

Mid-Atlantic States Radiation Control Programs Conference DE, MD, NJ, PA

21 – 22 September 2021

FINAL AGENDA

([WEBSITE FOR CONFERENCE](#))

Time	Presenter	Presentation
Day One, Plenary Session – 21 September 2021		
Moderator AM Session – James Hanes, Delaware Division of Public Health		
9:00 AM	Jamie Mack, Chief, Health Systems Protection, Delaware Division of Public Health	Welcome
9:10 AM	Rob Brinsfield, Delaware Radiation Control Program Director	Conference Logistics
9:15 AM	Tim Cooper, Director, Public Health Preparedness, Delaware Division of Public Health	Keynote: Public Health and Radiation Preparedness: Improvements, Planning, and the Future
9:30 AM	Fran Esposito, MD, Beebe Health Care	Radiation Therapy in a Community Hospital
10:00 AM	Morning Break	
10:30 AM	Mahadevappa Mahesh, MS, Ph.D., Johns Hopkins School of Medicine	To Shield or Not to Shield the Gonads: That's the Question!
11:00 AM	Nancy Stanley - NJ Department of Environmental Protection	Bridging the Gap: Outreach to First Responders for Radiation Emergencies
11:30 AM	Matthew Higgins, CHMM, Co-Chairman, REP Technical Assessment Center Team	Radiation Emergency Response in Delaware
12:00 PM	Lunch Break	

Moderator PM Session – Shannon Page, MD Department of Environment		
1:00 PM	Armin Ansari, Ph.D., Centers for Disease Control & Prevention	National Council on Radiation Protection, Program Area Three (PAC-3): Nuclear and Radiological Security and Safety
1:30 PM	John Crapo, DOE-NNSA	Resources in Support of State and Local Governments
2:00 PM	<i>Panel Discussion on Decommissioning of Nuclear Power Plants</i>	
	Patrick Mulligan, NJ	Nuclear Power Plant Decommissioning in New Jersey: Oyster Creek Nuclear Generating Station
	Dave Allard, PA	Nuclear Power Plant D&D in PA
	Bruce Watson, NRC	NRC Decommissioning Process
3:00 PM	Afternoon Break	
3:30 PM	Erhard Koehler, U.S. Department of Transportation, Marine Administration (MARAD)	N. S. SAVANNAH: Decommissioning Challenges and Opportunities
4:00 PM	<i>REP PAG Manual & NUREGS Panel</i>	
	Wagnus Prioleau, EPA	EPA PAGs
	Michael Noska, FDA	The Advisory Team: Challenges and Updates
	Craig Fiore, FEMA	FEMA REP Program Update
5:00 PM	Rob Brinsfield, DE	Conference Wrap Up & Logistics for Day One
Day Two, Session One, Resources for Radiological Emergency Planning, Preparedness, Response and Recovery – 22 September 2021		
Moderator – James Hanes, Delaware Division of Public Health		
0900 AM	James Hanes, DE	Introductions
0905 AM	Brendan Palmer	Overview (and Recent Advancements) in the Roll-out and Development of RadResponder
0920 AM	Jeff Chapman, ORNL	Radiation Measurement Data and Data Quality in Assessing Consequences in the Aftermath of a Major Nuclear Incident (and Simulation of it in Drills and Exercises)

0935 AM	<i>Mid-Atlantic States Panel Discussion on the Radiological Operations Support Specialist (ROSS) Virtual Evaluation Scenario Tool (VEST) -- Pilot, August 2021</i> Brian Iverson Larry Ricks Katherine McLellan, DOE	Radiological Operations Support Specialist (ROSS): Virtual Evaluation Scenario Tool (VEST) Pilot Live Demonstration of the VEST Pilot Products Using Radresponder ROSS VEST: Radiation Operations Safety Support Virtual Evaluation Scenario Tool
1000 AM	Steve Musolino, DOE-BNL	RDD Response Guidance: Planning for the First 100 minutes
1020 AM	Eliot Calhoun	Overview of the Planning Guidance for Response to a Nuclear Detonation (the 72-hour guidance)
1040 AM	Jonathan Gill, FEMA	Nuclear Incident Response Team – Research and Development
1100 AM	Debbie Gilley	Guidance for Medical Physicists Responding to a Nuclear or Radiological Emergency
1200 PM	James Hanes, DE	Closing
Day Two, Session Two, X-Ray Inspection Workshop: X-Ray Facility Inspection Lessons Learned during the Pandemic – 22 September 2021		
Moderator – Robert Brinsfield, DE Radiation Control Program		
1 PM	Robert Brinsfield, DE	Introductions
1 PM	James Hanes, DE	X-Ray Facility Inspection: Lessons Learned During the Pandemic
2 PM	Diane Halaycio, NJ Nathan Papperman, NJ	Lessons Learned from Performing Work Remotely During the Pandemic
3 PM	Dennis Ferguson, PA David Gaisior, PA Lisa Funk, PA Roy Huhn, PA	PA Panel Discussion
4 PM	Pamela Brooks, MD George Robinson, MD	Radiological Health Program Radiation Machines Division
5 PM	Rob Brinsfield, DE	Closing

Presenter	Abstract and Biosketch
Day One, Plenary Session	
<p>James Hanes, DE Department of Public Health</p>	<p>Title: AM Moderator</p> <p>Biosketch: <u>James Hanes</u> is an Environmental Scientist in the Office of Radiation Control, Delaware Division of Public Health. He worked as an environmental scientist for the University of Maryland prior to joining the Office of Radiation Control in 2018. He is certified as an FDA Mammography Inspector. He serves as subject matter expert in health physics and radiation measurements technology, and provides technical direction and training to others, as needed. Mr. Hanes has three years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, and dose assessment for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He serves as subject matter expert to state agencies involved in the Preventive Radiological Nuclear Detection (PRND) program for Delaware. He has been an Associate member of the Conference of Radiation Control Program Directors since 2018. Mr. Hanes holds a Bachelor of Science degree in Environmental Science & Engineering from the University of Delaware, a Master of Science degree in Health Physics from Oregon State University, and this year trained to serve in the Delaware National Guard.</p>
<p>Shannon Page, MD Department of Environment</p>	<p>Title: PM Moderator</p> <p>Biosketch: <u>Shannon Page</u> holds a Doctorate in Dentistry from Howard University, and a Bachelor of Science degree in Biology from Lincoln University. She has over ten years of experience in working with radiation, practicing dentistry, public health and business & project management. She currently works as Radiation Machines Division Chief for the Maryland Department of Environment, Radiological Health Program of the Air & Radiation Administration, and leads the Diagnostic Medical Radiation Events Project.</p>
<p>Jamie Mack, Chief, Health Systems Protection, Delaware Division of Public Health</p>	<p>Title: Welcome</p>

	<p>Biosketch: Since 2017, <u>Jamie Mack</u> has served as the State Environmental Health Director with the Delaware Division of Public Health (DPH). Jamie started his career with DPH in 2004 as an Environmental Scientist, before running various programs including Community Environmental Health Services. Jamie served as the Policy Lead in the Director’s Office for two years before taking his current role, working with the State Legislature and stakeholder groups to develop and implement statewide policies. Jamie has bachelor’s degrees in biology and Environmental Science and earned his Master of Public Administration from Penn State in 2018. Prior to his public services roles, Jamie worked in the private sector as an environmental consultant. As the Chief of the HSP section, Jamie oversees many public health programs and services throughout the state; including, ensuring safe products at retail food establishments, monitoring drinking water, ensuring use of lead-safe work practices, consultations on indoor air quality, regulatory oversight of healthcare facilities, oversight of radiation facilities, certification of radiation technologists and technicians, and many other services that protect and improve the health and safety of all Delawareans.</p> <p>During Jamie’s tenure with the Division of Public Health, he has participated in radiation preparedness activities, including training and participating in several successful FEMA-graded, full-scale nuclear power emergency exercises within the Technical Assessment Center, which functions within the Delaware Emergency Management Agency (DEMA).</p>
<p>Rob Brinsfield, Delaware Radiation Control Program Director</p>	<p>Title: Conference Logistics and Conference Wrap Up & Logistics for Day One</p>

