

Overview of Responsible Conduct of Research

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Chief Research Compliance Officer

Office of the Vice President for Research and Innovation

“Responsible Conduct of Research” is maintaining ethical standards:

“...conducting research in ways that fulfill the professional responsibilities of researchers, as defined by professional organizations, the institutions for which they work and, when relevant, the government and public.”

Responsible Conduct of Research (RCR) encompasses the elements of research integrity and ethics:

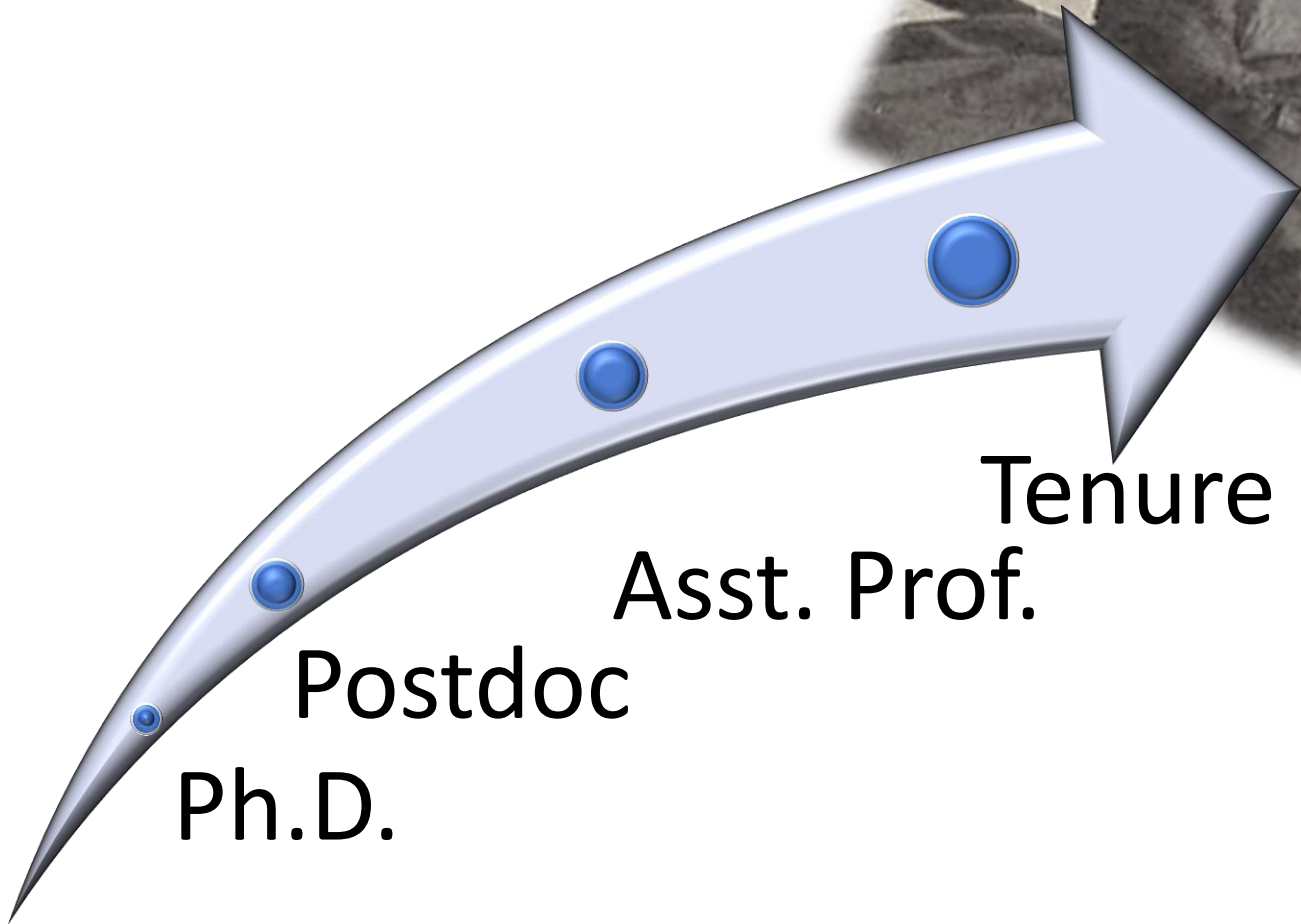
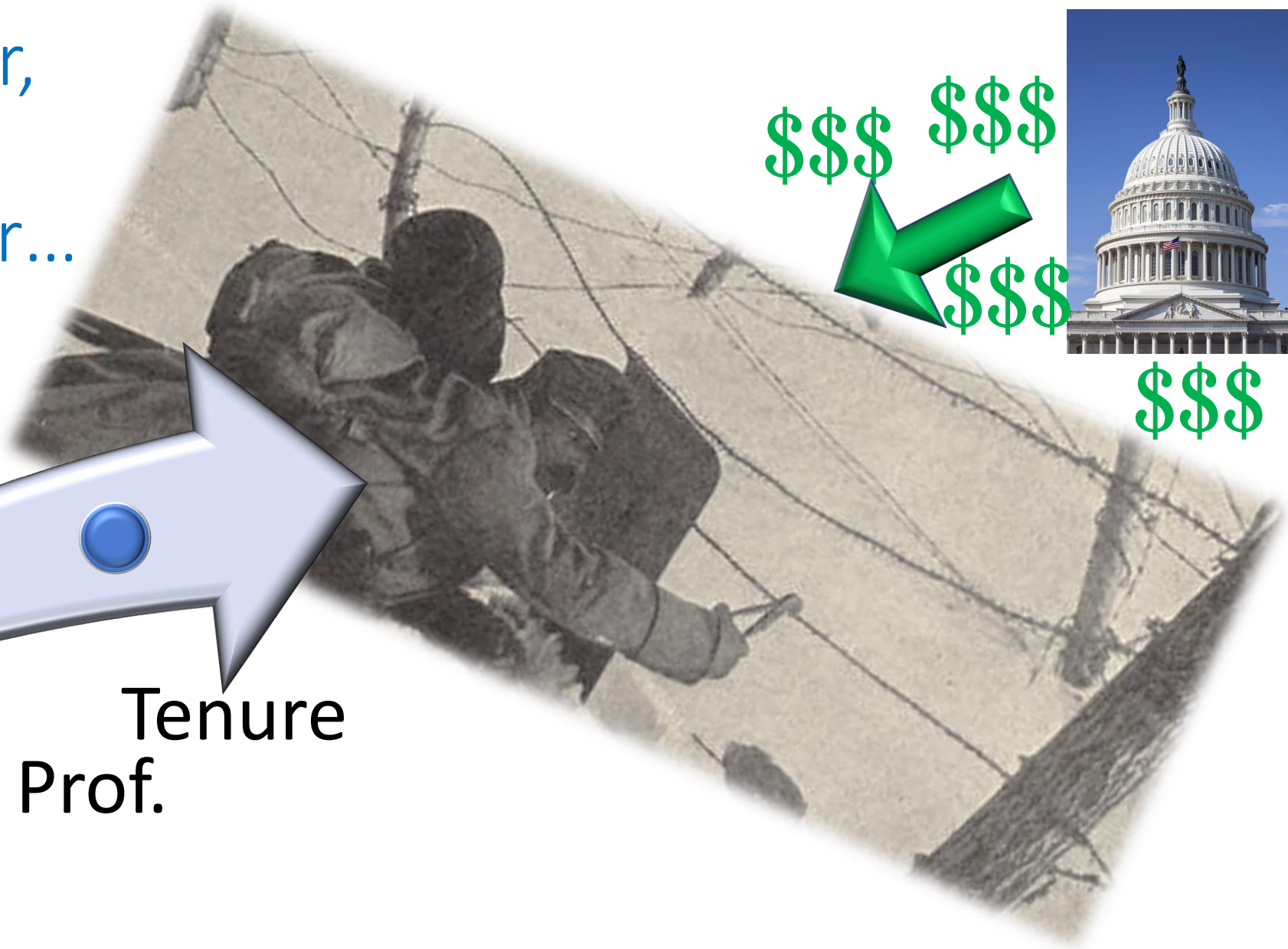
- Integrity in reporting research results
- Conflict of interest
- Use of human subjects
- Use of live vertebrate animals
- Use of biohazardous materials
- Data management and reproducibility
- Peer review
- Authorship and ethical citation

To the Researcher,
Compliance can
Appear as a Barrier...

