Misconduct or Crisis? Leveraging Communication to Guide Crisis Management in Research Institutions

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BACKGROUND

According to a 2021 meta-analysis by Xie et al.2, the prevalence rates of falsification, fabrication, and plagiarism (FFP) and other questionable research practices were 2.9% and 12.5%, respectively.

- ***Key Question:*** *How can communication strategies be leveraged to manage and mitigate crises arising from research misconduct effectively?*

Effective research communication can transform potential misconduct incidents into manageable crises, mitigating reputational damage and ensuring institutional integrity.

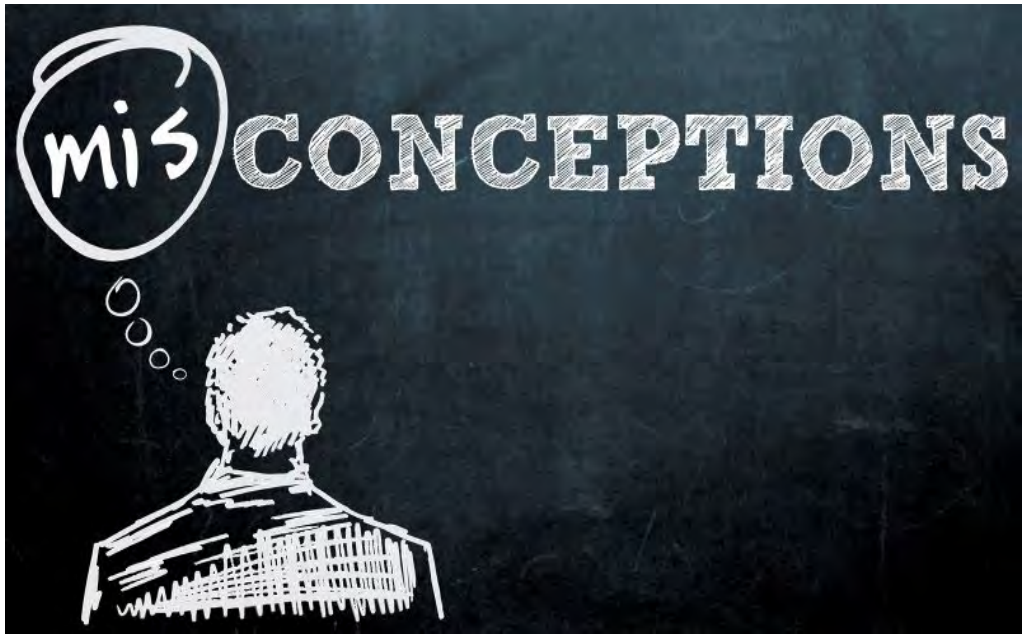
GOALS

- Explore strategies for managing crises involving research misconduct through communication best practices
- Identify major stakeholders in research institutions
- Define research misconduct and define crisis

- Discuss the potential consequences of misconduct
- Introduce the concept of crisis management in research institutions

Some Misconceptions & KEY TAKEAWAYS about CRISIS in Research

- Most previous studies about "Crisis" in Research Administration mostly center on COVID and natural disasters
- Misconduct is characterized here as an unethical research action that can lead to a crisis
- Understanding the crisis can assist you in identifying the primary and secondary stakeholders in varying situations
- Organizations can rebound from a crisis if it is appropriately managed. Outcomes can be favorable if preparatory and response measures are followed
- Time to react plays a major role in turning around the impact level and management of a crisis. The key is to be prepared.



