

**RCR - Responsible Conduct of Research**

# **Research Ethics Webinar**

Starting soon...

Adrienne Klein

Research Integrity Officer

October 21, 2021

**RCR - Responsible Conduct of Research**

# **Research Ethics Webinar**

October 21, 2021

**Adrienne Klein**

**Research Integrity Officer**

**[rcr@gc.cuny.edu](mailto:rcr@gc.cuny.edu)**

**Office of Research and Sponsored Programs**

# RCR - Responsible Conduct of Research

Presenter: **Adrienne Klein**, RIO, Graduate Center

**Rebecca Banchik** GC Director, Human Research Protection Program

**Paul Kran** CUNY Office of Research Compliance

**Travis McCarthy** CUNY Office of Research Compliance

**Kristin Sommer** RIO, Professor, Baruch College & GC

**Ed Catapane** RIO, Professor, Medgar Evers College

**Bill McClure** RIO, Dean of Faculty, Queens College

**Michele Kiely** RIO, Assoc Dean for Research, GS of Public Health & Health Policy

**Alan Kluger**, RIO, Professor, Lehman College

# **RCR - Responsible Conduct of Research**

**Thank you to the  
CUNY Office of Research**

**Tamera Schneider**

*CUNY Associate Vice Chancellor & Vice Provost for Research*

**Steve Everett**

*Graduate Center Provost and Senior VP for Academic Affairs*

# **RCR - Responsible Conduct of Research**

**The National Science Foundation (NSF) and other federal funders require the universities they fund to provide training in research ethics.**

# RCR - Responsible Conduct of Research

## CUNY policy...

CUNY policy on training in responsible conduct of research

CUNY policy for disposition of allegations of research misconduct

Research Integrity Officers

# RCR - Responsible Conduct of Research

## Our topics:

- Research Misconduct
- Protections
- Conflicts of Interest
- Mentoring
- Authorship credit
- Peer Review
- Data Management
- Collaborative Research
- Export Controls

# RCR - Responsible Conduct of Research





# RCR - Responsible Conduct of Research

e.g. Federal regs



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# RCR - Responsible Conduct of Research

