

RESEARCH
MISCONDUCT

2019-2020



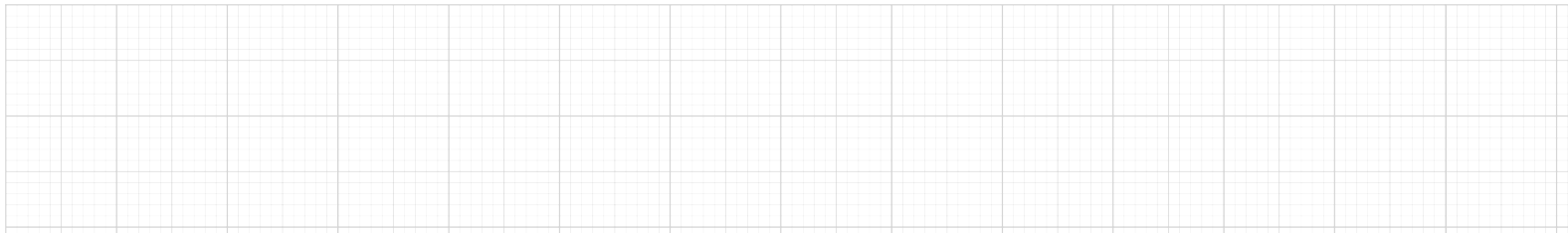
OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND INNOVATION /
SCHOLARLY INTEGRITY AND RESEARCH COMPLIANCE

RESEARCH
MISCONDUCT –
WHAT IS IT?

DEFINITION OF RESEARCH MISCONDUCT:

Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research results.

– 42 CFR part 93, 2 CFR part 910, 45 CFR part 689



FABRICATION

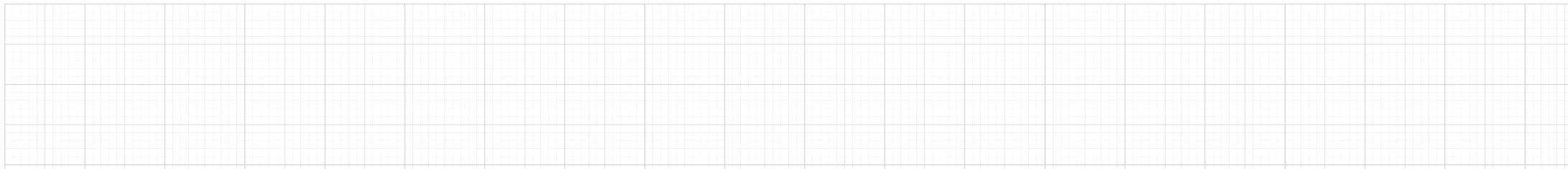
Making up results and recording or reporting them

FALSIFICATION

Manipulation of research materials, equipment, or processes, or changing or omitting results such that the research is not accurately represented in the record

PLAGIARISM

The appropriation of another's ideas, processes, results, or words without giving proper credit



THE PURPOSE OF
RESEARCH
MISCONDUCT
POLICIES

- To establish definitions for research misconduct
- To outline procedures for reporting and investigating misconduct
- To provide protection for whistleblowers and persons accused of misconduct

FEDERAL LAWS ON RESEARCH MISCONDUCT

- Public concern over research misconduct initially arose in the early 1980s
- In December 2000 the U.S. Office of Science and Technology Policy adopted a federal policy on research misconduct
- HHS, NSF, and other federal agencies require all funded institutions to address research misconduct and to develop requirements for responsible conduct of research training

PUBLIC HEALTH
SERVICE POLICIES
ON RESEARCH
MISCONDUCT

- Implements legislative and policy changes applicable to research misconduct
- Covers any entity that applies for a research, research training, or research-related grant or cooperative agreement with the Public Health Service (PHS) including all HHS agencies (e.g., NIH, CDC, CMMS)

Criteria for Research Misconduct

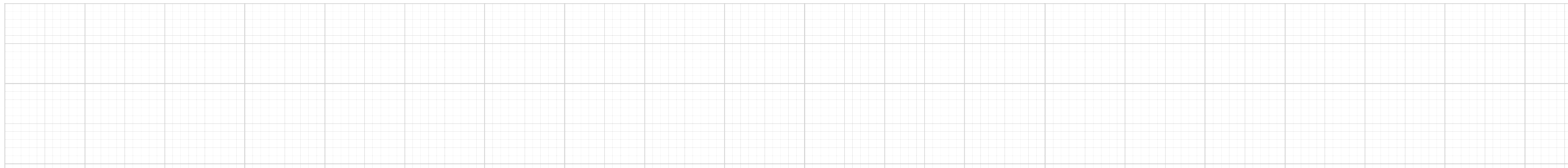
- Represents a significant departure from accepted practices
- Has been committed intentionally, or knowingly, or recklessly
- Proven by a preponderance of evidence

What is NOT Misconduct

- Honest, unintentional error
- Scientific disagreement

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WHY DOES
MISCONDUCT
HAPPEN?