CAN YOU IDENTIFY THE POTENTIAL CRISIS

A

B

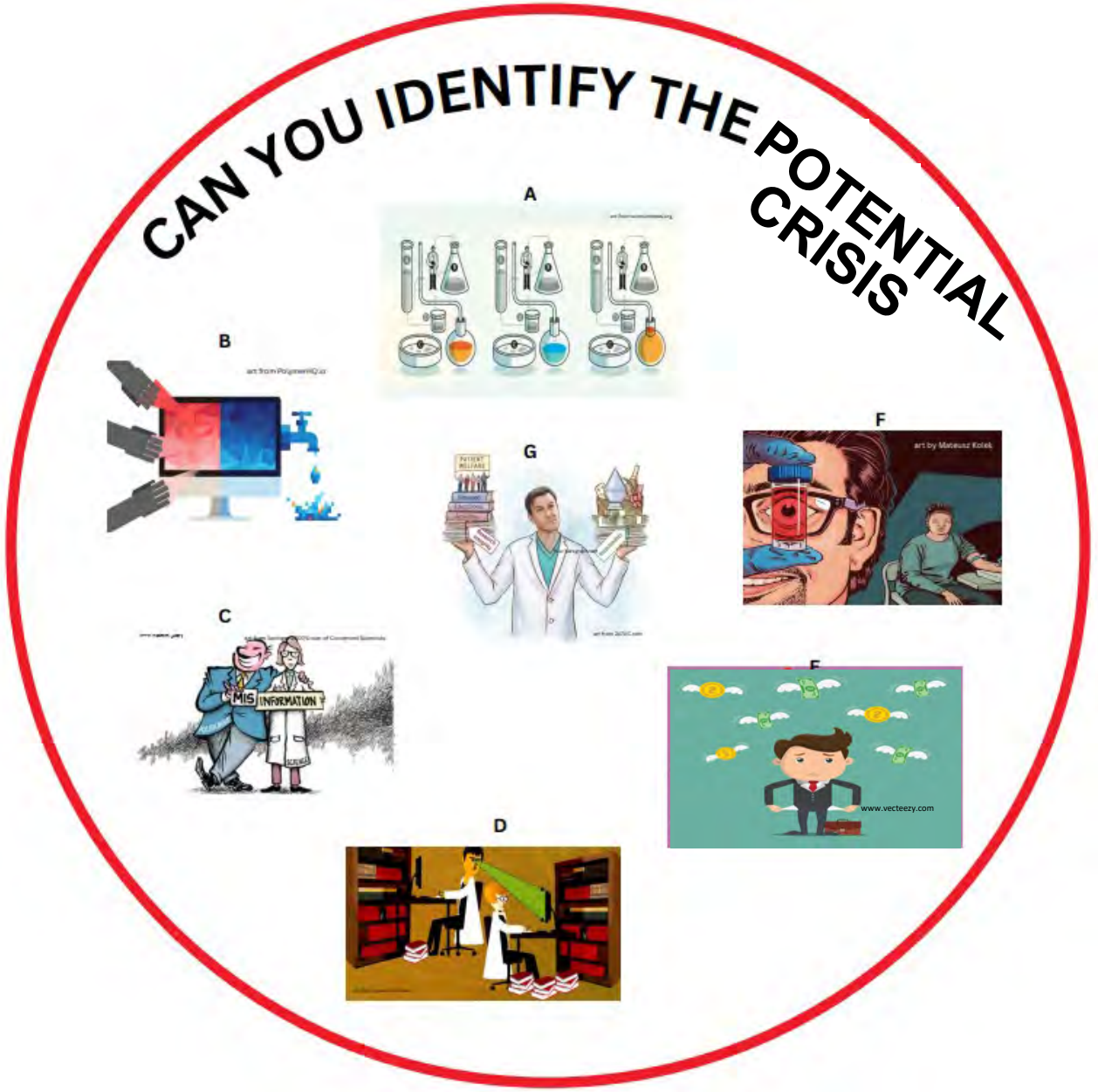
G

F

C

E

D



A. Replication Crisis
B. Data leak
C. Misinformation
D. Plagiarism
E. Funding mismanagement
F. Clinical Trial Misconduct
G. Conflict of interest

