National Radiological Emergency Preparedness Conference, Inc.

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https://www.nationalrep.org

TIME	EVENT
2024 NREP CONFERENCE AGENDA	
TIME	EVENT
SUNDAY, APRIL 28TH, 2024	
0700 – 0900	**CONFERENCE & WORKSHOP REGISTRATION FOR TRAINEES**
0900 – 1200	**Session 1:** Unified RASCAL Interface (URI) Training [Abstract/Bio] *Meagan Robinson – Structural Integrity Associates* Cardinal
1200 – 1330	**LUNCH ON YOUR OWN**
1330 – 1700	**Session 2:** MIDAS Training [Abstract/Bio] *Cameron Christensen – Pacific Gas and Electric (PG&E)* Cardinal
1600 – 1800	**CONFERENCE & WORKSHOP REGISTRATION FOR ALL ATTENDEES** Fleur De Lis
MONDAY, APRIL 29TH, 2024	

TRAINING & WORKSHOPS
NOTE: *Attendees must be registered for the Conference – no exceptions*

TIME	Session 3	Session 4	Session 5	Session 6 / 7
0800 – 1200	**Session 3:** RASCAL Training [Abstract/Bio] *Jeff Kowalczik - NRC*	**Session 4:** ROSS – New Concepts for NPP EP Training [Abstract/Bio] *William Irwin – Vermont DOH* *Wendy Renno – Radiation Emergency Services*	**Session 5:** REP Exercise Controller Course (RECC) (AWR-327) [Abstract/Bio]	**Session 6:** REP Post-Plume Planning Workshop [Abstract/Bio] *Scott Hallett – FEMA* Batik
1200 – 1300		*Angela Leek – SummitET* *Christine Allston – Chainbridge Technologies*	*Chris Bellone – FEMA* *Todd Gemskie - FEMA*	**LUNCH ON YOUR OWN**
1300 – 1700	Cardinal	Stemmons Ballroom A/B/C	Carpenter Ballroom	**Session 7:** REP Hostile Action Based (RHAB) Workshop [Abstract/Bio] *Scott Hallett – FEMA* Batik
1000 – 1200	**VENDOR BOOTH SETUP** NOTE: *All exhibits and related equipment MUST BE REMOVED by 1900 hrs on Wednesday, May 1st, 2024* East Atrium Lobby			
1200 – 1730	**VENDOR BOOTHS OPEN FOR CONFERENCE** East Atrium Lobby			
0700 – 1800	**CONFERENCE & WORKSHOP REGISTRATION OPEN** Fleur De Lis			

TIME	EVENT
2024 NREP CONFERENCE AGENDA	
TUESDAY, APRIL 30TH, 2024	
0700 – 1800	**CONFERENCE & WORKSHOP REGISTRATION OPEN** Fleur De Lis
0700 – 0800	**COFFEE & BEVERAGES – VENDOR BOOTHS OPEN** East Atrium Lobby
	2024 CONFERENCE OPENS
0800 – 0815	Color Guard & the National Anthem Opening Remarks – *Kelly Van Buren, Chair, Conference Steering Committee* Welcoming Remarks – *Lisa Bruedigan, Texas Department of State Health Services* Stemmons Ballroom
0815 – 0830	Sponsor Acknowledgements Stemmons Ballroom
0830 – 0915	**Session 8** Using AI for Enhanced Radiological Emergency Preparedness Planning and Outreach: Emerging Threat or Emerging Opportunity? [Abstract/Bio] *Holly Hardin – SummitET* Stemmons Ballroom
0915 – 1000	**Session 9** What can AI do for you? [Abstract/Bio] *Todd Smith – NRC* *Alfred Hathaway – NRC* Stemmons Ballroom
1000 – 1030	**BREAK – VENDOR BOOTHS OPEN** East Atrium Lobby
1030 – 1100	**Session 10** Remote Sensing – The Key to Virtual Preliminary Capability Assessments (PCA) [Abstract/Bio] *Kevin Wells – FEMA* *Travis Potter – FEMA* Stemmons Ballroom
1100 – 1145	**Session 11** Fission Vision: A Look at What's Next for Nuclear [Abstract/Bio] *Hilary Lane – NEI* Stemmons Ballroom
1145 – 1330	**LUNCH ON YOUR OWN**

1330 – 1400	**Session 12** WIPP Presentation [Abstract/Bio] *James Mason – DOE* Cardinal	**Session 14** Razor Sharp News Conferences [Abstract/Bio] *Eric Singer – Argonne National Lab* *Donald Hanscom – Argonne National Lab*
1400 – 1410	**TRAVEL TO NEXT SESSION**	
1410 – 1500	**Session 13** WIPP Truck Inspection Demonstration [Abstract/Bio] *Cpl. Casey Jones – Texas Department of Public Safety* Tower Outdoor Exhibit Area	Stemmons Ballroom
1500 – 1530	**BREAK – VENDOR BOOTHS OPEN** East Atrium Lobby	
1530 – 1615	**Session 15** EPA A-Team Presentation [Abstract/Bio] *Sara DeCair – EPA* *George Brozowski – EPA* Stemmons Ballroom	
1615 – 1700	**Session 16** The Dose Assessment We Don't Do [Abstract/Bio] *Bill Beal – DOE* *Brennen Brunner – New Hampshire DHHS* *Brian Hunt – FRMAC* Stemmons Ballroom	
1700 – 1730	**VENDOR BOOTHS OPEN** East Atrium Lobby	
1800 – 2100	**NREP NETWORKING SOCIAL** Jade Oval	

TIME	EVENT		
2024 NREP CONFERENCE AGENDA			
WEDNESDAY, MAY 1st, 2024			
0700 – 1800	**CONFERENCE & WORKSHOP REGISTRATION OPEN**		
0700 – 0800	**COFFEE & BEVERAGES – VENDOR BOOTHS OPEN** East Atrium Lobby		
0800 – 0850	**Session 17** Putting the Community in Community Reception Centers [Abstract/Bio] *Tanya Ridgle – LA County Department of Public Health* *Christine Allston – Chainbridge Technologies*	**Session 18** ALERT AND NOTIFICATION: Review Processes, IPAWS Implementation and 2023 RPM Update [Abstract/Bio] *Josh Barnes – FEMA* Cardinal	**Session 20** Comparing Federal Guidance and Model Predictions with Full-Scale Exercise Data: Lessons Learned from an Out-of-Sequence Reception Center Exercise [Abstract/Bio] *Robert Goff – Tennessee DOH* *Lauren Finklea – CDC* *Erica Houghton – FEMA* Batik
0850 – 0855		**TRAVEL TO NEXT SESSION**	
0855 – 0945	Stemmons Ballroom	**Session 19** IPAWS: Tips and Tricks for Nuclear Power Plant EPZ Implementation [Abstract/Bio] *Kevin Simpson – Constellation Energy* *CPT. Rockey Adams – Berrien County Emergency Management and Homeland Security* Cardinal	**Session 21** Tackling the REP Ingestion Requirements [Abstract/Bio] *Rae Walker – Texas Department of State Health Services* *Scott Hallett – FEMA* *Todd Gemskie – FEMA* Batik
0945 – 1015	**BREAK – VENDOR BOOTHS OPEN** East Atrium Lobby		
1015 – 1105	**Session 22** Care and Feeding of a HAB Exercise: How to Grow a Successful Experience [Abstract/Bio] *Charles Adams – Wisconsin DOH* *Kayla Beckerdite – Iowa Homeland Security and Emergency Management* *Tracy Nollenberg – Kewaunee County EMA* *Fred Petersen – Ottawa County EMA* *Chris Salz – Ohio DPS* *Travis Waack – Wisconsin Emergency Management* *Patty Riesberg – Iowa Health and Human Services Bureau of Radiological Health* *Linda Wendt – Iowa Health and Human Services Bureau of Radiological Health* Stemmons Ballroom	**Session 23** Effectively Communicating with Patients and Healthcare Staff during a Radiological Event [Abstract/Bio] *Steve Sugarman – SummitET* *Ben Maltz – Washington DOH* Cardinal	**Session 20 (Repeat)** Comparing Federal Guidance and Model Predictions with Full-Scale Exercise Data: Lessons Learned from an Out-of-Sequence Reception Center Exercise [Abstract/Bio] *Robert Goff – Tennessee DOH* *Lauren Finklea – CDC* *Erica Houghton – FEMA* Batik
1105 – 1110	**TRAVEL TO NEXT SESSION**		

Time	Column 1	Column 2	Column 3
1110 – 1200	**Session 24** Limerick Generating Station 2023 Hostile Action Based Exercise [Abstract/Bio] *Joseph Suders – FEMA* *Laurin Fleming – PEMA* *Sergeant Kevin Jancewicz – PSP* *Jake Frye – Montgomery County Department of Public Safety* *Jason Wilson – Montgomery County Department of Public Safety* *Sara Schmidt – Constellation* Stemmons Ballroom	**Session 25** 21st Century Agricultural Response [Abstract/Bio] *Kevin Dennison – USDA* *Brennen Brunner – New Hampshire DHHS* Cardinal	**Session 21 (Repeat)** Tackling the REP Ingestion Requirements [Abstract/Bio] *Rae Walker – Texas Department of State Health Services* *Scott Hallett – FEMA* *Todd Gemskie – FEMA* Batik
1200 – 1300	**LUNCH ON YOUR OWN**		
1300 – 1350	**Session 26** Ready…Set…Super-Spokesperson [Abstract/Bio] *Eric Singer – Argonne National Lab* *Donald Hanscom – Argonne National Lab*	**Session 25 (Repeat)** 21st Century Agricultural Response [Abstract/Bio] *Kevin Dennison – USDA* *Brennen Brunner – New Hampshire DHHS* Cardinal	**Session 27** NNSA Nuclear Emergency Support Team (NEST) Live Radiological Drills Overview and Lessons Learned [Abstract/Bio] *Sean Fournier – Sandia National Lab* *Craig Marianno – Texas A&M University* *David Farrar – Sandia National Lab* *David Egbert – Idaho National Lab* Batik
1350 – 1355		**TRAVEL TO NEXT SESSION**	
1355 – 1445	Stemmons Ballroom	**Session 28** Readability and Accuracy of DRDs at Low Doses of Radiation [Abstract/Bio] *Angela Leek – SummitET* *Scott Wendt – Iowa State University* Cardinal	**Session 29** Field Monitoring Techniques in the Event of a Commercial Nuclear Power Plant Incident [Abstract/Bio] *Michael Howe – FEMA* Batik
1445 – 1515	**BREAK – VENDOR BOOTHS OPEN** NOTE: *Vendor booths will close at the conclusion of this break* East Atrium Lobby		
1515 – 1605	**Session 30** Did we pass the T.E.S.T.? Evaluating the Effectiveness and Acceptability of Games as Exercises for Radiation Emergencies [Abstract/Bio] *Lauren Finklea – CDC* *Lean Abdelaziz – NACCHO*	**Session 31** Overview of DOE/Office of Secure Transportation [Abstract/Bio] *Charles Miller – DOE* Cardinal	**Session 27 (Repeat)** NNSA Nuclear Emergency Support Team (NEST) Live Radiological Drills Overview and Lessons Learned [Abstract/Bio] *Sean Fournier – Sandia National Lab* *Craig Marianno – Texas A&M University* *David Farrar – Sandia National Lab* *David Egbert – Idaho National Lab* Batik
1605 – 1610		**TRAVEL TO NEXT SESSION**	
1610 – 1700	Stemmons Ballroom	**Session 32** 2023 RPM Update [Abstract/Bio] *Nan Williams – FEMA* Cardinal	**Session 29a** INPO Unveiled: Guardians of Nuclear Excellence [Abstract/Bio] *Rick Doremus – INPO* Batik

