

IACUC	
IBC	
IRB  BIOSECURITY   RA	
RI   COMPLIANCE REGULATORY	

# **Three I's: Biosecurity and Research Integrity**<sup>TM</sup>: *Promoting the Responsible Conduct of Research, Partnership, Ethics, Best Practices and the Exploration of Current Trends*

### Day 3 WEDNESDAY APRIL 26, 2023

7:30 AM - 9:00 AM

9:05 AM - 9:50 AM

9:00 AM

GRAB Breakfast & YOUR FAVORITE AM BEVERAGE ... NETWORK|SPONSORS! WELCOME TO OUR FINAL DAY!

# THREE I's SESSION

INVESTIGATING THE FUNCTIONS OF VIRAL PROTEINS IN SARS-COV-2 PATHOGENESIS

**CONFERENCE AGENDA** 

## MOHSAN SAEED, PhD

ASSISTANT PROFESSOR, BIOCHEMISTRY BOSTON UNIVERSITY CHOBANIAN AND AVEDISIAN SCHOOL OF MEDICINE INVESTIGATOR, NATIONAL EMERGING INFECTIOUS DISEASES LABORATORIES (NEIDL)

#### **MORNING BREAKOUTS** 9:55 AM - 10:55 AM IBC ALL IS | Biosecurity | RI | RA IACUC **COMPLEXITIES OF RESEARCH** SIGNING CONTAINMENT USDA UPDATE DATA SHARING IN THE AGE OF LEVELS TO GENETICALLY NSPM-33 **MODIFIED PLANTS AND** DR KRISTIN NAPOLI **PLANT PATHOGENS IN KELÉ PIPER, DIRECTOR** SUPERVISORY ANIMAL CARE RESEARCH **RESEARCH COMPLIANCE**, SPECIALIST MASSACHUSETTS GENERAL USDA **DEBORAH HOWARD** HOSPITAL EXPERT, GLOBAL EHS **BIOLOGICAL MATERIALS** LINDSEY L SPANGLER, JD MANAGER ASSOCIATE DEAN, RESEARCH BASF INTEGRITY DUKE UNIVERSITY Plant research is the backbone of both genetically modified, disease resistance and breeding With the issuance of NSPM-33 of both academic and Implementation Guidance in January 2022, federal funding biotechnology research. Currently there are no published agencies and research institutions resources to help Biosafety have been working to increase Managers and Institutional their research security. As part of Biosafety Committees assign this effort, changes in policies and containment levels to genetically processes related to data sharing modified plants and plant have been put into place to comply pathogens in the R&D pipeline. with the new and expected This session will provide guidance requirements of NSPM-33. These in determining containment changes are in addition to the

determine containment levels will be used. processes institutions ha implemented to secure a research data and syster departing researchers ar collaborators.	and ve ccess to ns by			
10:55 AM – 11:05 AM REFRESH				
11:05 AM – 12:15 PM BREAKOUTS				
SPOT THE ISSUES IACUC, IBC, RA	& RI			
KATHRYN A HOLTHAUS, MS, MAESENTIALS OF INSTITDIRECTOR OF RESEARCH SUBJECTS PROTECTION AND LABORATORY SAFETY COMPLIANCE RESEARCH OPERATIONS BRIGHAM & WOMEN'S HOSPITALSTACY PRIT, DVM, MDIRECTOR OF RESEARCH OPERATIONS BRIGHAM & WOMEN'S HOSPITALSTACY PRIT, DVM, MCPIA, CHEC, ECOP (EAR Associate Vice PRESIDENT FOR RESEARCH ADMINISTRATION OFFICE OF SPONSORED PROJECTS   OFFICE OF RESEARCH UNIVERSITY OF RHODE ISLANDSuspan K Regula Management Medical Center UNIVERSITY OF RHODE ISLANDCHEMICAL BIOLOGICAL COUNTERMEASURES UNIT/WIMDD FBI HEADQUARTERSWhile not required by ar regulation, institutional interest (ICOI) programs committees are seen as mitigate human subjects research and avoid repu harm. Even though the a admintenance of such is typically viewed as oph and maintenance of such is typically viewed as oph and maintenance of such is typically viewed as oph adminestitutions with very lar research and avoid repu harm. Even though the conc alaso be a discussion 	REST S, MBA, ), DACAW , Research tory ychiatry ) hwestern y federal conflict of and a way to risk in ational creation programs ional, t robust cular s and ge human ept of COI, e of the of ICOI there will of best urrent s. Finally, n will be eview of			
	LUNCH			

1:05 PM – 1:50 PM	THREE I's				
	FBI   TBA				
1:55 PM – 2:40 PM	BREAKOUTS				
	IACUC IBC BIOSECURITY	IBC IRB	COMPLIANCE		
	DIPHTHERIA TOXIN POLICY: A STRATIFIED RISK ASSESSMENT APPROACH TO ENSURING WORKER SAFETY WITH A COMMONLY USED MOLECULAR BIOLOGY TOOL MARY BROCK SAFETY & HEALTH SPECIALIST DUKE UNIVERSITY DIphtheria toxin (DT) is an important tool in laboratory and animal research. DT can be used to target specific cells in transgenic mice engineered to express DT receptors on the surface. High concentrations of DT are necessary for this process and it presents a great risk to the workers performing these tasks, especially when using sharps to inject DT into mice. Humans are very susceptible to DT. Based on studies in mice, the estimated human LD50 is less than 100 ng/kg by IM injection. After a potential needle stick exposure, a thorough risk assessment was implemented to study the risks for those who handle DT. After extensive collaboration with physicians from Duke Employee Occupational Health and Wellness (EOHW) and a review of existing references, we stratified the control strategies into high-risk and standard-risk research activities, with the highest risk involving work with needles and high concentrations of DT. These activities and necessary requirements were clearly defined in the Duke Diphtheria Toxin Policy. A designation in the Safety Management System (SMS) tracks the users and provides automatic annual	SUITABILITY AND PERSONNEL RELIABILITY: KEEPING AN EYE ANGELA C BIRNBAUM DIRECTOR OF BIOSAFETY TULANE UNIVERSITY	<section-header></section-header>		

	email reminders for compliance with the ongoing health requirements. Since implementing the policy, 39 Principal Investigators and over 80 sub-researchers have been enrolled under this policy. Personnel are added to this policy through a review of institutional animal care and use protocols, laboratory safety evaluations, and institutional biosafety committee recombinant DNA/viral vector registrations. Lessons learned and challenges in the implementation and maintenance of the requirements, such as lab worker turnover or changes in assigned duties, updates to the SMS designations, maintaining changes to SOPs and animal protocols, will be discussed.				
2:45 PM – 2:55 PM	BREAK				
3:00 PM – 3:45 PM	THREE I's SESSION				
	ACTIVISM EXTREMISM FBI WMD  BioSecurity				
3:50 PM – 4:00 PM	EVALUATIONS & CLOSING REMARKS SEE YOU MAY 2024 at THE SHERATON PORTSMOUTH, NH!				