Research Misconduct Case Examples

Laurel L. Hester, Ph.D. and Beth Masimore, Ph.D.
Investigative Scientists

National Science Foundation
Office of Inspector General
## FY22 Research Misconduct Investigations

<table>
<thead>
<tr>
<th></th>
<th>Plagiarism</th>
<th>Fabrication/ Falsification</th>
<th>Mixed*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegations Received</td>
<td>37</td>
<td>16</td>
<td>0</td>
<td>53</td>
</tr>
<tr>
<td>Cases Opened</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Cases Closed</td>
<td>15</td>
<td>2</td>
<td>2</td>
<td>19</td>
</tr>
</tbody>
</table>

*‘Mixed’ indicates cases that involved more than one type of allegation.*
Some allegations are not opened as cases

1. No NSF Nexus
2. *De minimis* plagiarism
3. Authorship dispute
4. Insufficient evidence
5. Allegation is a scientific dispute
Some inquiries close without NSF action

Three Examples:

Our office noticed the retraction of an article acknowledging NSF support and contacted the author PI's university. The university did an inquiry, found the NSF-funded PI was not responsible for the alleged plagiarism. We concurred with the inquiry report's conclusion and closed the case.

Our inquiry determined this was a case of self-plagiarism and a difference of opinion about how to describe the research, so we closed the case.

Our inquiry determined the omission of a collaborator on a proposal submission did not warrant an investigation because the error arose from poor institutional guidance. We (NSF OIG) sent a Questionable Administrative Practices (QAP) letter to the University and a Questionable Research Practices (QRP) to the PI.
Our investigations and conclusions are independent

We independently review the evidence you obtain
• We may reach the same conclusion, or not
• We may concur in whole, or in part

We recommend findings and actions
• NSF adjudicates
• Protect NSF, and the federal interest
Case Study #1

What We Found
Faculty member PI and NSF reviewer plagiarized from an NSF proposal he reviewed and from various sources into an NSF proposal. The PI acknowledged copying the material.

Would the section of the copied material matter?

University Actions
PI required to submit plagiarism reports for proposals and papers for 3 years and complete Responsible Conduct of Research training.
Case Study #1 Outcome

What We Found
Faculty member PI and NSF reviewer plagiarized from an NSF proposal he reviewed and from various sources into an NSF proposal. The PI acknowledged copying the material.

University Actions
PI required to submit plagiarism reports for proposals and papers for 3 years and complete Responsible Conduct of Research training.

NSF Actions
• 2-year debarment of PI
• 5 years’ certification and assurances; prohibited from serving as NSF reviewer, advisor, consultant, or rotator
Case Study #2

What We Found
An NSF-funded postdoctoral researcher plagiarized images and subsequently falsified data by portraying them as original work. The images were in an NSF annual report and incorporated into a manuscript that acknowledged NSF support.

The postdoctoral researcher confessed during the University inquiry. Does a confession affect your institutional process?

University Actions
Notification to NSF OIG and to the postdoctoral researcher's current employer.

NSF Actions
- 1 year debarment
- 4 years’ certification and assurances; prohibited from serving as NSF reviewer, advisor, or consultant
Case Study #3

**Allegations:**
- 24 allegations of falsification related to images, figures, and procedures
- 2 papers and 1 non-NSF proposal

**University Assessment:**
- 14 falsified images and figures
- *Lack of physical evidence precluded drawing conclusions about experimental procedures*

**University Actions:**
- Finding of research misconduct
- Recommended that the Subject be removed from the Ph.D. program

**OIG Assessment and Recommendations:**
- Concurred with University regarding falsified images
- *Preponderance of the evidence indicated falsification of experimental procedures*
  - *Independent replication attempts failed and illustrated likely falsification*
- Recommend a Finding of Research Misconduct, debarment, etc
Case Study #4

Allegations:
• Plagiarism in an NSF proposal with a PI and co-PI
• Text, figure, and table from numerous sources

University Assessment:
• PI was responsible for majority of the plagiarism, which was committed intentionally
• Co-PI knowingly plagiarized a small amount of text

University Actions:
• Finding of Research Misconduct for PI and Co-PI

OIG Assessment and Recommendations:
• Concurred with University assessment of culpability
• PI: Recommend a Finding of Research Misconduct, etc
• Co-PI: No recommendations; Questionable Research Practices letter
Case Study #5

Allegations
A University notified us of an inquiry's conclusion that a research misconduct investigation was warranted for allegations regarding published NSF-supported research. We agreed and referred the investigation.

University Conclusions:
Although experimental methods were not accurately described, there was no research misconduct. We concurred. Specific allegations were determined to be *unsubstantiated, honest error, or a matter of scientific dispute*.

NSF OIG sent the authors *Questionable Research Practice* letters
Other OIG Communications

Clarification emails/letters
Sometimes we have questions or need more information following our review of institution reports and supporting documents.

Timeline notifications
The case lead may email the university contact at intervals to request updates, especially if we are continuing to defer our investigation due to delays in the university’s process. We will let you know if we decide to cease deferring our investigation.

Questionable Administrative Practices letter
Provides feedback regarding better ways to handle inquiry or investigation related matters and about potential adverse consequences of observed institutional practices.
## FY22 Research Misconduct OIG Investigation Outcomes

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<th>Total</th>
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</thead>
<tbody>
<tr>
<td>NSF Findings &amp; Actions</td>
<td>5</td>
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<td>6</td>
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<tr>
<td>Included Debarment*</td>
<td>1</td>
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<td>0</td>
<td>(1)</td>
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<tr>
<td>Closed with Warning</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Closed with No Action</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

*“Included Debarment” is a subset of NSF Findings and Actions.*
Questions?

Presenter Emails: LHester@nsf.gov, BMasimor@nsf.gov