

Principles of Good Research Practice and Creative Activities at

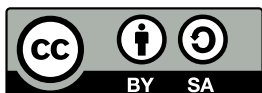
**Palacký
University
Olomouc**



Palacký University
Olomouc



HR EXCELLENCE IN RESEARCH



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Version 2.0

VUP 2026/0340

DOI: www.doi.org/10.5507/rup.2026-0340

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Ten Principles of Good Research Practice at UP

1. Respect and honesty
2. Transparency
3. Data Management Plan
4. Protection of participants
5. Fair authorship
6. Openness (FAIR)
7. Avoid predatory publishing
8. Correct affiliation
9. Conflicts of interest
10. Responsible use of AI

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Basic principles

In connection with the process of obtaining the HR Excellence in Research Award as part of its care for human resources in the research environment, Palacký University Olomouc (UP) has endorsed the principles set out in the European Charter for Researchers (2023), a set of general principles and requirements specifying the responsibilities and rights of researchers and students. An integral part of research is adherence to the highest standards of research practice, both in the preparation and conduct of research itself and in subsequent scholarly communication. The fundamental ethical and organisational requirements for creative activities and research data management are set out in particular in the Code of Conduct for Employees and Students of Palacký University Olomouc, the Statute of the Ethics Board of Palacký University Olomouc, and UP Policy R-B-24/08 Research Data Management at Palacký University Olomouc. With regard to the principles of good research practice, creative activities and teaching, UP endorses the rules and principles defined in the Ethical Framework for Research (Ministry of Education, Youth and Sports, 2005), acknowledged by the Government of the Czech Republic, and in the European Code of Conduct for Research Integrity (2023).

The purpose of this document is to provide a clear and practical framework for good research practice. The Principles are intended to help conduct high-quality research, foster a healthy and open research culture at the University, and prevent misconduct and other shortcomings in the research and creative activities of UP staff and students. A good research culture is a shared responsibility of individuals, research teams, leaders and the institution. The document distinguishes binding obligations arising from legislation and internal policies from standards and recommendations of good research practice.

These Principles apply to all persons who carry out or participate in research, development, innovation, artistic, publishing, evaluation or data-management activities at UP, in particular employees, students, visiting researchers, external collaborators, project investigators, and persons using UP infrastructure or affiliation. They also apply, as appropriate, to collaborations with external partners where the output is presented as a UP output or is produced using UP funding, data or infrastructure. This guide does not in itself create new sanctionable obligations; the binding nature of specific requirements derives from legislation, UP policies and standards, study or employment obligations, contractual commitments, and the rules of funding bodies.

Standards of good research practice evolve together with research methods, values, societal expectations and risks. This guide therefore cannot provide an exhaustive list of all situations; where there is doubt, the nature of the research, recognised disciplinary standards, and applicable legal, ethical, security and contractual requirements must be taken into account.

For the purposes of this guide, research integrity means a set of principles ensuring reliability, honesty, respect and accountability throughout the research process. Research ethics focuses in particular on the ethical acceptability of research aims, methods, risks and impacts, and on the protection of human participants, animals and other values affected by research. Legal and regulatory compliance means adherence to binding legal, contractual, security and institutional requirements. These areas overlap but are not identical.

1.1 Research integrity

The reliability of science depends on the integrity of individuals, research teams and institutions. Research integrity underpins trust in methods, results and scholarly communication. UP supports a research culture that enables honest, open and high-quality research. Managers, supervisors, project leaders and research team leaders are responsible not only for their own integrity but also for creating an environment in which early-career researchers are guided towards methodologically sound research, transparency, research data management, responsible authorship and inventorship, fair assessment, and the ability to raise concerns safely. Within its remit, UP creates the conditions for this through high-quality leadership and mentoring, education, infrastructure, support for open science, responsible research assessment, career development, and a psychologically safe environment in which doubts can be discussed and problematic practices can be reported without fear of retaliation. UP seeks to foster an environment that limits undue pressure relating to performance, publications, citations, grants or commercial exploitation of results; however, such pressure cannot justify breaches of good research practice. Palacký University Olomouc seeks to uphold a high

standard of integrity at all stages of the research process in accordance with the European Code of Conduct for Research Integrity (2023), which defines the following key values of good research practice:

