## Scientific Integrity Grade Rubric
### Scientific Misconduct

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Total Possible</th>
<th>Total Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Political Manipulation of Science</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>B. Breadth of Coverage</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C. Whistleblower Protection</td>
<td>12</td>
<td>0</td>
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<tr>
<td>D. Investigations of Complaints</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>E. Investigation Independent of Chain of Command</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>F. Sanctions for Misconduct</td>
<td>6</td>
<td>0</td>
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### Public Communications of Science

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<td>10</td>
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<td>B. Absence of policy review or agency screening for the above</td>
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<td>C. Ability of scientists to review press releases regarding their work prior to final publication</td>
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### Transparency of Policy Decision-Making

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<td>A. Requirement that all agency policy decisions must be based on science subjected to external peer review</td>
<td>10</td>
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<td>B. Original research documents are part of administrative record</td>
<td>10</td>
<td>0</td>
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</table>
I. **Scientific Misconduct** – (15/40 pts)

A. Political Manipulation of Science (3/6 pts)
   1. *Prohibits alteration of technical/scientific documents for non-technical reasons (3/3 pts)*

   Yes. “It is NASA policy that political officials should not suppress or alter scientific or technological findings.” NASA’s Scientific Integrity Policy also references 14 C.F.R. 1275, the agency’s research misconduct regulations, which prohibit “fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results, funded or supported by NASA.”

   2. *Prohibits intimidation or coercion to alter scientific data/analysis/conclusions for non-technical reasons (0/3 pts)*

   NASA’s Scientific Integrity Policy does not directly address this.

B. Breadth of Coverage (5/5 pts)
   1. *Applies to political appointees and senior managers (3/3 pts)*

   Yes.

   2. *Applies to contractors, states, and other partners (2/2 pts)*

   Yes. NASA’s regulations on research misconduct regulations extend to research “funded or supported by NASA.”

C. Whistleblower Protection (0/12 pts)
   1. *Explicitly protects those filing misconduct complaints from retaliation (0/4 pts)*

   NASA’s Scientific Integrity Policy does not directly address this. It only discusses the Whistleblower Protection Act.

   2. *Protects scientists for retaliation based on content of work (0/4 pts)*

   NASA’s Scientific Integrity Policy does not directly address this.

   3. *Provides that agency officials who engage in retaliation will be subject to discipline (0/4 pts)*

   NASA’s Scientific Integrity Policy does not directly address this.

D. Investigations of Complaints (5/5 pts)
   1. *Defined process (1/1 pt)*
NASA’s Scientific Integrity Policy incorporates the procedures NASA already has in place for investigating research misconduct, 14 C.F.R. 1275.

2. **Timelines (1/1 pt)**

NASA’s research misconduct regulations specify timelines for investigation.

3. **Ability of complainant to respond (1/1 pt)**

Yes. According to NASA’s research misconduct regulations, “NASA shall afford the accused individual or institution a chance to comment on the investigation report and a chance to appeal the decision resulting from the adjudication.”

4. **Transparency of findings and rationale (1/1 pt)**

Yes. “Based on a preponderance of the evidence, the NASA Adjudication Official shall issue a decision setting forth the Agency’s findings as to whether research misconduct has occurred and recommending appropriate administrative actions that may be undertaken by NASA in response to research misconduct determined to have occurred.” 14 C.F.R. 1275.107.

5. **Relationship with the IG is clearly defined (1/1 pt)**

Yes. NASA’s research misconduct regulations specify when the OIG should complete the investigation.

E. **Investigation Independent of Chain of Command (2/6 pts)**

An investigation under the Scientific Integrity Policy is to be conducted by the Inspector General (IG). The IG may recruit experts from within the agency for assistance with the investigation, but there is no prohibition on conflicts of interest between the experts and those involved in the investigation.

F. **Sanctions for Misconduct (0/6 pts)**

1. **States that misconduct is grounds for disciplinary action or dismissal (0/2 pts)**

   NASA’s Scientific Integrity Policy does not directly address this. NASA’s research misconduct regulations stipulate only ambiguous “administrative actions.”

2. **Explicit procedure for discipline of sustained misconduct complaints (2 pts)**

   NASA’s Scientific Integrity Policy does not address this.

3. **Automatic review of court rulings based upon arbitrary and capricious application of scientific information or scientific findings (2 pts)**
NASA’s Scientific Integrity Policy does not address this.

II. Public Communications of Science – (22/40 pts)

A. Process for scientist to publish or lecture regarding their official work with the general public, in external peer-reviewed journals or at scientific conferences (10/10 pts)

Yes. Regarding speaking, according to NASA’s Policy on the Release of Information to News and Information Media, available at http://www.fas.org/sgp/otergov/nasa033006.pdf, “NASA employees may speak to the media and the public about their work. When doing so, employees shall notify their immediate supervisor and coordinate with their public affairs office in advance of interviews whenever possible, or immediately thereafter, and are encouraged, to the maximum extent practicable, to have a public affairs officer present during interviews.”

Regarding publication, NASA’s Scientific Integrity Policy incorporates the agency’s policy on Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information, available at http://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=2200&s=2C, which specifies levels of technical review required for information quality.

B. Absence of policy review or agency screening for the above (2/10 pts)

“Scientific and technical information from or about Agency programs and projects will be accurate and unfiltered (14 CFR 1213.102(a)) and that editing by public affairs staff to ensure that public information products are well written and appropriate for the intended audience shall not change scientific or technical data or the meaning of programmatic content (14 CFR 1213.103(c)).”

C. Ability of scientists to review press releases regarding their work prior to final publication (0/10 pts)

Neither NASA’s Scientific Integrity Policy, nor its Policy on the Release of Information to News and Information Media, incorporated by reference, address this.

D. Explicit provision for agency scientists to be on governing and editorial boards of scientific societies (10/10 pts)

Yes. “It is NASA policy to allow NASA civil servant scientists and engineers to serve as editors or editorial board members of professional or scholarly journals. This service is generally considered part of a NASA scientist’s or engineer’s official duties and, when approved by his or her supervisor, may be carried out as part of his or her job.”

III. Transparency of Agency Decision-Making – (5/20 pts)
A. **Requirement that all agency policy decisions must be based on science subjected to external peer review (5/10 pts)**

NASA’s Scientific Integrity Policy references the agency’s policy on Requirements for the Conduct of NASA Research & Technology, available at http://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=1080&s=1A, which provides in relevant part that “[f]or external review of [Research & Technology] programs, NASA relies on peer review panels of R&T experts from outside NASA to conduct quality and performance assessments.” The Policy also directs that “NASA investigators and NASA-sponsored investigators should publish research results in the peer-reviewed literature to the greatest practical extent.”

B. **Original research documents are part of administrative record (0/10 pts)**

NASA’s Scientific Integrity Policy does not directly address this.

According to NASA’s policy on Requirements for the Conduct of NASA Research & Technology, “[a]ll documentary information, regardless of format, made or received in the course of conducting NASA R&T programs are Federal records and shall be maintained, safeguarded, and dispositioned in accordance with the requirements of NPR 1441.1, NASA Records Retention Schedules” and “[t]he results of NASA R&T efforts shall be provided the widest practicable and appropriate dissemination, while precluding the inappropriate dissemination of sensitive but unclassified information.”