TIME	EVENT	
2024 NREP CONFERENCE AGENDA		
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THURSDAY, MAY 2ND, 2024		
0700 – 0800	**COFFEE & BEVERAGES** East Atrium Lobby	
0800 – 0900	**Session 33** VISTA FORGE ATL: It Takes A Village to Prepare for Animal Decontamination Operations [Abstract/Bio] *Venessa Sims – Georgia Department of Agriculture* Stemmons Ballroom	**Session 35** Everything You Wanted to Know About PARs but were Afraid to Ask [Abstract/Bio] *Ken Evans – CRCPD* *Todd Smith – NRC*
0900 – 1000	**Session 34** Decontamination of Companion Animals in Disasters and Radiological Emergencies: Key Components and New Considerations [Abstract/Bio] *Deb Zoran – Texas A&M University* Stemmons Ballroom	Cardinal
1000 – 1030	**BREAK** East Atrium Lobby	
1030 – 1130	**Session 36** Journey to the REPP Academy [Abstract/Bio] *Chris Bellone – FEMA* Stemmons Ballroom	**Session 37** Animal Decontamination Demonstration [Abstract/Bio] *Texas A&M University Veterinary Emergency Team (VET)* Tower Outdoor Exhibit Area
1130 – 1200	**Session 38** DOE and CDC Updates [Abstract/Bio] Stemmons Ballroom	
1200 – 1330	**LUNCH ON YOUR OWN**	
1330 – 1415	**Session 39** EPA, FEMA and NRC Updates [Abstract/Bio] Stemmons Ballroom	
1415 – 1445	**Session 40** Decoding the Response: Leveraging Mental Models in Radiological Emergencies [Abstract/Bio] *Angela Leek – SummitET* Stemmons Ballroom	
1445 – 1500	**BREAK** East Atrium Lobby	
1500 – 1545	**Session 41** NEI and CRCPD Updates [Abstract/Bio] Stemmons Ballroom	
1545 – 1615	**Session 42** Making Magic: Lessons on Creativity [Abstract/Bio] *Cecilia Ragland-Loment – Texas HHS* Stemmons Ballroom	
1615 – 1630	**Announcements of 2025 Conference Location** Stemmons Ballroom	

1630 – 1700	**Closing Remarks** Stemmons Ballroom
1700	**CONFERENCE CONCLUDES**

Session 1: Unified RASCAL Interface (URI) Training

Abstract:

Explore the radiological dose assessment process with the Unified RASCAL Interface (URI) software used by many nuclear power plant facilities in the industry. This training class offers participants a comprehensive overview of URI's user-friendly software, built on the backbone of the NRC's RASCAL program. Attendees will gain insight into the core processes of radiological dose projection, including selection of source terms, integration of process reduction factors and utilization of available assessment methodologies.

By the session's conclusion, participants will emerge equipped with a better understanding of the URI software, ready to hardness its capabilities for use in decision-making processes.

Speaker Biographies:

Meagan Robinson is a consultant for Structural Integrity Associates with over 12 years of experience in environmental dose assessment and radiological controls. Prior to joining Structural Integrity, Meagan held a position as a Lead Emergency Preparedness Specialist with Constellation, where she was tasked with the development and maintenance of Constellation's URI programs and dose assessment processes. Meagan obtained her degrees in Physics and Mathematics from Bloomsburg University of Pennsylvania.

Session 2: MIDAS Training

Abstract:

This interactive session will provide participants with an overview of the MIDAS dose assessment software and demonstrate the most common methods of developing a radiological dose projection. Included will be discussion on radiological source terms, process reduction factors, radiation monitors, and how they are accounted for in dose calculations. Attendees will come away with an understanding of how a MIDAS operator starts with a simulated release of radioactivity, calculates a projected dose at a distance, and ultimately determines appropriate protective action recommendations.

Speaker Biographies:

Cameron Christensen is the Supervisor of Nuclear Emergency Planning at Diablo Canyon Power Plant. He has more than 12 years of experience in civilian nuclear power in the areas of engineering and emergency preparedness. Cameron is recognized in the nuclear power industry as a subject matter expert in radiological dose assessment, having provided his input to INPO, WANO, EPRI, and the NRC in various capacities. He received his degree in Mechanical Engineering from California Polytechnic State University, San Luis Obispo.

Session 3: RASCAL Training

Abstract:

RASCAL is emergency response software used to assess off-site consequences from a radiological release incident at a nuclear power plant or materials facility. This training course is a hands-on computer class for new and experienced RASCAL users using the current version of the code (RASCAL v4.3.4). It guides users through simulated release scenarios to develop an understanding of the RASCAL models, inputting data, and interpreting results. No prior RASCAL experience is required, but attendees are encouraged to bring laptop computers with RASCAL 4.3.4 installed for some additional training examples.

Speaker Biographies:

Jeff Kowalczik is a Certified Health Physicist that works as a Senior Emergency Response Coordinator within the Office of Nuclear Security and Incident Response at the NRC. He currently serves as the program manager for the NRC Incident Response Program. Before working at the NRC, Mr. Kowalczik attended Texas A&M University where he received a B.S. in Radiological Health Engineering and a M.S. in Health Physics.

Session 4: ROSS – New Concepts for NPP EP Training

Abstract:

The United States nuclear power plant community has relied on a steady model of planning, training, exercising and improvement for decades. With new reactor designs, limitations to scheduling of important phases, and competition for training resources, new approaches are needed today and in the future. This course looks at some of these new approaches including simulation files that allow survey teams to "see" radiation changing on their mobile phone app as they traverse the real world, to game-like training that uses these same simulation files to lay out a virtual world around the nuclear power plant that is explored with virtual vehicles used by multiple-person teams. The course also describes how we underestimate the number of state and local radiological emergency response and recovery subject matter experts needed to succeed even when a release to the environment is relatively low compared to the EPA Protective Action Guidelines, let alone if something more catastrophic were to occur. The course is one-quarter classroom presentation and three-quarters practical activity. The course runs through three phases of the nuclear power plant release emergency – the plume phase, the ingestion pathway phase and the recovery phase. The plume and ingestion pathway phases will use RadResponder radiation survey simulation files and the RadTeamSim. Route simulated sampling team motor vehicles tool to show how training can be done more often and with more depth, but with less cost and less time. Each will also use Radiological Operations Support Specialists (ROSS) to help all the moving parts engage more cohesively.

Speaker Biographies:

Dr. Bill Irwin is the Radiation Control Program Director for Vermont. In addition to working with US Naval submarines and aircraft carrier reactors, he worked at numerous commercial nuclear power plants, first as a technician and then as a trainer and training program manager. He obtained his Master of Science (MS) and Doctor of Science (ScD) degrees while working at the Massachusetts Institute of Technology (MIT) and Harvard prior to moving to Vermont. He is a Certified Health Physicist (CHP), a FEMA Type 1 Radiological Operations Support Specialist (ROSS) and a Council Member of the National Council of Radiation Protection and Measurements (NCRP). Concurrently, he is an officer of the Vermont Hazardous Materials Response Team, a contractor to Counterterrorism Operation Support (CTOS), and a contractor to the Department of Energy Nuclear Emergency Support Team (NEST) Incident Management Team (IMT) and Reserve Corp. Bill also volunteers as an EMT and Firefighter 2 for the Bakersfield Fire and Rescue Service.

Dr. Renno is the founder and president of Radiation Emergency Services, which specializes in training solutions using science-based simulation software for supporting radiation disaster preparedness. Wendy has also supported DOE/NNSA programs since 2010. Over the past 7 years, Wendy has been a part of the DOE Operations and Exercises team in leadership roles for each of the DOE Consequence Management (CM) exercises during that time. Before that, she worked within the CM program at the Remote Sensing Laboratory and held many positions supporting the Federal Radiological Monitoring and Assessment Center (FRMAC). Wendy's operational experience enables her to bring a unique perspective on scientific issues in operational settings. As a FRMAC Assessment scientist during the Fukushima Daiichi Nuclear Power Plant emergency, Wendy was heavily involved

in the creation of many of the FRMAC radiological data products that were used to support decision making by the U.S Department of Defense, Department of State, White House, and Government of Japan. Wendy has also routinely supported radiation emergency preparedness drills and training throughout the country. Wendy earned her Doctor of Radiochemistry and Bachelor of Science in Chemistry from the University of Nevada, Las Vegas.

Angela Leek, CHP, joined SummitET as the Director of Radiological Solutions and Regulatory Affairs after working 16 years in Iowa's radiation control program. In Iowa, she was responsible for all radiological programs and technical aspects of emergency response. At SummitET she is building a program to provide technical support solutions for state programs. She was recently the Chairperson for the Conference of Radiation Control Program Directors (CRCPD) and is a Director member of the Health Physics Society Board. Angela also supports the Radiological Operations Support Specialist Program (ROSS) and has developed and delivered over 100 trainings on radiation protection, regulatory program perspectives, and emergency response. Angela has been involved in radiation protection for over 25 years and is certified by the American Board of Health Physics. She earned her master's in Radiation Health Physics from Oregon State University and is finishing Ph.D. at Iowa State University in December 2023.

Christine Allston is a Project Management Professional (PMP) and certified UX designer who has worked on the CBRNResponder Network with Chainbridge Technologies since 2018. Christine is the lead Project Manager for CBRNResponder and is responsible for several federal contracts, outreach and training, user support and engagement, and communications. She graduated from Florida State University in 2016 with a Bachelor of Science in International Affairs.

Session 5: REP Exercise Controller Course (RECC) (AWR-327)

Abstract:

This course provides learners foundational knowledge on the preparation for, and conduct of, Radiological Emergency Preparedness (REP) exercise control, and presents an opportunity for participants to begin building controller skills. To prepare participants to control the flow (play) of scenario events to ensure an exercise is conducted in accordance with the exercise objectives and extent of play.

Speaker Biographies:

Chris Bellone is a seasoned professional with over 25 years of experience in emergency management and healthcare. Since 2013, he has been a training specialist in FEMA's Technological Hazards Division, Radiological Emergency Preparedness headquarters training unit. In this role, he manages the REP Exercise Evaluator and Controller Course. Mr. Bellone's FEMA journey began in 2009 when he served as the REP training specialist within FEMA Region V.

His professional goal is to enhance learning outcomes for the State, Local, Tribal, and Territorial (SLTT) as well as Federal emergency management workforce. He achieves this by leading and creating authentic, practical, and engaging technology-based learning ecosystems.

Chris is a Certified Emergency Manager (CEM®). He earned a Bachelor of Arts in Management with a concentration in leadership from American Military University and a Master's in Learning Design and Technology, including an e-learning certificate, from George Mason University.

Mr. Todd Gemskie started with FEMA REP in 2008 as Site Specialist assigned to Illinois and currently serves as the FEMA RV REP Training Officer. He served nearly 20 years at Point Beach Nuclear Plant (PBNP) with positions in Operations, Operations Training, and Emergency Preparedness Training. He finished his PBNP career as the Emergency Preparedness Manager. He also served six years in the United States Nuclear Navy fleet.

Session 6: REP Post-Plume Planning Workshop

Abstract:

This 4.0-hour workshop focuses on REP Post-Plume plan maintenance and review using guidance from NUREG-0654/FEMA-REP-1, Rev.2 planning standards and associated evaluation criteria with the 2023 REP Program Manual (RPM).

To support the offsite response organizations (OROs) with updating their REP Post-Plume plans to the planning guidance found in the 2023 RPM, the REP HQ Training Section has developed a tool to support this effort. Making use of the "2023 Cross-Reference Generator (CRG)" will act as the first-step in a systematic approach to transferring the plan location references, for each of the NUREG-0654/FEMA-REP-1, Rev.1 (2016 RPM) & Rev. 2 (2019 RPM) Planning Standard (PS), Evaluation Criterion (EC), and to Meet the Intent (MTI) statements found in the ORO's current NUREG cross-reference, to the correct corresponding (most equivalent) 2023 RPM PS-EC-MTI.