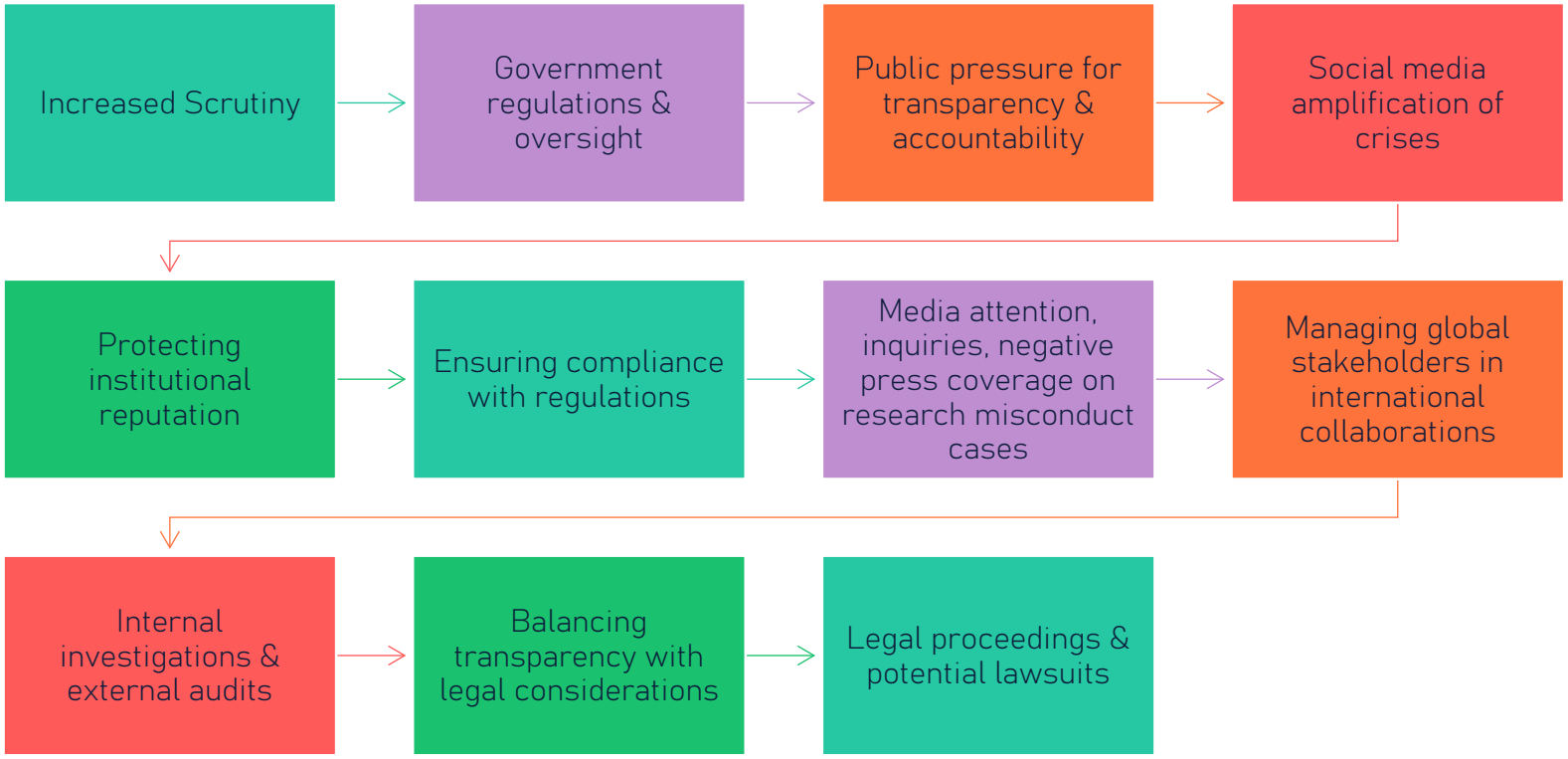
The fine line between misconduct & crisis in research institutions…

Research Misconduct: According to the Office of Research Integrity (ORI), Research misconduct is fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. *Reference:* https://ori.hhs.gov/definition-research-misconduct

Crisis: It is a highly relevant, unforeseen, and potentially disruptive incident (or misconduct) that could jeopardize an institution's reputation and research integrity, and have a significant impact on its relationships with stakeholders.

