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

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Adrienne Klein
Research Integrity Officer
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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
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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
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The National Science Foundation (NSF) and other federal funders require the universities they fund to provide training in research ethics.
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CUNY policy...

CUNY policy on training in responsible conduct of research

CUNY policy for disposition of allegations of research misconduct

Research Integrity Officers
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Our topics:

- Research Misconduct
- Protections
- Conflicts of Interest
- Mentoring
- Authorship credit
- Peer Review
- Data Management
- Collaborative Research
- Export Controls
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- Compliance
  - Requirement
  - Regulation
  - Standard
  - Laws
  - Terms
  - Guidelines
  - Transparency
  - Rules
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e.g. Federal regs

Compliance

Requirement

Regulation

Standard

Rules

Laws

Guideline

Terms

Transparency
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Compliance

- Regulation
- Standard
- Laws
- Terms
- Guidelines
- Transparency

Requirement

- Rules

e.g. Federal regs

State regs
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e.g. Federal regs

State regs

Sponsor requirements
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- Reporting requirements
- Institutional policies
  - e.g. Federal regs
- Compliance
  - Regulation
  - Standard
- Your research community
- Law
- State regs
- Sponsor requirements
- Rules
- Guideline
- Terms
- Transparency
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- Institutional policies
  - e.g. Federal regs
  - Read guidelines
  - Be aware of expectations

- Reporting requirements

- Your research community

- State regs

- Sponsor requirements

- Compliance
  - Requirement
    - Regulation
      - Rules
      - Guideline
    - Standard
      - Laws
      - Terms
    - Transparency
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Institutional policies

Reporting requirements

Your research community

e.g. Federal regs

Standard

State regs

Regulation

Requirement

Guideline

Laws

Terms

Rules

Compliance

Transparency

Sponsor requirements

Read guidelines
Be aware of expectations

Full communication
Transparency in interactions

fau.edu
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GC CUNY’s compliance policy
All researchers

Requirement 1:
Attend one workshop
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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.
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)**.
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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
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.

https://www.methodspace.com
Unethical peer review
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

BAD
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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
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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
Ideal Behavior

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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.
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
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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/
Research Misconduct - 1

**Fabrication**
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**Plagiarism**
Appropriation of another person’s ideas, processes, results or words without giving appropriate credit
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.
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Some temptations to commit misconduct

- Publish or perish pressures
- Need to obtain research funding
- Seeking promotion
- Reputational motivations
It’s not worth it!
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.
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Making an Error
A role-play

2 + 2 = 5

https://blogs.transparent.com
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Making an Error

Professor Perfect talks with her student, Steven ...
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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?
Making an Error
A role-play

How to avoid this problem?
Ideal Behavior

- 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
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
Plagiarism
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1 Acknowledge the contributions of others
2 Verbatim text: use quotation marks & a citation
Plagiarism
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1 Acknowledge the contributions of others
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3 Summarizing or paraphrasing: cite sources
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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
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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
Self-Plagiarism
A role-play
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.
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Self-Plagiarism
A role-play

How to avoid this problem?
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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
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**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
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
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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
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
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Competing Interests
A role-play

georgedelahenty.wordpress.com
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.
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...
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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?
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Competing Interests
A role-play

How to avoid this problem?

Discuss things in advance.
Establish ground rules.
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Ideal Behavior

- 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
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
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
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Authorship
A role-play

Rwldesign.com
A grad student, Jess, approaches her faculty mentor regarding credit for some writing she did.
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Authorship
A role-play

How to avoid this problem?
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Discuss in advance!
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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/
• Data Source

Data Collection

• Data recorded such that it can be validated
• Appropriate authorization
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/
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
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/
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
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
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https://www.youtube.com/watch?v=x_MsPvgetxw

Research Integrity

Video

Produced by the University of Amsterdam, 2016
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Review:

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

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Ideal Behavior

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Alan Kluger
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Webinar

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intellectual property intellectualism
think writing case hard
Serious misconduct standards
plagiarism conflict of interest
professionalism honesty
claiming methodology
data respect copy-paste
idea authorship formulate
strongest standards wrong
sufficient ethical behaviour
codes of conduct attitudes