



## **Research Misconduct Policy**

Version 2

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## Document Control

The GeoScience Laboratory Head will be responsible for the periodic review of this document.

## Document Responsibility

<b>Title</b>	Research Misconduct
<b>Directorate</b>	Research
<b>Unit</b>	GeoScience Laboratory
<b>Manager</b>	Head of GeoScience Laboratory
<b>Applicable to</b>	All ICRAF Staff

## Document Revision History

Version	Endorsed By	Meeting Reference	Date Endorsed	Approved By	Meeting Reference	Date Approved	Effective Date	Sections Modified
1	Senior Leadership Team	n/a	n/a	Board of Trustees	BOT56-D19	24-Nov-12	25-Nov-12	New Guideline
2	Senior Leadership Team	SLT-FIN-06-18	31-Oct-18	Board of Trustees	BOT68-D16	30-Nov-18	1-Dec-18	All sections modified

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## 1. Purpose

- 1.1. This policy aims to ensure that the trustworthiness of knowledge generated and disseminated by the Centre, and the extent to which it is trusted by stakeholders, is not limited by the actual or perceived threat of scientific fraud. Specific aims are:
  - 1.1.1. To reduce the risk of research misconduct.
  - 1.1.2. To respond appropriately to research misconduct.
  - 1.1.3. To demonstrate to stakeholders including donors, partners and knowledge-users how the Centre handles research misconduct.
- 1.2. The extent to which research products are trusted depends on many aspects of the way we conduct our business. Other policies refer to these. Research misconduct is not the most important threat. However, we know from experience, both within the Centre and in the broader research community, that it can happen—therefore the Centre must be aware and be prepared.

## 2. Scope

- 2.1. Research and case studies<sup>1</sup> show that scientists and technicians are tempted to deliberately falsify or misrepresent data and methods when some of the following occur:
  - (a) Researchers and technicians feel under career pressure. There is seldom a simple monetary gain involved, but they are under pressure to produce results.
  - (b) They know, or think they know, how the answer will turn out if the research is completed properly. While bending the rules of science, they often believe they are not corrupting the knowledge base.
  - (c) They work in a field where individual studies are not expected to be precisely reproducible, or for other reasons they believe the risks of getting caught are low.
  - (d) They lack motivation to follow expected practices.
  - (e) Unreasonable requests or workloads are imposed by supervisors.
- 2.2. This is a Centre-wide Policy and is applicable to all staff located in all countries where the Centre operates.

## 3. Definitions

- 3.1. **Research misconduct** (or scientific fraud) is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.<sup>2</sup> It also includes practices that seriously deviate from those that are commonly accepted within the research community for proposing, conducting or reporting research.

<sup>1</sup> For example: Koocher GP and Keith-Spielgel P (2010). Peers nip misconduct in the bud. *Nature* 466 438-440; and Coe et al (2010). Preventing and identifying Scientific Fraud in Tree Science Research, with specific reference to World Agroforestry Centre (ICRAF). ICRAF Working Paper no. 88. Nairobi, Kenya: World Agroforestry Centre.

<sup>2</sup> ALLEA (2017). *The European Code of Conduct for Research Integrity* (revised edition). Berlin: All European Academics.

- 3.2. **Fabrication:** Making up data or results and recording or reporting them.<sup>Error! Bookmark not defined.</sup>  
Examples of fabrication include:
- (a) Completing a questionnaire for a fictitious subject that was never interviewed.
  - (b) Creating a data set for an experiment that was never actually conducted.
  - (c) Adding fictitious data to a real data set collected during an actual experiment for the purpose of providing additional statistical validity.
  - (d) Insertion of a note or observation into the research record to indicate compliance with an element of the protocol that may not have actually taken place.
- 3.3. **Falsification:** Manipulating research materials, equipment, or processes, or changing or omitting/suppressing data or results without scientific or statistical justification, such that the research is not accurately represented in the research record. This would include the "misrepresentation of uncertainty" during statistical analysis of the data.<sup>2</sup> Examples of falsification include:
- (a) Alteration of data to render a modification of the variances in the data
  - (b) Falsifying dates and experimental procedures in the documentation of a study
  - (c) Misrepresenting results from statistical analysis
  - (d) Misrepresenting the methods of an experiment such as the model used to conduct the experiment
  - (e) False or misleading statements in the manuscript or published paper
  - (f) Misrepresenting the materials or methods of a research study in a published paper
  - (g) Providing false statements about the extent of a research study
- 3.4. **Plagiarism:** Plagiarism is any identical or lightly-altered use of one's own or someone else's work (ideas, texts, structures, images, plans, etc.) without giving appropriate credit.<sup>2</sup> This is not limited to research reports and scientific publications, but also includes project proposals and other types of documents presenting ideas and plans.
- 3.5. Scientific fraud does NOT include honest error or differences of opinion and has to be deliberate. It does not include the destruction of, loss of, or respondents' failure to provide research records—provided this is not done deliberately.
- 3.6. Data integrity