The CRG generates a NUREG cross-reference which will provide a starting point for the second and more vital step – to verify that the assigned reference locations are accurately addressing the 2023 RPM PS-EC-MTI statements and supplement any changes in planning content where additional information is needed.

Speaker Biographies:

Scott R. Hallett Since 2009, Scott R. Hallett has been a Training Specialist for the Department of Homeland Security (DHS) / Federal Emergency Management Agency (FEMA) / National Preparedness Directorate (NPD) / Technological Hazards Division (THD) / Radiological Emergency Preparedness Branch Headquarters (REP) in Washington, DC. His work includes establishing national training policies and procedures for new training initiatives within the FEMA Radiological Emergency Preparedness (REP) Program community, and strategic planning for development, coordination and implementation of national course offerings. He serves as a Radiological Emergency Preparedness (REP) Program Exercise Evaluator, evaluating numerous commercial Nuclear Power Plant Plume & Post-Plume (Ingestion) Pathway Exercises and a Hostile Action Based Drill. Completed the Master Exercise Practitioner Program (MEPP), and Radiological Operations Support Specialist (ROSS) training. Formerly, he founded and established the Tie Siding Volunteer Fire Department (TSVFD) in Tie Siding, WY and served as the department's first Fire Chief / Safety and Training Officer.

Session 7: REP Hostile Action Based (RHAB) Workshop

Abstract:

This 4-hour workshop focuses on REP Hostile Action-Based plan maintenance and review using guidance from NUREG-0654/FEMA-REP-1, Rev.2 planning standards and associated evaluation criteria with the 2023 REP Program Manual (RPM). During a Hostile Action-Based (HAB) incident, there are special considerations to consider. This HAB (awareness-level) workshop will focus on those differences from a non-HAB incident.

This workshop will not cover the topic of "Scenario Development". More information on this topic can be found in "NEI 06-04 Rev.3 / Section 4 / pgs. 11-20".

The FEMA/NPD/THD/Radiological Emergency Preparedness (REP) Program training section has developed a 4-hour workshop that will familiarize Offsite Response Organizations (OROs) with 2023 REP Program Manual (RPM) guidance related to hostile action-based offsite response to an incident at a commercial nuclear power plant (NPP). The workshop is meant to support Federal, State, Tribal and local emergency responders' recognition of response planning and preparedness specific to a hostile action-based event.

Speaker Biographies:

Scott R. Hallett Since 2009, Scott R. Hallett has been a Training Specialist for the Department of Homeland Security (DHS) / Federal Emergency Management Agency (FEMA) / National Preparedness Directorate (NPD) / Technological Hazards Division (THD) / Radiological Emergency Preparedness Branch Headquarters (REP) in Washington, DC. His work includes establishing national training policies and procedures for new training initiatives within the FEMA Radiological Emergency Preparedness (REP) Program community, and strategic planning for development, coordination and implementation of national course offerings. He serves as a Radiological Emergency Preparedness (REP) Program Exercise Evaluator, evaluating numerous commercial Nuclear Power Plant Plume & Post-Plume (Ingestion) Pathway Exercises and a Hostile Action Based Drill. Completed the Master Exercise Practitioner Program (MEPP), and Radiological Operations Support Specialist (ROSS) training. Formerly, he founded and established the Tie Siding Volunteer Fire Department (TSVFD) in Tie Siding, WY and served as the department's first Fire Chief / Safety and Training Officer.

Session 8: Using AI for Enhanced Radiological Emergency Preparedness Planning and Outreach: Emerging Threat or Emerging Opportunity?

Abstract:

Artificial intelligence (AI) stands at the forefront of revolutionizing various aspects of our lives. AI's ability to analyze vast amounts of data in real-time and its capacity for automation, predictive analytics, natural language processing, and image recognition are providing efficiencies and enhancements in all areas of preparedness. AI's dynamic role in our lives is shaping how we plan for, respond to, and recover from evolving threats and complex challenges that demand a multifaceted approach to preparedness. However, these efficiencies and opportunities do not come without inherent risks and challenges. Ethical considerations and potential challenges associated with AI implementation to prepare for, respond to, and recover from a radiation emergency will also be addressed. At the end of this session, participants will gain an understanding of how AI is revolutionizing and shaping the future of radiological preparedness planning and outreach.

Speaker Biographies:

Holly Hardin holds 17 years' experience in emergency management and strategic communications. As the Director of Strategic Communications at SummitET, Holly manages, develops, and delivers strategic communications training and provides exercise support and technical assistance to government and private industry. Prior to joining SummitET, Holly served as an Emergency Management Communications Analyst at Argonne National Laboratory and co-established the Public Affairs Science and Technology Fusion Cell, as well as the National Public Affairs Academy. At Argonne, Holly was responsible for assisting government agencies, non-governmental organizations, and private sector groups with plans, protocols, procedures, training, and exercises. Prior to Argonne, Holly worked for the Department of Justice in counterterrorism programs and was a first responder in the Department of Energy Oak Ridge Reservation Joint Information Center where she also managed a cadre of technical experts and provided risk and crisis communication and digital media expertise to Federal, state, and local government agencies, in addition to the commercial nuclear industry.

Session 9: What can AI do for you?

Abstract:

The U.S. Nuclear Regulatory Commission recognizes the growing interest in artificial intelligence (AI) and anticipates increased use of AI in NRC-regulated activities. To support this growing interest, the NRC published an AI Strategic Plan to focus on AI technologies with potential application to the nuclear industry. For emergency preparedness (EP) and incident response, AI has tremendous potential to enhance decision making and facilitate performance of EP functions. This presentation will demonstrate, through practical examples, the power of AI to inform EP and enhance incident response. Specifically, the NRC will demonstrate how neural networks were used to classify transportation networks for the study of evacuation time estimates; how machine learning can make predictions on accident progression; and how fuzzy logic can enhance integration of data for accident assessment.

Speaker Biographies:

Todd Smith is the Senior Level Advisor for Emergency Preparedness and Response at the US NRC. He graduated from Purdue University with a MS and PhD in Nuclear Engineering, specializing in thermal-hydraulics and reactor safety, and holds a MS in Radiation Health Physics from Oregon State University.

Session 10: Remote Sensing- The Key to Virtual Preliminary Capability Assessments (PCA)

Abstract:

In 2017, FEMA Region 4 initiated a Remote Sensing Cell (RSC) to gain actionable intelligence in near real time immediately following a disaster. Imagery gathered from this team has influenced decisions at all levels of the disaster response. Since the first activation of the RSC, it has grown in partnerships incorporating assets from federal, state, local agencies as well as several non-government organizations. By leveraging the assets and talents of the various partners and providing platforms for data / imagery sharing, the FEMA R4 RSC he been able to provide 3,000 products which directly influenced key decisions in disaster response.

During the 2022 hurricane which threatened the St Lucie Nuclear Power plant, the FEMA R4 RSC was able to leverage partnerships with state and utilities to access drone footage that allowed the PCA team to conduct a full PCA, virtually. This actionable intelligence allowed the RSC to direct other aerial assets to areas of justified concern to fully image any points of interest. Without leaving their duty station, the team was able to utilize the image capture and analysis capability to fully assess the situation and decide in record time. Working with the REP program, the RSC can pre-identify points of interest within the various Emergency Planning Zones and prioritize coordinate priority collection activities to quickly assess the situation.

Speaker Biographies:

Kevin Wells has served as the FEMA Region 4 Technological Hazards Branch Chief and RAC Chairperson since 2020. Mr. Wells came to FEMA in 2016, as the Program Manager for the Chemical Stockpile Emergency Preparedness Program (CSEPP). In this role, he led preparedness efforts of the off-post communities near the Blue Grass Army Chemical Depot, Kentucky. He administered over 120 million dollars in Cooperative Agreements and executed an annual Full-Scale Exercise which encompassed over 2,000 participants each year. In 2019, he led the effort to develop a Chemical Regional Sampling and Reentry Plan.

Mr. Wells began his public safety career in 1991, following service in the Marine Corps. He worked as an EMT / Paramedic in both ground and air services before returning to the military in 1997 as a medic in the Georgia Army National Guard. He retired from the military in 2014.

Travis Potter joined FEMA in 2008. Currently he is the Remote Sensing and Unmanned Aerial Systems (UAS) Coordinator for Region 04. He has deployed to over 30 disasters and has worked in IT, Communications, and Logistics. He is currently the ESF2 Coordinator during regional disaster response efforts.

Travis is a UAS enthusiast and leads the FEMA Region 04 UAS Strategy. In this role, he is the coordinator for the FEMA Region 04 state UAS working groups, and a contributor to the FEMA National

Integration Center's UAS Typing Initiative. Travis also works closely with many federal and state agencies, universities, and private sector partners on the integration of UAS during disaster operations.

Due to his UAS and remote sensing efforts he was awarded the 2019 FEMA Administrator's Award for Innovation and received the 2021 AUVSI 1st Place Award for Xcellence in Mission, Public Safety Project.

Session 11: Fission Vision: A Look at What's Next for Nuclear

Abstract:

The Nuclear Energy Institute (NEI) is the trade association for the commercial nuclear industry, representing nearly 350 companies, on key regulatory, policy, and technical issues. The commercial nuclear industry is currently seeing a once-in-a-generation moment, defined by rapidly growing demand for carbon-free, reliable nuclear energy. This demand is highlighted not only in the electricity sector, but the broader economy and other hard-to-abate sectors.

This new opportunity is due, in large part, to the steadfast success of the current fleet of 93 operating power reactors across the United States, which act as America's clean energy workhorse. There are over 60 companies involved in Advanced Reactor design and development, with individual states and newcomer communities eager to join the nuclear narrative. The federal and state policy landscape is in our favor, and nuclear enjoys strong bipartisan, bicameral support. The unprecedented legislative victories over the last few years will yield tangible results for the industry. Investors and customers are knocking at nuclear's front door, and there has never been a more exciting time to be in the nuclear industry!

Speaker Biographies:

Hilary Lane joined the Nuclear Energy Institute (NEI) in 2017 and has nearly 15 years of experience working in commercial and defense nuclear. She is currently the Director of Fuel and Radiation Safety, where her team works on a diverse array of regulatory, technical, and policy matters on behalf of the commercial nuclear industry. Prior to joining NEI, Ms. Lane worked at the U.S. Nuclear Regulatory Commission (NRC) as an International Safeguards Analyst. Ms. Lane began her career at the National Nuclear Security Administration (NNSA) in Washington, DC, in both the Office of Defense Nuclear Nonproliferation and Office of Defense Programs. During that time, Ms. Lane served on assignment to the British Embassy in Washington, and to Lawrence Livermore National Laboratory in Livermore, California. Ms. Lane graduated with honors from the University of Maryland, College Park, with a B.S. in Materials Science and Engineering. She also holds an Associate's Certificate in Project Management from George Washington University.

Session 12: WIPP Presentation

Abstract:

Updates and happening at the Waste Isolation Pilot Plant (WIPP). WIPP is the nation's only deep geologic long-lived radioactive waste repository. Located 26 miles southeast of Carlsbad, New Mexico, WIPP permanently isolates defense-generated transuranic (TRU) waste 2,150 feet underground in an ancient salt formation. WIPP was constructed for disposal of defense-generated TRU waste from DOE sites around the country. TRU waste consists of clothing, tools, rags, residues, debris, soil, and other items contaminated with small amounts of plutonium and other man-made radioactive elements. The waste is permanently disposed of in rooms mined in an underground salt bed layer over 2000 feet from the surface.

Speaker Biographies:

James Mason – DOE

Session 13: WIPP Truck Inspection Demonstration

<u>Speaker Biographies:</u>

Cpl. Casey Jones, Texas Department of Public Safety – Commercial Vehicle Enforcement
No bio or abstract needed

Session 14: Razor Sharp News Conferences

<u>Abstract:</u>

Eric Singer will conduct a 90-minute bootcamp to take your news conference planning and execution to a new level. Practical hands-on exercises will include best practices for stagecraft preparation for indoor and outdoor news conferences and briefings; learning the most effective ways to organize your subject-matter experts for the event; and how to ensure your facilitator is up to the task so the media and public only focus on one thing – your messaging. With video examples from the latest breaking news events.