- Respect for colleagues in academia, other employees, trainees, students and research participants (including respect for human rights and animal welfare), as well as respect for societal impacts, cultural heritage, the environment and living organisms.
- Honesty in developing research and educational designs, implementation, evaluation and communication of research, proper citation, and avoidance of improper publication practices.
- Reliability in ensuring the quality of research and teaching as a fundamental pillar of trust in science. Reliability, with particular regard to reproducibility, applies to all stages of research – from planning and data collection through analysis and interpretation to publication, preservation and any subsequent use of results and research data.
- Accountability for the consequences of one's own conduct in research and teaching, particularly in relation to staff safety and the responsible use of resources. Researchers continuously identify potential adverse impacts of their activities and take proportionate measures to minimise them. Accountability applies to research from planning through publication, preservation and subsequent use of results.

Another key value is the impartiality of the researcher, which is important for the quality of research and for public trust in research and its results. In particular, where conflicts of interest may arise, researchers and the research institution have a duty to ensure objective and responsible disclosure of results. Individual researchers should report serious departures from good research practice of

which they become reasonably aware. An honest error does not in itself constitute research misconduct; however, it should be acknowledged and corrected promptly and its consequences limited where possible. At the same time, the UP environment should encourage prompt reporting and learning from mistakes. Where misconduct is suspected, a fair process must be ensured: impartial and confidential assessment, informing the person concerned of the substance of the allegation and the relevant evidence, and giving them an opportunity to respond before a decision is made. See Chapter 4 for details.

How to proceed:

If misconduct is suspected, do not act hastily and do not accuse anyone publicly. Gather the available facts and discuss the situation in a safe environment with your supervisor or the UP Ethics Board. Maintain strict confidentiality until the matter has been clarified.

1.2 Transparency

Transparency is a key pillar of good research practice. To an extent appropriate to the nature of the research and recognised disciplinary standards, the research process should be documented so that it is possible to understand how the results were obtained. Depending on the nature of the study, the documentation should cover in particular:

- 1) the research plan, protocol and any preregistration;
- 2) the origin, selection, exclusion and modification of data;

- 3) the analytical procedure, statistical methods, code, software, workflow and models used, including AI models;
- 4) material changes from the original plan and the reasons for them;
- 5) the availability of data, metadata, code, materials and protocols after publication.

Prospective documentation is required where it is material to the credibility of the study; other steps should be documented on an ongoing basis. For studies where it is appropriate to the discipline and consistent with disciplinary standards, preregistration, publication of a protocol or another form of time-stamped documentation is recommended. Published outputs should include a Data Availability Statement in accordance with UP Policy R-B-24/08, including a justification of any restrictions on availability. These matters should be planned and recorded on an ongoing basis in a DMP or an equivalent document; the obligation to prepare a DMP is governed by the requirements set out in Section 2.1.

How to proceed:

Before starting a study, determine which parts of the plan must be documented in a time-verifiable manner; during the research, record material changes and the reasons for them; before publication, verify that the publication or other output links to the relevant data, metadata, code and protocols, or transparently explains restrictions on their availability.

Transparent research should provide sufficient information for independent verification or reproduction where this is methodologically possible. Transparency and openness are not merely tools of scrutiny; they are also part of a culture of collaboration, cumulative knowledge-building and trust in science. Transparency

increases the credibility of scientific endeavour, facilitates scrutiny of methods and results, and supports high-quality follow-on research.

Transparency is important for:

- a. reviewing protocols, documentation and research results as a whole;
- b. avoiding unnecessary repetition of studies that have already been carried out and reducing selective reporting of results;
- c. maximising the effective use of financial and other research resources and reducing publication bias, where relevant, by publishing negative or null results and registering studies.