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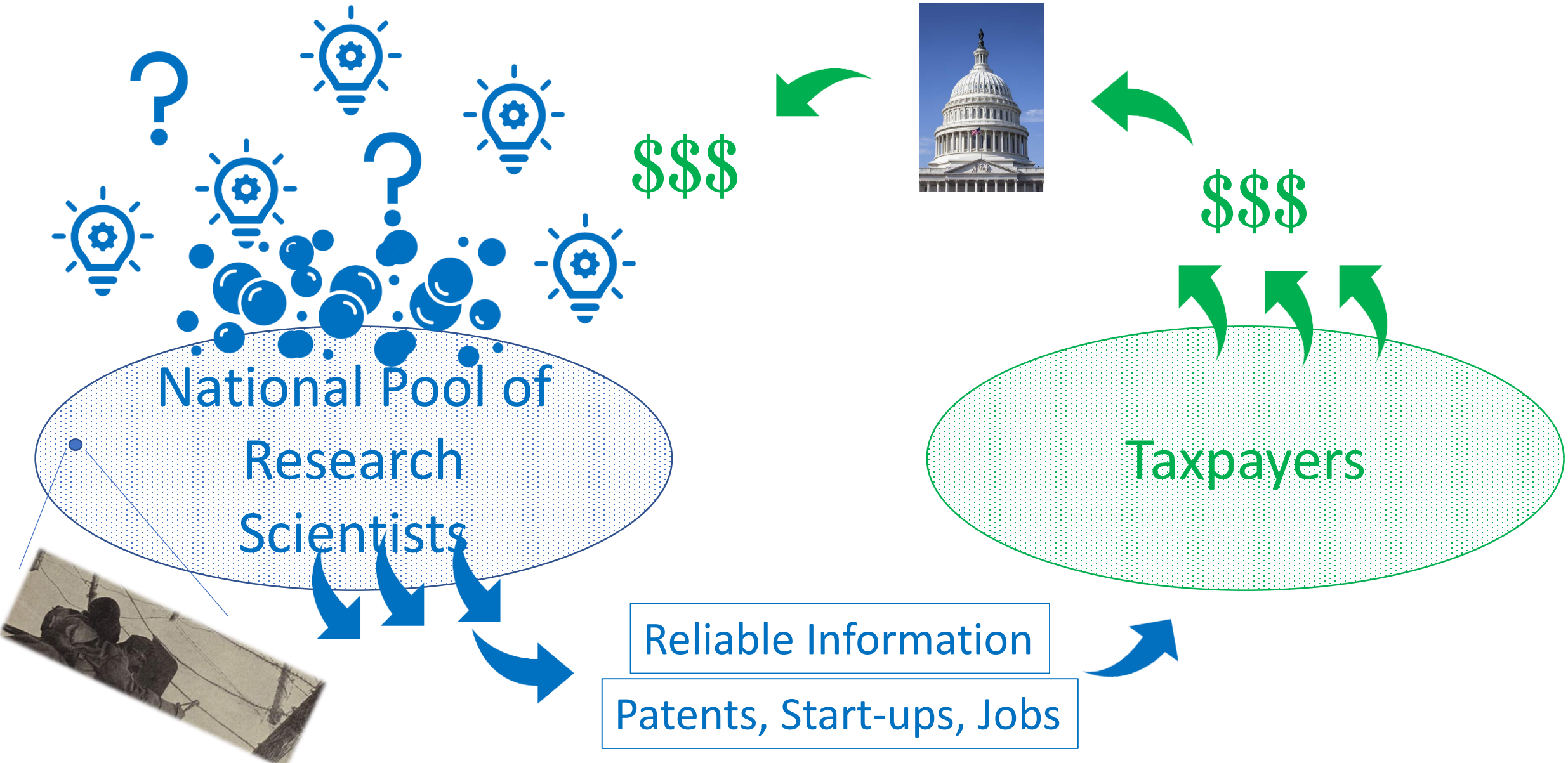
Ph.D.