Institutional policies

e.g. Federal regs



State regs

Sponsor requirements

# RCR - Responsible Conduct of Research



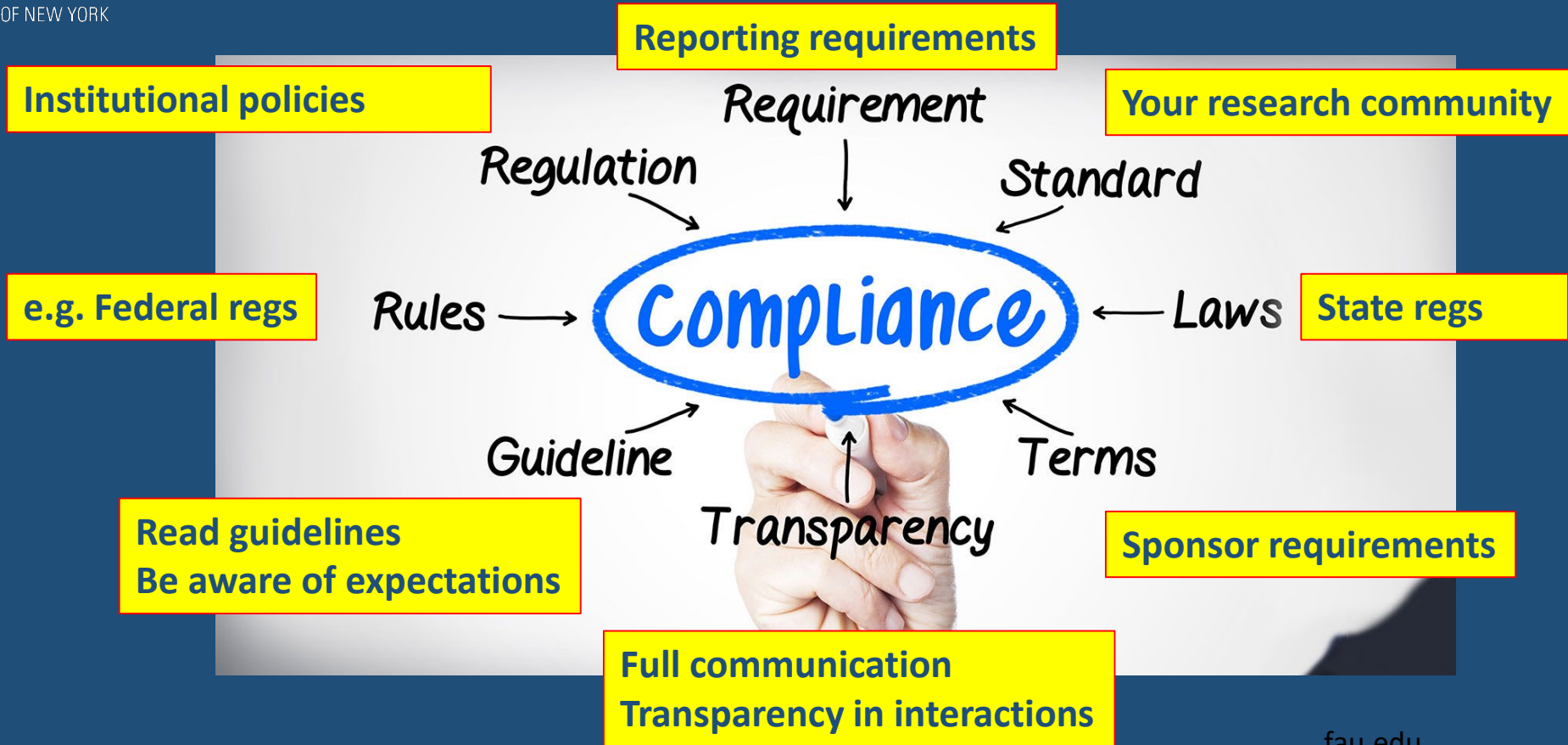
# RCR - Responsible Conduct of Research



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# RCR - Responsible Conduct of Research

**GC CUNY's compliance policy**

**All researchers**

**Requirement 1:**

**Attend one workshop**

# **RCR - Responsible Conduct of Research**

**GC CUNY's compliance policy**

**Biochemistry, Biology, Chemistry, Physics**

## **Requirement 2:**

**Take online RCR training through CITI.**

CITI is an online service that provides universities with online training programs, including Human Subjects and RCR training.

## RCR - Responsible Conduct of Research

Researchers and research institutions must conduct research in a way that is **honest, trustworthy, reliable and accountable**. That's ideal.

*Misconduct* is the worst possible behavior by a researcher.

Behavior that falls in between is referred to as *questionable research practices* (QRP)

# RCR - Responsible Conduct of Research

## BAD

p-hacking (re-analyzing data in different ways to yield a target result)

Excluding data

Unethical authorship

Unethical publication practices

Noncompliance with university policies

Violating privacy or confidentiality agreements

Non-compliance with sponsor-related requirements

## RCR - Responsible Conduct of Research

P-hacking: re-analyzing data in different ways to yield a target result.

Adjust your experiment and data enough times and you are eventually bound to get a result that appears to be 'statistically significant'!

Honest science demands that scientists go into their research with a clear, motivated hypothesis. For this reason, p-hacking is considered to be highly unethical.

To avoid p-hacking, you can preregister your detailed research plan with an online registry. For further information, discuss with your EO or mentor.

# RCR - Responsible Conduct of Research

Unethical peer review

**BAD**

Misappropriation of research funds

Delaying or impeding work of collaborators

Non-compliance with human subjects or animal requirements

Citing selectively or expanding bibliography unnecessarily

Misusing authority

# RCR - Responsible Conduct of Research

Non-compliance with reporting or registry requirements

Inadequate record keeping

Selective transparency of hypotheses

Conflicts of interest mismanagement (financial or commitment)

HARKing (hypothesis after results are known)

**BAD**

# RCR - Responsible Conduct of Research

## Ideal Behavior

GOOD

- sound research design and methodology
- reproducibility
- conscientious data management
- appropriate authorship
- appropriate mentorship
- appropriate use of funds
- disclosing conflicts of interest
- managing conflicts of commitment



# RCR - Responsible Conduct of Research

## Ideal Behavior

## GOOD

RCR also requires that researchers behave in an ethical manner, i.e. use sound ethical judgement that promotes trust. Research must be conducted with integrity, by consistently **doing the right thing**.