#### 4. Policy Statement

- 4.1. To be considered research misconduct, the act in question must represent a significant departure from accepted practices of the relevant research community, it must be conducted intentionally, knowingly, or recklessly, and the allegation must be proven by evidence.<sup>2</sup>
- 4.2. This Policy is based on the following principles:
- 4.2.1. All staff engaged in research must be aware of the meaning and consequences of research misconduct.
  - 4.2.2. The chances of research misconduct occurring must be minimized.
  - 4.2.3. All suspected cases of research misconduct must be investigated in an open and fair way.
  - 4.2.4. The risk of fraudulent or misleading results getting into the public domain must be minimized.

## 5. Roles and Responsibilities

### 5.1. Awareness:

- 5.1.1. Staff and students will be made aware of the meaning and consequences of scientific fraud when they join the Centre as part of the induction process.
- 5.1.2. This policy will be available to all staff and students, brought to their attention and discussed in suitable forums.
- 5.1.3. ICRAF staff interacting with partners will have to be aware of the partner organization's standards and traditions regarding data integrity. They need to ensure that data used by such organizations in their publications meet our standards for trustworthiness. In cases where there are sufficient grounds to suspect research misconduct on the part of partners, ICRAF staff will need to choose a response that is appropriate to the gravity of the situation: from simply abstaining from using the suspect information through to acting as 'whistleblowers' even at the cost of damaging partnerships with such organizations.

### 5.2. Minimizing risk:

- 5.2.1. The Centre will endeavour to provide a culture in which open scientific debate, criticism, skepticism and diversity of opinion are respected and encouraged. All staff should be able to question methods, data, assumptions and results of any other staff member in a spirit of scientific enquiry and advancement. The Centre will ensure that there are no negative consequences for anyone who engages in such debate, whatever the outcome.
- 5.2.2. The Centre will ensure that staff are encouraged and rewarded for producing research outputs of the highest quality, including results that might be seen as negative or failing to support a particular position or claim. Research is used to investigate open questions, and the Centre will ensure that staff are not under pressure to deliver any particular answer to such a question.
- 5.2.3. As much of the Centre's work combines research with action and demonstration of impact, the Centre will ensure that it does not make commitments to outcomes or impacts that are not justified by solid evidence, thereby avoiding pressure to distort evidence of impact.
- 5.2.4. Supervisors will ensure that staff and students fully understand the reasons for the work they are doing and give feedback on its value and how it is being used. They will ensure all staff have appropriate skills and experience for the tasks they are asked to perform; that workloads are realistic; and working conditions optimal. Supervisors must regularly spend time with their staff, actively engaged in research activities such as data collection, data management, analysis and interpretation—in order to understand the working context, procedures and potential problems. This should be included in a quality assurance plan, which all projects should have as part of project management plans.
- 5.2.5. Supervisors are responsible for ensuring all staff and students are aware of what is expected of them in the area of research integrity, and understand the definitions and consequences of research misconduct.

### 5.3. Investigating research misconduct

- 5.3.1. Referring to the Whistleblower Protection Policy under the Human Resources Policy and Procedures Manual (Article 1.20; supplemented by Integrity Policy), every staff member or student has a duty to report suspected research misconduct to her/his supervisor, the suspect's supervisor or the DDG-Research. Suspected cases of scientific fraud should be reported if they involve any ICRAF research work or project, even if the suspect is a staff member of a partner organization.
- 5.3.2. The following principles and procedures will be followed in investigating research misconduct:
- 5.3.2.1. Any staff member or student reporting suspected research misconduct in good faith is protected from negative consequences by the Centre's Whistleblowing Policy through the Internal Audit.
- 5.3.2.2. If the suspect is an ICRAF staff member, student or consultant the staff member alerted will consult with the Senior Leadership Team (SLT) on an appropriate panel to investigate the allegations. If the suspect is a staff member of a partner organization, the Centre will inform suitable authorities in that organization, including the suspicions and reasons for them.
- 5.3.2.3. The investigation will be conducted with transparency, and in accordance with the highest principles of integrity, fairness and confidentiality; and with a commitment to there being no detriment to the careers of staff members until such a time as guilt is established.<sup>3</sup>
- 5.3.2.4. If the investigation finds there is no basis for the allegations then the case is considered closed.
- 5.3.2.5. If the investigation finds there is no basis for the allegations and the whistleblower acted in good faith, as specified in the Whistleblowing Policy, the case is considered closed for all.
- 5.3.2.6. If research misconduct is proven, relevant disciplinary procedures come into play. These include verbal warnings, summary dismissal and possible criminal proceedings, depending on the seriousness of the misconduct. Similar action will be considered where it is clear that staff members have acted deliberately and in bad faith, misusing the protection provided to whistleblowers, in order to tarnish the reputation of fellow staff members.
- 5.3.2.7. A staff member, student or consultant found guilty of research misconduct has the right to appeal to the Board of Trustees.
- 5.3.3. If research misconduct is proven, the Centre will assist the culprit's supervisor and other relevant staff to examine possible reasons for its occurrence and find ways of preventing it from happening again.