	<p>Biosketch: <u>Robert Brinsfield</u> is Radiation Control Program Director, Delaware Division of Public Health. He worked as a Biomedical/Diagnostic Imaging Engineer from 1988 – 2000 in an acute care hospital prior to transitioning to the State Office of Radiation Control. Since 2001, he has served as the Project Manager for the Delaware Division of Public Health contract with the U.S. Food and Drug Administration (FDA) for annual inspections of mammography facilities, and worked as the most senior FDA-certified Mammography Facility Inspector. He represents the Delaware Department of Health and Social Services as Administrative Agent to a Governor appointed public board, the Delaware Authority on Radiation Protection, and represents Delaware on the Appalachian Commission for Low Level Radioactive Waste. Mr. Brinsfield has years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, software modeling, and dose assessment and most recently, serving as Co-Chair for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He has been a member of the Conference of Radiation Control Program Directors since 2002. He holds a master’s degree in Business Administration from Wilmington University, a bachelor’s degree in Industrial Technology/Engineering from Southern Illinois University, and an associate degree in Electrical Engineering from Delaware Technical Community College.</p>
<p>Tim Cooper, Director, Public Health Preparedness, Delaware Division of Public Health</p>	<p>Title: Keynote – Public Health and Radiation Preparedness: Improvements, Planning, and Future</p> <p>Abstract: The Director of the Delaware Division of Public Health’s Office of Preparedness – a published author, Certified Emergency Manager, and prior EMS Special Operations Coordinator and paramedic – will share his teams experience improving radiological emergency Preparedness in Delaware to include updating sheltering and radiation reception centers plans as well as the challenges for preparing and responding during a pandemic. Serving as the Operations Section Chief during the COVID-19 pandemic response has highlighted the necessary improvements needed for radiological preparedness and vulnerable populations.</p>

Biosketch: Tim Cooper serves as Director of the Office of Preparedness within the Delaware Division of Public Health, Emergency Medical Services and Preparedness Section. He holds an associate degree in Emergency Services Management from Delaware Technical Community College, a bachelor's degree in Emergency Management from Jacksonville State University, and a Master of Arts Degree in Homeland Security from American Public University. Mr. Cooper serves as Adjunct Faculty at Wilmington University where he teaches Healthcare Emergency Management and Disaster Management in Public Health, courses he developed. Mr. Cooper is a member of the International Association of Emergency Managers where he holds the designation of Certified Emergency Manager. Mr. Cooper is a member of the Children and Disaster Caucus. In addition, he also represents the State of Delaware on the National Association of City and County Health Official Preparedness Policy Advisory Group. Mr. Cooper has had several articles published in the Delaware Journal of Public Health topics involving family preparedness and emergency response improvements following Superstorm Sandy.

Tim joined the Delaware Division of Public Health in 2012. He is responsible for managing the Centers for Disease Control and Prevention Public Health Emergency Preparedness Grant that funds the office programs. As Director, he oversees three branches including Logistics, Training, Planning, and additional consultants and technical support staff within the Office of Preparedness. Cooper has served as the Operations Section Chief during State Health Operations Center (SHOC) events such as Covid-19 Response and Super Storm Sandy. Mr. Cooper has led efforts to improve capabilities for mass care and working with people with access and functional needs in disaster.

Prior to his work with DPH, Tim served as a Region IV Hospital Preparedness Coordinator with the Maryland Department of Health and Mental Hygiene, Office of Preparedness and Response. While serving as the coordinator he assisted healthcare partners with regional preparedness activities including managing the Hospital Preparedness Grant Program for the nine counties of Eastern Shore of Maryland. During his tenure, he assisted in the development and sustainment of the health care coalition and several other regional projects to include regional communication, information sharing, public information and warning, and medical surge.

Prior to his work in Public Health, Mr. Cooper he served in various roles within Delaware's Sussex County EMS. His background includes serving as a Paramedic, Shift Commander, Public Information Officer, and Special Operations Coordinator. In addition, Mr. Cooper helped to improve target capabilities such as medical surge, critical infrastructure, and hazardous materials decontamination while serving as the EMS Discipline Lead for the Delaware Terrorism Preparedness Homeland Security Working Group.

	Originally from Maryland, Tim now lives with his wife and daughter just outside of Lewes, Delaware.
Fran Esposito, MD, Beebe Healthcare	<p>Title: Radiation Therapy in a Community Hospital</p> <p>Abstract: Radiation therapy in a community hospital Therapy with radiopharmaceuticals falls under the purview of the radiology subspecialty, nuclear medicine. Currently, most of the radiopharmaceutical therapy is with radioactive iodine (I131), for thyroid disease. Recently Radium 223 dichloride (Xofigo) has been shown to be useful in the treatment of metastatic prostate cancer to the skeleton that is resistant to castration. Since prostate cancer is a very common malignancy and has a high rate of skeletal involvement, this represents an exciting new avenue of nuclear medicine practice.</p> <p>Biosketch: <u>Frances Stewart Esposito</u> is a diagnostic radiologist and nuclear medicine specialist who has practiced at Beebe Healthcare in Lewes DE for the last 30 years, and previously at Germantown Hospital in Phila, PA for 15 years. She has been radiation safety officer at both institutions. She has been a past chief of radiology at Beebe Healthcare as well as previous president of the medical staff and has served as the Delaware Medical Society representative to the Delaware Authority on Radiation Protection for the last 25 years. Education began with a BS in Chemistry from Duke University followed by MD from Women’s Medical College in Phila., internship in internal medicine at Women’s Medical College, residency in diagnostic radiology at Philadelphia General Hospital, and fellowship in nuclear medicine at Albert Einstein Medical Center in Phila., PA.</p>
Mahadevappa Mahesh, MS, Ph.D	<p>Title: To Shield or Not to Shield the Gonads: That’s the Question!</p> <p>Abstract: The American Association of Physicists in Medicine (AAPM) published a position statement in April of 2019 against the use of patient gonadal and fetal shielding. In that statement, the following points were highlighted:</p> <ul style="list-style-type: none"> • Gonadal and fetal shielding provide negligible, or no, benefit to patients’ health. • The use of gonadal and fetal shielding can negatively affect the efficacy of the exam. <p>This was supported and endorsed by number of professional societies, including American College of Radiology, Health Physics Society, and others. In January of 2021, NCRP published statement no. 13, recommending end to the use of routine gonadal shielding during abdominal and pelvic radiography. This presentation will discuss the rationale for the above decisions and its implications on existing regulatory requirements.</p>

