## Rules vs. Responsibilities

#### Rule: Scientific Misconduct Policy

- Statements to define specific requirements or prohibitions and related consequences for noncompliance
- Specified process based on laws, regulations or procedural standards

How we do good by doing right, and what happens when we don't

#### **Responsibility: Professional Conduct**

- Principles to communicate expectations, aspirations and accountability to demonstrate through words and actions
- Based on shared values, community standards or accepted norms

How we do well by going beyond "right" to "better" and what happens when we cross boundaries

# Codified Expectations

#### **Faculty Handbook**

#### 5.2.2.7 Misconduct in Research

Misconduct in research is defined as fabrication, falsification, or plagiarism. In addition, other practices that seriously deviate from those that are commonly accepted within the research community for proposing, conducting, or reporting research may also constitute misconduct in research. These practices are covered by the Duke University Policy and Procedures Governing Misconduct in Research (in Appendix P). As noted in that policy, "misconduct" does not include honest error or differences of opinion.

#### **Institutional Code of Conduct**

This document serves as a statement of responsibilities for all members of the Duke community to adhere to institutional values and policies, and to abide by all applicable legal and compliance requirements....

#### Research and Scientific Integrity:

Research at Duke is integral to its mission and must always be conducted to the highest ethical standards and in compliance with all applicable laws, regulations, policies and contractual obligations.

## Culture and Values

Respect • Trust • Inclusion • Discovery • Excellence

Shared values - along with codified professional standards, codes of conduct and personal beliefs – influence institutional culture through:

- individual behaviors and actions
- commitment to integrity
- accountability to self, colleagues, students, peers and community



# Case Examples

#### Research Misconduct

- Background elements
  - Access to data
  - Authorship dispute
  - Academic productivity
- Investigation approach
- Outcomes and recommendations

#### Research Bias

- Background elements:
  - Dual financial interest
  - Public disclosure expectations
  - Position of influence
- Investigation approach
- Outcomes and recommendations

# A Culture of Research Integrity

**Normative Ethics** 

Right versus wrong

**Compliance** 

Within bounds of laws, regulations, policies

Rigor and Reproducibility

Doing "good science"

**Social Value** 

Doing science that society values Workplace relationships

Environment to conduct sound work













WORLD VIEW · 19 FEBRUARY 2019

# To move research from quantity to quality, go beyond good intentions



Australian chief scientist Alan Finkel calls for formal action to bake in better research practices.

# Stakeholders Need to **ACT** to Move Beyond **Good Intentions**

## Key Principles of Duke Research Integrity Culture

#### Inclusive

 All stakeholders need to participate

#### Comprehensive

 Education, oversight and accountability

#### Multifaceted

Holistic

 approach
 across all
 dimensions of
 research
 integrity

#### Pragmatic

Provide
 resources and
 tools to make
 it "easy" to do
 the right thing

#### **Empowering**

Empower community and stakeholders to speak up



# Key DOSI Initiatives

#### **Education and Training**

- Faculty and Staff Responsible Conduct of Research (RCR) Training Program
- RCR training for Administrators
- Research Town Hall

#### **Best Practices**

- Scientific Accountability and Culture Plans (SCAPs)
- Data Management Documentation
- Electronic Research Notebook
- Core and Shared Resource Reviews

#### Accountability

Policy Attestation systems

#### Measuring Effectiveness

• SOURCE Survey



# Appendix

**Examples of DOSI Initiatives** 



## Research Town Hall

Whose Paper is it Anyway? A Discussion on Authorship

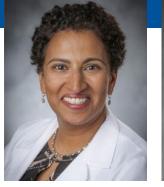
#### January 07, 2019

1:30 - 3:00pm • Great Hall, Trent Semans Center

Geeta Swamy, Vice Dean and Associate Vice Provost for Scientific Integrity
Michael C. Fitzgerald Professor and Dir. of Graduate Studies, Department of
Chemistry

Cathleen Colon-Emeric, Professor of Medicine and Office of Research Mentoring Raphael Valdivia, Professor, Department of Molecular Genetics and Microbiology Elise Smith, Fellow, National Institute of Environmental Health Sciences Jennifer Ahern-Dodson, Assistant Professor of the Practice in the Thompson Writing Program

Join us for an interactive discussion on authorship allocation, ordering and dispute resolution.













\*Fulfills the faculty and staff RCR training requirement.

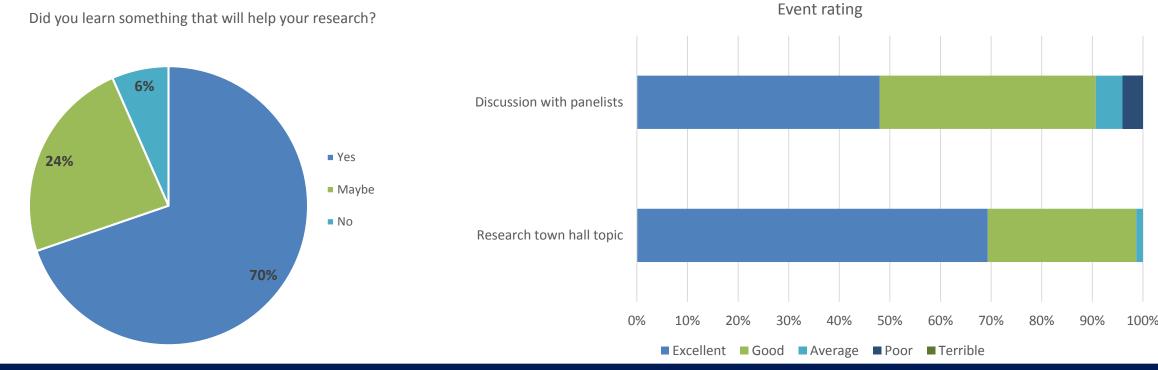


http://duke.is/JGLUKp



# Whose Paper is it Anyway? A Discussion on Authorship

- Estimated Attendance: 200 ppl
  - Offered as RCR credit
- Post-Event Survey: 76 ppl