# RCR - Responsible Conduct of Research

## Research Misconduct - 1

### **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**

Appropriation of another person's ideas, processes, results or words without giving appropriate credit

# RCR - Responsible Conduct of Research

## Human Subjects

### CUNY Human Research Protection Program (HRPP)

- HRPP Coordinators / IRB Administrators (Research Compliance Administrators) on each campus.

## Rebecca Banchik, GC Dir, HRPP

- University Integrated (UI) Institutional Review Boards (IRB)

<https://www.cuny.edu/research/research-compliance/human-research-protection-program/>

# RCR - Responsible Conduct of Research

## Research Misconduct - 1

### **Fabrication**

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# RCR - Responsible Conduct of Research

## Research Misconduct - 2

A finding of research misconduct requires that:

- There be a significant departure from accepted practices of the relevant research community (i.e. the humanities, social sciences, or scientific research community);
- the misconduct be committed intentionally, or knowingly, or recklessly; and
- the allegation be proven by a preponderance of evidence.

# RCR - Responsible Conduct of Research

## Some temptations to commit misconduct

- Publish or perish pressures
- Need to obtain research funding
- Seeking promotion
- Reputational motivations

# RCR - Responsible Conduct of Research

**It's not worth it!**

## **RCR - Responsible Conduct of Research**

The federal Office of Research Integrity (ORI) may impose a variety of penalties when a finding of research misconduct is upheld. These penalties may include:

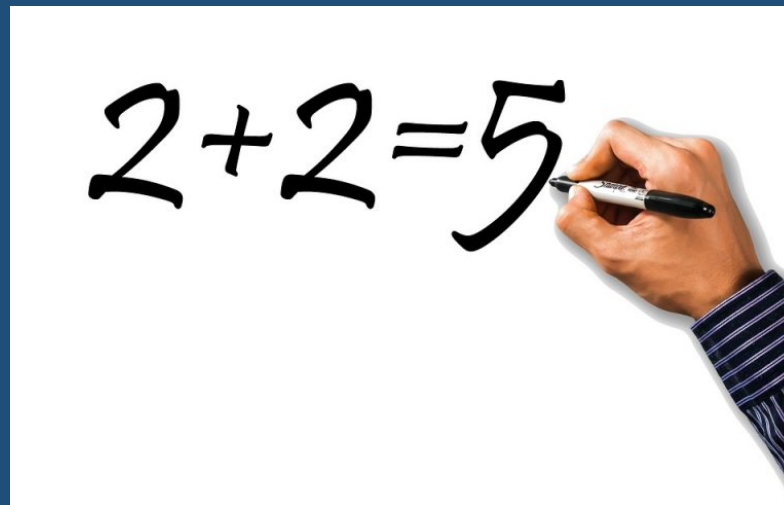
- Correction of the research record.
- Letters of reprimand.
- Suspension or termination of a research grant.
- Suspension or debarment from receiving federal funds.

Researchers who commit research misconduct may face significant professional stigma as well as corrective actions from employers.



# RCR - Responsible Conduct of Research

## Making an Error A role-play



<https://blogs.transparent.com>

# **RCR - Responsible Conduct of Research**

## **Making an Error**

**Professor Perfect talks with her  
student, Steven ...**

# RCR - Responsible Conduct of Research

## Making an Error

*Can a researcher ignore an error they have noticed?*

*Can a researcher ask a journal to print a correction?*

*How does requesting a correction affect an author's reputation?*

# **RCR - Responsible Conduct of Research**

## **Making an Error**

### **A role-play**

**How to avoid this problem?**

# RCR - Responsible Conduct of Research

## Ideal Behavior

GOOD

- sound research design and methodology
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- disclosing conflicts of interest
- managing conflicts of commitment

# RCR - Responsible Conduct of Research

## Plagiarism

**The appropriation of another person's ideas, processes, results, or words without giving appropriate credit**

**How to avoid this problem?**

1 Acknowledge the contributions of others

# RCR - Responsible Conduct of Research

## Plagiarism

### How to avoid this problem?

- 1 Acknowledge the contributions of others
- 2 Verbatim text: use quotation marks & a citation