<u>Speaker Biographies:</u>

Eric Singer is an Emergency Management Communication Specialist with the Argonne National Laboratory Risk & Crisis Communication Program. He is a popular instructor with Argonne's Public Affairs Science and Technology (PAST) Fusion Academy. He is part of a team that helps provide public affairs training, exercise support, product development, and technical assistance for government, non-profit, private sector, and international organizations. He has been with Argonne since 2014. Prior to his career as a full-time PAST Fusion Academy instructor and being part of preparedness exercises to train and evaluate emergency public information, he had more than 30 years as an award-winning all-platform journalist in radio, television, print, and online.

Session 15: EPA A-Team Presentation

Abstract:

Michelle misplaced the abstract for this presentation and couldn't find it in time before this book went to print due to her brain being on IPX stuff. By the way, the Advisory Team (A-Team) resources were utilized at the IPX! Here's what I know...Sara is a fantastic presenter and I'm sure the George is too, because Sara wanted him to be her copresenter. EPA's A-Team is for environment, food, and health. Providing radiation guidance during an emergency. The A-Team is comprised of radiation experts' representatives from the Food and Drug Administration, the Centers for Disease Control and Prevention, the Environmental Protection Agency, and the U.S. Department of Agriculture. The Team is currently chaired by FDA. The A-Team may provide remote or on-site support. The Team anticipates integrating into the incident command structure through the Planning Section, where it can provide technical advice to the Incident or Unified Command. The Team can reach out to other Federal and state organizations as required by a particular incident. I love it when a plan comes together.

Speaker Biographies:

George Brozowski has over 30 years in Federal service. For 25 years, George has been the Senior Regional Health Physicist/Radon Policy Advisor for US Environmental Protection Agency – Region 6 (Dallas, Texas). George is responsible for all radiological concerns and emergencies within the Region, including the oversight of four Department of Energy facilities. Prior to working in Region 6, George worked for US EPA - Region 2 and FEMA - Region 2, both offices located in NYC. From 1985-1990, George worked for the Rockland County Health Department, participating in Indian Point REP exercises as the Dose Assessment Team Leader. George has been married for 40 years! He and his wife, Veronica, have a son, a daughter-in-law, a grandson (he's so cute), and a daughter! George is very active in Boy Scouts, having been an Eagle Scout for 50 years, along with being a Vigil Honor member of the National Order Of The Arrow for the past 15 years. He continues to give back to Scouting by volunteering as the Southern Star District (Ellis County, TX) as the District Advancement Chairman for the past 15 years, approving over 300 Eagle Scout!

Sara DeCair has been a health physicist with Environmental Protection Agency's Radiation Protection Division since 2003. She serves as the Associate Director of the Center for Science & Technology -- a small group of radiation experts who support EPA's radiological protection program with continuing education and producing Federal Guidance Reports.

Session 16: The Dose Assessment We Don't Do

Abstract:

Every eight years, programs must address different issues and demonstrate capabilities in an Ingestion Pathway Exercise. Yet we increasingly realize these are skills to develop, not dust off when needed.

The Intermediate Phase of a radiological incident can be described in many ways, but it is clearly more technical in nature. Decision makers will demand answers, and the science and specific details matter.

This talk will clarify important concepts and share best practices for state programs to implement. Topics discussed include:

§ How do we verify our initial models?
§ Real weather: how sure are we of what's downwind?
§ Concepts behind the 10-point Monitoring Plan
§ Initial sampling plan development
§ State and FRMAC assessment integration
§ Requesting different maps
§ Sample results and information sharing with your public health laboratory
§ Realistic timelines and expectation management

This talk will have something for both technical and non-technical audiences, sharing concepts large and small to consider, and integrate into procedures and plans.

Speaker Biographies:

Dr. Bill Beal is a physicist supporting U.S. federal radiological emergency response from the Department of Energy, National Nuclear Security Administration's Remote Sensing Laboratory at Joint Base Andrews in Washington, DC. Over the last eighteen years, he has worked on several programs spanning a broad mission spectrum, from radiological search to aerial radiological measurement to post-incident radiological monitoring and dose assessment. He spent over two months supporting the U.S. government's response to the 2011 Fukushima Daiichi nuclear power plant accident, including three weeks with the deployed NNSA team in Tokyo, Japan. He continues to support the Federal Radiological Monitoring and Assessment Center (FRMAC) as a scientist, instructor and liaison, and currently serves as the skill set leader for FRMAC liaisons. Dr. Beal received his Ph.D. in nuclear physics from North Carolina State University.

Brennen Brunner is the radiological emergency planner working for the New Hampshire Department of Health and Human Services, member of the FRMAC Assessment Working Group, and advisor to the CRCPD HS/ER-5 Committee on Emergency Response. Formerly employed by Minnesota Homeland

Security and Emergency Management, he was the lead state planner for Northern Lights 2016 consequence management exercise.

Brian Hunt is a Certified Health Physicist who has been supporting NNSA's Consequence Management (CM) Program and the Federal Monitoring and Assessment Center (FRMAC) at Sandia National Laboratories in Albuquerque, New Mexico since 2008. Brian currently serves as the Chair of the Interagency FRMAC Assessment Working Group, which is responsible for establishing Federal Government policy for implementing consistent, defensible, state-of-the-art radiological assessment methods for emergency response. Brian holds B.S. and M.S. degrees in Nuclear Engineering from the University of New Mexico. He received his ABHP certification in 2009.

Session 17: Putting the Community in Community Reception Centers

Abstract:

This session will focus on best practices and tips for setting up community reception center procedures for your organization/region, while using RadResponder to create a common operating picture.

This workshop will provide an overview of all training resources available to state and local agencies for setting up CRCs as well as a review of some of the different set up strategies used by various state and local agencies who have CRC plans already in place or are in the process of implementing plans. Participants will gain valuable knowledge from the successes and challenges other agencies have endured.

On the RadResponder side, in August of 2023 a Nationwide Drill was conducted focusing on community reception centers and population monitoring with over 40 participating organizations. The goal of this drill was to highlight the enhancements made to the population monitoring module in RadResponder by using the CRC SimPLER tool to generate data to then associate with RadResponder events and community reception centers. This session will provide an overview of the drill, how RadResponder was used for CRCs, and the feedback/lessons learned participants identified to aid in a real-world response or exercise.

Speaker Biographies:

Tanya Ridgle currently works full time for the Los Angeles County Department of Public Health, Radiation Management as a Principal Radiation Protection Specialist. In this role, Ms. Ridgle handles all matters related to radiological emergency preparedness and response for Los Angeles County, including responding to and investigating incidents involving radioactive materials, providing radiation safety training and support to local first responders and stakeholders and assisting with the development of radiological emergency plans and procedures. Ms. Ridgle began her career in the Radiation Safety field immediately after receiving her Bachelor of Science in Chemistry from the University of California, Los Angeles in 2001 and has over 22 years of experience in the field of Radiation Safety. In addition to working for Los Angeles County Department of Public Health, Radiation Management, Ms. Ridgle is a Department of Homeland Security (DHS) certified Counter Terrorism Operations Support instructor who provides technical instruction to emergency responders pertaining to Radiological/Nuclear prevention and response.

As a member of the Conference of Radiation Control Program Directors (CRCPD), Ms. Ridgle serves on the Board of Directors as the Homeland Security/Emergency Response Council Chair and chairs the HS/ER-13 Task Force for Development of Population Monitoring Train the Trainer Workshops.

Christine Allston is a Project Management Professional (PMP) and certified UX designer who has worked on the CBRNResponder Network with Chainbridge Technologies since 2018. Christine is the

lead Project Manager for CBRNResponder and is responsible for several federal contracts, outreach and training, user support and engagement, and communications. She graduated from Florida State University in 2016 with a Bachelor of Science in International Affairs.

Session 18: ALERT AND NOTIFICATION: Review Processes, IPAWS Implementation and 2023 RPM Update

Abstract:

Assisting utility, federal, state, tribal and local emergency managers, and planners more effectively meet Alert and Notification Systems (ANS) Design Objectives, when making changes to plans and Design Reports. Discuss the review and approval track for changes to ANS, IPAWS implementation requirements and updates in reviews and testing found in the 2023 REP Program Manual (RPM).

Speaker Biographies:

Joshua Barnes joined FEMA in 1992 during Hurricane Andrew. He has worked in Individual Assistance, Federal Coordination, Hazard Mitigation, Public Information, Hurricane Tracking, Legislative Affairs, Emergency Response Teams (ERT) that later became the IMAT, Defense Coordination and Special Projects. He joined the FEMA Technological Hazards Division in 2008 as an Emergency Management Specialist in Policy and Doctrine.

The following are some of the projects, teams and programs he has worked on developing, supporting or completing for Policy and Doctrine: Fukushima Tiger Team, FEMA Planning Integration Committee (FPIC), THIRA/SPR Communications Working Group, Nation-State Threats Working Group, Alert and Notification Policy, Integrated Public Alert and Warning System (IPAWS) Integration, Pt. V of the REP Program Manual and reviews ANS Evaluations Reports (Design Reports).

Mr. Barnes holds a BS in Emergency Administration and Planning from the University of North Texas, and a MS in Homeland Security and Emergency Management from Long Island University.

Session 19: IPAWS: Tips and Tricks for Nuclear Power Plant EPZ Implementation

Abstract:

Berrien County became an all-hazards Integrated Public Alert and Warning System (IPAWS) 'Alerting Authority' in 2013. Three years ago (April 2021), in collaboration with D.C. Cook, Berrien County completed the project to formally credit IPAWS as the primary Radiological Emergency Planning (REP) Alert and Notification System (ANS). Thus, replacing off-site sirens completely. This was the second commercial nuclear power plant IPAWS project (of 54 U.S. power reactors) to remove sirens from nuclear ANS completely. They were also the first to physically remove sirens from a nuclear power plant Emergency Preparedness Zone (EPZ).

Through the experience of successful REP IPAWS implementers, this session will explore sirenless-ANS systems from conception to implementation. Topics will include: Why IPAWS? Organizational roles and responsibilities. REP ANS Design Report writing, submittal, and approval processes. Implementing procedure development. Comprehensive public and media outreach and education. Testing opportunities and avenues. Record keeping and inspection activities. Real-world issues and operating experience.

Speaker Biographies:

CPT. Rockey Adams is the Emergency Management & Homeland Security Coordinator for Berrien County, Michigan and has been in this role for 12 years. CPT Adams has served with the Berrien County Sheriff's Office since 2000. He has taken on many challenges during his many assignments and roles, which include: Marine Patrol, Jail Security, Road Patrol-Law Enforcement, Detective, a Road Patrol Supervisor, and finally an Emergency Management and Homeland Security Coordinator. CPT. Adams has also taken on secondary roles during his career; to include; Hazardous Materials Technician (Team Commander), Bomb Technician (Assistant Team Commander), and Evidence Collection Technician/Crime Scene Investigator (Team Commander). He is recognized by the State of Michigan as a Professional Emergency Manager. His team consists of two Sergeants, seven School Resource Officers, a Senior Accountant / Public Assistance Officer, two Training and Exercise Officers, and an Emergency Management Specialist (EOC/Manager). Together, they are known for their relentless pursuit of high-quality Emergency Management for their community. They achieve success through their continuous improvement programs and values. The Berrien County Team is well known within the Radiological Emergency Preparedness program as a strong advocate for the use of the Integrated Public Alert and Warning System as part of their warning strategy. The team worked very closely with their local radio broadcast stations to implement these technologies. Their attention to these programs translates into a high functioning Emergency Management program to meet the needs of the Berrien County communities.

