

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

## **Radioactive Sources: Applications and Alternative Technologies**

### **Virtual Meeting** **DRAFT PUBLIC AGENDA**

**January 6, 2021 Eastern Time (ET)**

#### **Connection Information**

**Link:** <https://nas-sec.webex.com/nas-sec/j.php?MTID=m19ca2aa2d452fda2130f3f92242af33b>

**Meeting ID:** 199 022 5145

**Password:** fbQtCKZi487 (32782594 from phones and video systems)

**Telephone:** +1-415-527-5035 or +1-929-251-9612

**Access code:** 199 022 5145

<b>1:00 pm – 1:05 pm</b>	<b>Open PUBLIC SESSION</b> Bonnie Jenkins, Committee Chair
<b>1:05 pm – 1:25 pm</b>	<b>1.1 NTI Radioactive Source Security Assessment</b> Samantha Neakrase, Senior Director, Materials Risk Management, Nuclear Threat Initiative
<b>1:25 pm – 1:40 pm</b>	<b>Q+A and Discussion</b>
<b>1:40 pm – 2:00 pm</b>	<b>1.2 Sterilization in the Medical Device Industry</b> James McCoy, Program Manager, Sterilization R&D, BD
<b>2:00 pm – 2:15 pm</b>	<b>Q+A and Discussion</b>
<b>2:15 pm – 2:35 pm</b>	<b>1.3 USDA-APHIS-PPQ Phytosanitary Irradiation</b> Laura Jeffers, National Operations Manager for Phytosanitary Treatments, USDA-APHIS-PPQ Field Operations
<b>2:35 pm – 2:50 pm</b>	<b>Q+A and Discussion</b>
<b>2:50 pm – 3:00 pm</b>	<b>General Q+A Session</b>

## READING MATERIAL

### 1.1

Nuclear Threat Initiative, NTI Nuclear Security Index - Losing Focus in a Disordered World; 5<sup>th</sup> Edition; 2020: [https://www.ntiindex.org/wp-content/uploads/2020/09/2020\\_NTI-Index\\_Report\\_Final.pdf](https://www.ntiindex.org/wp-content/uploads/2020/09/2020_NTI-Index_Report_Final.pdf)

## PRESENTER BIOGRAPHIES

### 1.1

**Samantha Neakrase** joined NTI in June 2012. At NTI, she has led two major projects: the NTI Nuclear Security Index and the Global Dialogue on Nuclear Security Priorities. She has also led projects on cyber security of nuclear weapons and related systems and the Nuclear Nonproliferation Treaty. Ms. Neakrase is co-author of two recent NTI reports, “Nuclear Weapons in the Cyber Age” and “A Roadmap for America’s Nuclear Policy and Posture.” She has also authored two articles on the review of the Amendment to the Convention on the Physical Protection of Nuclear Material: “Strengthening Nuclear Security with a Sustainable CPPNM Regime” (*Arms Control Today*, June 2019) and “More Work to Do: A Pathway for Future Progress on Strengthening Nuclear Security” (*Arms Control Today*, October 2015, co-authored with Jonathan Herbach). In May 2012, Ms. Neakrase completed an MPA degree at the Harvard Kennedy School, where she focused on foreign policy and national security and received the Donald K. Price Award for academic excellence and community service. She also served as a research assistant for *New York Times* journalist David Sanger on his book *Confront and Conceal: Obama’s Secret Wars and Surprising Use of American Power*. Prior to attending the Kennedy School, Ms. Neakrase practiced law at Simpson Thacher & Bartlett LLP and clerked for the Honorable Maryanne Trump Barry on the U.S. Court of Appeals for the Third Circuit. Ms. Neakrase was a term member of the Council on Foreign Relations. She holds a BA from St. Olaf College and a JD from Villanova University School of Law, where she was elected to the Order of the Coif.

### 1.2

**James McCoy** is a graduate of Texas A&M University with research focused on the utilization of alternate radiation sources (eBeam and X-ray) in the food, medical device, and pharmaceutical industries. Currently the leader of sterilization R&D and creator of the Sterilization Technology and Advancement Research Center within BD. Whose focus is the development and investigation of alternative technologies and the optimization of legacy modalities to deliver a sustainable future for sterilization. Other current work includes advisory board member for Areial, an electron beam and x-ray research company, PI on Department of Energy research grants focused on investigation of alternative technologies to gamma, and membership to a number of standards committees in the field of material science and sterilization.

### 1.3

Dr. **Laura Jeffers** is a graduate of North Carolina State University and began her career in an insecticide development lab at Rhône-Poulenc, an Agricultural Chemical Company, in Research Triangle Park, NC. In 2007, Laura made the jump from Insect Physiologist to Regulatory Entomologist when she joined the USDA APHIS Plant Protection and Quarantine (PPQ) Exotic Pest Information Collection and Analysis (EPICA) staff as a Biosurveillance Analyst. In 2009, she joined the PPQ Treatment Quality Assurance Unit (TQAU), where she spent most of her time resolving technical issues regarding phytosanitary quarantine treatments. In that position, Laura was the Phytosanitary Irradiation Program Manager and the Business System Manager for the Commodity Treatment Information System (CTIS). In 2015, Laura joined PPQ Field

Operations as a National Operations Manager, where she coordinates operational efforts for the phytosanitary fumigation, irradiation, heat, and cold treatment programs. While with PPQ, she's completed several work details, including the Field Operations Exclusions and Imports Director, the Virginia State Plant Health Director, and the Plant Health Programs Critical Issues Manager. Laura even had the fortune to spend one long, hot summer supporting the preclearance irradiation program in Bangkok, Thailand.