Another definition of "crisis" found in https://www.definitions.net/definition/ is *"a critical & intense situation or event that poses a significant threat or challenge…, a turning point or a moment of decision that demands decisive measures to mitigate negative consequences, restore stability, or manage evolving circumstances."*

The Evolving Landscape of Challenges in Research Institutions...



Preparatory Stages In Crisis Management for Research Institutions

Qualifications & Certifications	Ensure there are proper qualifications and certifications and the recruitment process has no room for nepotism or cronyism Investigate/ Do a background check, among all the necessary checks before hiring! Lookout for conflicts of interest and conduct annual COI people & project contributors should be documented Get an IRB approval
Data Collection	Ensure proper documentation/monitoring, especially with data &Compare data regularly to rule out falsification Carry out several simulations to get the right data/outcome Monitor data yourself, and the efforts of each contributor should be documented. Behavior in action should be also documented
Policy Development & Update	Ensure relevant policies are created and updated regularly, especially the whistleblower's policy, Intellectual property policies, and Conflict of interest policies. There has to be adequate awareness of the licensing terms of the project and what belongs to whom after the project's completion Direct and indirect cost and travel policies should be clearly stated and addressed
Account Management	Hire/use an accountant if you can Create a checklist for onboarding and closeout meetings Ensure proper documentation; Budget, purchases (and their usage), and approvals should be documented and addressed constantly and put handovers in place (the bus theory) Ensure there are solidified agreements to Terms & Conditions before every project between relevant parties Also, ensure there is no conflict of interest especially when PI has sub-projects Researchers should be transparent with the sponsors, especially with extensions and deadlines Build a good relationship with program officers and local media
Training, Scenario Development & Emergency Plannings	Ensure there is misconduct training, scenario development, prediction & emergency planning Put in place strong plagiarism software and require its usage Mandatory training for international concerns when appropriate (funds, appointments, projects)
Communication to the TA of the crisis	Establish lifelines and front liners then communicate & train Develop proactive communication and guidelines for TA Access the degree of the crisis before making a decision on; what extent to communicate it, and to whom to Communicate Enforce disciplinary measures to promote accountability
Develop & Prioritize solutions	Have a lawyer or a situational attorney, and a PR/Crisis/Communication team on the ground Develop & Prioritize solutions Create Flexibility in Pre-recovery

RESPONSE: R. I. C. E

Recognize the crisis - Situational awareness and focus on understanding the problem

Risk assessment - decisions should be made based on the lowest impact on involved stakeholders

Identify the root cause - to decide best how to handle the situation

A Crisis team (this should have been created at the preparation stage) should be ready with the front liners identified and briefed so that communication correlates

Emergency push button - The first action should never be to deny or pass blame

Emergency Action - Dispatch resources already planned for

Communicate proactively to different stakeholders (*Public awareness vs Stakeholder Awareness)* so that no one is caught off guard. Based on the situation, alert only relevant stakeholders to contain the situation.

Re-establish lifeline communications & dispatch lessons learned. Communicate and reinforce disciplinary measures to promote accountability

Recover and move on

STAKEHOLDERS IN RESEARCH INSTITUTIONS

These are diverse groups or individuals who have an interest in, are affected by, or/and can influence the research process and its outcomes. Varying situations determine what stakeholder is primary or secondary.

Internal Stakeholders	External Stakeholders	Resource Users	Media & Communication Partners	Ethical and Regulatory Bodies
· Researchers, scientists · Research assistants, lab technicians · Administrative staff · Students (undergraduate, graduate, postdoctoral) · Institutional leadership (e.g., department heads, deans, provosts)	· Funding agencies & sponsors · Government bodies & policymakers · Industry partners & collaborators · Community organizations & advocacy groups · Beneficiaries of the research outcomes (e.g., patients, specific populations) · Other academic institutions/research networks	· Those associated with industries that may use or be impacted by the research (e.g., mining, fisheries, agriculture)	· They are not direct stakeholders, but they still play a role in disseminating research findings	· Institutional Review Boards (IRBs) · Ethics committees · Regulatory agencies

Let's explore some real-life case studies together...

