BEYOND COMPLIANCE: TRANSFORMING RESEARCH CULTURE

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ETHICS AND COMPLIANCE

COMPLIANCE: NECESSARY BUT NOT SUFFICIENT

- No rules
- Gray areas
- Rapidly changing science
- Changing norms
- Unpredictability

WHAT CONTRIBUTES TO NON-COMPLIANCE? (BAD DECISIONS)

Myths

- It's just the "bad apples"
- Doing more is always better
- Knowing the science is enough
- Regulations are a punishment for all due to the mistakes of a few (FASEB)

DuBois, et al., 2016
"Lessons from Researcher Rehab"

Reality

- New, unfamiliar territory
- Complex situations
- Emotions and stress - overload!

DuBois, Anderson, et al., 2013
"Understanding Research Misconduct"

COMPLIANCE:
INCREASING BURDEN, LOWER PRIORITY, "RITUAL PERFORMANCE?

- National Science Board, 2014 – *Reducing investigators' administrative workload for federally funded research:*

"The past two decades have witnessed increasing recognition that the administrative workload places on federally funded researchers at U.S. institutions is interfering with the conduct of science in a form and to an extent substantially out of proportion to the well-justified need to ensure accountability, transparency, and safety."

RESEARCH CULTURE

- How is research incentivized?

- What is prioritized? What is valued?

- What is rewarded? What is ignored? What is punished?

- What support is provided? What infrastructure exists?

- Are resources limited? Is access to resources equitable?

- Do researchers feel comfortable admitting mistakes? Saying "I don't know"? Asking for help?

Antes, "First law of leadership: be human first, scientist second," Nature 2018

HOW DO WE TRANSFORM RESEARCH CULTURE?

3 domains:

- Researcher education, socialization, and ongoing professional development

- Institutional structures

- Across science

TRANSFORMING EDUCATIONAL FRAMING: CHANGING HOW RESEARCHERS ARE SOCIALIZED

"Compliance helps me stay out of trouble":

- "knowing the rules is enough"

- "ethics is arbitrary"

- "others will make policy, decisions about ethics"

"Compliance is a virtue of any good researcher"

"RCR is life-long learning"

- "Developing skills that help me make decisions in the gray areas is as important as any data analysis technique"

- "I will engage in oversight locally and policy-making and developing ethical guidance for my discipline/field"

TRANSFORMING EDUCATION: ADDITIONAL CONTENT

- Leadership skills/styles and relationship building

- Stress management, Emotional control

- Reflection on personality traits and personal biases

Antes, First Laws of Leadership, *Nature* 2018
DuBois, Anderson, et al., Understanding Research Misconduct, *Accountability in Research,* 2013
DuBois, Lessons from Researcher Rehab

TRANSFORMING INSTITUTIONAL STRUCTURES

- "When researchers lack knowledge of technical matters they frequently turn to colleagues or the literature to find answers – why do they not do the same with questions about compliance? Why is the investigator not taking time to pay attention to the details?" (DuBois, Chibnall, & Gibbs, 2016, *Science & Engineering Ethics*)

- "pause and discussion" are evidence-based strategies

- Can be operationalized:
  - Research ethics consultation services
  - "Embedded" ethics/ethicists

DuBois et al, *Academic Medicine*, 2013 "A Humble Task: Restoring Virtue in an Age of Conflicted Interests"

TRANSFORMING SCIENCE WHAT DO WE VALUE ?

The Hong Kong Principles for Assessing Researchers: Fostering research integrity

1. Implement more responsible metrics

2. Value complete reporting

3. Reward openness

4. Acknowledge a broader range of research activities (dissemination)

5. Recognize essential tasks (mentoring, peer review)

Moher et al, *PLOS Biology*, 2020