<sup>3</sup> These principles are taken from: OECD (2009). *Investigating research misconduct allegations in international collaborative research: A practical guide* (OECD Global Science Forum) (<http://www.oecd.org/dataoecd/42/34/42770261.pdf>). An expanded explanation is in the Appendix.

#### 5.4. Public consequences

- 5.4.1. The investigation into a case of research misconduct will include investigation of where fraudulent or misleading information has been used, published or referred to. The Centre will endeavor to remove all such information from Centre and public knowledge bases and alert users. This includes withdrawing ICRAF publications, asking external publishers to retract journal publications, or publishing our own retractions. It also includes correcting donor or other reports that use the misleading information.
- 5.4.2. When a case of research misconduct is discovered, the Centre will inform the staff, Board of Trustees and relevant partners (e.g. partners in the research project) of what happened and the actions taken.
- 5.4.3. Public announcements of research misconduct will not normally be made, but should reasonable enquiries be made by any stakeholder then the Centre will disclose what happened and the actions taken.
- 5.4.4. The Centre will keep records of all cases of research misconduct

### 6. Review

- 6.1. This policy will be reviewed every three years or earlier if required by the GeoScience Laboratory.
- 6.2. Any changes made to the Policy will be presented to the Senior Leadership Team for endorsement and thereafter submitted to the Board of Trustees for approval.

### 7. Related Documentation

- 7.1. ICRAF Research Ethics Policy
- 7.2. ICRAF Human Resources Policy and Procedures Manual
- 7.3. ICRAF Integrity Policy
- 7.4. ICRAF Fraud Prevention Policy
- 7.5. ICRAF Risk Management Policy
- 7.6. UNESCO (2018). *Recommendation on Science and Scientific Researchers* (39 C/Resolution 85). Paris: United Nations Educational, Scientific and Cultural Organization.

### 8. Annexes

- 8.1. Principles for investigation of allegations of research misconduct.<sup>3</sup>
  - 8.1.1. Investigations of allegations of research misconduct should be consistent with the national laws of the country in which the investigations are conducted, and should aim to support the emergence of solutions. Investigations should follow an agreed, standardized



and clearly defined procedure and must be conducted with appropriate transparency and in accordance with the highest standards of:

8.1.2. Integrity

8.1.2.1. Investigations into research misconduct allegations must be fair, comprehensive and conducted expediently but without compromising accuracy, objectivity and thoroughness.

8.1.2.2. Those parties involved in the procedure must ensure that any interests they have, which might constitute a conflict of interest are disclosed and managed.

8.1.2.3. Detailed and confidential records will be maintained on all aspects of the procedure.

8.1.3. Fairness

8.1.3.1. Investigation of research misconduct allegations should be conducted in a manner that is fair to all parties and in accordance with relevant laws.

8.1.3.2. Persons accused of research misconduct must be given full details of the allegation(s) in writing and allowed a fair process for responding to allegations, asking questions, presenting evidence, calling witnesses and providing responses to information presented.

8.1.3.3. Allow witnesses to be accompanied by, or seek advice and assistance from, anyone of their choosing.

8.1.4. Confidentiality

8.1.4.1. The procedure should be conducted as confidentially as possible, in order to protect those involved in the investigation. Such confidentiality should be maintained, provided this does not compromise the investigation of the allegation, health and safety, or the safety of participants in research.

8.1.4.2. Where possible any disclosure to third parties should be made on a confidential basis.

8.1.4.3. If the organization and/or its staff have legal obligations to inform third parties of research misconduct allegations, those obligations must be fulfilled at the appropriate time through the correct mechanisms.

8.1.5. No detriment

8.1.5.1. Anyone accused of research misconduct is presumed innocent.

8.1.5.2. No person should suffer any unnecessary penalty when accused of research misconduct before the allegation is proven.

8.1.5.3. No person should suffer any penalty for making an allegation of research misconduct in good faith, but action may be appropriate against persons making allegations otherwise.

8.1.5.4. Any action(s) taken should be subject to appeal.

8.1.6. Balance

8.1.6.1. Occasionally the investigators may need to strike a balance between disclosures of identities and confidentiality. Such decisions should be made keeping in mind that the primary goal of this procedure is to determine the truth of the allegation.

- 8.1.6.2. Consideration should be given to reasonably and appropriately restore reputations.
- 8.1.6.3. Proportionate action should be taken against persons found to have committed research misconduct.