

**INOC – Istituto Nazionale
Oncologico Candiolo**

RESEARCH INTEGRITY

Sommario

.....	1
REVISION HISTORY	2
RESEARCH INTEGRITY	3
PREVENTION, RESEARCH QUALITY AND RESPONSIBLE RESEARCH PRACTICES	3
MAIN PRINCIPLES TO BE FOLLOWED IN RESEARCH:	4
WHAT IS RESEARCH MISCONDUCT:	4
PUBLICATION AND AUTHORSHIP INTEGRITY	6
DISCLOSURE AND MANAGEMENT OF CONFLICTS OF INTEREST	6
RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE TOOLS IN RESEARCH	7
DEALING WITH VIOLATIONS AND ALLEGATIONS OF MISCONDUCT:	7
MAIN PRINCIPLES TO BE FOLLOWED IN HANDLING ALLEGATIONS:	12
TRAINING AND RESEARCH INTEGRITY CULTURE	12
RESEARCH INTEGRITY MANAGER – CONTACTS:	13

REVISION HISTORY

N° Rev.	Date	Review Description
00	15/02/2023	First issue
01	27/07/2026	Document update

RESEARCH INTEGRITY

INOC – Istituto Nazionale Oncologico Candiolo is highly committed to the responsible conduct of research. Our medical and scientific community relies on the integrity of its scientists, its clinicians, and its whole staff. Everyone involved in the research process must be compliant with and follow good research practices and policies on responsible research in order not to violate professionals' responsibilities and distort research records. Such a misconduct is responsible for jeopardizing public trust in research and may expose research subjects, this Institution, and the whole society to unnecessary harm. Adopting a responsible conduct, governed by basic principles of research integrity helps to ensure the quality and reliability of our research. Principles guide researchers in their work as well as in their engagement with the practical, ethical, and intellectual challenges inherent in research.

This Institution ensures that researchers receive an adequate training in ethics and research integrity and ensures that all concerned are made aware of the relevant codes and regulations to prevent misconduct.

PREVENTION, RESEARCH QUALITY AND RESPONSIBLE RESEARCH PRACTICES

In order to promote a robust culture of research integrity, this Institution shall adopt not only reactive procedures for the management of misconduct allegations, but also preventive and quality-oriented measures integrated throughout the entire research lifecycle.

Research integrity shall therefore be promoted through continuous training activities, institutional awareness initiatives, scientific supervision, transparent research practices, and monitoring systems aimed at ensuring the reliability, reproducibility, traceability and accountability of research activities.

Preventive actions may include:

- training programs on research integrity and responsible conduct of research;
- mentoring and supervision activities for early-career researchers;
- dissemination of institutional guidelines and best practices;
- support for responsible data management and documentation;
- monitoring of publication and authorship compliance;
- promotion of transparency and reproducibility principles.

This Institution recognizes that research integrity is a shared responsibility involving researchers, Principal Investigators, research support offices, management structures and institutional governance bodies.

MAIN PRINCIPLES TO BE FOLLOWED IN RESEARCH¹:

Reliability in protecting the quality of research, mirrored in the design, the methodology, the conduct, the analysis, and the use of resources.

Honesty in developing, reviewing, reporting and communicating research in a transparent, fair, and unbiased way. It also involves refraining from making unfounded claims, from fabricating or falsifying data and/or sources and refraining from presenting results more favorably or unfavorably than they actually are.

Respect for colleagues, research participants (patients or healthy volunteers), animals eventually used for research aims, society, and the environment.

Responsibility means conducting research that is scientifically and/or societally relevant by respecting – within reasonable limits – the legitimate interests of research participants and animal test subjects, as well as those of funding bodies and the environment.

Accountability for the research from the main idea to publication, for its management, for supervision and mentoring, and for its potential impacts.

Scrupulousness means, among other things, using methods that are scientific or scholarly and exercising the best possible care in designing, reporting and disseminating research.