- Perceived pressure (e.g., publish or perish)
- Opportunity
- Personal problems
- Character issues
- Cultural differences
- Institutional culture



TOP TEN POOR BEHAVIORS

- 1 Falsifying or “cooking” research data
- 2 Ignoring major aspects of human-subjects requirements
- 3 Not properly disclosing involvement in firms whose products are based on one’s own research (conflict of interest)
- 4 Having relationships with students, research subjects, or clients that may be interpreted as questionable
- 5 Using another’s ideas without obtaining permission or giving due credit (plagiarism)
- 6 Unauthorized use of confidential information in connection with one’s own research
- 7 Failing to present data that contradict one’s own previous research
- 8 Circumventing certain minor aspects of human-subjects requirements
- 9 Overlooking others’ use of flawed data or questionable interpretation of data
- 10 Changing the design, methodology or results of a study in response to pressure from a funding source (falsification)

OTHER DETRIMENTAL RESEARCH PRACTICES

- Publishing the same data or results in two or more publications
- Inappropriately assigning authorship credit
- Withholding details of methods or results in papers or proposals
- Using inadequate or inappropriate research designs
- Dropping observations or data points from analyses based on a gut feeling that they were inaccurate
- Inadequate record-keeping related to research projects

U.S. OFFICE OF
RESEARCH
INTEGRITY (ORI)
RECOMMENDATIONS

- Adopt zero tolerance policy for research misconduct
- Protect whistleblowers
- Clarify how to report
- Train mentors
- Model ethical behavior
- Create culture of ethics

MENTOR RESPONSIBILITIES

- Ensure all trainees (post-docs, grad students, undergrads) are aware of the responsible conduct of research
 - Define the Relationship
 - Role of trainee
 - Publication/authorship
 - Serving as PI or co-PI
- Obligation to report

INSTITUTIONAL
PROCEDURES
REQUIRED TO
QUALIFY FOR
FEDERAL
FUNDING

- Designation of an individual authorized to receive and investigate allegations of misconduct (RIO)
- Provisions for an initial inquiry to determine if allegations have merit
- Provisions for a formal investigation to determine the truth of the allegations
- Designation of an individual authorized to adjudicate the conclusions of the investigation and impose administrative actions to redress the misconduct or to vindicate the person charged (DO)
- Provisions for reporting findings to federal funding agency

VIRGINIA TECH
REQUIREMENTS
(Policy 13020)

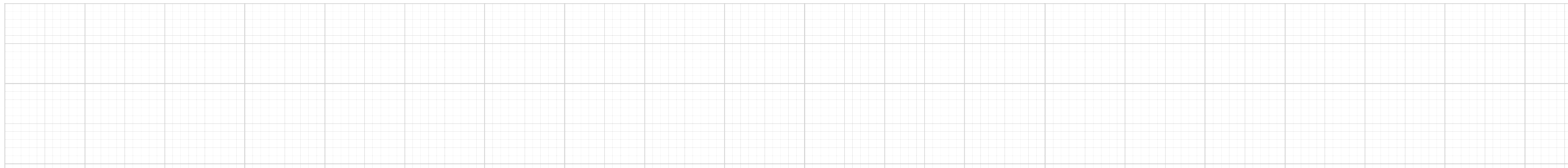
- Establish policies and procedures for investigating and reporting instances of alleged research misconduct
- Respond to allegations
- Promote a culture of responsible conduct of research
- Provide assurances necessary to permit Virginia Tech to participate in federally supported research
- Provide annual report to federal agencies

OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND INNOVATION /
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┌ INVESTIGATING
RESEARCH
MISCONDUCT

HOW IS
MISCONDUCT
IDENTIFIED?

- Suspected and reported by a colleague, team member, student, etc.
- Failure to confirm research results by own lab or others
- During peer-review process
- Post-publication



WHO MUST
REPORT
MISCONDUCT?

HOW IS IT
REPORTED?

- All members of the Virginia Tech community who observe or have information about research misconduct are required to report it
- Contact the University Research Integrity Officer (RIO)
<https://www.research.vt.edu/research-integrity-office.html>

WHO IS
INVESTIGATED
AND WHO IS HELD
ACCOUNTABLE?

