INL Research Ethics Committee

GUIDELINES FOR GOOD RESEARCH PRACTICES / STANDARDS

(approved by the INL Research Ethics Committee on 29 June 2023)

Good Research Practices refer to the standards required to conduct responsible research in the following contexts:

- 1. Research Environment
- 2. Training, Supervision and Mentoring
- 3. Research Procedures
- 4. Safeguards
- 5. Data Practices and Management
- 6. Collaborative Working
- 7. Publication and Dissemination
- 8. Reviewing, Evaluating and Editing

1. Research Environment

To foster research integrity and minimise research misconduct and questionable research practices, INL shall nurture a supportive environment. In general, hypercompetition, harmful publication pressure, detrimental power imbalances, and conflicts are condemned and shall be explicitly addressed and adequately handled.

Fairness, transparency, diversity, inclusion and responsible assessment and promotion of researchers are marks of a good research environment supported by INL. Collegiality, openness, reflection, and shared responsibility are vital elements for a suitable working environment, in which the risk of major and minor breaches of research integrity is minimised.

2. Training, Supervision and Mentoring

Competent supervision and mentoring are to be offered to researchers at all stages of their career development. Specific procedures and criteria for qualifying as a supervisor or mentor must be developed in independent policies and should include guidelines for supervision and mentoring of researchers at different career stages, with due attention to responsible research practices.

Furthermore, adequate training in research design, methodology and analysis, as well as in research integrity and ethics must be provided by qualified trainers to researchers at all career stages, with special consideration to INL research newcomers. Senior researchers, research group leaders and supervisors should mentor their team members and offer specific guidance and training to properly develop, design and structure their research activity and to foster a culture of research integrity.

Specific training and opportunities for the exchange of experiences shall be offered to staff handling research integrity issues. The researchers shall also have access to adequate online information about research integrity and responsible research practices.

3. Research Procedures

In their research activity, researchers shall consider state-of-the-art knowledge in developing new research ideas; design, carry out, analyse and document research in a careful and well considered manner; make proper and conscientious use of research funds; publish results and interpretations of research in an open, honest, transparent and accurate manner; and respect the integrity and confidentiality of data and findings, when legitimately required to do so. Moreover, researchers are expected to report their results in a way that is compatible with the standards of their discipline and, where applicable, can be verified and reproduced.

Researchers must comply with all legal and ethical requirements and other guidelines that apply to their research. This includes, where appropriate, the submission of research proposals for their review by the REC, and the observance of the review outcomes. They should also ensure that research projects are approved by all competent bodies, ethical, regulatory or of any other nature.

To facilitate and ensure that researchers can adhere to research ethics requirements, INL shall maintain suitable supportive mechanisms, such as REC, reflecting the ethical commitment within the organisation.

4. Safeguards

Researchers must consider different safeguards in order to comply with the research integrity principles, codes and policies. Concretely, they must comply with the relevant regulations and standards of their discipline; they must handle research subjects—human, animal, cultural, biological, environmental or physical—with respect and care, and in accordance with legal and ethical provisions; have due regard for the health, safety and welfare of the community, collaborators and other persons connected with their research; as well as recognise and manage potential harms and risks relating to their research.

5. Data Practices and Management

Researchers must ensure that practices are compliant with ethical and legal regulations, including applicable codes of conduct and internal policies related to data protection, privacy, and Intellectual property rights. The organisation must provide adequate infrastructures for secure data processing; collection, storage, retention archiving, and sharing. Data integrity and confidentiality must be maintained where undertakings have been made to third parties or to protect intellectual property rights. Researchers should ensure that research data to be used in publications are duly processed and available for discussion with other researchers.

Researchers should not disclosure the research or its findings when this might invalidate any commercial property rights that could result. However, researchers should acknowledge that, as a matter of presumption, any intellectual property discovered or developed using public funds should be disseminated so as to benefit society at large. Such presumption may be rebutted by the existence of a legitimate cause of restriction that must be expressed beforehand. In any case, and as a principle, the benefits obtained from this withholding must surpass those that would be achieved through its dissemination.

Researchers should try to anticipate any issues relating to intellectual property at the earliest opportunity and agree jointly in advance on how they might be addressed, communicating any decision to all members of the research team.

6. Collaborative Working

Collaboration across disciplines, sectors and countries is an integral part of research within INL.

All collaborators in research are responsible for the integrity of the research and should agree beforehand on the research integrity standards. They will procure to know the ethical and legal regulations, or will involve people with this knowledge, applicable to either the accomplishment of the research project, the dissemination of its results and the resolution of conflicts and cases of dereliction of duty.

Responsible research collaboration is to be carried out at the INL when the performance of the research project requires certain conditions, e.g., when researchers from different disciplines or with different professional backgrounds collaborate.