Case Study - Jesse Gelsinger (June 18, 1981 – September 17, 1999)

The Jesse Gelsinger case is a tragic and infamous example of research misconduct that occurred in 1999 during a gene therapy clinical trial at the University of Pennsylvania.

Jesse Gelsinger, an 18-year-old with a rare metabolic disorder, volunteered for a gene therapy trial aimed at treating ornithine transcarbamylase (OTC) deficiency

On September 17, 1999, Jesse died from multiple organ failure, four days after receiving the experimental treatment

Investigations revealed several serious ethical violations and research misconduct:

- Failure to obtain proper informed consent: The researchers did not disclose that two monkeys had died in pre-clinical studies and that other human volunteers had experienced adverse reactions.
- Protocol violations: The study continued despite participants experiencing toxic reactions that should have halted the trial.
- Conflicts of interest: The lead researcher, Dr. James Wilson, had a significant financial stake in the gene therapy vector being tested, which was not adequately disclosed.

The university declined to take responsibility for Jesse's death

Jesse's parents sued

FDA suspended human research at Penn's Institute for Human Gene Therapy (January 2000)

The University of Pennsylvania and Children's National Medical Center paid over $1 million in settlements to the government

The University eventually shut the program down

The case led to increased scrutiny of gene therapy research and highlighted the need for stricter oversight and ethical guidelines in human subject research.

The Jesse Gelsinger case remains a powerful reminder of the importance of research integrity, proper informed consent, and the potential consequences of conflicts of interest in clinical trials.

References: https://www.niehs.nih.gov/research/resources/bioethics/timeline

By implementing these communication strategies, the a University could have better managed the crisis, maintained trust with stakeholders, and potentially mitigated some of the long-term reputational damage resulting from the case via:

Transparency & Timely Disclosure: The university should have promptly disclosed relevant information about the risks & previous adverse events to participants, like about other human volunteers experiencing adverse reactions

Protocols: Establishing clear internal protocols for sign-off on all crisis communications would have ensured swift stakeholder engagement. The university should have mapped out all stakeholders (including participants, their families, the broader scientific community, and the public) and tailored communications to each group. This would have allowed them to control the message and dispel rumors or misinformation

Clear internal mitigation of risks and delays: designating a first point of contact for media inquiries to manage the situation quickly, expertly, and sensitively

Proactive Media Strategy: Instead of being reactive, the university could have developed a proactive media strategy to address concerns and demonstrate its commitment to ethical research practices and participant safety

Addressing Conflicts of Interest: The university should have openly addressed and managed the conflict of interest involving Dr. James Wilson's financial stake in the gene therapy vector being tested

Consistent Messaging: Training spokespeople to deliver consistent messaging that reflects organizational values and commitment to research integrity would have helped maintain trust

Prioritizing Stakeholder Welfare: The university should have communicated their prioritization of participant welfare over financial concerns or research outcomes

Ongoing Updates: Providing regular, honest updates to all stakeholders throughout the crisis would have demonstrated transparency and a commitment to addressing the issues at hand.

Case Study – The Hwang Woo-suk Scandal

Initial Claims: Hwang Woo-suk, a South Korean biologist, claimed to have successfully cloned human embryonic stem cells in 2004 and 2005, publishing his findings in the journal "Science"

Investigations and Misconduct: Investigations revealed that Hwang fabricated data and violated ethical guidelines. He claimed to have created stem cell lines that did not exist.

Ethical Violations: Hwang used far more human eggs than reported, some of which were obtained unethically from his own researchers. This raised serious ethical concerns about the treatment of research participants.