Mr. Kevin Simpson is the Emergency Preparedness Manager at the Donald C. Cook Nuclear Plant in Bridgman, Michigan and has been in this role for six years. He has held previous commercial nuclear power plant positions as Emergency Response Supervisor, Senior Operations Instructor, and Senior

Health Physicist. Kevin served for 10 years in the U.S. Naval Nuclear Propulsion Program as Machinist Mate, Engineering Laboratory Technician, and Master Training Specialist. He graduated from Excelsior College with a Bachelor of Science in Nuclear Engineering Technology and is a member of the National Registry of Radiation Protection Technologists (NRRPT).

Session 20: Comparing Federal Guidance and Model Predictions with Full-Scale Exercise Data: Lessons Learned from an Out-of-Sequence Reception Center Exercise

Abstract:

A community reception center (CRC) exercise was conducted in Tennessee as part of the 2022 Sequoyah Nuclear Power Plant Ingestion Pathway Exercise. This out-of-sequence exercise was unique because it was a full-scale exercise. The planning team for the exercise included local and regional public health, local and state emergency management agencies, Radiological Health, FEMA, and CDC. Planning began in late 2021, culminating in the full-scale exercise on July 14, 2022, with over 140 people from 35 agencies participating. Evacuees moved through the CRC for 95 minutes and included one blind individual with a service animal and two deaf individuals. Instead of demonstrating CRC processes for only six individuals, as defined in FEMA's Radiation Emergency Preparedness (REP) Manual, 170 individuals moved through the portal monitor, and 25 people showered. The CDC collected time measurements for each section of the CRC. These data were used to further validate the ability of CDC's CRC SimPLER (Community Reception Center Simulation Program for Leveraging and Evaluating Resources) to predict throughput capacity.

The exercise calculated throughput was 104 individuals per hour. The FEMA calculation predicted throughput ranged dramatically from 51 to 600 individuals per hour. CRC SimPLER, which is a discrete event simulation model that integrates timing distributions rather than averages, predicted an hourly throughput of 100 individuals per hour.

This session will review lessons learned from Tennessee's first full-scale out-of-sequence exercise, exercise planning considerations, how time collection data from this and other exercises can assist emergency planners, and proposed action steps for emergency planners.

Speaker Biographies:

Robert Goff, MPH, is Emergency Preparedness Director for the Southeast Region of the Tennessee Department of Health. He has held this position since 2004. He is responsible for public health emergency planning for 10 counties on Southeast Tennessee, including public health's role in Radiological Emergency Preparedness (REP) planning for two nuclear power plants located in his region. This includes training public health personnel in monitoring and decontamination in addition to performing these duties during annual exercises, which are evaluated by the Federal Emergency Management Agency. Mr. Goff has also conducted monitoring and decontamination training sessions across Tennessee to increase the number of public health personnel who have basic readiness to respond to a radiological event. He has participated in in- and out-of-sequence exercises annually since 2000.

Lauren Finklea is a health physicist in the Emergency Management, Radiation and Chemical Branch within the National Center for Environmental Health at the Centers for Disease Control and Prevention. Ms. Finklea serves as a subject matter expert for emergency preparedness and response activities and computational modeling for radiation protection. She is lead subject matter expert for Community Reception Centers (CRCs) and the creator of SimPLER, a software to assist states with planning and visualizing gaps in their response plans. She also developed a HSEEP-aligned board game exercise, This is a T.E.S.T., for training and exercising CRCs. This game has won numerous awards, including 2023's most innovative communication tool.

She received her B.S. and M.S. degrees in Nuclear and Radiological Engineering from Georgia Institute of Technology in Atlanta, Georgia, and will graduate with her doctorate in Public Health at Georgia State University in May 2024.

Erica Houghton is an Emergency Management Specialist with FEMA Region 4 in Atlanta, GA. She is with the Radiological Emergency Preparedness Program, Technological Hazards Branch, National Preparedness Directorate. She serves as the State Lead for Georgia and Tennessee, and Site Specialist for the Sequoyah Nuclear Plant in Soddy-Daisy, TN. Prior to joining FEMA in 2019, she worked for the Pueblo County Sheriff's Office in Pueblo, Colorado as the Chemical Stockpile Emergency Preparedness Program Coordinator.

Prior to joining the Pueblo County Sheriff's Office, Erica worked as a contractor for 10 years supporting FEMA Headquarters and the District of Columbia Homeland Security and Emergency Management Agency. Erica has a Bachelor of Arts in Criminal Justice and has earned both her International Association of Emergency Management Certified Emergency Manager® and Colorado Certified Emergency Manager designations.

Session 21: Tackling the REP Ingestion Requirements

Abstract:

As part of the FEMA REP Program, state, local, tribal and private sector organizations plan, train and exercise with the nuclear power plant's 50-mile Ingestion Pathway Planning Zone. To meet the Ingestion Exposure Pathway planning and exercise criteria and reporting requirements in the FEMA Annual Letter of Certification, there are many approaches that can be taken. FEMA will dive deep into what the Ingestion Pathway requirements are and share how different FEMA Regions are meeting the requirements. Texas Department of State Health Services Radiation Program will give examples of approaches they've taken by leveraging existing preparedness and response partnerships in order to meet these reporting requirements without breaking the bank!

Speaker Biographies:

Rae Walker has over 19 years of experience working in various emergency preparedness and response roles at DSHS, often assisting in the oversight and coordination of Federal, State and local agencies and state agency staff on projects, including emergency preparedness, planning and response activities before and during incidents, as well as recovery efforts. She has contributed to the development, training and exercising of guidelines, emergency response plans and standard operating procedures to facilitate the State's accurate and timely response to ESF-8 Public Health and Medical emergencies, including responding to severe weather, pandemic, radiological, and other incidents.

Scott Hallett: Since 2009, Scott R. Hallett has been a Training Specialist for the Department of Homeland Security (DHS) / Federal Emergency Management Agency (FEMA) / National Preparedness Directorate (NPD) / Technological Hazards Division (THD) / Radiological Emergency Preparedness Branch Headquarters (REP) in Washington, DC. His work includes establishing national training policies and procedures for new training initiatives within the FEMA Radiological Emergency Preparedness (REP) Program community, and strategic planning for development, coordination and implementation of national course offerings. He serves as a Radiological Emergency Preparedness (REP) Program Exercise Evaluator, evaluating numerous commercial Nuclear Power Plant Plume & Post-Plume (Ingestion) Pathway Exercises and a Hostile Action Based Drill. Completed the Master Exercise Practitioner Program (MEPP), and Radiological Operations Support Specialist (ROSS) training. Formerly, he founded and established the Tie Siding Volunteer Fire Department (TSVFD) in Tie Siding, WY and served as the department's first Fire Chief / Safety and Training Officer.

Todd Gemskie is currently the FEMA Region 5 Radiological Emergency Preparedness (REP) Program Training Officer, training state and local offsite response organizations across R5 and the nation. Todd started with FEMA REP in 2008 as a Site Specialist assigned to Illinois. Todd served nearly 20 years at Point Beach Nuclear Plant with positions in Operations, Operations training, Emergency Preparedness training, and finished his career there as Emergency Preparedness Manager. He also served six years in the United States Nuclear fleet as a nuclear Machinist Mate, instructing nuclear plant operations for nearly four years.

Session 22: Care and Feeding of a HAB Exercise: How to Grow a Successful Experience

Abstract:

Do you have a HAB exercise in your future?

Come to this panel discussion about successful 2024 HAB exercises to learn what it took to create the exercise, how to prepare your responders, and what improvements conducting a realistic HAB can bring to your preparedness efforts!

During this panel staff from several States, Counties, and a Plant will present: ideas for realistic HAB scenarios that involve a radioactive release, ideas from real-world events, plan improvements for home rule jurisdictions, ways to increase federal participation and the advantages of that, what training timelines worked and didn't, inject enhancements and ideas that can draw more participation out of new REP players, ways to get old REP hands reengaged with the new challenges, and what we expected to happen that didn't.

This free-flowing panel will contain planners from State Rad Control, State and County Emergency Management, and Site EP in Wisconsin, Ohio, and Iowa.

We invite you to join us in discussing what worked, what didn't, and how you can take our examples to create a successful HAB exercise of your own.

Speaker Biographies:

Charles W. Adams III is a Nuclear Engineer within the State of Wisconsin's Department of Health Services – Radiation Protection Section. He currently conducts radiation emergency planning, training, and response within the state and assists with the coordination of efforts with partner groups within and without the State of Wisconsin. He is a duty standing Wisconsin State Radiological Coordinator (SRC). His background includes nine years in the United States Navy as an EM1(SW) nuke and graduation summa cum laude with a BS from NIU's nuclear engineering program. He interned with the NRC's Nuclear Security and Incident Response office and was part of the USS Abraham Lincoln (CVN72) Deep Rescue team. For the last 9 years he has worked for the State of Wisconsin as part of the REP community.

Kayla Beckerdite is currently the REP Site Specialist for Iowa Homeland Security and Emergency Management (HSEMD). Prior to her current position, she served as the Emergency Services Director for Manitowoc County, WI, and held various positions with the American Red Cross of Iowa. She has been involved with two HAB exercises, one with Point Beach Nuclear Plant as the Manitowoc County Emergency Services Director, and one as a planner/trusted agent for Quad Cities Generating Station

as the REP Site Specialist for Iowa HSEMD. She holds a B.S in both Emergency and Disaster Management and Criminology from Western Carolina University.

Tracy Nollenberg started working with Kewaunee County in 2003. She transitioned into Emergency Management in 2007, starting out as a Program Assistant. Ms. Nollenberg earned her associate degree in accounting in 2008 while also working towards her Wisconsin Certified Emergency Management credentials achieved in 2013. She was appointed as the Kewaunee County Emergency Management Director on September 11, 2015. Ms. Nollenberg has been part of two HAB exercises and a number of Ingestion Exercises while being with Kewaunee County.

Fred Petersen has been with the Ottawa County Emergency Management Agency since October of 1994 and was appointed as Director in January of 2010. He is responsible for the administration and direction of the agency and the planning and development of the overall program. Additionally, he serves on the board of directors for the Safety Council of Northwest Ohio, and the Western Lake Erie Area Contingency Planning Committee. He is also affiliated with Ottawa County Fire and EMS Chiefs Association, Ottawa County Township Association and the Emergency Management Association of Ohio. Fred served as a firefighter with the Portage Fire District in Oak Harbor for five years. A lifelong resident of Ottawa County, Fred resides in Oak Harbor with his wife Angela, whom together they have five children and two grandchildren. He is a graduate of the University of Findlay with a B.S. in Environmental and Hazardous Materials Management.

Chris Salz is the State of Ohio REP Program Manager, and The U.S. NRC State Liaison Officer for the State of Ohio. The REP program falls under the Ohio Emergency Management Agency, which is under the umbrella of the Department of Public Safety. Chris has been in his current role for 8 years, and with the state of Ohio for 13 years. Chris obtained his BS in IT Project Management from Columbia Southern University. Chris's initial radiological emergency preparedness knowledge came from serving aboard the USS Alaska SSBN 732 (B), the sub-tender USS McKee AS-41 after qualifying RadCon Shift Supervisor (RCSS), and finally during new construction on the last trident submarine the USS Louisiana SSBN 743 (G). Chris was an Engineering Laboratory Technician in the Navy. When not working you can find Chris and his wife out west enjoying hiking in the mountains or spending time with their children and grandchildren.

Travis Waack has served as the REP Program Manager for Wisconsin Emergency Management since 2022. Prior to joining the State, he served as the Emergency Services Director for Manitowoc County for 5 years and as a Disaster Program Manager for the Wisconsin Red Cross for 11 years. He holds a bachelor's degree in emergency & disaster management from the American Military University. Travis has planned or participated in numerous REP exercises at the state and local level during his various roles.