Transparency means, among other things, ensuring that it is clear to others what kind of data the research originated from, how the data were obtained and processed, what results were achieved, and how.

WHAT IS RESEARCH MISCONDUCT:

Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

Fabrication: making up results and recording them as if they were real.

Falsification: manipulating research materials, equipment or processes or changing, omitting or suppressing data or results without justification.

Plagiarism: using other people's work and ideas without giving proper credit to the original source,

¹ Reported principles are listed on the following sources: ALLEA - All European Academies, Berlin 2023, "The European Code of Conduct for Research Integrity Revised Edition", available at: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity_horizon_en.pdf and Netherlands Code of Conduct for Research Integrity (2018) available at: <https://www.nwo.nl/en/policies/scientific+integrity+policy/netherlands+code+of+conduct+for+research+integrity>

thus violating the rights of the original author(s) to their intellectual outputs².

A finding of misconduct must be shown to be a “significant departure from accepted practices of the relevant research community” and to have been committed “intentionally, knowingly or recklessly”³

In addition to Fabrication, Falsification, and Plagiarism, according to the European Code of Conduct for Research Integrity⁴, there are further violations of good research practice that may impair the integrity of the research process. Examples of unacceptable practices include, but are not confined to:

- Manipulating authorship or denigrating the role of other researchers in publications.
- Re-publishing substantive parts of one’s own earlier publications, including translations, without duly acknowledging or citing the original (‘self-plagiarism’).
- Citing selectively to enhance own findings or to please editors, reviewers or colleagues.
- Withholding research results.
- Allowing funders/sponsors to jeopardize independence in the research process or reporting of results so as to introduce or promulgate bias.
- Expanding unnecessarily the bibliography of a study.
- Accusing a researcher of misconduct or other violations in a malicious way.
- Misrepresenting research achievements.
- Exaggerating the importance and practical applicability of findings.
- Delaying or inappropriately hampering the work of other researchers.
- Misusing seniority to encourage violations of research integrity.
- Ignoring putative violations of research integrity by others or covering up inappropriate responses to misconduct or other violations by institutions.
- Establishing or supporting journals that undermine the quality control of research (‘predatory journals’)⁵.

² Definitions of Fabrication, Falsification, and Plagiarism are reported from ALLEA - All European Academies, Berlin 2023, “The European Code of Conduct for Research Integrity Revised Edition”, available at: https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf

³ PHS (2005), Public health service policies on research misconduct. Department of Health and Human Services – Public Health Service, Federal Register, 70(94).

⁴ ALLEA - All European Academies, Berlin 2023, “The European Code of Conduct for Research Integrity Revised Edition”, available at: https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf

⁵ ALLEA (2023) The European Code of Conduct for Research Integrity – Revised Edition 2023. Berlin. [DOI 10.26356/ECOC](https://doi.org/10.26356/ECOC)

IMPORTANT: Please note that research misconduct does NOT include honest error or differences of opinion.

PUBLICATION AND AUTHORSHIP INTEGRITY

This Institution promotes transparency, fairness and accountability in scientific publication practices.

Authorship attribution shall appropriately reflect the actual scientific contribution provided by each contributor, according to internationally recognized criteria and applicable institutional policies. Practices such as gift authorship, ghost authorship or unjustified exclusion of contributors are considered unacceptable.

Researchers are expected to:

- accurately report affiliations and institutional acknowledgements;
- appropriately acknowledge funding sources and supporting grants;
- ensure the originality and accuracy of submitted manuscripts;
- avoid duplicate publication and undisclosed self-plagiarism;
- maintain traceability between research activities, funding sources and scientific outputs.

This Institution may implement internal support and verification processes aimed at ensuring compliance with institutional, ethical and funding-related publication requirements before manuscript submission.

DISCLOSURE AND MANAGEMENT OF CONFLICTS OF INTEREST

Researchers involved in clinical studies shall disclose any financial, professional or personal conflict of interest that could directly or indirectly influence the design, conduct, interpretation or reporting of research activities.