1.3 Reproducibility

Reproducibility and replicability express the possibility of verifying research results by repeating an analysis, experiment or entire study and obtaining results that are consistent within the range of expected variability. The precise definitions of these terms differ between disciplines. Researchers may therefore use the terminology customary in their field provided that they always clearly describe who performed the verification, whether original or new data were used, and whether the same procedures or independently developed procedures were employed. The form of verification also differs according to the epistemological and methodological traditions of individual disciplines. In qualitative research and in the humanities and social sciences, quality may lie primarily in the transparency of the research process, the traceability of the link between data or sources and conclusions, methodological robustness, reflexivity, and the possibility of expert review of the interpretation. Recognising this plurality does not lower quality standards, but

requires that the mechanisms of scrutiny used be described and justified. For the purposes of these Principles, the following terms are used as follows:

- Repeatability: the ability to obtain consistent results when the same procedure is repeated under the same or very similar conditions.
- Reproducibility: the ability to obtain a consistent result again from the same input data or other original source materials using sufficiently described analytical or computational procedures.
- Replicability: the ability to obtain consistent results in a new study addressing the same or a similar research question and based on newly collected data, samples or measurements.

In some fields, the possibility of verifying results may be limited by legal, ethical, security or technical considerations.

How to proceed:

Share your primary data, source code used and sufficiently detailed methodology with the research community through trusted repositories, unless legal restrictions prevent this. Consider preregistering your study before data collection begins.

1.4 Collaboration, funding and knowledge valorisation

1.4.1 Research collaboration

UP collaborates with a wide range of public institutions, agencies and private companies. Such collaborations can enhance the quality and relevance of research, for example in the areas of public health, the environment, security or artificial intelligence. In research collaboration with external partners, it is essential to preserve research integrity, academic freedom, and responsibility for methods and interpretation. The following principles should therefore be observed:

- a. An external partner may contribute to defining research topics and questions, but scientific methods should be selected solely on the basis of scientifically justified considerations, and the UP researcher remains responsible for the scientific methods chosen.
- b. Researchers must be free to present research results in a manner that does not compromise their research integrity.
- c. To ensure quality and verifiability, researchers must have access to data, meta-data and accompanying documentation obtained by the external partner to the extent necessary for the proper conduct and verification of their part of the research. If full access is prevented by legal, contractual or security reasons, the agreement must specify a controlled-access regime or another credible means of independent verification.
- d. UP and an external partner may contractually agree on a reasonable delay in publishing results for legitimate reasons, particularly to protect intellectual property or confidential information. For example, disclosure of an invention before a patent application is filed may destroy novelty and thereby prevent or substantially limit

patent protection; the duration of any publication delay must therefore be justified and defined in advance.

- e. Research collaboration with an external partner must, to an extent commensurate with its risks and commitments, be described in a written agreement recorded in a durable form.

Where relevant to the particular collaboration, the agreement must specify in particular the rights and obligations of the partners, rules for handling data and results, publication conditions, protection of confidential information and intellectual property, the duration of the collaboration, the conditions and consequences of its termination, and the management of conflicts of interest.

When planning a joint project, researchers should agree on:

- a. remuneration of personnel;
- b. the allocation of research project costs;
- c. the handling of research data, including the timetable for disclosure;
- d. research outputs and their publication, researchers' affiliations, patent applications and other applications for industrial property rights, etc.;
- e. the protection of, and anticipated shares in, intellectual property created.

Agreements on shares in publications, data and industrial property rights should reflect actual creative contributions and must respect the authority of persons to act on behalf of UP. Mutual expectations, duties, responsibilities, roles, possible outputs and potential conflicts of interest should be clarified in advance and reviewed regularly during the project. Contributions by technical, data and research-management staff, as well as other support roles, should be

appropriately recognised. International openness is a default value of scientific collaboration, but it is not absolute: sharing may legitimately be restricted by legislation, ethical and security requirements, sanctions regimes, contractual confidentiality or intellectual property protection. UP researchers are required to comply with requirements applicable both to UP and to the partner institution and to address any conflict between them in a timely manner.