Consequences: In 2006, Hwang's papers were retracted from Science, and he was dismissed from Seoul National University. He faced criminal charges for fraud and embezzlement.

Impact: The scandal severely damaged the credibility of stem cell research and highlighted the importance of scientific integrity and rigorous peer review processes in scientific research.

Reference:

https://en.wikipedia.org/wiki/Hwang_affair

Immediate Transparency and Fact-Based Communication

- **Acknowledge errors early:** SNU should have publicly acknowledged concerns about Hwang's research integrity as soon as allegations arose, rather than waiting for external investigations. Delays allowed rumors to spread and damage trust.
- **Issue a unified fact sheet:** A centralized document detailing confirmed findings (e.g., ethical violations, fabricated data) would have countered misinformation and provided clarity to stakeholders

Stakeholder-Specific Messaging

- **For the scientific community:** Disclose methodological flaws and retract papers swiftly to prevent further reliance on fraudulent research
- **For the public**: Use simplified terms to explain the scandal's implications, emphasizing steps to prevent recurrence (e.g., stricter oversight, ethical training)
- **For government partners:** Address conflicts of interest transparently, particularly Hwang's ties to political figures like President Roh, who publicly supported him despite ethical concerns

Restructuring Media Relations

- **Avoid beat-centered reporting:** The scandal revealed how close reporter-source relationships in Korean media suppressed critical coverage. SNU could have partnered with independent journalists to ensure balanced reporting.
- **Designate trained spokespersons:** A single authoritative voice (e.g., university president or ethics committee head) should have managed media interactions to prevent mixed messaging

Proactive Misinformation Management

- **Counter nationalist narratives:** The public and media initially framed criticism of Hwang as "unpatriotic". SNU could have emphasized that scientific integrity, not nationalism, drives long-term credibility.
- **Collaborate with external validators:** Independent scientific bodies or international experts could have verified claims, reducing reliance on Hwang's team for information

Internal Reforms and Accountability

- **Publicize institutional changes:** After Hwang's dismissal, SNU should have communicated reforms (e.g., strengthened IRBs, financial oversight) to rebuild trust
- **Address cultural flaws:** The scandal exposed hierarchical structures that discouraged whistleblowing. Transitioning to horizontal, team-based oversight could have fostered accountability.

Long-Term Reputation Management

- **Highlight corrective actions:** Regular updates on policy changes (e.g., ethics training programs, transparent funding audits) would have demonstrated commitment to reform.
- **Engage global peers:** Partnering with international institutions for joint research audits could have restored credibility in the scientific community.

Case Study – The University of Virginia (2015) A Positive Turnaround

Crisis: Allegations of research misconduct related to fabricated data in a high-profile medical research project.