Patty Riesberg is the Bureau Chief for the Iowa Health and Human Services Bureau of Radiological Health. She has served in this position since February 2023 and is the U.S. NRC State Liaison Officer for Iowa. Patty has worked in the bureau for over 6 years with the majority of the time spent as a MQSA Mammography Inspector. She has also spent some time in the Radiation Machines program. She previously supported radiological emergency preparedness and response in Iowa through support of CBRNResponder and data management for dose assessment. Prior to her time in the bureau she spent 13 years in the radiology setting, serving as a Mammography Manager and a Radiologic Technologist. She has an A.S. in Radiologic Technology from Mercy College of Health Sciences and a B.A. in Exercise Science from the University of Northern Iowa.

Linda Wendt serves as the Radiation Emergency Preparedness Coordinator for the Iowa Department of Health and Human Services Bureau of Radiological Health. Before joining the Bureau, she was the REP Site Specialist for the Iowa Department of Homeland Security and Emergency Management. The majority of her career, however, was spent in the healthcare field as an RN and executive leader in a variety of roles across UnityPoint Health and other health entities in Iowa. She holds a bachelor's degree in Russian from the University of Pittsburgh and a master's degree in healthcare administration from Des Moines University. She is currently serving on the National Radiological Emergency Preparedness (NREP) Conference steering committee.

Session 23: Effectively Communicating with Patients and Healthcare Staff during a Radiological Event

Abstract:

Healthcare providers dealing with those involved in a nuclear power plant incident or other radiological emergency need to be able to understand the situation and make good decisions. Effective communication between health physicists and healthcare providers during a radiological emergency is critical to achieving positive treatment outcomes. Those tasked with medically managing victims of radiological incidents may be expected to have the same concerns as members of the public when faced with a radiation event and may therefore have questions that could affect their willingness to respond or their ability to respond without the distraction of worrying about a misunderstood hazard. Concerns that may need to be addressed include, but are not limited to: What are the risks associated with treatment of irradiated patients? Is it safe to admit a contaminated patient into the hospital? What are the priorities when treating a contaminated injured patient? How can I protect myself from radioactive materials? Patient concerns are also an issue that needs to be addressed. Effective communication with patients and/or their families can have a significant impact on the healthcare organization. Examples of where effective radiological communications with patients/involved individuals play an important role for the healthcare institution: addressing an emergency room full of the worried-well, patient acceptance of prognoses or medical countermeasures, support at triage or population monitoring areas, and others. While health physicists understand their roles include dose estimation, contamination control, etc., many do not understand their communication roles. Taking the time to develop good messages and effectively communicate with the involved individuals will ensure the healthcare provider understands the risks and priorities associated with a radiological response and the patient understands the implications of the radiation dose they may – or equally as important – may not have received.

Speaker Biographies:

Stephen L. (Steve) Sugarman is the Vice President and Corporate Health Physicist at SummitET – a contractor to DOE, DHS, FBI, various states, and others. He has been working in the health physics field for more than for more than 35 years. He is a certified by the American Board of Health Physics and has a master's degree in Safety Education and Service from the University of Tennessee. His primary focus is the integration of health physics into radiation emergency response. Prior to SummitET, Steve was at REAC/TS as the Health Physics Project Manager where during his 18 years of service he responded to numerous real-world radiation emergencies and provided training/education to thousands of physicians, nurses, and other response personnel. He has a has been invited to speak to numerous national and international gatherings, and he has multiple peer-reviewed publications to his credit.

Ben Maltz. MD currently works as a health physicist 3 for the REP section in the Office of Radiation Protection, Washington Department of Health. In this capacity, he is the training lead for the section and is active in radiological response. He recently retired from the Washington Army National Guard

as the Army State Surgeon and State Medical Detachment Commander. During the Covid pandemic, he served as the Joint Surgeon leading the Guard's medical response to the pandemic. Prior to that, he served as the analytical science officer and medical officer for the WA National Guard's 10th Civil Support Team for Weapons of Mass Destruction for 12 years and has deployed to Iraq and Jordan. Prior to his National Guard Service, he practiced as a board-certified emergency physician, mainly in rural and semi-rural hospitals for 15 years.

Session 24: Limerick Generating Station 2023 Hostile Action Based Exercise

Abstract:

This panel consists of collective comments from the key players, planners, and evaluators involved with the LGS HAB Exercise and supported by the Federal Emergency Management Agency, Nuclear Regulatory Commission, Pennsylvania Emergency Management Agency, Bureau of Radiation Protection, Pennsylvania State Police, Montgomery County Emergency Management Agency, and Constellation. The panel will elaborate on the challenges and successes involved with the integration of law enforcement throughout the HAB exercise process that focused on achieving the objectives of both onsite and offsite agencies.

Speaker Biographies:

Joe Suders currently serves as a Senior Emergency Management Specialist with FEMA Region 3 within the Technological Hazards Branch. Joe serves as the Team Leader North for the 4 Pennsylvania Commercial Nuclear Power Plants. He has been with FEMA Region 3 since 2008 and began as a Site Specialist for North Anna Power Station and Surry Power Station within the Commonwealth of Virginia before taking over Team North. Joe also serves as the REP Regional Training Host and coordinates with REP Headquarters for the planning and delivery of REP Training Courses for our regional states and recruitment initiatives within Region 3 for solicitation of adjunct REP evaluators. Following a 20-year career in the United States Army, Joe served as a REP Training and Exercise Manager with the Pennsylvania Emergency Management Agency (PEMA) with oversight of 5 Emergency Planning Zones (EPZs) and seventeen Medical Services Hospital. Joe was credentialed Radiological Officer, Radiological Instructor 3, and acted as the Pennsylvania State Radiological Officer. Joe is a graduate of the REP Executive Education Program in addition to completion of the Emergency Management of Radiation Accident Victims and Advanced Radiation Medicine Courses at the Radiation Emergency Assistance Center Training Site (REAC/TS) in Oak Ridge Tennessee.

Laurin Fleming, Emergency Management Specialist Radiological Response Planner Pennsylvania Emergency Management Agency (PEMA). Laurin Fleming is currently working as an Emergency Management Specialist with Pennsylvania Emergency Management. At PEMA he is a radiological planner, trainer, and specialist working primarily with off-site readiness for the Peach Bottom Atomic Power Station and with radiological training across the state. Laurin has had the distinction of leading the first in the nation Hostile Action Exercise for Three Mile Island in 2013. In addition, he has 30 years past experience in Fire, Rescue, and EMS. He is currently a municipal Emergency Management Coordinator with over 40 years of experience, a Community Emergency Response Team Leader /

Trainer, and a Critical Incident Stress Management Team Leader. His deployments include the Eric Frein incident and Flight 93.

Sergeant Kevin Jancewicz, NIMS Compliance Supervisor Pennsylvania State Police (PSP). Sgt. Jancewicz is currently a sworn law enforcement member for the Pennsylvania State Police, a full-service law enforcement agency. He has been with PSP for 19 years and has served in numerous roles within the Department. Those of note are Patrol, Forensic Services, Risk and Vulnerability Assessment Team member, Fusion Center Intelligence Liaison, and National Incident Management System compliance officer. He retired from the U.S. Navy Reserve after 24 years of service. Deployments include Mediterranean Cruise, Kosovo, Bosnia, and the Horn of Africa.

Jake Frye – Assistant Director for Special Operations, Montgomery County Department of Public Safety. Jake Frye is currently the Assistant Director of Emergency Management for Special Operations. As the Assistant Director of Emergency Management, he is responsible for the coordination and management of the Hazardous Materials Response Team, Urban Search and Rescue Team, Logistics program, and other county-sponsored response teams. Jake started with Montgomery County as the Radiological Planner in 2019 and moved into the role of Emergency Preparedness Specialist in 2020. In those roles, Jake was responsible for planning and preparedness for incidents involving the Limerick Generating Station for Montgomery County and over twenty municipalities and supporting agencies. Jake holds an associate degree from Montgomery County Community College and a bachelor's degree in fire science and public safety administration from Holy Family University. He is currently pursuing a master's degree in emergency services management from Columbia Southern University. Jake also has twelve years in the volunteer fire service where he has held various administrative and operational roles.

Jason R. Wilson – Deputy Director for Emergency Management, Montgomery County Department of Public Safety. Jason Wilson is currently Deputy Director of Emergency Management with the Montgomery County Department of Public Safety. As Deputy Director, Jason Wilson is responsible for managing the day-to-day duties of Division of Emergency Management staff and is responsible for maintaining the readiness the Montgomery County Emergency Operations Plan and Emergency Operations Center. Prior to his appointment as Deputy Director for Emergency Management, Jason served as a Municipal Planning Specialist and Radiological Specialist within the Division of Emergency Management. Jason holds an Associates of Arts in Fire Science from the Montgomery County Community College and a Bachelor of Arts in Public Safety Administration from Holy Family University. Jason has participated in 9 Plume Exposure Pathway exercises, two of which were Hostile Action Based exercises and 1 50-Mile Ingestion Zone exercise.

Sara Schmidt, Constellation Senior Emergency Preparedness Specialist. Sara Schmidt is a Senior Emergency Preparedness Specialist with Constellation. She is the offsite coordinator for Constellation's nuclear power plants in Pennsylvania and Maryland. In this role, Sara provides

interface and coordination between offsite agencies, including federal, state, and local emergency management partners, and the onsite emergency preparedness program. Sara has a Master of Science in Emergency Management and a Bachelor of Arts in Anthropology and Political Affairs from Millersville University.

Session 25: 21st Century Agricultural Response

Abstract:

Since the inception of the REP Program, there have been substantial changes in modern agricultural production practices across many sectors.

This session will provide an overview of:

· Developing an initial agricultural control zone (ACZ) that reflects both data and modern agricultural production practices.

· Accounting for producer protective actions during the ACZ identification and management

· Continued agricultural testing and management or soil mitigations.

· Utilizing agricultural movement permits in radiological incidents, mirroring the millions of permits issued by USDA and States that allow movement of known safe products during animal disease response.

· Building communication and trust with agricultural industry and managing agricultural trade impacts, both domestic and international.

· Crisis communication for the food and agricultural sector that relies on science, transparency, and effective messaging. This process will be challenging, addressing rumors, intentional disinformation, and public anxiety about food safety.

Identifying the initial agricultural area of concern after a radiological incident requires sampling data, aerial data, and agricultural data. Agricultural data includes the type and location of production, management practices, protective actions implemented by producers, and the potential application of soil or management mitigations. The process is anything but simple and, with effective protective measures or mitigations in place, many producers may be able to resume safe production. The speakers will endorse a re-examination of how our nation approaches planning, exercises, and response to the agricultural impacts of radiological incidents.

Speaker Biographies:

Dr. Kevin Dennison graduated from Colorado State University with a BS in 1977 and Doctorate in Veterinary Medicine in 1980. Dr. Dennison worked in private mixed practice in Colorado for over 20 years before working on animal emergency management and biodefense issues in Colorado for 5 years. In 2008, Dr. Dennison joined the national emergency management staff at USDA Animal and Plant Health Inspection Service. Since 2011, Dr. Dennison has also served on the Advisory Team for

Environment, Food, and Health, a multiagency Federal team from CDC, EPA, FDA. and USDA, that provides protective action recommendations in nuclear or radiological incidents and exercises. Dr. Dennison and his wife live on a small ranch near Fort Collins, Colorado.

Brennen Brunner is the radiological emergency planner working for the New Hampshire Department of Health and Human Services, member of the FRMAC Assessment Working Group, and advisor to the CRCPD HS/ER-5 Committee on Emergency Response. Formerly employed by Minnesota Homeland Security and Emergency Management, he was the lead state planner for Northern Lights 2016 consequence management exercise.

