneer Innovative Method to Clear Stuck Artillery Round**

U.S. Army  

-  Alternative Energy
-  Biometrics
-  CBRNE Defense
-  Critical Infrastructure Protection
-  Cultural Studies
-  Homeland Defense & Security
-  Medical
-  Weapons of Mass Destruction

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