

Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.

The primary responsibility for research integrity is with researchers themselves. Researchers should be supported by an institutional culture of research integrity to create and respect rules, procedures and guidelines as well as training and mentoring based on the exchange of best practices.

In order to foster good research practices and a culture of research integrity, a number of dimensions need to be considered by all stakeholders involved, such as research integrity in research environments; training and capacity building on research integrity; research processes and policies embedding research integrity; data, publication, dissemination, review, evaluation and editing policies. Equally, mechanisms to identify, report and deal with research misconducts should be put in place.

Researchers should avoid plagiarism of any kind. Particular attention should be paid to the principles of joint ownership when research is carried out in collaboration with supervisors and/or other researchers – as appropriate to the discipline – as well as to intellectual property rules. This should apply at all stages of the research process including conception, preparation of funding applications and the development and delivery of results. The need to validate observations by showing that findings are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly referenced.

The values of ethics and integrity are also of great importance when researchers are in a supervisory role. These should be applied promptly to ensure a safe, inclusive and gender equal research environment for all involved and especially when discrimination, sexual or moral harassment, hindrance to learning or research work, or unjustified personal appropriation of data or results occur.

(2) Freedom of Scientific Research

The freedom of scientific research is a common core value and principle for research cooperation within the European Research Area and with international partners. Researchers should focus their research on the good of humanity and expanding the frontiers of human knowledge, while enjoying freedom of thought, opinion and expression, the freedom to define research questions, the freedom to identify methods by which problems are solved, the freedom to choose and develop theories, the freedom to question accepted wisdom and bring forward new ideas and the freedom to associate in professional or representative academic bodies. Researchers should have the right to disseminate and publish the results of their research including through training and teaching. Researchers should, however, recognise the limitations to this freedom that could arise because of particular research circumstances – including supervision/guidance/management – or legal or operational constraints, e.g. intellectual property rights, budgetary or infrastructural reasons.

(3) Open Science

Researchers should target engagement in all aspects of Open Science ⁽²⁾ and be facilitated by their employers and funders in this regard. They should share their results openly, e.g. through open and FAIR-Findable, Accessible, Interoperable and Reusable data, open access publications, and open software, models and algorithms. They should take measures to ensure reproducibility of research results. They should aim at practicing Open Science methodologies and at engaging in open peer review. Employers and funders should support, provide the necessary tools and infrastructure, and reward a true Open Science culture across the Union, including mainstreaming open access to scholarly publications, research data and other research outputs – i.e. following the ‘as open as possible, as closed as necessary’ principle – and the diffusion and uptake of Open Science principles and practices, while considering differences among disciplines and cultural differences, including multilingualism, supporting the development of Open Science skills, and further developing and integrating the underpinning digital infrastructure and service.

⁽²⁾ The transition towards an Open Science system – Council conclusions (adopted on 27 May 2016) – Council doc. 9526/16.