Postdoc

Asst. Prof.

Tenure

To Sponsors, Compliance is Keeping Faith with the Public

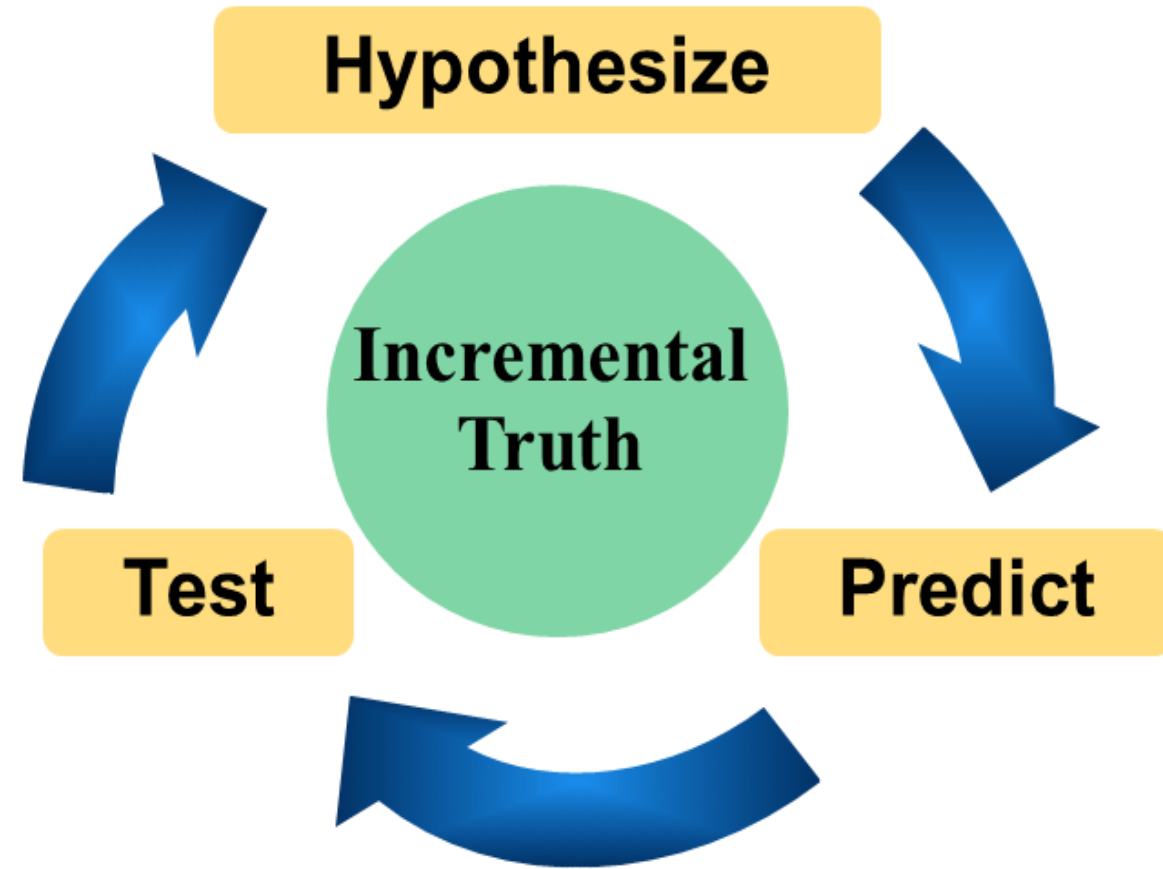


Unethical Conduct is Destructive and Expensive

- Damages institutional reputation
 - Suppresses future grants and gifts,
 - Drives away prospective students and faculty,
 - Students learn flawed methods.
- Distorts the scientific record
 - Spawning misinformed research and
 - Damaging the public trust in scientific knowledge.
- Wastes Public funds.