- **Investigated:** All authors who are involved in the specific project in question
- **Held accountable:**
 - Primary author
 - Other authors whose results are found culpable
 - Principal investigator

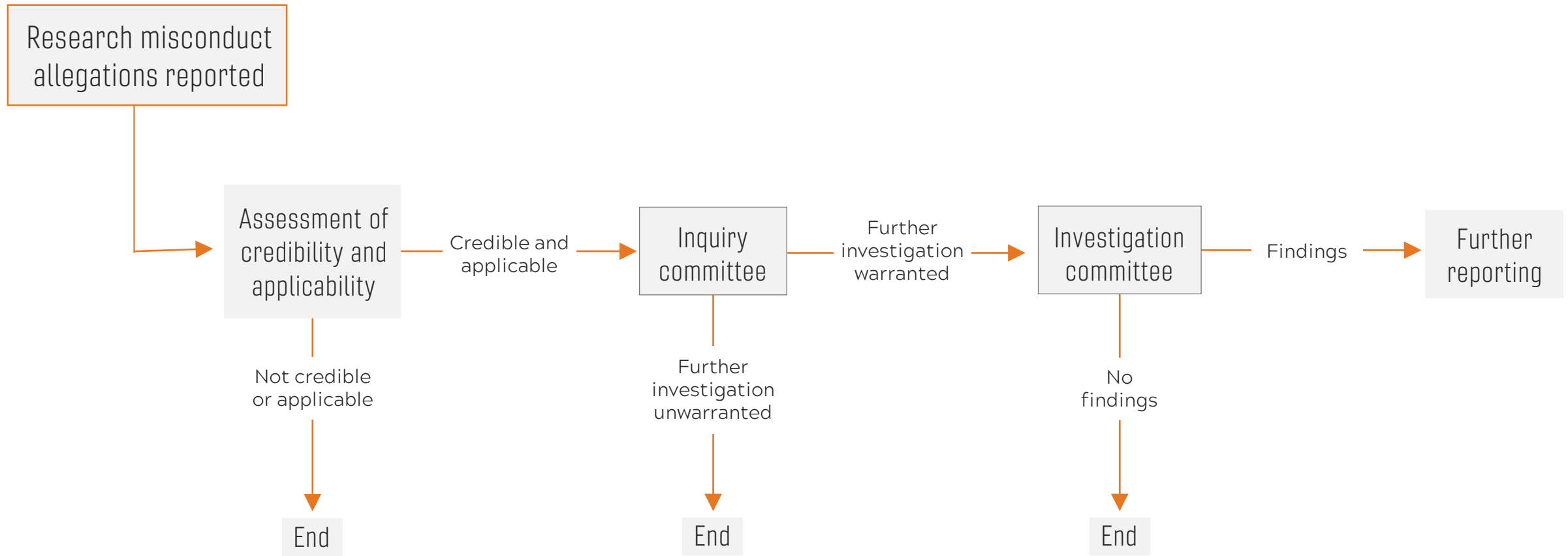
CONSEQUENCES
(IF MISCONDUCT IS
SUBSTANTIATED)

- Withdrawal or correction of all pending and published papers and abstracts affected by the misconduct
- Reprimand, removal from project, rank and salary reduction, dismissal
- Restitution of funds to the granting agency
- Ineligibility to apply for federal grants for years or forever – i.e., *the end of your research career*

INVESTIGATION PROCESS

1. Allegations reported to and assessed by RIO
2. RIO reviews allegations, sequesters research records, and, if allegations are credible, forwards to inquiry committee
3. Inquiry report is made and if investigation is substantiated records are forwarded to investigation committee
4. Initial draft reviewed by RIO and DO (Provost), and final report sent to all parties (respondent, complainant, RIO, DO, and funding agency)
5. Institutional decision, administrative action, and federal response

PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH



RESPONSIBLE
RESEARCH
CONDUCT

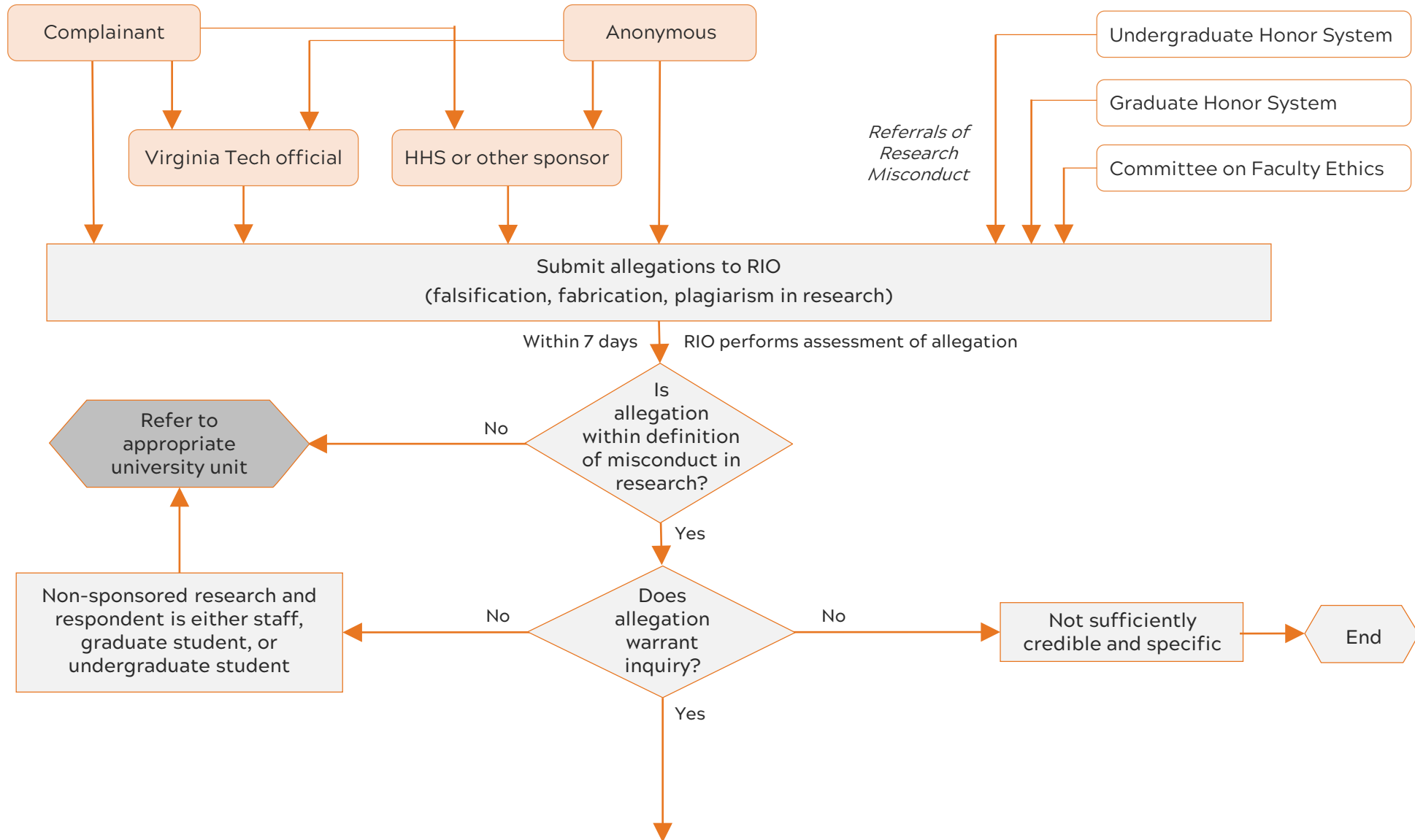
- The Office of Research Integrity (ORI) defines research integrity as “adherence to rules, regulations, guidelines, and commonly accepted professional codes or norms”
- Research integrity is essential to ensure the reliability of research results and to preserve public support for research

