

Recent Developments and Key Issues in Research Integrity

An Overview of Research Integrity and Ethics and its programming at UVA November 6, 2024

An Overview of Research Integrity at UVA

- Responsible Conduct of Research Program
 - Online training/Live Courses for credit
 - Outreach and Education
 - Policies/Procedures
 - Website / Guidance
 - Tools for RCR (iThenticate/Proofig)
- Research Misconduct
 - Education and Prevention
 - Complaint Assessment and Investigation

"Research responsibility begins from the initiation of research plan and goes beyond the prevention of misconduct." Nath (2021)









Discuss Use Artificial Intelligence in Research & Research Integrity Promote Tools to Ensure Credibility and Quality in Research: iThenticate/ Proofig

Advance Data Management Support Excellence in Global Collaboration

Use of AI in Research & Research Integrity

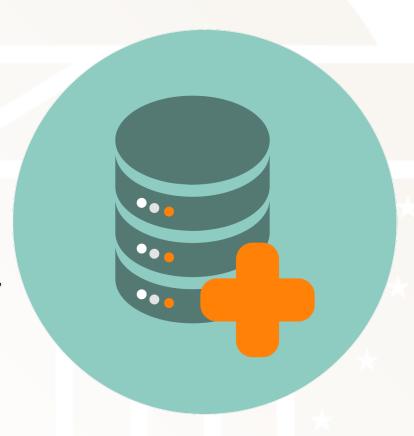


Ethical Considerations

- Bias Mitigation
- Transparency
- Reproducibility and Verification
- Automated Analysis
- Verification Tools
- Regulatory Compliance
- Accountability
- Data Privacy
- Algorithmic Bias

Risks of Failure in Data Management in Research

- Data Integrity Issues
 - Poor data management can lead to inaccuracies, affecting research outcomes.
 - Reproducibility Challenges
 - Inconsistent Results
- Lack of Transparency
- Ethical and Legal Risks
 - Non-compliance: data protection regulations (e.g., GDPR,
 HIPAA).
- Reputation Damage
 - Credibility Loss
 - Retractions
- Operational Inefficiencies



<u>This Photo</u> by Unknown Author is licensed under <u>CC BY-NC</u>

Technological Advances and Ethics



- Digital Image
 Manipulation: Addressing issues
 of data integrity.
- **Text Recycling:** Understanding and managing self-plagiarism.
- Promotion of iThenticate:Protecting research and students.
- Pre-print Servers & Predatory
 Journals: Navigating the ethics of early publication.

Global Trends and Collaborations

Multidisciplinary

Research: Increasing collaboration across disciplines and countries.

• Ethical Harmonization: Need for consistent ethical standards globally.



Policy and Regulation Updates

- NSF Training Requirements: New mandates for ethical training for all research personnel.
- HHS ORI: New research misconduct regulations.

Research Misconduct Procedure







Assessment

•The RIO evaluates the complaint to determine whether it falls within the scope of the UVA Research Misconduct Policy. If it does, the case moves to the inquiry stage.

Inquiry

•The RIO establishes an inquiry committee who will gather preliminary evidence and may conduct interviews to determine whether an investigation is warranted.

Investigation

•The RIO-established committee examines research records and related evidence in depth, conducts interviews, and develops a factual record leading to recommended findings on whether research misconduct has been committed, by whom, and to what extent.

UNIVERSITY of VIRGINIA Concepts to Prevent Misconduct

- De-stigmatize Corrections
- Promote a Culture of Transparency
- Incentivize Through Recognition and Rewards
- Implement Robust Training Programs
- Strengthen Institutional Policy
- Use Technological Tools
- Foster Collaborative Efforts

Collaborative Opportunities

Encourage UVA's existing experts in ethics and the study of research integrity

Ensure collaboration between OVPR and schools/departments on workshops, training, courses, and mentorship

Provide administrative support to schools with evolving research integrity activities

Recognize outstanding research contributions for those working in study of the field of research integrity & ethics

Involve faculty in the development of institutional research ethics policies