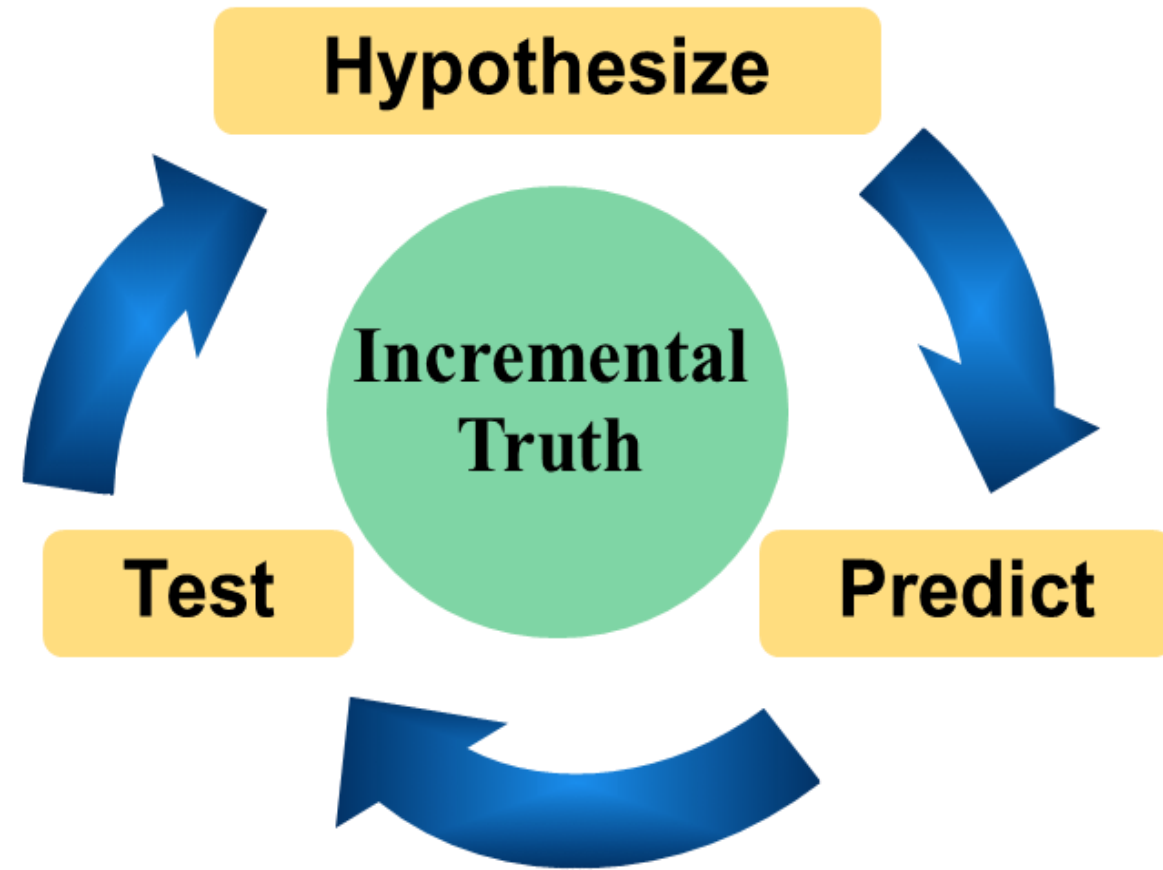
The Scientific Method Slowly Corrects Error

- Replication and peer review identify and correct mistakes.



The Scientific Method Slowly Corrects Error

- Replication and peer review identify and correct mistakes
- Temptations to “cut corners” come from real life pressures:
 - Desperate need for the next grant
 - Competition for jobs
 - Experiments go “wrong”
 - “Publish or perish”
 - Etc.