Session 26: Ready…Set…Super-Spokesperson

Abstract:

Eric Singer and Don Hanscom will present a two-hour workshop to share the latest best practices and real-world examples so you can become the spokesperson you want to be for your agency. New message mapping fundamentals and on-camera interview practice will be among the hands-on exercises that keep you fresh with good spokesperson habits and help you rein in any bad habits that may hinder your messaging during crisis communications. Conducted in a supportive environment, for new and experienced communicators alike.

Speaker Biographies:

Eric Singer is an Emergency Management Communication Specialist with the Argonne National Laboratory Risk & Crisis Communication Program. He is a popular instructor with Argonne's Public Affairs Science and Technology (PAST) Fusion Academy. He is part of a team that helps provide public affairs training, exercise support, product development, and technical assistance for government, non-profit, private sector, and international organizations. He has been with Argonne since 2014. Prior to his career as a full-time PAST Fusion Academy instructor and being part of preparedness exercises to train and evaluate emergency public information, he had more than 30 years as an award-winning all-platform journalist in radio, television, print, and online.

Session 27: NNSA Nuclear Emergency Support Team (NEST) Live Radiological Drills Overview and Lessons Learned

Abstract:

In the summer of 2023, three live-radiological Consequence Management-focused drills were conducted by Department of Energy Nuclear Emergency Support Team (NEST) assets to exercise their ability to respond to incidents involving dispersed radiological materials. These events were unique in that real radionuclides were released in outdoor and indoor environments to simulate a real nuclear incident response. Teams had the opportunity to conduct measuring and sampling activities in personal protective equipment in challenging environments and process their personnel, equipment, and samples through a radiological control hotline. Samples collected were analyzed by the CM Fly Away Laboratory and the data was processed for review by assessment scientists. This presentation will give an overview of these exercises as well as the capabilities at the Idaho National Laboratory Radiological Response Training Range and the Texas A&M University Disaster City for conducting these live-radiological exercises. An overview of the CM sampling and measuring process, the radiological sample control hotline and check-in process, and lessons learned during the exercise will also be presented. A radiological control hotline will be set up and the processes for sample collection and hotline check-in will be demonstrated. Attendees will be given the opportunity to ask questions to the NEST responders who planned and conducted these exercises to help improve State, Local, Tribal, Territorial, and Federal responder training programs. SNL is managed and operated by NTESS under DOE NNSA contract DE-NA0003525

Speaker Biographies:

Sean Fournier is a nuclear engineer in the Sandia National Laboratories Nuclear Incident Response Program (NIRP). He received his MS in Nuclear Engineering from the University of New Mexico in 2018. Sean started his career in 2010 working in the radiochemistry laboratory at Sandia. Sean has participated in several inter-agency working groups on nuclear incident response preparedness; most notably, the Department of Energy's Federal Radiological Monitoring and Assessment Center (FRMAC) Laboratory Analysis Working Group. This group is responsible for determining the methods, procedures, and training for sample control and analysis during a national-scale nuclear emergency. Sean is the current skillset leader for the Consequence Management Laboratory Analysis Unit and works toward maintaining readiness of the responders and the technology used by the team.

Dr. Craig Marianno is an Associate Professor in the Department of Nuclear Engineering at Texas A&M University and the Deputy Director for the Center of Nuclear Security Science and Policy Initiatives (NSSPI). He graduated with his Ph.D. in Radiation Health Physics from Oregon State University in 2000. He is also a certified health physicist with the American Academy of Health Physics. Prior to

coming to Texas A&M Dr. Marianno spent 9 years as a contractor for the National Nuclear Security Administration (NNSA) at the Remote Sensing Laboratory (RSL)where he served on many of the administration's emergency response teams. In 2009 he joined NSSPI as a researcher and in 2016 became a tenure-track faculty member in the Department of Nuclear Energy. His research team at Texas A&M focuses on emergency response health physics, radiation detection and nuclear security. He teaches courses in radiation detection, nuclear nonproliferation, health physics and nuclear security.

David Farrar, CHP is a health physicist in the Sandia National Laboratories Nuclear Incident Response Program (NIRP), team scientist in Region 4 of the Department of Energy's Radiological Assistance Program, and PhD student in the University of Texas at Austin. He received his MS in Health Physics from Colorado State University in 2007 and MS in Statistics from University of New Mexico in 2017. In addition to radiological/nuclear emergency response, David's career has included work in external and internal dosimetry, operational health physics, and environmental health physics and decommissioning.

David H. Egbert is a Radiological Assistance Program (RAP) Training and Outreach Coordinator. He has 36 years of experience in the Health Physics Field. Enjoy providing training to personnel in On-The-Job training environments. Develop training programs for RAP by performing analysis, design, development, implementation, and evaluation. Currently serves as committee Chairperson on the RAP National Training Program committee with responsibilities for developing and maintaining the RAP National Training Plan program. Achieved a Certificate of Applied Science in Radiation Safety/Health Physics, Eastern Idaho Vocational Technical School 1986. Completed an associate degree in art and sciences, RICKS College 1991. Began working at Hanford N Reactor in 1986 as a Health Physics Technician. While at Hanford moved into positions of Senior Health Physics Technician, Health Physics On-The-Job Trainer/Analyst, Emergency Preparedness Exercise Specialist, and Radiological Assistance Program Training Coordinator. Resides in Idaho Falls Idaho, and work at INL in the RAP organization.

Session 28: Readability and Accuracy of DRDs at Low Doses of Radiation

Abstract:

The 2019 REP program manual suggests that offsite response organizations provide emergency workers (EWs) with two direct reading dosimeters (DRDs): a low range and a high range. This recommendation is based on the observation that higher-range dosimeters, like those reading 0-5R or 0-20R, might not show changes at the 500mR dose level. There's concern that such dosimeters might lead a responder to receive their maximum allowed dose of 5 rem before noticing any accumulated dose. This risk arises from applying correction factors, often around 5 times, to account for internal doses. In contrast, lower-range DRDs, which are believed to reflect lower doses more accurately, might max out before reaching the dose limit. Thus, the two-dosimeter approach is suggested. However, there are limited scientific data about high-range DRDs' capability to detect and display doses at the lower end of their scales. Furthermore, few studies gauge how well emergency workers can spot minute changes below the 1R level on high-range DRDs.

Our study assesses the response of high-range pencil dosimeters and their readability, especially for responders unfamiliar with radiation environments. Issuing two DRDs might be challenging operationally; emergency workers could face confusion about which to read or report, potentially adding to the stress of their tasks.

In this follow-up presentation from one made at NREP in 2023, we'll present data gathered from the general public, representing emergency workers at a NPP incident. These participants were tasked with reading high-range DRDs exposed to low radiation doses to assess their ability to accurately read each dosimeter at low exposures (below 1R).

Speaker Biographies:

Angela Leek, CHP, joined SummitET as the Director of Radiological Solutions and Regulatory Affairs after working 16 years in Iowa's radiation control program. In Iowa, she was responsible for all radiological programs and technical aspects of emergency response. At SummitET she is building a program to provide technical support solutions for state programs. She was recently the Chairperson for the Conference of Radiation Control Program Directors (CRCPD) and is a Director member of the Health Physics Society Board. Angela also supports the Radiological Operations Support Specialist Program (ROSS) and has developed and delivered over 100 trainings on radiation protection, regulatory program perspectives, and emergency response. Angela has been involved in radiation protection for over 25 years and is certified by the American Board of Health Physics. She earned her master's in Radiation Health Physics from Oregon State University and is finishing Ph.D. at Iowa State University in December 2023.

Scott Wendt has been a technical reviewer, trusted agent and controller for Iowa's REP Program since 2017 at Iowa State University (ISU). He has BS and MS degrees in Nuclear Engineering, and worked at Point Beach nuclear power in Wisconsin and Bettis Atomic Power Laboratory (near Pittsburgh) before becoming the reactor manager and senior reactor operator for ISU's NRC licensed research reactor. Scott directed the final years of reactor operations, defueling and oversaw the decommissioning. After transitioning to the CNDE engineering research center at ISU, Scott spent 15 years performing high-precision x-ray experiments necessary for the development and validation of computer model simulations in x-ray imaging. These computer simulations accurately modelled the physics for the full x-ray system from: electron acceleration, to Bremsstrahlung x-ray generation, included x-ray interactions in complex CAD parts, with Compton scattering, and the final deposition of the x-ray energy in various imaging detectors.

Session 29a: INPO Unveiled: Guardians of Nuclear Excellence

Abstract:

INPO is the organization charged with promoting excellence in the operation of commercial nuclear power plants. This session will peak behind the curtain and provide insight to the inter-workings of this organization.

Speaker Biographies:

Rick Doremus – INPO

Session 30: Did we pass the T.E.S.T.? Evaluating the Effectiveness and Acceptability of Games as Exercises for Radiation Emergencies

Abstract:

This is a T.E.S.T. (Tabletop Exercise Simulation Tool was developed by the Centers for Disease Control and Prevention (CDC) using cooperative board game methodology to create an engaging Homeland Security Exercise and Evaluation Program (HSEEP) aligned exercise format that brings all radiation response staff together to promote rapid decision making, staff training and identification of planning gaps. In 2022 CDC developed This is a T.E.S.T. CRC (Community Reception Center) Edition during a radiation emergency was developed for Austin Public Health officials to assist with exercising and building their CRC plans during a national level exercise. CDC continued piloting the game throughout the country and to perform an extensive evaluation to look at the effectiveness of This is a T.E.S.T. game as a training and exercise tool and its acceptability compared to other more traditional exercise formats, such as tabletops.

Findings from the post-game play surveys show a that approximately 90 percent of players who fill out the survey felt that they were able to identify appropriate actions to take during a response and gaps in their current plans. Most participants surveyed have agreed that they felt the game format was more engaging than a traditional tabletop exercise and that they felt more comfortable going into a functional or full-scale exercise.

Participants in this session will be provided with an overview of the methods used to design, build, facilitate and evaluate the game as well as be given an opportunity to play it themselves.

Speaker Biographies:

Lauren Finklea is a health physicist in the Emergency Management, Radiation and Chemical Branch (EMRCB) within the National Center for Environmental Health (NCEH) at the Centers for Disease Control and Prevention (CDC). Ms. Finklea serves as a subject matter expert for emergency preparedness and response activities and computational modeling for radiation protection. She is the lead subject matter expert for Community Reception Centers (CRCs) and the creator of SimPLER, a software to assist states with planning and visualizing gaps in their response plans. Ms. Finklea also developed a HSEEP-aligned board game exercise, This is a T.E.S.T., for training and exercising CRCs. This game has won numerous awards, including most innovative communication tool in 2023.
She received her B.S. and M.S. degrees in Nuclear and Radiological Engineering from Georgia Institute of Technology in Atlanta, Georgia and will graduate with her doctorate in Public Health at Georgia State University in May 2024.

Session 31: Overview of DOE/Office of Secure Transportation

Abstract:

The mission of the DOE Office of Secure Transportation is to provide safe and secure transportation of nuclear weapons, nuclear weapon components, and special nuclear materials in support of the national security of the United States of America.
This presentation will be an overview of OST capabilities, safeguards, operations, and emergency response. During the briefing we will discuss the possible role of federal, state, local and tribe responders in an OST operational emergency.

Speaker Biographies:

Charles "Chuck" Miller is the Liaison Outreach Program Manager for OST. He has been with OST since 2008 and was previously assigned as a Lead Federal Agent (Convoy Commander) at Agent Operations Eastern Command. While at OST, Charles has executed the responsibilities as a Designated Marksman, Special Response Force Team member, Firearms Instructor and Drive Instructor. Prior to Charles joining OST he served as a Deputy Sherriff with the Hamilton Co. Sheriff's Office (TN) as well as a Patrolman with East Ridge Police Dept. (TN). His duties included SWAT and Field Training Officer.

Session 32: 2023 RPM Update

Abstract:

The FEMA Radiological Emergency Preparedness (REP) Program Manual 2023 update will be published in December 2023. This workshop will provide a thorough overview of the changes and identify key points of clarification. The workshop setting will allow the opportunity for a more detailed discussion on the rationale for changes made to the RPM than in traditional update briefings. The workshop will also allow time to present specific points of clarification on guidance topics that have been a source of confusion in recent past.