7. Publication and Dissemination

INL shall adopt policies and procedures related to the publication and dissemination of research results according to the following principles:

- Researchers should address issues relating to publication and authorship, especially the roles of all collaborators and contributors, at an early stage of the project design, recognising that roles and contributions may change during the time span of the research, in accordance with legal and ethical requirements. Decisions on publication and authorship should be agreed jointly and communicated to all members of the research team.
- Authorship is to be restricted to those contributors and collaborators who have made a substantial intellectual or practical contribution to the work. No person who fulfils the criteria for authorship should be excluded from a submitted work ("ghost authorship"), nor should any person who does not meet the authorship criteria be included in the submitted work ("guest authorship"). Researchers should be aware that anyone listed as an author of any work should be prepared to take public responsibility for that work and ensure its accuracy and be able to identify their contribution to it.
- Researchers must clearly acknowledge all scientific sources, funding support, and individual or institutional contributions related to their research and seek permission from any individuals if a significant amount of their work has been used in the publication, official communication or presentation in conferences.
- Researchers must adhere to any conditions set by funding or other bodies regarding the publication of their research and its findings in open access repositories within a set period of time.
- All authors are fully responsible for the content of a publication, unless otherwise specified.
- Authors shall ensure that their work is made available to colleagues in a timely, open, transparent, and accurate manner, unless otherwise agreed, and be honest in their communication to the general public, either through traditional or social media.
- Authors and publishers must issue corrections or retract research work, if necessary. In order to issue prompt post-publication corrections, the processes must be clear, the reasons stated, and authors given credit.

In relation to research conduct, funding, peer review, evaluation, assessment, promotions, and collaboration across different sectors, researchers should provide transparent declarations of interests and ensure that conflicts of interests are handled adequately, pursuant to the INL's conflicts of interest policy.

When possible and appropriate, researchers should enable the participants to access to the results of the research referred to themselves.

8. Reviewing, Evaluating and Editing

Researchers take seriously their commitment to the research community by participating in refereeing, reviewing and evaluating.

As an important good practice, INL encourages and supports its researchers to act as peer reviewers for the publication and dissemination of research and its findings; the assessment of applications for research grants; and the ethical review of research projects.

Peer reviewers practice should be thorough and objective. Researchers should maintain confidentiality and not retain or copy any material under review without the express written permission from whom the review was requested. They should not make use of research designs or research findings from a paper under review without the express permission of the authors and should not allow others to do so. Researchers acting as peer reviewers must declare any relevant conflicts of interest; in case of conflict of interests, reviewers or editors must refrain from such activities.

While carrying out peer review, researchers may become aware of possible misconduct, such as plagiarism, fabrication or falsification, or have ethical concerns about the design or conduct of the research. In such cases, they should confidentially inform the REC. INL should provide means to fulfil the principles and duties of the Guidelines and Ethics Code.

VIOLATIONS OF RESEARCH INTEGRITY

Even in environments with a strong culture of research integrity, breaches of responsible research practices occur. However, in the interest of society and the research community, violations should be handled in a consistent and transparent way.

Misconduct in research includes, but it is not limited to:

- a) Fabrication;
- b) Falsification;
- c) Misrepresentation of data and/or interests and/or involvement;
- d) Plagiarism; and
- e) Failures to follow accepted procedures or to exercise due care in carrying out responsibilities for:
 - i) avoiding unreasonable risk or harm to:
 - humans;
 - animals used in research; and
 - the environment; and
 - ii) the proper handling of privileged or private information on individuals collected during the research.

Any misconduct in research is unacceptable and should be reported. Researchers who are found to have committed misconduct in research will be subject to disciplinary proceedings and, where researchers are members of a regulated profession, cases of serious misconduct in research will be referred to the professional regulatory body. If after the investigation, the researchers are found to have committed no misconduct in research, they will be supported and appropriate steps must be taken to restore their professional reputation, as well as that of any research project involved.

The investigation shall commence with the allegations of misconduct in research, ensuring that such allegations are thoroughly and fairly investigated in a timely manner. The following principles must lead any investigation process:

<u>Integrity</u>

Investigations must be fair, comprehensive and conducted expediently, without compromising accuracy, objectivity or thoroughness. The parties involved in the procedure must declare any conflict of interest that may arise during the investigation.

Measures are to be taken to ensure that investigations are carried through to a conclusion. Procedures are to be conducted confidentially in order to protect those persons involved in the investigation.

<u>Fairness</u>

Investigations must be carried out with due process and in fairness to all parties. Persons accused of research misconduct must be given full details of the allegations and allowed a fair process for responding and presenting evidence. Appropriate restorative action will be taken when researchers are exonerated of an allegation of misconduct. Anyone accused of research misconduct is presumed innocent until proven otherwise.

Researchers should know what constitutes misconduct in research and report any suspected misconduct as soon as they become aware of it. They should recognise that good practice in research includes reporting concerns about the conduct of research and should cooperate with any investigation of misconduct in research when requested.

Final Note:

This document is based on "The European Code of Conduct for Research Integrity" developed in 2017 by All European Academies (ALLEA) and the European Science Foundation (ESF). It is a living document that will be revised as necessary to take account of evolving concerns, so that it can continue to serve the research community as a framework for good research practice.