Contact Us

integrity@vt.edu

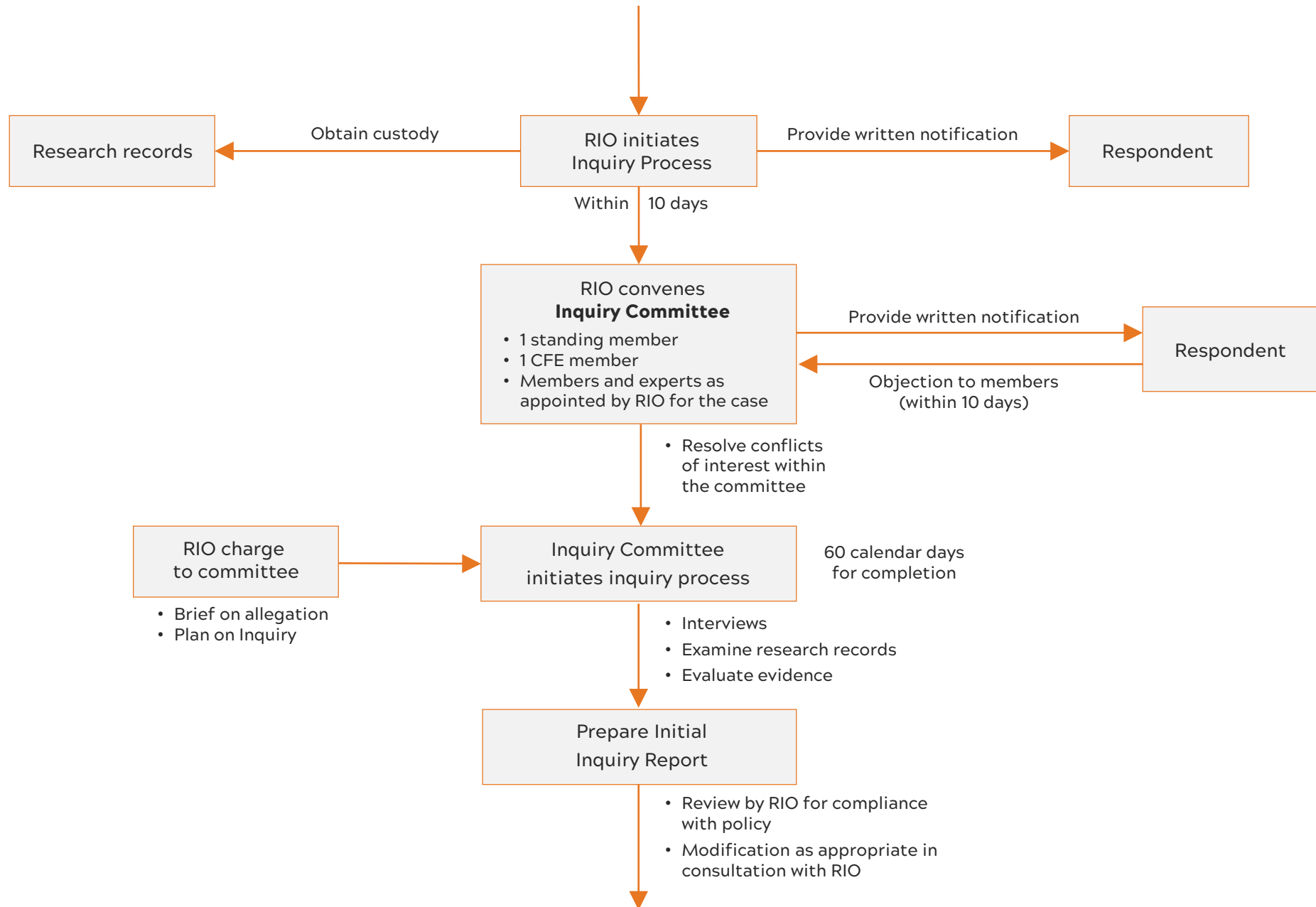
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