	<p>Biosketch: <u>Dr. Mahadevappa Mahesh</u> is the Professor of Radiology and Cardiology at the Johns Hopkins University School of Medicine, Baltimore, MD. He is board certified from the American Board of Radiology in diagnostic radiological physics and is a member of the Radiation Control Advisory Board for the State of Maryland. His research interests are in medical imaging, particularly in areas of computed tomography (CT), interventional fluoroscopy and digital mammography.</p> <p>Dr Mahesh is currently Associate Editor for the Journal of American College of Radiology and board member for the American Association of Physicists in Medicine and the American College of Radiology. He serves as subject-matter-expert to the United Nations-International Atomic Energy Agency (UN-IAEA) and is the national contact person for the United States in the UNSCEAR.</p> <p>Dr Mahesh is the author of the textbook titled ‘MDCT Physics: The Basics – Technology, Image Quality and Radiation Dose’.</p> <p>Dr Mahesh is a fellow of the AAPM (2007), ACR (2009), American College of Medical Physics (2011), Society of Cardiovascular Computed Tomography (SCCT) (2011) and International Organization of Medical Physics (IOMP) (2019).</p>
<p>Nancy Stanley, NJ Department of Environmental Protection</p>	<p>Title: “Bridging the Gap,” Outreach to First Responders for Rad Emergencies</p> <p>Abstract: “Over the last decade and a half, there has been an abundance of published recommendations and guidance from agencies as varied as the National Council on Radiation Protection and Measurements (NCRP), the Conference of Radiation Control Program Directors (CRCPD), the Department of Homeland Security (DHS; through its various agencies) and the Health Physics Society (HPS), stressing the need for training emergency responders to respond to radiological emergencies. While there are many free course offerings available to responders, such as those offered at the National Nuclear Security Site through the Counter Terrorism Operations Support Center (CTOS), and FEMA’s Center for Domestic Preparedness, for a variety of reasons they are not always taken advantage of by responders.</p> <p>Many responders, particularly in the Northeast, have a rudimentary understanding of radiation detection and hazards. The expertise at the state level often lies with the state radiation control program staff. It is an infrequent occurrence when these two groups of professionals can interact. Fostering relationships with municipal, county, and state level responders allows for a professional environment which enables a better flow of technical knowledge and expertise.</p>

	<p>This presentation will highlight the training effort undertaken by the State of New Jersey’s Department of Environmental Protection radiation control program to bring radiological emergency response training, specifically as it relates to DHS’s National Urban Security Technology Laboratory’s (NUSTL) recent Radiological Dispersal Device Guidance, to responders at the municipal, county, and state level using both classroom and online training initiatives.”</p> <p>Biosketch: <u>Nancy Stanley</u> is a Radiation Physicist with the State of New Jersey’s Department of Environmental Protection (NJDEP). While her primary responsibilities include radioactive materials licensing and inspections, she is also responsible for the management and coordination of the NJDEP’s radioactive materials response activities, covering incidents from contaminated trash & scrap, lost & abandoned devices, to overexposures and medical misadministration incidents. Nancy is also deeply involved in emergency response activities focused on nuclear power plants, and in recent years, has concentrated on New Jersey’s preparation for responses to potential radiological dispersal device and improvised nuclear device incidents. She maintains a keen interest in the role of public communication in radiation emergencies, as well as in fostering inter-agency cooperation, including training.</p> <p>Nancy holds a Masters in Radiation Science from Rutgers University, and a bachelor’s degree in chemistry from Trenton State College and is a member of the New Jersey Chapter of the Health Physics Society, as well as the national Health Physics Society, where she serves as a board member of the Homeland Security and Emergency Response Section. Her 35-year career also encompasses work in radiochemical analysis, gamma spectroscopy, and contaminated site assessment and decommissioning.</p>
<p>Matthew Higgins, CHMM, Co-Chairman, REP Technical Assessment Center team</p>	<p>Title: Radiological Emergency Preparedness Programs in Delaware</p> <p>Abstract: Delaware has a population of approximately 45,000 residents within the 10-mile emergency planning zone of the Salem-Hope Creek Nuclear Generating Station in New Jersey and as such, has participated actively in maintaining capacity for nuclear power emergency response planning, preparedness, response and recovery capabilities to protect Delawareans. The state has also developed additional capabilities for preparedness and response to radiological events apart from nuclear power plants, with reliance on scientists from multiple offices and agencies of state government and utilization of federal guidance, tools and programs. This talk will provide an overview of radiological emergency capabilities and discuss the importance of partnerships within state & local government, and collectively with federal programs to assure radiological protection of all Delawareans.</p>

	<p>Biosketch: <u>Matthew Higgins</u> is a State Emergency Senior On-Scene Coordinator with the State of Delaware’s Department of Natural Resources & Environmental Control’s Emergency Response Team. He is an On-Scene Coordinator for all types of Hazardous Material response incidents and has been employed with the DNREC since 1992.</p> <p>Matt currently serves as an appointed member of the Delaware Authority on Radiation Protection representing Department Secretary Shawn Garvin, is an appointed Delaware Alternate Commissioner for Secretary Shawn Garvin on the Appalachian States Commission for Low Level Radioactive Waste and serves as Co-Chair of the Technical Assessment Center for the Delaware Radiological Emergency Preparedness Program managed by the Delaware Emergency Management Agency (DEMA).</p> <p>He received a Bachelor of Science degree in Environmental Sciences from Wesley College and is a Certified Hazardous Materials Manager (CHMM).</p>
<p>Armin Ansari, Ph.D., Centers for Disease Control & Prevention</p>	<p>Title: Overview of the Recent Radiological/Nuclear Preparedness Guidance from the National Council on Radiation Protection and Measurements</p> <p>Abstract: The National Council on Radiation Protection and Measurements (NCRP) Program Area Committee (PAC) 3 provides guidance and recommendations for response to nuclear and radiological incidents of both an accidental and deliberate nature. The NCRP PAC 3 is responsive to the needs of the emergency preparedness and response community and draws from national expertise from inside and outside the Council as needed to provide the best scientific and technical advice and recommendations. This presentation will provide an overview of the recently completed and ongoing work by NCRP PAC-3 that enhance our national preparedness for such emergencies.</p> <p>Biosketch: <u>Dr. Armin Ansari</u> chairs the NCRP program area committee on Nuclear and Radiological Security and Safety. He is the Radiological Assessment Team Lead at the Centers for Disease Control and Prevention (CDC) serving as subject matter expert in CDC’s radiation emergency preparedness and response activities. He is also a fellow and past president of the Health Physics Society, an adjunct associate professor of nuclear and radiological engineering at Georgia Institute of Technology and serves as member of the U.S. delegation to the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR).</p>
<p>John Crapo, DOE-NNSA</p>	<p>Title: Resources and Capability of the FRMAC (Federal Radiological Monitoring and Assessment Center)</p>

