### RESEARCH TRAINEES

WHAT YOU NEED TO KNOW ABOUT

RESEARCH-MISCONDUCT

Misconduct

#### Anyone Can Report Misconduct

# Institutions Have Policies to Protect All Involved

Scientists are obligated to point out errors regardless of their position in the lab.

The research community depends on you to report misconduct.

Of ORI's research misconduct cases<sup>3</sup>:

were reported by research trainees

were committed by research trainees

Every institution has a requirement to take all reasonable and practical steps to protect the reputation of those who report research misconduct and anyone falsely accused.

# You Can Report Research Misconduct Anonymously

Anyone can contact ORI anonymously by phone or email to address concerns.

240-453-8800 AskORI@hhs.gov

For the full definition of research misconduct, see 42 C.F.R. § 93.103.

RIOs may have other titles, such as Chief Compliance Officer, Director of Compliance, Vice President/Dean of Research, or Director of Integrity.

Statistics based on closed ORI case findings from 2011–2015. Trainees are students and postdoctoral fellows.

## IT'S A SLIPPERY SLOPE TO RESEARCH MISCONDUCT

It doesn't matter if you re an undergraduate researcher, a graduate student, a post-doc, or a principal investigator who is performing federally funded research, writing a research paper, or leading a research program; research integrity matters at every level.

### Small lapses in judgment could lead to a slippery slope ending in research misconduct.

Be vigilant against these common lapses:

#### 1. TAKING SHORTCUTS

Lack of care in experimentation that might impact reproducibility

#### 2. CHEATING

Such as puffery, which is inflating your resume, can establish dangerous behavior patterns

#### 3. "BEAUTIFICATION" OF IMAGES

Removing an unwanted feature, even if unrelated to the result, could be scientifically significant

#### 4. LACK OF APPROPRIATE CONTROLS

Failure to perform a control with the experimental sample could affect result interpretation

#### 5. COMPOSITE IMAGES

Assemblies of images that are not clearly labeled, such as a montage of cell images from the same experiment but not labeled as such.

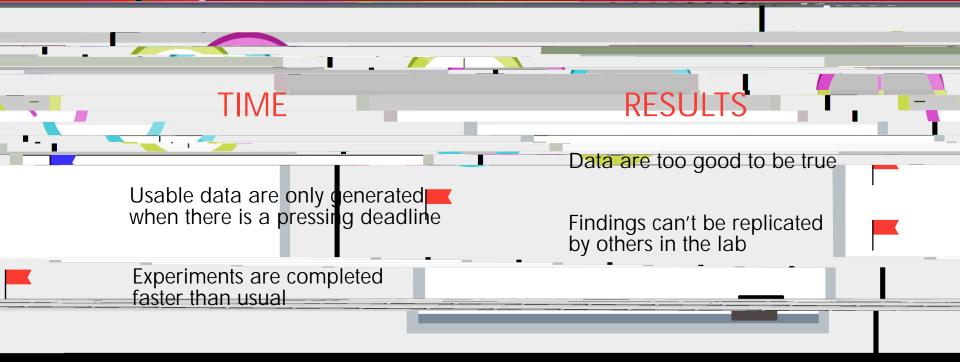
#### 6. OUTLIERS

Omitting outlier data without appropriate pre-experiment justification which alters the overall conclusion of the analysis

#### 7. IMAGE MANIPULATION

Splicing, cutting, or cropping images; without properly documenting changes, that alters the results or falsely claims a result which was not obtained.

# POSSIBLE RED FLAGS OF RESEARCH MISCONDUCT



LACK OF TRANSPARENCY