# Research Town Hall Plagiarism and Intellectual Credit

#### February 06, 2019

1:00 - 2:30pm • Great Hall, Trent Semans Center

Chris Simon, Associate Professor in Population Health Sciences, Moderator

#### Panelists:

Cary Moskovitz, Professor of the Practice in the Thompson Writing Program
David Hansen, Associate University Librarian for Research, Collections
and Scholarly Communication

**Donna Kessler,** Research Misconduct Review Officer **John Klingensmith,** Associate Dean for Academic Affairs, Graduate School

Join us for an interactive discussion on plagiarism and intellectual credit – the issues, the stakeholders, and the need for action.









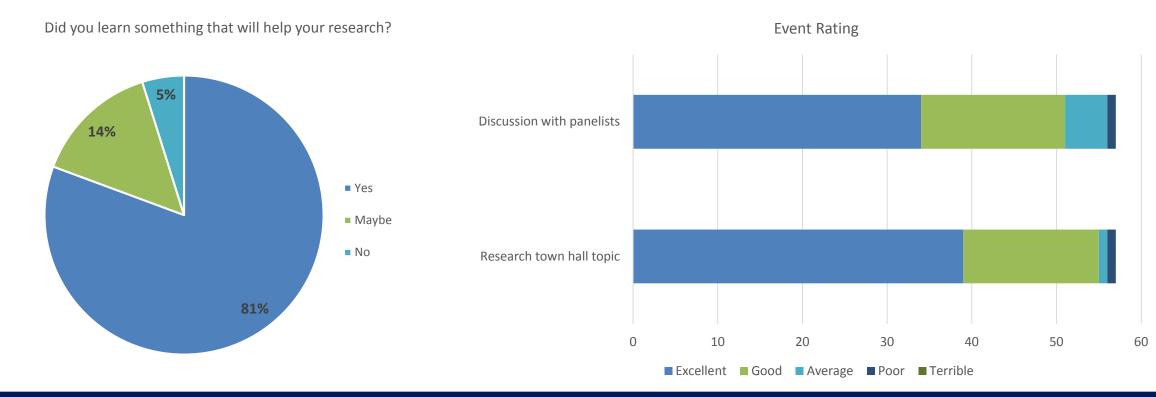
\*Fulfills the faculty and staff RCR training requirement.



http://duke.is/H3QPgW > @Duke\_OSI

### Plagiarism and Intellectual Credit

- Estimated Attendance: 190 ppl
  - Offered as RCR credit
- Post-Event Survey: 59 ppl





# Scientific Culture and Accountability Plan (SCAP)

#### Goal

 Ensure Departments, Centers and Institutes communicate clear expectations about localized research integrity culture

#### Approach

 All SOM Departments, Centers and Institutes required to develop a SCAP and post it on their website

#### Intended Audience

• For all within a specific Department, Center and Institute

#### Key Features

DOSI available for consultation and reviews, as well as provides guidance documents



# Data Management Plan

#### Goal

Promote good data management practices across the Data Life Cycle

#### Approach

All SOM wet labs required to document their data management practices

#### Intended Audience

• Individuals within a laboratory or research unit

#### Key Features

ASIST available for consultation and reviews, as well as provides template



# Data Management Plans Next steps

- OARC completed review of SOM DMPs Fall 2018; draft report provided
- Based on OARC report, working to implement policy changes to improve effectiveness of DMPs
  - New DMP format developed with Duke University Libraries
  - New policies (i.e., review, attestation, quality assurance)
- Expand DMPs to all Duke Schools



# Research Town Hall Caring for Your Data: Data Management Resources at Duke



#### Wednesday, April 10, 2019

1:00 - 3:00 pm Great Hall, Trent Semans Center

1:00 - 2:15 pm Resource Presentations

2:15 - 3:00 pm Resource Fair

Come learn about data management resources at Duke to help care for your data throughout the data life cycle!

#### **Participating Groups**

- Duke Clinical Research Institute
- Duke Health Technology Solutions
- Duke Office of Clinical Research
- Duke University Libraries
- IT Security Office
- Medical Center Library
- Office of Information Technology
- Office of Scientific Integrity
- Research Data Security

\*Fulfills the faculty and staff RCR training requirement.

Duke

## Supporting Data Life Cycle

 Electronic Research Notebooks (ERNs) are used to electronically capture laboratory information

#### Multiple benefits:

- Data are searchable and accessible anywhere
- Less/no paper notebooks
- Secure storage in central location
- Allows signing, file versioning, and activity tracking in support of data provenance
- Data easily shared with PI and/or collaborators

#### Duke has purchased an institutional license

- Soft launch January 2019 with full roll-out April 1, 2019
- Over 300 users as of this week



# Measuring Effectiveness: SOURCE Survey

National Contact for Professional & Research Ethio

National Center for Professional & Research Ethics

- Survey of Organizational Research Climate (SOURCE) is a validated instrument to assess the climate of research integrity with academic institutions
- Key domains assessed:
  - Responsible Conduct of Research
  - Regulatory Quality
  - Integrity Socialization
  - Integrity Norms
  - Advisor-Advisee Relations
  - Lack of Integrity Inhibitors
  - Departmental Expectations
- Nearly 1,500 Duke SOM researchers completed baseline survey in 2017
- Plan to repeat in 2020 to assess any changes and consider University-wide distribution