	<p>Abstract: In the event of a major radiological emergency, 17 federal agencies with various statutory responsibilities have agreed to coordinate their efforts at the emergency scene under the umbrella of the Federal Radiological Emergency Response Plan (FRERP). These agencies are the U.S. Departments of Agriculture (USDA), Commerce (DOC) , Defense (DoD), Energy (DOE), Health and Human Services (HHS), Housing and Urban Development (HUD), Interior (DOI), Justice (DOJ), State (DOS), Transportation (DOT) and Veterans Affairs (VA), U.S. Environmental Protection Agency (EPA) , U.S. Nuclear Regulatory Commission (NRC), Federal Emergency Management Agency (FEMA), General Services Administration (GSA), , National Aeronautics and Space Administration (NASA) and National Communications System (NCS). This cooperative effort will assure the designated Lead Federal Agency (LFA) and the state(s) that all federal radiological assistance efforts fully support their objective to protect the public. The mandated federal cooperation ensures that each agency can obtain the data critical to its specific responsibilities.</p> <p>This talk will discuss the Federal Radiological Monitoring and Assessment Center's (FRMAC) response activities in a major radiological emergency. It also describes the federal assets and subsequent operational activities which provide federal radiological monitoring and assessment of the off-site areas. These off-site areas may include one or more affected states.</p> <p>Biosketch: <u>John Crapo</u> is a Program Manager in the Office of Nuclear Incident Response at the National Nuclear Security Administration (NNSA) in Washington, DC. In that capacity, he provides management oversight for the consequence management capabilities of the NNSA's Nuclear Emergency Support Team (NEST), as well as serving as a Federal Team Leader for operations and incident response. He served on active duty for over 26 years retiring at the rank of Lieutenant Commander in the Medical Service Corps of the United States Navy. He has earned three degrees: Sc. M., Environmental Health, Harvard University; M. S., Health Physics, Georgetown University; and a B.S., Radiological Health Physics, University of Lowell. He is a Certified Health Physicist and a Fellow of the Health Physics Society.</p>
<p>Panelists:</p> <p>Patrick Mulligan, NJ, Dave Allard, PA, Bruce Watson, NRC Decommissioning Process</p>	<p>Title: Panel Discussion on Decommissioning of Nuclear Power Plants</p> <p>Abstract: This panel discussion will feature the perspective on decommissioning from Pennsylvania, New Jersey and the Nuclear Regulatory Commission. The state will provide an overview of the state's experience with decommissioning sites. The NRC will provide an overview of the process and their role in decommissioning.</p>

<p>Patrick Mulligan, NJ Department of Environmental Protection</p>	<p>Biosketch: <u>Patrick Mulligan</u> is the Assistant Director of the Radiation Protection Program in the New Jersey Department of Environmental Protection and brings over 29 years of experience in various disciplines of radiation protection and many years of management experience to his position as Assistant Director. Pat’s experience with the state is diverse and includes the evaluation of NRC regulation and the reactor oversight process, license renewal evaluations, decommissioning, emergency response and preparedness, environmental monitoring and transportation of radioactive materials. During his time with the DEP, Pat has been an integral part of countless projects to improve and enhance the DEP’s state of preparedness for nuclear emergencies.</p> <p>Pat has gained national recognition in the field of radiological emergency preparedness for his work with the Conference of Radiation Control Program Directors (CRCPD). He was elected to serve on the CRCPD’s Board of Directors as Member at Large from May 2013 through May 2016, assigned as the Chairperson of the Homeland Security. Pat also received the CRCPD’s James W. Miller award for significant contributions to the field of nuclear emergency preparedness and response in May 2012. He was recently elected to serve on the CRCPD Board of Directors once again as Chair Elect.</p>
<p>Dave Allard, PA Department of Environmental Protection</p>	<p>Biosketch: <u>David Allard</u> is the Director of Pennsylvania’s Department of Environmental Protection (DEP) Bureau of Radiation Protection; responsible for the accelerator, x ray, environmental surveillance, nuclear safety, radiological emergency response, radioactive materials, decommissioning/site cleanup, low-level waste, and radon programs within the Commonwealth. He is the Governor’s official liaison to the U.S. Nuclear Regulatory Commission, and a Commissioner for the Appalachian States Low-level Radioactive Waste Compact Commission.</p> <p>Mr. Allard received a BS in Environmental Sciences from the State University of New York – Albany and an MS in Radiological Sciences and Protection from the University of Massachusetts – Lowell. He is certified by the American Board of Health Physics and a Fellow of the Health Physics Society.</p>
<p>Bruce Watson, NRC Decommissioning Process</p>	<p>Biosketch: <u>Bruce A. Watson</u>, CHP is the Chief, of the Reactor Decommissioning Branch in the Division of Decommissioning Uranium Recovery and Waste Programs in the Office of Nuclear Material Safety and Safeguards.</p>

	<p>M. Watson has been with the NRC since March 2004. He has extensive experience in decommissioning of reactors and materials sites and was the technical lead for the license terminations at Trojan, Maine Yankee, Rancho Seco, and Big Rock Point power reactors. He has overseen the closure and license terminations at AAR and Stepan material sites and the University of Illinois, NASA, and Cornell research reactors. In May 2010, Bruce was appointed as the Chief, Reactor Decommissioning Branch, and is responsible for power and research reactor, complex materials and uranium decommissioning project management, licensing and inspection programs. Since 2010, he has overseen the license terminations at Worcester Polytechnic Institute, University of Arizona, University of Michigan, and SUNY at Buffalo research reactors and the power reactor decommissioning activities at Humboldt Bay, La Crosse and Zion. Bruce has extensive international decommissioning experience with the IAEA in the development of decommissioning safety guides and training programs, served as an expert on IAEA missions, bilateral decommissioning cooperation meetings with France, Korea, Taiwan and has provided reactor decommissioning workshops in Korea and Taiwan. Prior to joining the NRC, his previous experience included management of defense complex decommissioning projects at Rocky Flats and international projects in Spain, Italy and the United Kingdom. Bruce has 20 years of reactor operating experience and served as the Radiation Safety Manager at Calvert Cliffs.</p> <p>Bruce has a B.S. from Virginia Tech and is certified by the American Board of Health Physics. He has 40 years of experience in health physics, including over 30 years of management experience</p>
<p>Erhard Koehler, U.S. Department of Transportation, Marine Administration (MARAD)</p>	<p>Title: N.S. Savannah Decommissioning Update</p> <p>Abstract: Since the 2018 Mid-Atlantic States Conference, the Maritime Administration (MARAD) has pressed forward with decommissioning of the N.S. Savannah nuclear power plant. With a bit of COVID-induced delay, MARAD has completed the transition from planning, engineering and outfitting to industrial dismantlement and license termination planning. Erhard Koehler will briefly review the work that has been accomplished since September 2018 and provide a look-ahead at plans for dismantlement of major components. He will also address the challenges and opportunities associated with work on a compact, floating decommissioning site located inside a busy hub of maritime commerce.</p>

	<p>Biosketch: <u>Erhard Koehler</u> is a 1987 graduate of the State University of New York Maritime College, with a BE degree in Naval Architecture. After 3-1/2 years as a structural and field-support engineer with the Philadelphia Naval Shipyard, he joined the Maritime Administration (MARAD) Office of Ship Operations in Washington, DC in early 1991. An avid amateur maritime historian, Erhard enthusiastically jumped at the assignment in late 1992 to oversee the SAVANNAH's return to MARAD custody from the Patriots Point Naval and Maritime Museum, and her subsequent 1994 drydocking and relocation to the agency's reserve fleet site near Newport News, Virginia. He remained with the ship as a project engineer and member of the licensee organization during its protective storage period. In 2004 he succeeded to the agency's senior SAVANNAH management positions. As Manager, N.S. SAVANNAH Programs, Erhard is responsible for all program activities related to licensed operations, maintenance, repair, custody and preservation of the SAVANNAH. Since 2003 he has established and led a comprehensive licensee staff to manage decommissioning of the ship's remaining nuclear facilities.</p>
<p>Panelists: Wagnus Prioleau, EPA, Craig Fiore, FEMA, Michael Noska, FDA</p>	<p>Title: REP PAG Manual & NUREGS Panel</p> <p>Abstract: This panel discussion will feature the various topics related to Emergency Preparedness. The US EPA will discuss the updated Protective Action Guides (PAG) Manual and the implementation of the Water PAGs. FEMA will provide an update on the status of NUREG 0654 and the REP Program Manual implementation and insights into the impacts of the national pandemic on the exercises and the exercises schedule. The Advisory Team will provide an update in activities and initiative.</p>

