IACUC | THREE I's	
IBC	
IRB| BIOSECURITY | RA	
RI | COMPLIANCE REGULATORY	

THREE I's: and RESEARCH INTEGRITY™: COMPLIANCE, ETHICS and BIOSECURITY … Building Resilience

Day 4 **THURSDAY, APRIL 30, 2026**   **DRAFT CONFERENCE AGENDA**

10:00 AM – 10:45 AM	**THREE I's SESSION**	
	CREATING 3RS CHANGE THROUGH SCIENTIFICALLY SUPPORTED METHODS This session explores how the Theory of Planned Behavior (TPB) can be used as a practical, evidence-based framework to drive meaningful 3Rs (Replacement, Reduction, and Refinement) improvements in scientific research. By examining the key components of TPB (attitudes, subjective norms, and perceived behavioral control) the session will illustrate how each factor influences decisions and behaviors around adopting 3Rs practices. Participants will learn how to use this theory to create 3Rs changes using real-world examples and strategies in action. **MEGAN LA FOLLETTE, PhD** EXECUTIVE DIRECTOR THE 3RS COLLABORATIVE	
10:50 AM – 11:00 AM	**BREAK**	
11:00 AM – 11:40 PM		
	RISK ASSESSMENTS FOR IBC PROTOCOLS **JAMES W. KLENNER, MSC, MPH, MPA, RBP, CBSP** ASSOCIATE DIRECTOR OFFICE OF RESEARCH INTEGRITY BIOSAFETY OFFICER BALL STATE UNIVERSITY Risk assessments are not always straightforward and this presentation will describe aspects that can affect a risk assessment determination and the assignment of appropriate biocontainment. The presented examples may help participants with future reviews of IBC submissions.	**TBA** **ELIZABETH J. MCEVOY** MEMBER OF THE FIRM EPSTEIN BECKER GREEN
11:45 AM - 12:30 PM		

		IRB | COMPLIANCE	**COMPLIANCE**
		HARNESSING AI AND LLMS FOR SMARTER IRB ADMINISTRATION: PRACTICAL STRATEGIES, PITFALLS, AND PATHWAYS TO COLLABORATION	**LEVERAGING ANDRAGOGICAL STRATEGIES IN RESEARCH INTEGRITY COMPLIANCE EDUCATION**
		TOM BECHERT, SENIOR DIRECTOR, HURON CONSULTING GROUP	**SARA FLOWERS, PhD MeRTEC**
		This session explores how Artificial Intelligence, especially Large Language Models (LLMs), can transform IRB administration and compliance. Attendees will learn practical approaches for integrating AI into IRB workflows, including investigator support, process automation, and decision-making. We'll discuss key limitations—such as bias and data privacy—and highlight the importance of process optimization and human oversight. The session emphasizes collaboration across compliance committees to reduce redundancies and improve research integrity. Educational Goals: Build foundational understanding of AI and LLMs in IRB operations. Identify practical strategies for responsible AI adoption and process improvement. Promote interdisciplinary collaboration to enhance compliance and ethics.	Mandatory training is an inevitability in many professional fields and we know both anecdotally and from research that the effectiveness of these learning sessions is questionable. Using principles from adult learning theory as well as Understanding by Design (UbD)--backwards planning--these learning experiences can be clearer, targeted, and more effective on the critical topics of research integrity compliance education. The session will cover the assumptions of adult learning, instructional planning, and alignment to the standards of training mandates.
12:30 PM – 1:00 PM	**LUNCH**		
1:00 PM – 1:45 PM			

RI | ETHICS

EVALUATING THE IMPACT OF A METACOGNITIVE STEM ETHICS CURRICULUM

ROBERT BRUCE THOMPSON, MA, PHD,
ROSS HICKEY, JD, CIP, CPIA
CAROL NEMEROFF, PhD

Contemporary research on STEM ethics has firmly established that conventional approaches to ethics education and regulatory compliance, which primarily focus on rule knowledge and awareness of sanctions and penalties, is necessary but not sufficient for establishing cultures of compliance. This presentation will report on the ongoing data collection for an NSF study (NSF#22-526) exploring the efficacy of a metacognitive STEM ethics curriculum designed to increase students' ability to critically evaluate their own biases and aspects of heuristic reasoning when faced with ethically complex decisions. Our approach uses an experimental design with control and intervention groups. The experimental intervention involves intensive training in cognitive neuroscience and psychological foundations for poor decision-making and lapses in ethical reasoning. Fictional case scenarios are used that are structured to have tiers of moral reasoning using Kohlberg's classic developmental stages.

Our assessments included instruments for self-regulation (Applied Mindfulness), executive function (BRIEF-A), and metacognitive awareness. Ethical reasoning was evaluated using case scenarios adapted from the Engineering and Science Issues Test (ESIT) to map onto Kohlberg's developmental levels.

We also developed a new behavioral outcome measure that avoids deception, something common in psychology and highly criticized. Participants took part in the "Ethics Quiz Game," competing for money. They were informed of an honor system but made aware that they could cheat by looking at an answer key. A second behavioral measure

			provided an opportunity for participants to "sell out" their team member by withdrawing their earned points to cash out individual winnings, knowingly preventing their team from winning.

Initial findings demonstrated that metacognitive self-regulation significantly predicts advanced, post-conventional ethical reasoning. Our behavioral challenge yielded promising results:
Cheating: Almost 60% of control group participants cheated for a cash prize, compared to under 35% of students who received the Metacognitive Ethics curriculum.
Loyalty: None of the students who completed the Metacognitive Ethics curriculum chose to abandon their team member by cashing out their winnings, whereas over 60% of the control group did so.

This finding was paralleled by a trend showing Metacognitive Ethics students performed better than controls in identifying and devaluing ethical rationales centered on self-promotion or self-protection when evaluating fictional misconduct cases. The full, qualitative and quantitative analyses will examine the link between metacognitive skills and complex ethical evaluation. |
1:45 PM – 2:00 PM			
	TBA		
2:00 PM	**EVALUATIONS & CLOSING REMARKS** **SEE YOU IN 2027!**		