Brian Wansink WIKIMEDIA COMMONS

Cornell nutrition scientist resigns after retractions and research misconduct finding

By Kelly Servick | Sep. 21, 2018, 11:25 AM (AAAS Science Website)

You don't want to see your name in something like this!

Duke University settles research misconduct lawsuit for **\$112.5 million**

By [Science News Staff](#) Mar. 25, 2019

Harvard teaching hospital to pay **\$10 million** to settle research misconduct allegations

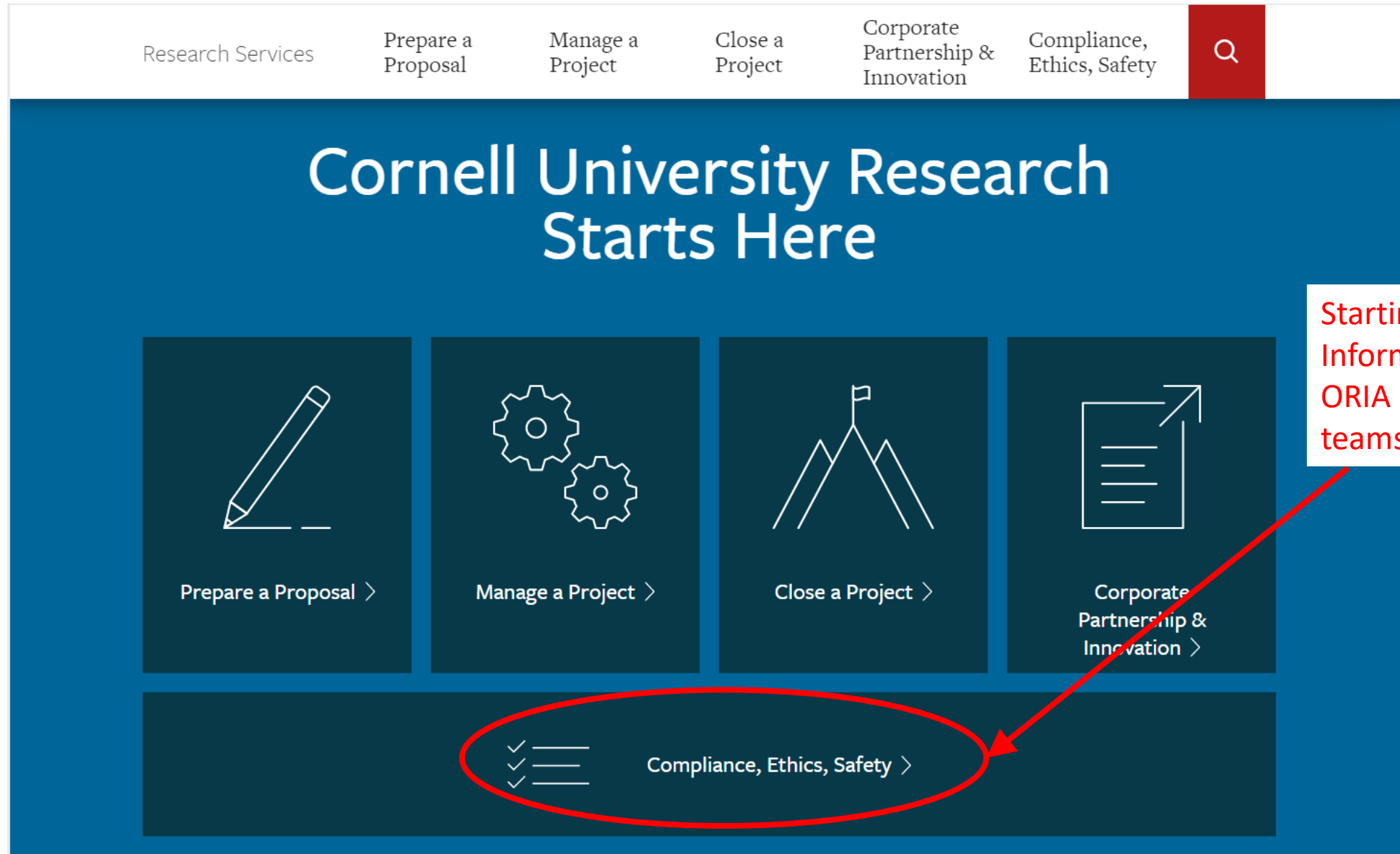
Retraction Watch April 27, 2017

Office of Research Integrity & Assurance (ORIA)