<p>Wagnus Prioleau, EPA</p>	<p>Biosketch: <u>Wagnus D. Prioleau</u> is a health physicist in the Center for Radiological Emergency Management (CREM) in the Office of Air and Radiation (OAR) at the U.S. Environmental Protection Agency Headquarters in Washington, D.C. He has 35 years of civilian health physics experience: 31 years U.S. Navy and 4 years U.S. EPA. His Navy career carried him to Naval facilities across the country from Charleston Naval Shipyard, Norfolk Naval Shipyard, Pearl Harbor Naval Shipyard, to Yorktown Naval Weapons Station. His radiological knowledge and experience included: two-year formal U.S. Navy training as a Radiological Control Technician (RCT) in the Naval Nuclear Propulsion Program (NNPP), RCT field work performing radiological surveys and emergency response operations during overhaul and refueling of Naval nuclear surface ships and nuclear-powered submarines, formal Navy training as a Nuclear Course Instructor, formal Navy training as a nuclear engineer, nuclear engineering instructor, Radiological Control Branch Supervisor at Pearl Harbor Navy Shipyard, formal U.S. Nuclear Regulatory Commission (NRC) training for inspecting and licensing of byproduct, Navy Permit Inspector of material and machine radiation sources at Naval facilities nationwide and overseas under the Navy’s Master Materials License. His EPA career started 16 October 2016 and included successful work on the following EPA mission critical projects: MARSSIM course training, MARSSIM Revision 2, Radiological Emergency Response Team (RERT) Concept of Operations Plan development, Federal Radiological Monitoring and Assessment Center (FRMAC) Assessment Workgroup, Conference of Radiation Control Program Directors (CRCPD) E-37 Subcommittee, and Advisory Team for Environment, Food and Health. He has a bachelor’s degree in Computer Engineering from Old Dominion University and a graduate Public Management Certificate from Indiana University. He has been married for 30 years and have two wonderful children.</p>
<p>Craig Fiore, FEMA</p>	<p>Biosketch: <u>Craig Fiore</u> is currently the Deputy Chief for the REP Program Branch in the Technological Hazards Division at FEMA Headquarters. The REP Program coordinates the national effort to provide state, local and tribal governments with relevant and executable radiological emergency preparedness planning, training, and exercise guidance, and in cooperation with the Nuclear Regulatory Commission sets policies necessary to ensure that adequate capabilities exist to prevent, protect against, mitigate the effects of, respond to, and recover from incidents involving commercial nuclear power plants. Mr. Fiore supports the REP Branch Chief with strategic direction and program implementation, which impacts over thirty states across the nation.</p>

	<p>Mr. Fiore has been with FEMA’s Technological Hazards Division since 1991 and in that time has served in several different capacities including: Budget Analyst; Contracting Officer’s Representative (COR); Regional Liaison; Budget & Finance Manager; Training and Policy Manager; Acting Region IX RAC Chair; Action Office Manager; Executive Officer and Acting Business Operations Branch Chief. In 2015, Mr. Fiore also served on a 120-day detail as the Executive Officer for the Deputy Associate Administrator for the Federal Insurance and Mitigation Administration.</p> <p>Mr. Fiore graduated from the University of North Carolina-Asheville in 1991 with a BA degree in Economics and Corporate Finance. He has completed FEMA’s Leadership Excellence Program and attended the REP Executive Education Program at the Center for Homeland Defense and Security.</p>
Michael Noska, FDA	<p>Biosketch: <u>Captain Michael Noska</u> is a Senior Health Physicist, Radiological Health Representative and the Team Lead for Radiological Emergency Response at the US Food and Drug Administration. He has been a health physicist with the US Public Health Service for 29 years and has had multiple assignments at the National Institutes of Health and the FDA with a focus on internal radiation dosimetry and radiological emergency preparedness and response. Prior to joining the PHS, CAPT Noska worked as a research assistant in radiopharmaceutical laboratories at Harvard Medical School and Duke University Medical Center developing radiolabeled monoclonal antibodies for the treatment of cancer. He received his M.S. from the University of North Carolina School of Public Health as a Department of Energy Applied Health Physics Fellow. CAPT Noska is a member of the National Council on Radiation Protection and Measurements. He is also the current Chair of the Federal Advisory Team for the Environment, Food and Health and a member of the Federal Radiological Preparedness Coordinating Committee. He is a Past Chair of the Environmental Health Officer Professional Advisory Committee to the US Surgeon General and Past President of the Baltimore-Washington Chapter of the Health Physics Society. CAPT Noska serves on several interagency committees and workgroups related to radiological emergency response. In 2011, he deployed to Japan as part of a team from the Department of Health and Human Services in support of the US Ambassador following the Great Tohoku Earthquake and the nuclear crisis at the Fukushima Dai-ichi Nuclear Power Station.</p>
<p>Day Two, Session One, Resources for Radiological Emergency Planning, Preparedness, Response and Recovery</p>	

Abstract: State governmental agencies build and sustain a wide variety of capabilities to plan, prepare, respond and recover from radiological emergencies, in addition to their core duties in carrying out radiation control activities such as inspections, investigations and public outreach with other state agencies and external partners. This session provides an overview of resources available from federal and international partners, to assist state and local governments in their radiological planning and preparedness efforts. Effective partnering in an emergency takes place on the front end, before a crisis happens. This session will provide an overview of resources available to build and sustain radiological emergency planning, preparedness, response and recovery capabilities.

James Hanes, DE
Department of Public Health - Moderator

Biosketch: James Hanes is an Environmental Scientist in the Office of Radiation Control, Delaware Division of Public Health. He worked as an environmental scientist for the University of Maryland prior to joining the Office of Radiation Control in 2018. He is certified as an FDA Mammography Inspector. He serves as subject matter expert in health physics and radiation measurements technology, and provides technical direction and training to others, as needed. Mr. Hanes has three years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, and dose assessment for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He serves as subject matter expert to state agencies involved in the Preventive Radiological Nuclear Detection (PRND) program for Delaware. He has been an Associate member of the Conference of Radiation Control Program Directors since 2018. Mr. Hanes holds a Bachelor of Science degree in Environmental Science & Engineering from the University of Delaware, a Master of Science degree in Health Physics from Oregon State University, and this year trained to serve in the Delaware National Guard.

Jeff Chapman, DOE-ORNL

Title: Data Quality Objectives and Simulation As Implemented in RadResponder

	<p>Abstract: In the aftermath of a large-scale nuclear incident, State, Local, Tribal, and/or Territorial (SLTT) responders will be first on-site to evaluate and assess the consequences of the incident, and most importantly, take immediate protective actions to save lives and mitigate health impacts to the public, from radiation exposure. The Federal Radiological Monitoring and Assessment Center (FRMAC) is a federal asset available on request by the Department of Homeland Security (DHS) to respond to nuclear and radiological incidents. The National Nuclear Security Administration (NNSA), Office of Nuclear Incident Response coordinates and manages the Consequence Management Home Team (CMHT) and Consequence Management Response Team (CMRT) in support of the FRMAC. FRMAC assets develop tools, techniques, and methods to enhance SLTT effectiveness in the early phase of a response. This paper will focus on specific advancements related to radiological data acquisition, management, and assessment, data quality assessment, and national level drills and exercises intended to improve proficiency in conducting radiological monitoring and sampling during the immediate aftermath of a large-scale nuclear incident, before FRMAC field teams arrive.</p> <p>Biosketch: <u>Jeff Chapman</u> is a Technical Advisor to the Office of Nuclear Incident Response, an asset of the Nuclear Emergency Support Team (NEST). He has worked as a Department of Energy contractor since 1983, working in multiple production facilities in the disciplines of Health Physics, Nuclear Engineering, Criticality Safety, Material Control and Accountability, and Emergency Response: Pinellas plant, Rocketdyne/SSFL, Los Alamos, Rocky Flats, Sandia, Savannah River, and for 20 years, Oak Ridge, and internationally – Hungary, South Africa, Armenia, and Kazakhstan. He has a B.S. in Physics, and M.S. in Nuclear Engineering, and completed coursework for a Ph.D. He is a Certified Health Physicist, a licensed Professional Engineer, and a Fellow of the Health Physics Society.</p>
<p>Brian Iverson, Larry Ricks and Katherine McLellan, DOE</p>	<p>Title: Mid-Atlantic States Panel Discussion on the ROSS VEST (Radiological Operations Support Specialist -- Virtual Evaluation Scenario Tool) Pilot, August 2021</p> <p>Abstract: During radiological and nuclear emergencies, routine decisions and operations for Federal, State, local and tribal response agencies become increasingly complex. These actions require radiation experts to safeguard the public and responders. Through the creation of a new position called the Radiological Operations Support Specialist (ROSS), the Departments of Homeland Security (DHS) and Department of Energy (DOE) train, equip, and certify radiation experts to integrate within the Incident Command System (ICS) during responses to radiological and nuclear incidents. These ROSS positions will directly support the Incident Commander (IC), agency decision makers, and elected officials.</p>