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## Plagiarism

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- 3 Summarizing or paraphrasing: cite sources



# RCR - Responsible Conduct of Research

## Plagiarism

### How to avoid this problem?

- 1 Acknowledge the contributions of others
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- 3 Summarizing or paraphrasing: cite sources
- 4 Cite primary sources

# RCR - Responsible Conduct of Research

## Plagiarism

### How to avoid this problem?

- 1 Acknowledge the contributions of others
- 2 Verbatim text: use quotation marks & a citation
- 3 Summarizing or paraphrasing: cite sources
- 4 Cite primary sources
- 5 Cite when in doubt about facts or common knowledge

# RCR - Responsible Conduct of Research

## Self-Plagiarism

A role-play



# RCR - Responsible Conduct of Research

## Self-Plagiarism

### A role-play

*Jess is writing her thesis after 6 grueling years of study with Professor Winter. Due to excellent mentoring, Jess has published three first-author papers that she co-wrote with Professor Winter. As she begins writing the literature study of her thesis, she copies and pastes some of the introductory materials from the papers she wrote. As Professor Winter begins reading early drafts of the thesis, he becomes suspicious.*

# **RCR - Responsible Conduct of Research**

## **Self-Plagiarism**

A role-play

**How to avoid this problem?**

# RCR - Responsible Conduct of Research

## Self-Plagiarism

A role-play

**How to avoid this problem?**

**Cite where you have used the text before.**

*Get assistance from the GC Writing Center*

# RCR - Responsible Conduct of Research

## Protections: Animal Welfare

Humane treatment of animals used in research and educational activities

- Institutional Animal Care and Use Committees (IACUC)
- Veterinarians, animal facilities staff, & IACUC administrators

# RCR - Responsible Conduct of Research

## Protections: Biosafety

### Environmental Health, Safety & Risk Management

- Policies and procedures regarding laboratory safety, hazardous materials, health safety & radiation safety

### On each campus: Institutional Biosafety Committees (IBC)

- Recombinant DNA & gene therapy research
- Risk group 2 or higher infectious agent use
- Use of transgenic animals



# **RCR - Responsible Conduct of Research**

## **Conflicts of Interest**

### **Financial Conflict of Interest**

- CUNY policy, procedures and disclosure forms at

<https://www.cuny.edu/research/research-compliance/conflict-of-interest/>

### **Conflict of Commitment**

- Relationships with individuals or entities
- Use of resources / funds
- Honor time commitments made

**On each campus: College Conflicts Officers**

CUNY Conflicts Committee

# **RCR - Responsible Conduct of Research**

## **Mentor / Trainee Responsibilities**

- Proactively set expectations
- Clarify evaluation criteria
- Clear distribution of responsibilities
- Standard operating procedures
- Criteria for establishing authorship & ownership
- Awareness of and compliance with institutional requirements

# RCR - Responsible Conduct of Research

## Competing Interests A role-play



# RCR - Responsible Conduct of Research

## Competing Interests

### A role-play

*Steven, a graduate student, is looking forward to starting his thesis work in the lab of a well-known professor on campus, Prof. Brown. The research project he will be working on is supported partly by the university but mainly by Huge Enterprise, a company of which Prof. Brown is a co-owner.*

# RCR - Responsible Conduct of Research

## Competing Interests

### A role-play

*Steven, a graduate student, is looking forward to starting his thesis work in the lab of a well-known professor on campus, Prof. Brown. The research project he will be working on is supported partly by the university but mainly by Huge Enterprise, a company of which Prof. Brown is a co-owner.*

**Several months pass...**

# RCR - Responsible Conduct of Research

## Competing Interests

Are there problems with Prof Brown being owner, PI and faculty advisor?

Does Steven have rights to anything that might be commercialized?

Who can Steven talk to?

# RCR - Responsible Conduct of Research

## Competing Interests

A role-play

**How to avoid this problem?**

Discuss things in advance.

Establish ground rules.

# RCR - Responsible Conduct of Research

## Ideal Behavior

GOOD

- sound research design and methodology
- reproducibility
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- managing conflicts of commitment



# RCR - Responsible Conduct of Research

## Responsible Authorship

Who should be listed as an author?