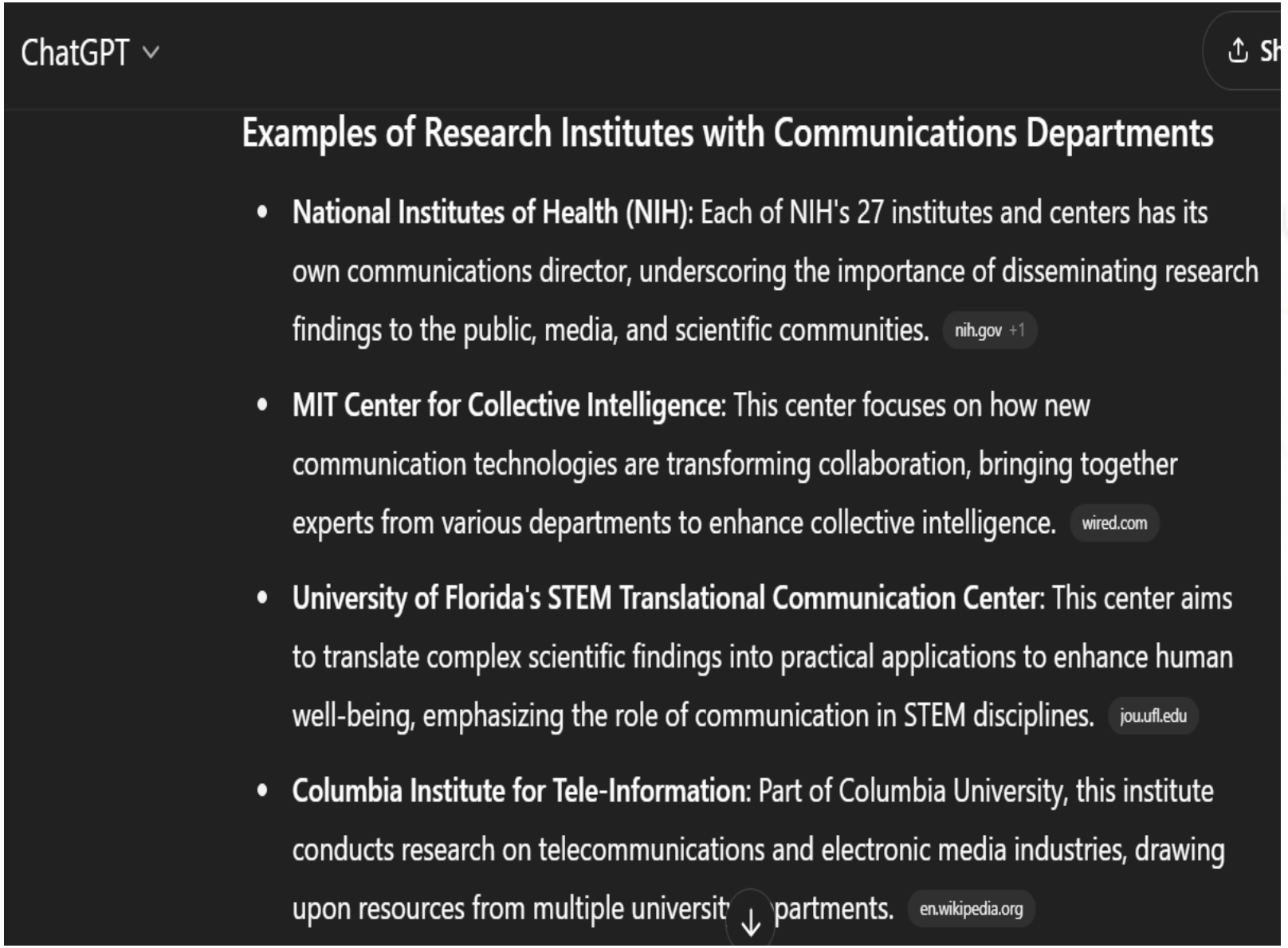
Communication Approach:

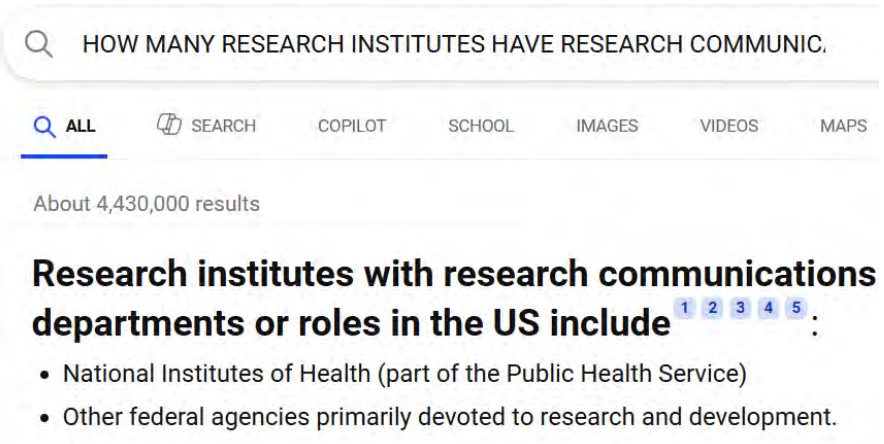
- **Immediate internal investigation** with external oversight
- **Transparent** updates shared with stakeholders and media
- **Regular updates** through institutional communication channels to manage public perception
- **Outcome:** Restoration of trust with the research community and public, though reputational damage lingered.