	This talk will discuss the tools that are available to a ROSS. In particular, the talk will describe the Virtual Evaluation Scenario Tool (VEST) and how it can be used as a training tool.
Brian Iverson	<p>Biosketch: <u>Brian Iverson</u> has more than thirty years of public safety experience at the local and state level in both rural and urban environments. He began his career in 1985 serving the City of Virginia Beach as a volunteer firefighter and EMS provider before joining the Norfolk Fire Department in 1987, where he was one of the original members of the port city’s Technical Response Team serving also as a member of the Southside Tidewater Hazardous Materials Regional Response Team, the Tidewater Regional Technical Rescue Team, and Urban Search and Rescue Task Force VA-2.</p> <p>In December of 1994, Brian joined the Virginia Department of Emergency Management as the state’s Radiological Protection Officer in the agency’s Technological Hazards Division. In this capacity, he coordinates radiological training and radiological protection programs to support the state’s hazardous materials emergency response program. He also provides on-scene technical assistance and guidance to agencies responding to radioactive or other hazardous materials incidents. With two commercial nuclear power plants operating in Virginia, Brian serves the role of State On-Scene Coordinator to orchestrate the on-scene response activities of state agencies with those of Dominion Energy at their Corporate Emergency Response Center.</p> <p>In his career, Brian has participated in numerous exercises of private, local, state, and federal agency capabilities to respond to transportation, nuclear power plant and weapons emergencies. In addition, he has been involved in the coordination of many hazardous materials responses throughout Virginia ranging from local incidents to federally declared disasters.</p>
Larry Ricks	Biosketch: TBD
Katherine McLellan, DOE	<p>Biosketch: <u>Katharine McLellan</u> began her health physics career as a DOE subcontractor. She transferred to the NIH where she worked as an operational and emergency response health physicist for over 23 years. She then accepted an opportunity at the Department of Energy, Office of Public Radiation Protection. While working in her current office, she participated in several Radiological Nuclear exercises for NNSA Office of Incident Response which led to a detail to NNSA as the ROSS Program Manager. She currently works in the DOE Office of Public Radiation Protection (AU-22) as a health physicist focusing on Biota, Transportation, Emergency Response and Exercises, and Institutional Controls.</p>
Steve Mussolino, DOE-BNL	Title: An Overview of “Radiological Dispersal Device (RDD) Response Guidance - Planning for the First 100 Minutes”

Abstract: This guidance uses a notional 100-minute timeframe to provide technical recommendations on field operations, public messaging, and response coordination. 100 minutes was chosen as the guidance framework knowing that it was optimistic but hoping that it would set a high bar for local responders and planners. Responders can use the 100-minute timeframe presented here as a starting point, and adjust the timeframe as needed during planning discussions. Two critical assumptions made by placing this guidance on a timeline are the following:

- In the first hours of a radiological dispersal device (RDD) detonation response, it is unlikely that federal and state support is on scene. This means that local jurisdictions and agencies must rely on their own assets, technical equipment, and training.
- Many of the public safety recommendations presented in this guidance are time sensitive and it is important for local agencies to plan for both how the operation is achieved and when it must be completed to have the desired impact. A complete local RDD response protocol will include an achievable, detailed timeline of how Tactics and coordination are executed.

This talk will discuss the tactics or technical objectives described in this guidance that can be used to identify operational gaps. Discussing those gaps with state and federal partners will help document the support that may be required during a radiological response and the process for requesting assistance.

Biosketch: [Dr. Stephen V. Musolino](#) is a scientist at the United States Department of Energy's (DOE) Brookhaven National Laboratory (BNL) with more than 40 years of experience in Health Physics. His current research interests are in nonproliferation, counterterrorism, and planning for response to the consequences of radiological and nuclear terrorism. Since 1981, he has been part of the DOE Radiological Assistance Program as a Team Captain/Team Scientist and has been involved in developing radiological emergency response plans. During the Fukushima crisis, he was deployed as an Assessment Scientist with the DOE response team in Japan who were measuring the environmental consequences of the radioactive material released from the damaged nuclear power plants. Dr. Musolino is a Fellow of the Health Physics Society, 2018 Failla Memorial Lecturer, Distinguished Alumnus of Buffalo State College, and serves as a member of the editorial board of the journal Health Physics. He earned a bachelor's degree in engineering technology from Buffalo State College, a Master of Science degree in nuclear engineering from the Polytechnic Institute of New York University, and a doctorate in health physics from the Georgia Institute of Technology. He is certified by the American Board of Health Physics.

<p>Eliot Calhoun</p>	<p>Title: Overview of the Planning Guidance for Response to a Nuclear Detonation (the 72-hour guidance to nuk/det)</p> <p>Abstract: U.S. Department of Homeland Security (DHS) Science & Technology (S&T) Directorate's National Urban Security Technology Laboratory (NUSTL) has partnered with U.S. Department of Energy's National Nuclear Security Administration (NNSA) to develop the draft "Nuclear Detonation Response Guidance: Planning for the First 72 Hours." This project is a collaborative federal interagency effort with the goal of providing state, local, tribal, and territorial jurisdictions with operational planning guidance for the first 72 hours of a response to a nuclear detonation. The draft response guidance is organized into "Missions" and "Tactics" which focus on a wide range of emergency response activities, such as issuing public warnings, life-saving emergency response, critical infrastructure recovery, shelter and evacuation, and establishing a common operating picture.</p> <p>The 72 Hour Response Guidance is a companion document to an existing Federal Emergency Management Agency (FEMA) document, titled Planning Guidance for the Response to a Nuclear Detonation, which is currently being updated. While FEMA's Planning Guidance provides expansive technical information on nuclear detonation effects and emergency response, the 72 Hour Response Guidance provides prioritized operational guidance focusing on the first few days of the response. In his presentation, Eliot Calhoun from DHS S&T NUSTL, will provide a high-level overview of the draft response guidance.</p> <p>Biosketch: <u>Eliot Calhoun</u> is a Program Analyst in the Radiological/Nuclear Response & Recovery (RNRR) Research & Development Portfolio at the National Urban Security Technology Laboratory (NUSTL), a government-owned and government-operated laboratory of the US Department of Homeland Security's Science & Technology Directorate.</p> <p>The RNRR R&D Portfolio develops tools and solutions designed to increase the capability of state and local jurisdictions to manage the complexity of radiological and nuclear emergencies. Many of these products specifically focus on enabling responders to conduct more effectively life safety, environmental mitigation, and incident coordination during the early minutes and hours of an incident, when the bulk of Federal resources are not immediately available.</p>
<p>Brendan Palmer</p>	<p>Title: Overview (and Recent Advancements) in the Roll-out and Development of RadResponder</p>