This Institution promotes transparency and appropriate management of conflicts of interest in accordance with applicable institutional policies and ethical standards.

RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE TOOLS IN RESEARCH

This Institution acknowledges the increasing use of artificial intelligence (AI)-based tools in scientific research and scientific writing activities.

The use of AI tools in research activities shall be aligned with the Institutional AI Policy and with the principles of transparency, human oversight, traceability, cybersecurity, data protection and accountability adopted by the Institution.

The use of AI tools shall always comply with principles of transparency, reliability, accountability, confidentiality and scientific responsibility.

Researchers remain fully responsible for the integrity, accuracy and originality of all scientific contents, analyses, interpretations and conclusions, regardless of the use of AI-assisted technologies.

In particular:

- AI tools shall not be listed as authors of scientific publications;
- the use of AI systems for scientific writing or content generation should be appropriately disclosed when relevant;
- AI-generated outputs must be critically reviewed and validated by researchers;
- the use of AI for fabrication, falsification or manipulation of data, images, references or results is strictly prohibited;
- confidential, proprietary or sensitive data shall not be entered into unauthorized AI systems.

This Institution encourages a responsible and ethically compliant adoption of AI technologies in research activities.

DEALING WITH VIOLATIONS AND ALLEGATIONS OF MISCONDUCT:

Definitions:

- Research Integrity Manager: is in charge of handling the procedure from its submission. The Research Integrity Manager acts as a filter between allegations that involve only minor events and allegations that express concern of research misconduct and thus need further investigation.
- Research Integrity Board: is involved only when and if the Research Integrity Manager expresses concern of research misconduct based on a submitted allegation.

How to prevent accidental misconduct:



In order to prevent accidental misconduct, researchers can ask the Research Integrity Manager to check in advance for any images/data/texts subject to forgery/fabrication/plagiarism before submitting scientific articles to publisher. To request verification, write an e-mail to marco.asioli@inoc.it and valeria.leuci@inoc.it, accompanying the request with the documentation to be analyzed. Researchers can also contact the Research Integrity Manager if they have any doubts about authorship of their work.

How to report research misconduct:

If you detect or if you have a valid reason to suspect any of the following kinds of misconduct, you must immediately notify the Research Integrity Manager by sending an e-mail to marco.asioli@inoc.it and valeria.leuci@inoc.it and enclosing the “Research misconduct notification form”. The allegation must be properly documented in order to be evaluated.

Please note that only allegations reported through the specific form will be considered and processed by this Institution.

Kinds of misconduct:

- Misconduct (fabrication; falsification; plagiarism) in proposing, performing, reviewing, or reporting research. Please consider that research misconduct does not include honest error or differences of opinion;
- Whistleblower retaliation for reporting misconduct;
- Awardee or staff with an unreported foreign affiliation, component, support, funding, or other form of scientific overlap;
- Human subjects potentially at risk in an ongoing study.

The Research Integrity Manager will pseudonymize every allegation, for assuring the confidentiality. Every allegation submitted will be identified only by a code in order to be traceable. After you report an allegation from the list above to the Research Integrity Manager, he/she will take action within three business days. The Research Integrity Manager will treat any information about such allegations as strictly confidential.

If you are considering an allegation submission or if you have already submitted one **do not** take any of the following actions:

- Divulge any other information;
- Express personal opinions;
- Attempt to investigate the allegation;
- Request supporting documentation;
- Contact a principal investigator, extramural institution official, contractor, reviewer or any other professional other than the research integrity manager.

What happens next?