- Made significant contributions to the research
- Assumed responsibility for data collection & analysis
- Participated in drafting the publication
- Approved the final publication

Improper practice

- Honorary authorship
- Duplicate publication

# RCR - Responsible Conduct of Research

## Peer Review

The responsibility

- Assess project for quality
- Make judgment regarding importance of research

Doing it with responsible conduct

- Timely review
- Constructive feedback
- Free from personal bias
- Maintain confidentiality

# RCR - Responsible Conduct of Research

## Authorship A role-play



# RCR - Responsible Conduct of Research

## Authorship A role-play

*A grad student, Jess, approaches her  
faculty mentor regarding credit for some  
writing she did.*

# RCR - Responsible Conduct of Research

## Authorship

A role-play

**How to avoid this problem?**

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Discuss in advance!

# RCR - Responsible Conduct of Research

## Data Management

### Data Ownership

- Funding source – grants vs. contracts
- Institutional policy
- CUNY Intellectual Property Policy:

<https://www.cuny.edu/about/administration/offices/legal-affairs/policies-resources/intellectual-property/> f

- Data Source

### Data Collection

- Data recorded such that it can be validated
- Appropriate authorization

# RCR - Responsible Conduct of Research

## Data Protection

- Proper storage to avoid accidental damage, loss or theft
- Confidentiality & privacy agreements honored
- Data retention according to contract &/or institutional practice
- CUNY use of computer resources policy:

<https://www.cuny.edu/about/administration/offices/cis/it-policies/>

## Data Sharing

- We may enter into various types of data sharing agreements (data use, data transfer, etc.)

<https://www.cuny.edu/research/research-compliance/research-agreements/>



# RCR - Responsible Conduct of Research

## Collaborative research - 1

### Roles & Relationships

- Define each collaborator's role in the project in a written agreement
- Ensure common understanding of the research goals
- Be familiar with each institution's intellectual property & ownership policies

### Management Plan

- Financial Management
- Training & Supervision
- Compliance

# RCR - Responsible Conduct of Research

## Collaborative Research - 2

### Formal Agreements

- Examples include: Memorandum of Understanding; Memorandum of Agreement; Material Transfer Agreement; Data Transfer Agreement
- Contact research compliance staff prior to signing these
- Ensure that your collaboration is documented in a formal agreement
- Signatory authority defined by policy:

<https://www.cuny.edu/research/research-compliance/research-agreements/>

# RCR - Responsible Conduct of Research

## Export Control – 1

### Controls

#### State, Commerce & Treasury Controls

- Hardware, software, materials, equipment, technology & technological data that have **civilian and inherent military or defense application**
- Defense **articles** designed or modified for defense or military application without civil equivalent **and defense services.**
- Restricted **transactions**; for example, those with Cuba, Iran, Syria or Sudan

# RCR - Responsible Conduct of Research

## Export Control – 2

CUNY policy, procedures, guidance & forms

<https://www.cuny.edu/research/research-compliance/export-control/>

On each campus: Export Control Administrators

### Requirements

- Exceptions for fundamental research activities
- Prior authorization or license may be required
- Screening of all parties involved

# RCR - Responsible Conduct of Research

[https://www.youtube.com/watch?v=x\\_MsPvgetxw](https://www.youtube.com/watch?v=x_MsPvgetxw)

Research Integrity

Video

Produced by the University of Amsterdam, 2016

# RCR - Responsible Conduct of Research

## Review:

- Research Misconduct
- Protections
- Conflicts of Interest
- Mentoring
- Authorship credit
- Peer Review
- Data Management
- Collaborative Research
- Export Controls

# RCR - Responsible Conduct of Research

## Resources:

- Professor
- Mentor
- Executive Officer
- Conflict of Interest Administrator
- Export Control Administrator
- Human Subjects: HRPP Director
- Plagiarism: Academic Affairs
- Ombudsman: Martin Gitterman
- Research Integrity Officer

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Thanks to:

U.S. Office of Research Integrity – Health & Human Services

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Online Ethics Center / U of Virginia

Rebecca Banchik

Ed Catapane

Michele Kiely

Paul Kran

Travis McCarthy

Bill McClure

Kristin Sommer

Alan Kluger

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