	<p>Abstract: The RadResponder Network is the national standard and Whole Community solution for the management of radiological data. It is a product of collaboration between Federal Emergency Management Agency (FEMA), Department of Energy (DOE) / National Nuclear Security Administration (NNSA), the Environmental Protection Agency (EPA), and the Defense Threat Reduction Agency (DTRA) and is provided free of charge to all Federal, state, local, tribal, and territorial response organizations.</p> <p>This talk will discuss RadResponder's flexible architecture that enables organizations rapidly and securely to record, share and aggregate large quantities of data while managing their equipment, personnel, interagency partnerships, and multijurisdictional event space. RadResponder can be accessed on smartphones, tablets, and via the web, allowing it to be seamlessly and rapidly employed at all levels of government during a response to a radiological or nuclear emergency.</p> <p>RadResponder has a growing community and innovative technology designed to accelerate radiological emergency response to today's speed of information.</p> <p>Biosketch: TBD</p>
Jonathan Gill, FEMA	<p>Title: Update on Capability Enhancements from the FEMA-NIRT Program</p> <p>Abstract: During disasters involving nuclear weapons, radiological incidents, or acts of nuclear terrorism, the Nuclear Incident Response Team (NIRT) is activated by the Department of Homeland Security FEMA office and operates under their direction, authority, and control. The NIRT consists of 13 Department of Energy (DOE) National Nuclear Security (NNSA) and Environmental Protection Agency (EPA) specialized assets that perform support functions related to nuclear or radiological emergencies, radiation exposure, radiological assistance, and related activities. This talk will discuss on the capability enhancements in the program.</p>

	<p>Biosketch: <u>Jonathan Gill</u> is currently the Nuclear Incident Response Team and Nuclear Radiological Incident Task Force program manager in FEMA’s Chemical, Biological, Radiological and Nuclear (CBRN) Office. Prior to this, Jon spent two and a half years at DOE/NNSA headquarters in the Office of Nuclear Incident Response as a fellow and lab detailee where he advised and assisted in the management of interagency projects involving the Office of Nuclear Incident Response’s Consequence Management program. Before his time at DOE, Jon conducted graduate research at the University of Tennessee on optically stimulated luminescence applications to fission track counting for nuclear forensics, manufacture of surrogate nuclear debris, and dissolution and fusion methods for mass spectral analysis of surrogate and real nuclear debris. In Jon’s previous life, he served eight years in the US Army as an Engineer Officer at various levels of leadership in construction and combat units. Jon has a Ph.D. in Nuclear Engineering from the University of Tennessee.</p>
Debbie Gilley	<p>Title: Radiological Emergency Guidance for Medical Physicists</p> <p>Abstract: Medical physicists represent valuable assets in a nuclear or radiological emergency. They should be available to respond to nuclear or radiological emergencies (NREs), especially in the hospital environment. The recognition of this fact led the International Atomic Energy Agency (IAEA) and the International Organization for Medical Physics (IOMP) to develop and improve education and training of medical physicists so that they may support response efforts in case of NREs. This led to the development and implementation of training workshops in Fukushima University, Japan and Centres for Disease Control, United States. The training material and feedback from the participants and instructors lead to the two publications. These publications “Guidance for Medical Physicists Responding to a Nuclear or Radiological Emergency” and “Pocket Guide for Medical Physicists Supporting Response to a Nuclear or Radiological Emergency” were published in 2020. These publications provide the framework and guidance for medical physicists to respond and support a local effort in the event of an NRE. The presentation will discuss to concepts and how the information can be used to improve the medical physics response in the event of an NRE.</p> <p>The Project was funded through extra-budgetary contribution from Japan within the IAEA Nuclear Safety Action Plan.</p>

	<p>Biosketch: <u>Debbie Gilley</u> is a Radiation Protection Specialist with the International Atomic Energy Agency in the Division of Radiation, Transport and Waste Safety Radiation Protection of Patients Unit. Her activities within the Agency included the development and implementation of the Safety in Radiation Oncology medical event reporting system (SAFRON), assisting in IAEA patient protection and safety campaigns and assisting countries in supporting radiation protections of patient activities. She is a contributing author of several IAEA publications on patient safety and a chapter in the recently published book entitled “Modern Technology of Radiation Oncology” and Radiotherapy in Cancer Care: Facing the Global Challenge”.</p> <p>Past professional responsibilities include Government Relations Specialist with the American Association of Physicists in Medicine (AAPM) where she supports the Association in areas for state government relations and patient safety in imaging and therapy physics. Twenty-four years of service to the Florida Bureau of Radiation Control, United States as Manager of the Training and Quality Assurance Program, Manager of the Radioactive Materials Program, and investigator for reported radiological medical events. Academically she has an undergraduate and master’s degree from Florida State University and has also attended Oak Ridge Associated Universities.</p> <p>She served as the agreement state representative to the US NRC Advisory Council on the Medical Use of Isotopes (ACMUI) from 2008 until 2011. She is a past board member and chairperson (2008) of the Conference of Radiation Control Program Directors (CRCPD). She is a Past President and Secretary of the Florida Chapter of the Health Physics Society (HPS) and member of several HPS committees and a delegate to the International Radiation Protection Association.</p>
<p>Day Two, Session Two, X-Ray Inspection Workshop: X-Ray Facility Inspection Lessons Learned during the Pandemic</p>	
<p>Abstract: Training content to provide opportunity for each state to present and learn from each other regarding process changes, protocol and/or practice changes, and lessons learned in the transition to working remotely during the Covid pandemic. Changes to practices may have included for example: setting up home office with technology upgrades to enable accessing web-enabled databases or keeping a state fleet car at home and traveling directly to on-site radiation facility inspections throughout the week, with periodic visits to office for data downloads only. This session also provides an opportunity for state programs to discuss pros and cons of their various Information technology, electronic inspection data collection, and radiation detection measurement systems.</p>	

<p>Robert Brinsfield, DE - Moderator</p>	<p>Biosketch: <u>Robert Brinsfield</u> is Radiation Control Program Director, Delaware Division of Public Health. He worked as a Biomedical/Diagnostic Imaging Engineer from 1988 – 2000 in an acute care hospital prior to transitioning to the State Office of Radiation Control. Since 2001, he has served as the Project Manager for the Delaware Division of Public Health contract with the U.S. Food and Drug Administration (FDA) for annual inspections of mammography facilities and worked as the most senior FDA-certified Mammography Facility Inspector. He represents the Delaware Department of Health and Social Services as Administrative Agent to a Governor appointed public board, the Delaware Authority on Radiation Protection, and represents Delaware on the Appalachian Commission for Low Level Radioactive Waste (LLRW). Mr. Brinsfield has years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, software modeling, and dose assessment and most recently, serving as Co-Chair for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He has been a member of the Conference of Radiation Control Program Directors since 2002. He holds a master’s degree in Business Administration from Wilmington University, a bachelor’s degree in Industrial Technology/Engineering from Southern Illinois University, and an associate degree in Electrical Engineering from Delaware Technical Community College.</p>
<p>James Hanes, DE</p>	<p>Biosketch: <u>James Hanes</u> is an Environmental Scientist in the Office of Radiation Control, Delaware Division of Public Health. He worked as an environmental scientist for the University of Maryland prior to joining the Office of Radiation Control in 2018. He is certified as an FDA Mammography Inspector. He serves as subject matter expert in health physics and radiation measurements technology, and provides technical direction and training to others, as needed. Mr. Hanes has three years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, and dose assessment for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He serves as subject matter expert to state agencies involved in the Preventive Radiological Nuclear Detection (PRND) program for Delaware. He has been an Associate member of the Conference of Radiation Control Program Directors since 2018. Mr. Hanes holds a Bachelor of Science degree in Environmental Science & Engineering from the University of Delaware, a Master of Science degree in Health Physics from Oregon State University, and this year trained to serve in the Delaware National Guard.</p>