Handling of allegations may be articulated in different steps and foresees two different bodies. This Institution follows the procedure reported by the ENRIO⁶ Handbook which involve:

1. Initial evaluation and screening inquiry

Once an allegation is submitted to the Research Integrity Manager, it is firstly reviewed to verify the consistency and the seriousness of the potential allegation. As suggested by the ENRIO, in making an initial evaluation and establishing whether further action will be needed, the following questions should be considered:

- Does the allegation involve research? Is/Are the alleged person(s) researcher(s)? Has the allegation already been dealt with or is another institution presently dealing with the allegation?
- Does the allegation concern possible serious breaches of good research practice or irresponsible research practices?
- Are there implications for notifying external funders based on terms of funding agreements?
- How serious is the allegation? This could determine how and by whom it should be further handled.
- Does it fall within the definition or description in guidelines of unacceptable practices/research misconduct?
- Is there sufficient evidence to support an in-depth investigation, or is further documentation required before deciding on this?⁷

This step will determine whether allegations submitted concern events of research misconduct or minor breaches that will not proceed to further stages of this procedure.

2. Investigation and inquiry

Where, based on the submitted allegation, a case of concern is detected by the Research Integrity Manager, the Research Integrity Board is involved in order to proceed to investigation and determine the extent of the misconduct. Within this delicate passage, the following questions should be considered:

- Does the responsible board have the necessary expertise or is there a need for external experts?
- Has the board documented their real or perceived conflicts of interests?
- Has the board been advised of their role and which standards they should apply in assessing the allegation(s)?
- Does the board require training in the national/institutional policy/guideline and in handling allegations of this sort?
- Is there a need for further documentation? How should it be obtained?

⁶ ENRIO Handbook, Recommendations for the Investigation of Research Misconduct, available at: http://www.enrio.eu/wp-content/uploads/2019/03/INV-Handbook_ENRIO_web_final.pdf

- Is it possible to expand the investigation during the process if “new evidence or allegations” occur?
- Is there an established timeline for completion of the investigation and a mechanism for extending timelines when justified?
-

3. Formal hearings of involved parties or witnesses

- This could be done in writing and/or in verbal hearings.
- Documentation of written/oral hearings to maintain an accurate record (record/transcribe) should be considered.
- It should be ensured that due process/procedural fairness and all relevant employee/grantee contractual agreements have been considered.

4. Writing of a report including a conclusion

Investigations require careful analysis of the facts and thorough application of the pertinent standards (rules, regulations, guidelines) and end with a clear and concise conclusion based on the opinion of the board. If necessary, communication to other parties involved (Supervisors, Journals, Publishing House, Funding Body etc.) is required and is managed by the Research Integrity Manager.

In this phase, the following questions should be taken into account:

- Is this misconduct (e.g. FFP) or other unacceptable/irresponsible research practices?
- Did the researcher’s actions demonstrate intent to deceive or distort?
- Other behaviors or misbehaviors?
- What is the basis for the decision?

The report should include the kind of misconduct, the research record in which the misconduct occurred (progress reports, publications, other records), relevant dates and description of standards applied.

It is a good practice to give parties involved the chance to comment on the facts of the case before disseminating the report.

With respect to this, any mitigating factors should be considered.

OUTCOME OF THE INVESTIGATION

At the conclusion of the investigation, appropriate corrective actions may be recommended in order to safeguard research integrity and preserve the reliability of the scientific record.

Such actions may include communication with journals, publishers, funding bodies or competent authorities, where appropriate, as well as any additional institutional measures deemed necessary according to the nature of the case.

The outcome of the procedure shall be communicated to the parties involved in accordance with applicable institutional procedures and legal requirements

CONSEQUENCES OF RESEARCH MISCONDUCT

Confirmed violations of research integrity principles may result in corrective, administrative, disciplinary or other measures, depending on the nature and severity of the misconduct, in accordance with applicable laws, contractual obligations and institutional regulations.

Where appropriate, corrective actions may include:

- correction or retraction of scientific publications;
- notification to funding agencies, sponsors, scientific journals or competent authorities;
- temporary or permanent exclusion from specific research activities;
- disciplinary measures in accordance with applicable employment regulations.

Any measure adopted shall respect the principles of proportionality, due process and the right of defence.

CONFIDENTIALITY AND DATA PROTECTION

All information relating to allegations, investigations and outcomes shall be processed confidentially and only by persons authorized to participate in the procedure.