Reference:

University of Virginia. (2015). *The impact of research misconduct on the university's reputation: A case study*. University of Virginia Press.

The Role of the Research Communications Office


ChatGPT
Examples of Research Institutes with Communications Departments
• National Institutes of Health (NIH): Each of NIH's 27 institutes and centers has its own communications director, underscoring the importance of disseminating research findings to the public, media, and scientific communities. nih.gov +1
• MIT Center for Collective Intelligence: This center focuses on how new communication technologies are transforming collaboration, bringing together experts from various departments to enhance collective intelligence. wired.com
• University of Florida's STEM Translational Communication Center: This center aims to translate complex scientific findings into practical applications to enhance human well-being, emphasizing the role of communication in STEM disciplines. jou.ufl.edu
• Columbia Institute for Tele-Information: Part of Columbia University, this institute conducts research on telecommunications and electronic media industries, drawing upon resources from multiple universit partments. en.wikipedia.org


HOW MANY RESEARCH INSTITUTES HAVE RESEARCH COMMUNIC.
ALL
SEARCH
COPILOT
SCHOOL
IMAGES
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MAPS
About 4,430,000 results
Research institutes with research communications departments or roles in the US include 1 2 3 4 5 :
• National Institutes of Health (part of the Public Health Service)
• Other federal agencies primarily devoted to research and development.

TASKS FOR RESEARCH COMMUNICATIONS TEAM

- Job Description:
- Providing strategic communication advice
- Developing key messages and talking points
- Managing media inquiries and social media
- Transparent, timely, and accurate messaging
- Clear guidelines for internal and external stakeholders
- Managing sensitive information without compromising institutional integrity
- Ensuring alignment with organizational values & crisis protocols
- Coordinating with internal & external stakeholders

- Post-Crisis Evaluation: Assess the effectiveness of communication efforts and adjust policies for future incidents

- Key Communication Strategies:
- **Message Development:** Crafting clear, concise &empathetic messages
- **Stakeholder Engagement:** Communicating with researchers, leadership, media, & the public
- **Internal Communication:** Brief leadership, faculty, and staff with the same message to ensure consistency
- **External Communication:** Control external narratives via the media, community outreach & public statements
- **Media Relations:** Building relationships with journalists & controlling the narrative

Key departments that the research communications team/individual can collaborate with:

Research and Development (R&D): to understand and accurately communicate ongoing research projects and breakthroughs.

Marketing: Partnering to develop integrated communication and marketing strategies that highlight the breadth and impact of the institution's research

Media Relations: Collaborating to manage relationships with journalists and secure coverage in top-tier publications

Office of Research: to develop broader impact dissemination strategies and support principal investigators in their grant applications.

Academic Departments: Coordinating with specific academic departments to promote their research achievements

Technology and Social Media: Partnering with teams managing the institution's online presence to share research findings through various digital platforms

Best Practices in Research Crisis Communication

- Establish a dedicated crisis communication team
- Develop clear communication protocols and guidelines and proactive communication strategies
- Train researchers and administrators in crisis communication
- Build stakeholder trust through consistent messaging
- Utilizing multiple communication channels effectively
- Institutions should invest in training, crisis simulations & communication tools to be ready when a crisis occurs
- Foster a culture of research integrity and transparency in research processes

Integrating Technology in Crisis Communication (Keyhole, Meltwater, etc)

Utilizing social media for rapid response and updates

Implementing crisis management software for coordination (10 of the Best Incident and Crisis Management Software for 2025)

Leveraging data analytics for sentiment analysis and impact assessment

Future Trends in Research Communications for Crisis Management

AI-powered crisis prediction and early warning systems

Enhanced data integrity verification tools

Blockchain for transparent research documentation

Virtual reality simulations for crisis management training

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