Speaker Biographies:

Nan Williams has over 20 years of experience in radiological emergency planning and preparedness. Nan currently serves as the FEMA THD Policy Section Chief. Prior to joining THD, Nan served as the FEMA Region 6 Regional Assistance Committee (RAC) Chair and Senior Site Specialist for nearly 13 years. During her tenure at FEMA Region 6, Nan served on multiple national policy working groups including the NUREG0654/FEMA-REP-1, Rev. 2 writing team and the REP Program Manual revision team. Before coming to FEMA, Nan worked for the State of Louisiana Department of Environmental Quality in the Radiological Emergency Preparedness and Planning Unit for nearly 10 years.

Session 33: VISTA FORGE ATL: It Takes a Village to Prepare for Animal Decontamination Operations

Abstract:

Preparing for animal decontamination operations in a high consequence incident takes tremendous planning and logistical preparations—IT TAKES A VILLAGE! Multi-year planning allowed for the successful implementation of animal decontamination operations commanded by the Georgia Department of Agriculture during VISTA FORGE ATL, a national level exercise, hosted by Atlanta Fulton County EMA and US Northern Command (NORTHCOM). This discussion will walk you through the planning process, operational training, and logistical preparations to successfully conduct animal decontamination operations with a multi-agency staffed Animal Decontamination Branch. An Animal Decontamination Workgroup directed interagency planning, logistics (supplies and equipment acquisition), and operational guidance that led to two animal decontamination drills, a PIO Workshop, and the successful Joint Animal decontamination operations utilizing the US Marine Corps CBIRF and State Task Force during a full-scale exercise conducted on November 3-4, 2022 that included 10 Federal, 28 local/state, 5 sponsoring organizations representing 650+ participants. This inaugural effort has led to standardized practices that are being replicated in other jurisdictions. Come learn how to implement animal decontamination operations in your home jurisdiction and how to build relationships with state, federal, and local partners and the veterinary medical community who play a critical role in providing these operations.

Speaker Biographies:

Venessa A. Sims, MEP, GA-CEM is the Director of Emergency Management and Asst. Food and Feed Rapid Response Team (GA RRT) Program Manager for the Georgia Department of Agriculture. She supports emergency management and homeland security duties for the food and agriculture sector in Georgia. Venessa is the Georgia representative for the Southern Animal and Agriculture Disaster Response Alliance (SAADRA) and served as the Past Board President and a current Board Member for the National Alliance of State Animal and Agriculture Emergency Programs (NASAAEP) and the Heritage Emergency Response Alliance (HERA). Venessa is the Emergency Support Function (ESF) 11 Coordinator for the state of Georgia and coordinates response activities at the State Operations Center (SOC) for ESF 11 during activations, ESF 11 planning, coordination, and exercise support activities, and ESF 11 recovery endeavors. She was the VISTA FORGE-ATL FSE Unified Commander and on the Planning Committee for animal decontamination operations.

Session 34: Decontamination of Companion Animals in Disaster and Radiological Emergencies: Key Components and New Considerations

Abstract:

Emergencies and disasters result in an increased risk for the release of harmful materials into the environment. Inadvertent or accidental releases pose a threat to the health and well-being of resident animals and animals participating in search and rescue efforts and require that animal decontamination be a component of the incident response. While decontamination protocols and methods are well defined for human victims of hazardous exposures, there are knowledge gaps in the current literature that specifically address animal decontamination. This session, through didactic lecture and audience discussion, will provide an enhanced understanding of the challenges associated with decontaminating animals to include important considerations for ensuring both animal and responder safety while performing decontamination.

Speaker Biographies:

Dr. Deb Zoran is a founding member and the second Director of the Texas A&M Veterinary Emergency Team (VET). Her DVM was awarded in 1984 from Kansas State University, followed by a PhD in nutrition from Texas A&M, where she rose to Professor and taught small animal medicine for 20 years. Since joining VET in 2009, she has been on over 25 deployments to multiple types of disasters in Texas and beyond, including wildfires in California and hurricanes in Louisiana and Florida. She helped develop and has been a lead instructor for the required clinical rotation in Veterinary Emergency Management to 4th year veterinary students (the only such rotation in the US). She is also a member of Texas A&M Task Force as veterinary support for the working canines and serves on the FEMA Incident Support Team as a Veterinary Specialist in support of working canines deployed to national disasters.

Session 35: Everything You Wanted to Know About PARs but were Afraid to Ask

Abstract:

This workshop will enhance participant understanding of onsite and offsite protective action recommendations (PARs) for radiological emergencies around commercial nuclear power plants. Training will be provided on the technical basis for PARs including an overview of historical and state-of-the-art consequence analyses, key research studies on protective actions, insights into the radiological and nonradiological risks, and how source term information informed protective action guides (PAGs), and dose projection models. The workshop will also focus on how protective action strategies use PAGs and plant conditions to determine when and where to recommend the public evacuate or shelter. Participants will reinforce their learning through tabletop exercises. The workshop will conclude with a group discussion on how participants can apply what they learned on PAR decision-making.

Speaker Biographies:

Ken Evans has over 43 years in Emergency Planning, having recently retired as the head of the Radiological Emergency Assessment Center for the Illinois Emergency Management Agency. In this capacity Ken was responsible for coordinating scenario development for the offsite organizations by working closely with the nuclear utility. Ken also was responsible for providing training to the Radiological Task Force at IEMA and reviewing Federal documents related to Emergency Planning. Ken has been involved with the CRCPD HS/ER-5 Committee on Emergency Response Planning since 2009 and became chair of the committee in 2013. Prior to joining Illinois Emergency Management Agency in 2002 Ken was employed by the Clinton Power Station for 18 years with responsibilities in all areas of onsite Emergency Planning including scenario development, training and dose modeling, and implementation of the Severe Accident Management Guidelines. Ken started his career as a Health Physicist for the Arkansas Department of Health and moved to the Tennessee Valley Authority one year after TMI to help develop their Emergency Plans.

Todd Smith is the Senior Level Advisor for Emergency Preparedness and Response at the US NRC. He graduated from Purdue University with a MS and PhD in Nuclear Engineering, specializing in thermal-hydraulics and reactor safety, and holds a MS in Radiation Health Physics from Oregon State University.

Session 36: Journey to REPP Academy

Abstract:

This session provides an insightful exploration of the transformative power of the Design Thinking and User Experience (UX) model to produce a digital roadmap for the REP Community. By empathizing with beginner's mindset, leveraging institutional knowledge and the exchange of best practices, the result is the creation of a practical, authentic digital solution known as the REPP Academy. At its core, the REPP Academy prioritizes the sensible retrieval of accurate information through a user-centric approach, fostering meaningful connections among REP professionals. The foundation of this digital community of practice lies in its ability to offer swift access to information, thereby supporting practitioners in navigating competing priorities, daily operational demands, and rigorous REP programmatic requirements. This session underscores how listening to the needs of individuals contribute to program enhancement, ensuring increased effectiveness and efficiency within the REP program.

Speaker Biographies:

Chris Bellone is a seasoned professional with over 25 years of experience in emergency management and healthcare. Since 2013, he has been a training specialist in FEMA's Technological Hazards Division, Radiological Emergency Preparedness headquarters training unit. In this role, he manages the REP Exercise Evaluator and Controller Course. Mr. Bellone's FEMA journey began in 2009 when he served as the REP training specialist within FEMA Region V. His professional goal is to enhance learning outcomes for the State, Local, Tribal, and Territorial (SLTT) as well as Federal emergency management workforce. He achieves this by leading and creating authentic, practical, and engaging technology-based learning ecosystems. Chris is a Certified Emergency Manager (CEM®). He earned a Bachelor of Arts in Management with a concentration in leadership from American Military University and a Master's in Learning Design and Technology, including an e-learning certificate, from George Mason University.

Session 37: Animal Decontamination Demonstration

Abstract:

The Texas A&M Veterinary Emergency Team (VET) mobile response unit will demonstrate animal decontamination emergency response operations. Radiological Emergency Response Team members from the Texas Department of State Health Services (DSHS) Radiation Program will support VET radiological monitoring and contamination control measures during the demonstration.

Session 38: DOE and CDC Updates

Abstract:

As part of the Federal Updates panel, the DOE and CDC will provide an update on activities pertinent to the REP community.

Session 39: EPA, FEMA and NRC Updates

Abstract:

As part of the Federal Updates panel, the EPA and FEMA will provide an update on activities pertinent to the REP community. As part of the Federal Updates panel, the NRC will provide an update on regulatory activities in the areas of rulemaking, licensing, oversight, and incident response.

Session 40: Decoding the Response: Leveraging Mental Models in Radiological Emergencies

Abstract:

Imagine standing at the precipice of a radiological emergency—where the knowledge you hold and the myths you believe could spell the difference between control and catastrophe. This is where our recent research kicks in, revealing a reality that isn't surprising to most who have been in the field for a while: the mental model of emergency responders, their grasp on radiation and risk, can have a significant impact on how they respond. Those who have confidence in their training and in the leaders directing them more effectively executed expected response procedures. But there's a catch: if they have the wrong idea about the risks of radiation—for example, thinking that a 25-rem dose is more dangerous than it actually is—their performance takes a hit.

It's time to take a close look at what misconceptions our current approach to training may be subtly reinforcing. Ask yourself: Are the myths of radiation fully dispelled in your training? Is your own knowledge influenced by ingrained fallacies? Using insights from this recent study and a tool called the EMMS Diagnostic Matrix, we're set to reshape our understanding of emergency response behavior. But knowing is only half the battle; the real challenge lies in applying this knowledge to develop more effective training methods, perhaps through virtual reality experiences, and then evaluating their effectiveness. This session is more than a presentation—it's an invitation to learn how we can use innovative approaches to improve our understanding of responders' training needs and our collective approach to radiological risk perception.

Speaker Biographies:

Angela Leek, CHP, joined SummitET as the Director of Radiological Solutions and Regulatory Affairs after working 16 years in Iowa's radiation control program. In Iowa, she was responsible for all radiological programs and technical aspects of emergency response. At SummitET she is building a program to provide technical support solutions for state programs. She was recently the Chairperson for the Conference of Radiation Control Program Directors (CRCPD) and is a Director member of the Health Physics Society Board. Angela also supports the Radiological Operations Support Specialist Program (ROSS) and has developed and delivered over 100 trainings on radiation protection, regulatory program perspectives, and emergency response. Angela has been involved in radiation protection for over 25 years and is certified by the American Board of Health Physics. She earned her master's in Radiation Health Physics from Oregon State University and is finishing Ph.D. at Iowa State University in December 2023.

Session 41: NEI and CRCPD Updates

<u>Abstract:</u>

NEI and CRCPD will provide an update on activities pertinent to the REP community.

Session 42: Making Magic: Lessons on Creativity

Abstract:

Uncover the secrets of creative leadership with Leadership and Innovation Specialist, Cecilia Ragland-Loment. Learn how to inspire innovation and lead with unparalleled vision. Don't miss the chance to ignite change and unleash your leadership magic. Join us and leave ready to make your mark!

Speaker Biographies:

Cecilia Ragland-Loment has been with Texas Health and Human Services for nearly 14 years. She has been in her current position as a Leadership and Innovation Specialist for nearly 4 years. Cecilia's experience lies at the intersection of empowering people and fostering creativity. By tapping into her extensive knowledge of leadership principles, employee development, and group dynamics. Her dedication to innovation goes beyond theory; she navigates the complexities of the ever-evolving modern workplace by using cutting-edge presentation and development techniques, alongside best practices in instructional design and curriculum development. Cecilia is skilled in problem identification and resolution, as well as effective verbal and written communication, which have greatly contributed to the success of numerous development programs.