Personal data shall be processed in accordance with Regulation (EU) 2016/679 (General Data Protection Regulation – GDPR), applicable national legislation and the Institution's internal policies on privacy and information security.

This Institution shall ensure that the confidentiality of whistleblowers, respondents and all persons involved in the procedure is protected to the maximum extent permitted by law.

Documentation generated during the procedure shall be retained and accessed only for purposes connected with the management of the case and in accordance with applicable legal retention requirements.

The figure below, presented within the ENRIO Handbook, pictures the phases for handling research misconduct allegations:



Figure 1. Prototypical process in handling research misconduct allegations.

⁷ The European Code of Conduct for Research Integrity REVISED EDITION 2023, available at: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity_horizon_en.pdf and OECD Global Science Forum. Investigating Research Misconduct Allegations in International Collaborative Research Projects. A PRACTICAL GUIDE. April 2009, 6 ff.

MAIN PRINCIPLES TO BE FOLLOWED IN HANDLING ALLEGATIONS:

Handling research integrity allegations requires guiding principles to govern the whole process. Such principles are:

Integrity:

- Investigations are fair, comprehensive and conducted expediently, without compromising accuracy, objectivity or thoroughness.
- The parties involved in the procedure declare any conflict of interest that may arise during the investigation.
- Measures are taken to ensure that investigations are carried through to a conclusion.
- Procedures are conducted confidentially in order to protect those involved in the investigation.
- Institutions protect the rights of 'whistleblowers' during investigations and ensure that their career prospects are not endangered.
- General procedures for dealing with violations of good research practice are publicly available and accessible to ensure their transparency and uniformity.

Fairness

- Investigations are carried out with due process and in fairness to all parties.
- Persons accused of research misconduct are given full details of the allegation(s) and allowed a fair process for responding to allegations and presenting evidence.
- Action is taken against persons for whom an allegation of misconduct is upheld, which is proportionate to the severity of the violation.
- Appropriate restorative action is taken when researchers are exonerated of an allegation of misconduct.
- Anyone accused of research misconduct is presumed innocent until proven otherwise.⁷

TRAINING AND RESEARCH INTEGRITY CULTURE

This Institution promotes continuous education and awareness on research integrity principles and responsible research practices.



Specific educational and training initiatives may be organized periodically for researchers, clinicians, PhD students, research fellows, study coordinators and research support personnel.

Training activities may include topics such as:

- research misconduct and questionable research practices;
- plagiarism prevention;
- responsible authorship and publication ethics;
- data integrity and data management;
- conflicts of interest;
- peer review ethics;
- transparency and reproducibility;
- ethical and responsible use of artificial intelligence tools in research;
- compliance with institutional, national and international funding requirements.

This Institution recognizes training and awareness as key preventive measures for fostering a responsible and trustworthy research environment.

RESEARCH INTEGRITY MANAGER – CONTACTS:

marco.asioli@inoc.it

valeria.leuci@inoc.it

USEFUL RESOURCES:

Websites:

- ENRIO 2020 Congress on Research Integrity Practice
- European Network of Research Integrity Offices (ENRIO)
- USA - Office of Research Integrity (ORI)
- ALL European Academies (ALLEA)
- ENERI
- World Conferences on Research Integrity Foundation (WCRIF)
- Comité d'éthique du CNRS (COMETS)
- German Research Ombudsman
- UKRIO

Documents:

- The Hong Kong Manifesto for Assessing Researchers: Fostering Research Integrity
- Recommendations for the Investigation of Research Misconduct by ENRIO (2019) http://www.enrio.eu/wp-content/uploads/2019/03/INV-Handbook_ENRIO_web_final.pdf
- Integrity in Practice toolkit by UKRIO (2018) <https://ukrio.org/wp-content/uploads/UKRIO-Royal-Society-Integrity-in-Practice.pdf>
- EGE - Statement on the formulation of a code of conduct for research integrity for projects funded by the European Commission https://ec.europa.eu/research/ege/pdf/research_integrity_ege_statement.pdf
- ALLEA - European Code of Conduct for Research Integrity – Revised Edition 2023.
- Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations <https://wcrif.org/montreal-statement/file>
- Singapore Statement on Research Integrity https://www.jsps.go.jp/english/e-kousei/data/singapore_statement_EN.pdf
- ESF Report Fostering Research Integrity in Europe http://www.esf.org/fileadmin/user_upload/esf/ResearchIntegrity_Report2011.pdf
- COPE A Short Guide to Ethical Editing for New Editors https://publicationethics.org/files/A_Short_Guide_to_Ethical_Editing.pdf
- Science Europe Working Group on Research Integrity- Seven Reasons to Care about Integrity in Research <https://www.scienceeurope.org/our-priorities/research-integrity-and-ethics/>
- OECD on investigating research misconduct in international collaborative research projects
- (2007). Best Practices for Ensuring Scientific Integrity and Preventing Misconduct. <https://www.oecd.org/sti/sci-tech/40188303.pdf>
- COPE Code of Conduct and Best Practice Guidelines for Journal Editors <https://publicationethics.org/files/Code%20of%20Conduct.pdf>
- Responsible Research Publication: International Standards for Editors https://www.elsevier.com/data/promis_misc/JACS-Ethics_in_Publishing_Statement.pdf
- ORI Guidelines for Institutions and Whistleblowers https://ori.hhs.gov/documents/guidelines_whistle.pdf
- Regno Unito: Code of Practice for Research. Promoting Good Practice and Preventing Misconduct <https://ukrio.org/wp-content/uploads/UKRIO-Code-of-Practice-for-Research.pdf>
- Regno Unito: Guidance for Researchers on Retractions in Academic Journals <https://ukrio.org/wp-content/uploads/UKRIO-Guidance-for-researchers-on-retractions-in-academic-journals.pdf>
- Organisation for Economic Cooperation and Development (OECD) and Global Science Forum (2007). Best Practices for Ensuring Scientific Integrity and Preventing Misconduct. <https://www.oecd.org/sti/sci-tech/40188303.pdf> [Accessed 15/01/2017]
- Research Data Alliance RDA (2016). RDA/WDS Publishing Data Workflows WG Recommendations. <http://dx.doi.org/10.15497/RDA00004> [Accessed 15/01/2017]
- Research Data Alliance RDA (2016). Data Description Registry Interoperability WG

Recommendations. <http://dx.doi.org/10.15497/RDA00003> [Accessed 15/01/2017]

- UK Academy of Medical Sciences (2015). Perspective on 'Conflict of Interest'. <https://acmedsci.ac.uk/file-download/41514-572ca1ddd6cca.pdf> [Accessed 13/03/2017]
- Wilkinson MD et al. (2016). The FAIR Guiding Principles for scientific data management and stewardship, Scientific Data 3:160018 doi: 10.1038/sdata.2016.18 <http://www.nature.com/articles/sdata201618> [Accessed 15/01/2017]
- World Conference on Research Integrity WCRI (2013). Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations. <http://www.researchintegrity.org/Statements/Montreal%20Statement%20English.pdf> [Accessed 05/01/2017]
- World Conference on Research Integrity WCRI (2010). Singapore Statement on Research Integrity. www.singaporestatement.org/statement.html [Accessed 15/01/2017]

RESEARCH MISCONDUCT NOTIFICATION FORM

Notify the INOC – Istituto Nazionale Oncologico Candiolo about a concern that research misconduct is affecting our scientific community by completing this form:

Fields marked with an * are required.

*Date:
Your first name (Optional):
Your last name (Optional):
Your email address (Optional):
Your phone number (Optional):
*First name of the person who may have committed research misconduct:
* Last name of the person who may have committed research misconduct:
* Please briefly describe what kind of research misconduct has been committed and how:

This form must be sent to the Research Integrity Managers: valeria.leuci@inoc.it, marco.asioli@inoc.it