In international collaborations and projects, research security risks must be assessed proportionately. Key considerations include in particular: undesirable transfer of knowledge and technology; foreign interference and influence activities; circumvention of sanctions regimes; breaches of ethics or integrity; misuse of personal data, confidential data or trade secrets; threats to intellectual property; cyber risks; export controls; and the dual-use potential of results.

How to proceed:

(1) Identify relevant risks, (2) designate the principal investigator or collaboration lead responsible for assessing them, (3) consult the appropriate specialist UP unit according to the type of risk, (4) document decisions and protective measures, and (5) review risks on an ongoing basis. The assessment should form part of responsible internationalisation and should not unnecessarily restrict open scientific collaboration or academic freedom, or create general mistrust of foreign partners.

1.4.2 Research funding

Research funding and project development should support methodologically sound, ethical and realistically planned research. Funder requirements and competitive pressure must not distort professional judgement or create incentives for questionable research practices. The principal investigator or project leader should plan realistic team capacity and workload, data-management costs, ethical and security requirements, responsible working conditions, and transparent use of institutional resources. UP also develops long-term research capacity through professional support for research managers. The UP Project Service (PSUP; <https://www.upol.cz/ps/>) and equivalent units at individual constituent parts provide support for international, national and internal grants and publish current calls and training opportunities through their information channels.

How to proceed:

Plan the project and its budget well in advance. Consult grant calls with the UP Project Service already at the proposal stage and remember to include budget items for Open Access fees and data management.

1.4.3 Use and valorisation of knowledge

Knowledge valorisation means using research results for the benefit of society, culture, education, public policy, professional or clinical practice, and the economy. It may take the form of commercialisation and intellectual property protection, but also the development of standards and methodologies, public engagement,

open software, data and other outputs, citizen science, or collaboration with public administration and the non-profit sector; the appropriate form depends on the discipline, the nature of the result and the public interest. The legal regime governing results created at UP depends on the nature of the result, the status of the author or inventor, the relationship of the result to their employment or study duties, contractual arrangements, and the applicable legislation and internal policies. For employee works, UP exercises the author's economic rights under the conditions laid down by copyright law. For employee-created subject matter of industrial property, UP may exercise the right to seek protection under the conditions laid down by the applicable legislation. For student works, economic rights generally remain with the student unless otherwise provided or agreed; the regime governing industrial property and any proceeds from its commercialisation is assessed separately under the relevant legislation, internal policies and agreements. Before a new result is disclosed, it is advisable to assess not only its publication potential but also its societal, cultural, professional and, where relevant, commercial potential, in particular the possibilities for protection, licensing, transfer, provision of a unique service, or creation of a spin-off company.

How to proceed:

Before disclosing a result (e.g. in an article or at a conference), consider its commercial and protection potential. If such potential exists, contact the UP Science and Technology Park (VTP UP) in good time and, before disclosure, assess the appropriate form of protection with it; where patent protection is relevant, ensure that a patent application is filed before the result is disclosed.

1.5 Assessment, review and related activities

Peer review and expert assessment of individual outputs and projects are important parts of scholarly communication and decision-making processes where this form of evaluation is used. Reviewers and evaluators should follow the rules of the commissioning body and relevant disciplinary standards; publication peer review may also draw on the recommendations of the Committee on Publication Ethics (COPE). In particular, a reviewer should verify their expertise and impartiality, disclose any conflict of interest, maintain confidentiality, refrain from using non-public information for personal benefit, and provide a substantive and respectful assessment; see the COPE Ethical Guidelines for Peer Reviewers for further detail.

Responsible assessment of research, researchers and teams should be qualitative and contextualised and should reflect the principles of research assessment reform, including the CoARA framework. Quantitative indicators – such as AIS/IF, journal quartile or decile, H-index, and numbers of publications or citations – may provide relevant supporting evidence in some disciplines, but should not be used mechanically or as the sole criterion. Depending on the discipline, career stage and role, consideration should be given in particular to research quality, originality and reliability, leadership, supervision and mentoring, open science, sharing of data and software, methodological outputs, teamwork, knowledge valorisation, societal impact and public engagement, professional contributions to research management and support, and adherence to research integrity.