- ORIA educates the Cornell research community about Research Integrity and RCR requirements.
- ORIA administrates research compliance programs for:
 - Conflict of Interest & Commitment
 - Human subject, Animal, and Biohazardous Materials.
- ORIA cannot, and should not, directly monitor every Cornell research activity.
- Every researcher is responsible for conducting research ethically and with integrity.

Consult the Research Services Website

<https://researchservices.cornell.edu>



Starting point for Information on ORIA compliance teams and RCR.

RCR Overview:

<https://researchservices.cornell.edu/resources/what-is-rcr>

Research Services Prepare a Proposal Manage a Project Close a Project Corporate Partnership & Innovation Compliance, Ethics, Safety

Responsible Conduct of Research is a crucial component of the education provided to students and trainees who are involved in Cornell research. RCR instruction encourages professional ethical behavior through online trainings, workshops and symposia. The following topics are covered as a part of Cornell's RCR educational offerings. Click on [them](#) to learn more:

[EXPAND ALL](#)

- [Research misconduct](#)
- [Authorship](#)
- [Peer review](#)
- [Collaborative research](#)
- [Use of human subjects](#)
- [Use of live vertebrate animals](#)

If specific RCR training is required for certain grants, e.g. NIH and USDA, faculty and students will be notified.

Explicitly required or not, it's a good idea to look through this website and become familiar with its content.

Cornell University Policy 1.2, Definition of Academic Misconduct

“Any act that violates the standards of integrity in the conduct of scholarly and scientific research and communication.”

Mistakes and sloppiness are not misconduct.

Misconduct is intentional.

It's not unethical to be a poor researcher.

(But it isn't a good idea.)

Federal Research Misconduct*

- This is more narrowly defined, including only:
 - **Fabrication:** making up data or results and recording or reporting them.
 - **Falsification:** manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record
 - **Plagiarism:** the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

*OSTP Research Misconduct Policy 65 FR 76260

Plagiarism

- Plagiarism is the unacknowledged use of the words or ideas of others.
- It is the most common form of academic integrity violation at Cornell.
- Cornell (Ithaca and Weill Cornell Medical campuses) provides resources for recognizing and educating yourselves about plagiarism.
- Many are easy to find by searching Cornell and plagiarism on the internet.

OSTP Research Misconduct Policy 65 FR guides all agency policies (NIH, NSF, USDA, etc.)

When an allegation of Research Misconduct is made, the university must:

1. Inquire: Does the allegation have substance? If so;
2. Investigate: What are the facts? Did misconduct occur?
If so, recommend corrective actions
3. Adjudicate: Review recommendations and determine corrective actions

Office of the University Ombudsman

<https://www.ombudsman.cornell.edu/>

- The Ombudsman is an advocate for fairness and equity and:
 - Is independent to the highest degree possible within Cornell.
 - Is neutral, unaligned and impartial.
 - Strives to promote procedural fairness.
 - Does not engage if conflict of interest is perceived.
 - Holds identity of those seeking assistance in strict confidence.
 - except as required by law, or
 - If imminent risk of serious harm exists.

RCR Resources

| Type of concern | Responsible offices/Resources |
|---|--------------------------------------|
| Suspected Academic Misconduct | Dean of Faculty, CRCO |
| Authorship or collaboration disputes | Advisor, Graduate School |
| Concerns about data management (reporting, loss of confidentiality) | Advisor |
| Concerns about mentoring | Graduate School |
| Use of human subjects | Advisor, ORIA (IRB) |
| Use of live vertebrate animals | Advisor, ORIA (IACUC) |
| Use of Biohazardous Materials | Advisor, ORIA (IBC) |
| Conflicts of Interest | Advisor, ORIA |