<p>Michael Zdradzinski, DE</p>	<p>Biosketch: <u>Michael Zdradzinski</u> is an Environmental Scientist III, in the Office of Radiation Control, Delaware Division of Public Health. He previously worked as a Biomedical / Diagnostic Imaging Engineer in an acute care hospital, and then for many years was owner/operator of a family-run local pharmacy, prior to transitioning to the State Office of Radiation Control in 2018. He is certified as an FDA Mammography Inspector. Since 2019, he has served as the Project Manager for the Division of Public Health contract with the U.S. Food and Drug Administration (FDA) for annual inspections of mammography facilities in Delaware. Mr. Zdradzinski has three years of experience with the Delaware Radiological Emergency Preparedness (REP) program, providing data analysis, software modeling, and performing dose assessment for emergency preparedness programs associated with the Salem-Hope Creek Nuclear Generating Station in New Jersey. He has been an Associate member of the Conference of Radiation Control Program Directors since 2018. He has a Bachelor of Science Degree in Industrial Technology/Engineering from Southern Illinois University, and an Associate of Science degree in Biomedical Engineering from Delaware Technical Community College.</p>
<p>Mollee Dworkin, DE</p>	<p>Biosketch: <u>Mollee Dworkin</u> was born in Montana and raised in Delaware by a parent who was in the US Air Force. She earned her MS from the University of Delaware in Molecular Biology and Genetics, her BS and AAS in Biotechnology from Delaware State University and Delaware Technical & Community College, respectively. Mollee worked at Delaware State University for five years as a Research Technician, managing the laboratory and conducting research in epigenomics of crop plants.</p> <p>For the past 2.5 years, Mollee has been an Environmental Scientist for the Delaware Division of Public Health Emergency Medical Services and Preparedness Section. She serves as the Section’s subject matter expert in radiological issues. Mollee attended the Radiological Emergency Planning: Terrorism, Security, and Communication training at the Harvard T.H. Chan School of Public Health Center for Executive and Continuing Professional Education, FEMA’s Radiological Accident Assessment course, and many other emergency management and radiological-related courses. Mollee also serves as the Occupational Health Champion for her section within the Division of Public Health.</p>

Diane Halaycio, NJ	Biosketch: <u>Diane Halaycio</u> is a Radiation Physicist within the New Jersey Department of Environmental Protection, Bureau of X-ray Compliance since 2016. She has been an FDA Mammography Quality Standards Act inspector since 2019. Diane has an Associate of Applied Science in Radiography from Burlington County College. She is a graduate of UMDNJ (now Rutgers University) with a Bachelor of Science in Healthcare Management & Education (Magna Cum Laude honors). In addition, she has over 20 years' experience as a radiologic technologist and as a lead technologist for 10 years. She is a member of the American Registry of Radiologic Technologists and the American Society of Radiologic Technologists.
Nathan Papperman, NJ	Biosketch: <u>Nathan Papperman</u> is a Radiation Physicist within the New Jersey Department of Environmental Protection, Bureau of X-ray Compliance since 2013. He is a graduate of Drew University with a Bachelor of Arts in Environmental Studies & Sustainability and a Bachelor of Arts in Chinese Studies.
Pamela Brooks, MD	Biosketch: <u>Pamela Brooks</u> holds a master's degree in Public Administration, a Bachelor of Science degree in Public Health, and an associate degree in Applied Science in Radiologic Technology. She previously worked as a Radiologic Technologist certified in X-ray, mammography and bone densitometry. She currently works as a Health Physics Supervisor for the Maryland Department of the Environment. Ms. Brooks states that her passion and values are all facets of public health. She enjoys being an instrument to ensure optimal health of all people.
George Phillip Robinson, MD	Biosketch: <u>George Phillip Robinson</u> holds a Master of Science degree in Physics from Texas A&M University-Commerce, and a Bachelor of Science degree in Physics from Angelo State University. He works as a Health Physicist for the Maryland Department of the Environment.
David Gaisior, PA	Biosketch: <u>David Gaisior</u> graduated from Penn State University in 1986 with a BS degree in chemistry and science education. He began working for the PA Department of Environmental Resources (PA DER) Bureau of Laboratories in 1989 as an inorganic chemistry technician. Staying with PA DER, he transferred to the Bureau of Radiation Protection and worked with the Radon Division in Gilbertsville, PA. He performed indoor radon testing in private homes as part of the original Reading Prong indoor radon data collection project. When the Gilbertsville radon office was phased out and closed in 1989, Dave transferred to PA DER's Southeast Regional Office in Norristown PA. There he transitioned to inspecting X-ray machines and accelerators. He trained with FDA and became qualified as an MQSA inspector in 1995. PA DER was reformed the Department of Environmental Protection (DEP) in July 1995. Dave became supervisor of DEP's SERO X-ray and Accelerator Safety Section in 2004.

<p>Lisa Funk, PA</p>	<p>Biosketch: <u>Lisa Funk</u> is a registered x-ray and mammography technologist who spent 29 years working in the health care field. She joined the PA Bureau of Radiation Protection in 2010. She is currently the Radiation Protection Program Supervisor for the X-ray/Accelerator/Vendor section in the Harrisburg central office.</p>
<p>Dennis Ferguson, PA</p>	<p>Biosketch: <u>Dennis Ferguson</u> is a Combat Engineer/NBC Survey Team (COG) veteran who started working at TMI-2 in 1981 as a Radiation Protection Technician. He progressed to a data acquisition and management engineer (performing gamma spectroscopy and direct radiation measurements) there before going “on the road” as an ANSI 3.1 Senior (NRRPT) technician in 1990 within the PA Electric Company system. He spent over a year at the Princeton Plasma Physics Lab during the Tokamak fusion Test Reactor (TFTR) Deuterium-Tritium tests and 4 years as a coordinator of various programs (Respiratory Protection, Hazardous Waste and Emergency Response) at Point Beach Nuclear Plant before coming to the Bureau of Radiation Protection in 2009. He is currently the Radiation Protection Program Supervisor for the X-ray/Accelerator Section in the Central Region. He has held NRRPT and Hazwoper certifications.</p>
<p>Roy Huhn</p>	<p>Biosketch: <u>Roy Huhn</u> became a registered radiologic technologist in 1977. He worked as a Radiographer, Nuclear Medicine Technologist, an Interventional Technologist and was Director of Imaging at three facilities. He completed a Bachelor of Science in Business from the University of Pittsburgh in 1986 and a Master of Science in Public Management and Policy from Carnegie Mellon University in 1991. He joined the Bureau of Radiation Protection in 2004. He has been a MQSA inspector since 2005 and was a member of the CRCPD CT Scanner committee where he still is an advisor. He was an adjunct instructor in Ultrasound and Radiation Physics for 9 years. He is currently the Radiation Protection Program Supervisor for the X-ray/Accelerator Section in the Southwest Region.</p>