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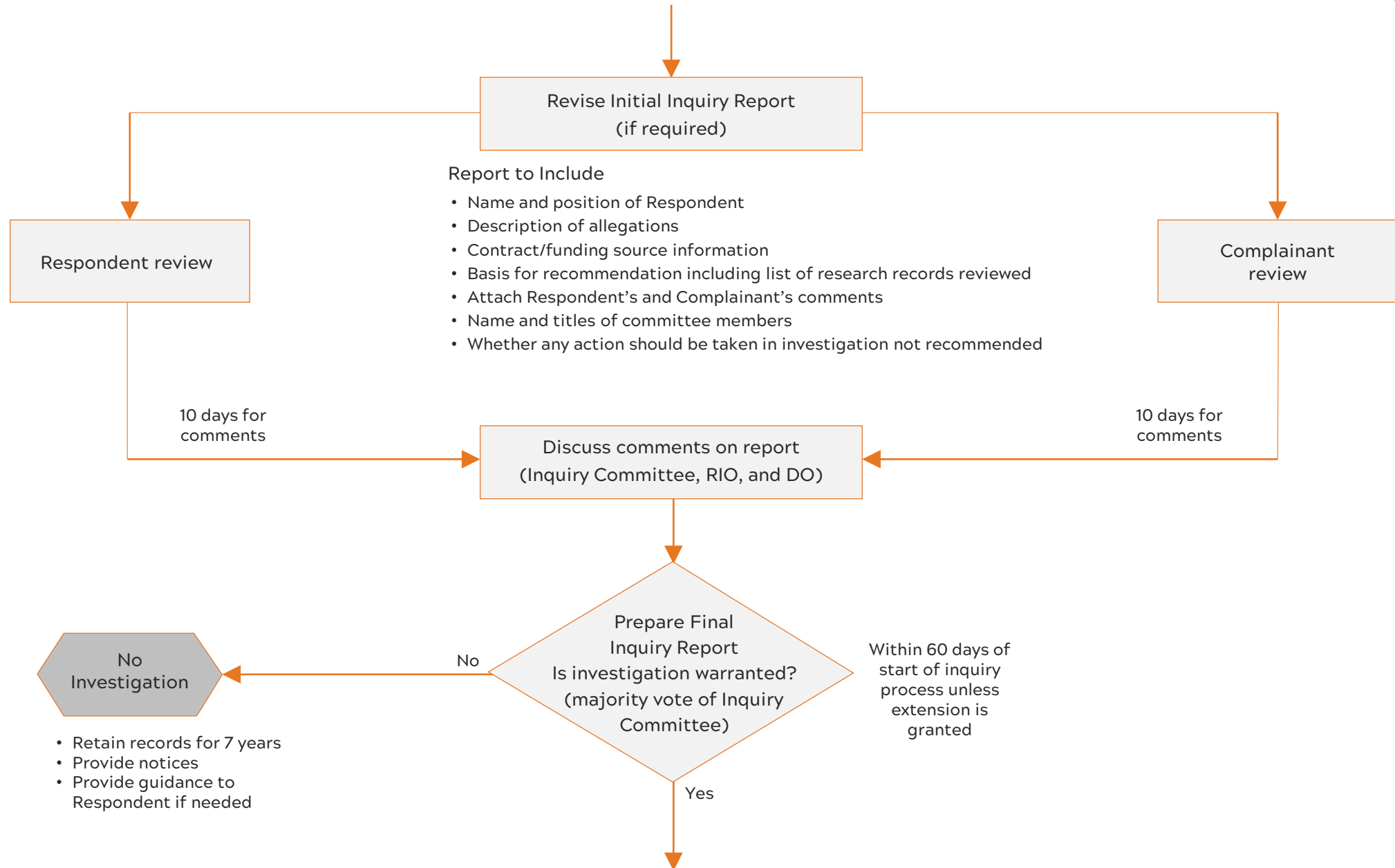
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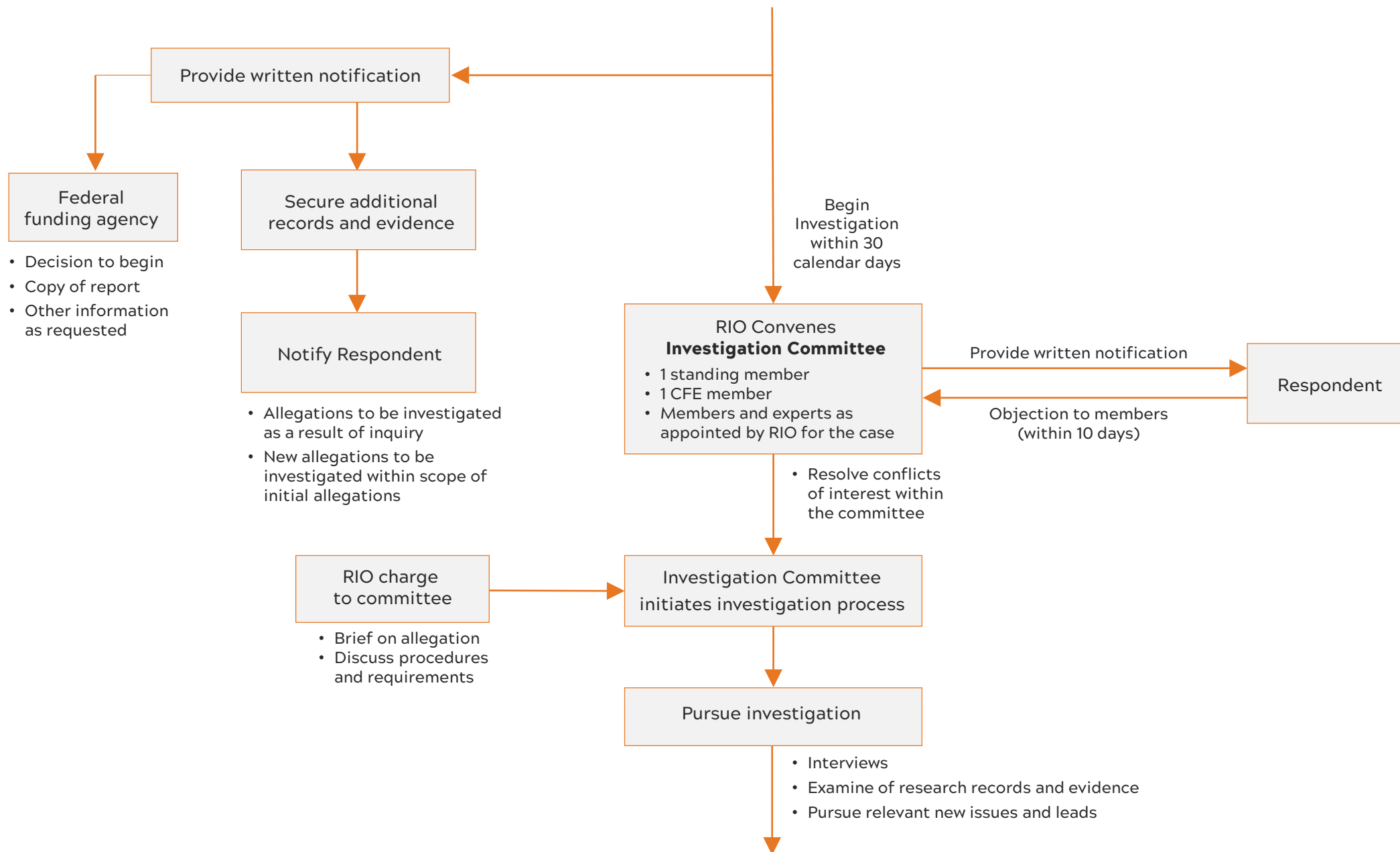
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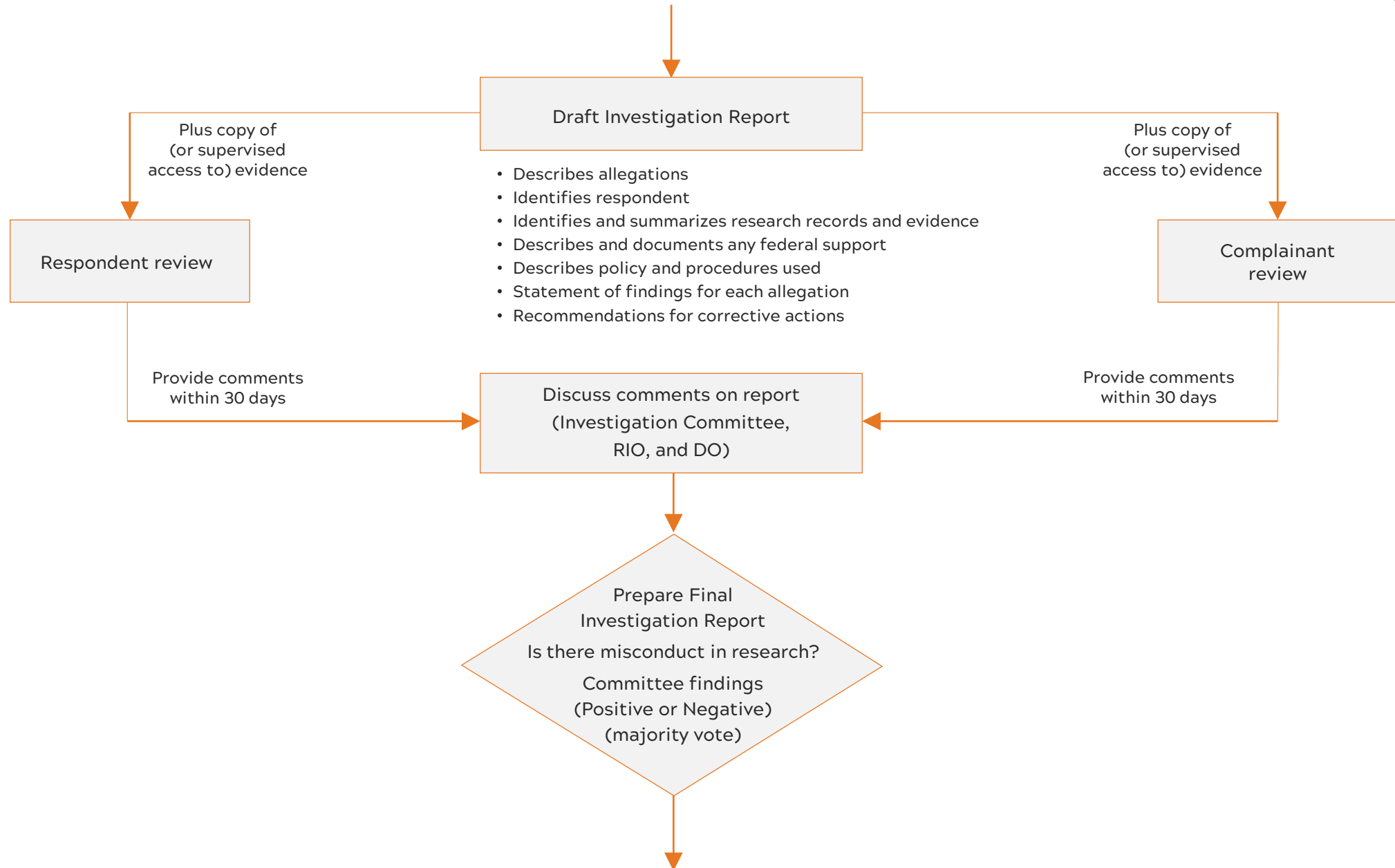
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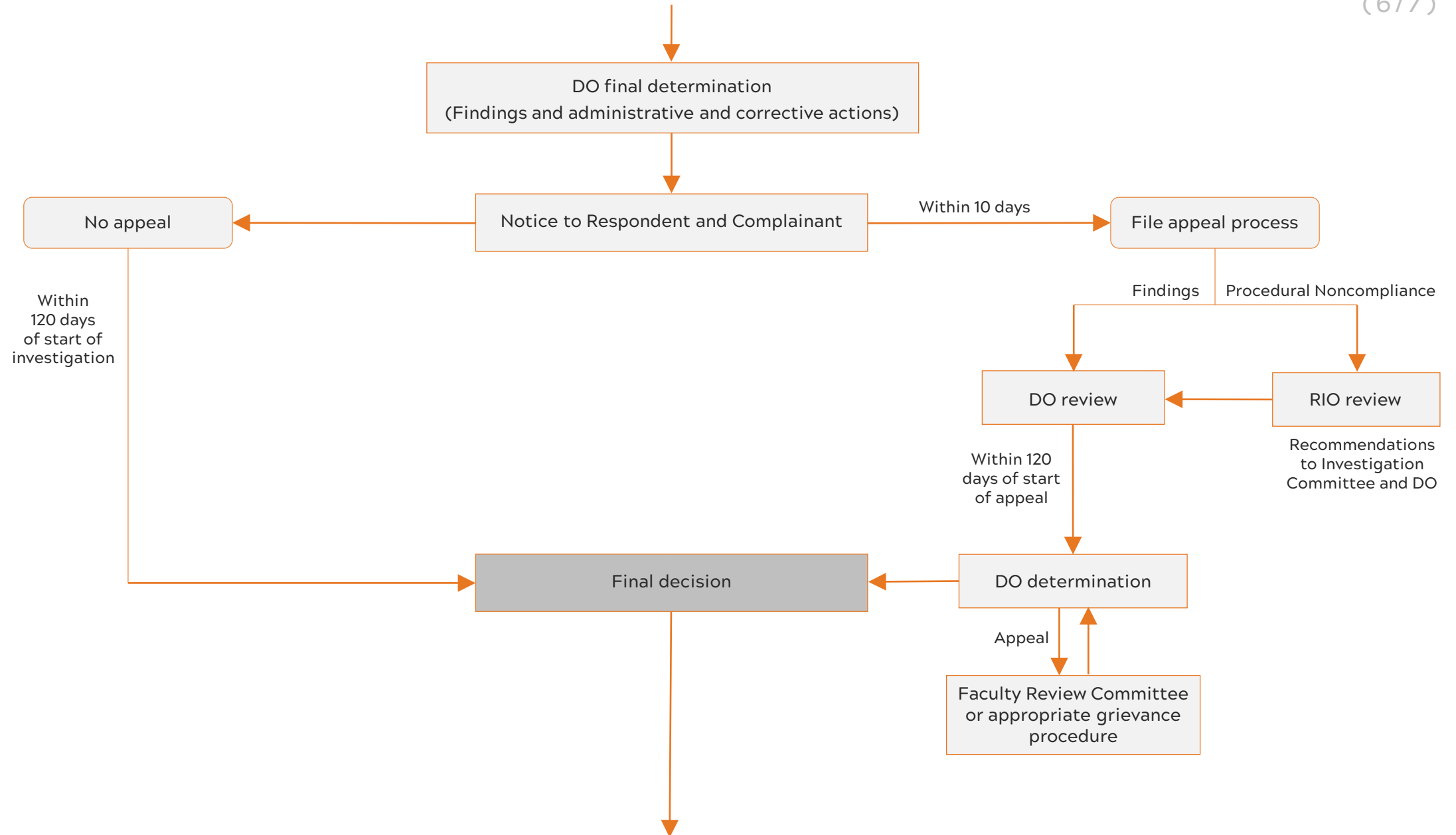
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

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PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

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PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

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