Practical rule: a metric may draw attention to a particular aspect of performance, but its significance must be explained in the disciplinary and career context, and the final judgement should not be a purely automatic consequence of a ranking or threshold value.

When assessing the work of others – for example publications, grant proposals, qualification theses, positions or projects – the evaluator should in particular:

- a. assess their own qualifications and impartiality;
- b. declare any conflict of interest and, where necessary, withdraw from further discussion and decision-making;
- c. act with the highest degree of diligence and objectivity;
- d. maintain the confidentiality of the materials under review, refrain from using information, ideas or knowledge from them for their own benefit or the benefit of others, and respect copyright and other intellectual property rights, including by not making unauthorised use of, disclosing or publicly discussing such materials;
- e. protect the material under review by not entering it into external tools using artificial intelligence, including tools for translation, language correction and stylistic editing (e.g. DeepL or Grammarly), unless an appropriate secure mode has been approved at UP for the tool and the type of information being processed;
- f. formulate the assessment clearly, specifically, substantively and respectfully regardless of its ultimate conclusion; criticism should not contain personal attacks or vague judgements based solely on impressions and, where appropriate, should include recommendations for improvement.

How to proceed:

Before accepting a request for peer review, always assess whether you have a conflict of interest. During the review, do not share reviewed data or manuscripts with publicly available AI tools. Formulate criticism substantively, without personal attacks, and include recommendations for improvement.

2

Research data management

2.1 General principles

Researchers and research teams must handle research data and other research materials responsibly throughout the data life cycle and the research activity or project. Data management is a shared responsibility of the researcher, the team and the institution: researchers and teams plan, document and protect data, while UP, within its rules and capacities, provides appropriate infrastructure, expert support, training and long-term capacity for data management. Data management must comply with legal, ethical, organisational, security, contractual and other legitimate requirements; at the same time, to an extent appropriate to the nature of the research, it should follow recognised disciplinary standards and the FAIR principles. FAIR means that data should be Findable, Accessible, Interoperable and Reusable. In research concerning Indigenous Peoples or communities with collective rights over data, it is appropriate to consider the CARE principles (Collective Benefit, Authority to Control, Responsibility, Ethics) alongside FAIR.

Every researcher or research team should:

- a. plan research data management in accordance with UP Policy R-B-24/08 Research Data Management at Palacký University Olomouc. A data management

plan (DMP) is mandatory where required by a funder or another binding requirement; in other cases, its use is governed by R-B-24/08. The DMP should be updated throughout the data life cycle and should cover, in particular, the areas listed in Article 5(2) of that policy: the nature and creation of data, documentation and metadata, processing, storage and preservation or destruction, sharing and security, legal and ethical parameters, rights and responsibilities, rights in data, and the costs and resources of data management;

- b. document their work and research data in sufficient detail and clarity to enable the research results to be reproduced (e.g. by independent experts) on the basis of the information available in the documentation and metadata;
- c. ensure the confidentiality, availability and integrity of research data and select appropriate procedures to protect and secure the data and minimise the risks of loss, damage, unauthorised access, misuse, unauthorised alteration or disclosure;
- d. ensure the long-term preservation and availability in particular of those research data that are needed for the reproducibility and validation of published research results and that have potential for future reuse, including their documentation and metadata; research data that underpin published research results, underpin an application seeking legal protection under legislation governing industrial property rights, or themselves constitute a research result must be retained for at least 10 years unless this is entirely precluded by law or other compelling reasons;
- e. share data according to the principle ‘as open as possible, as closed as necessary’. Before data are disclosed or transferred, particular attention should be paid to the protection of personal data and participants’ rights, intellectual property, trade secrets and contractual obligations, research security and security interests, export controls and dual-use risks, and any legitimate knowledge-transfer plan. The chosen access regime and the reasons for restrictions should be

documented in the DMP and, where appropriate, discussed with a data steward or another relevant unit.

Institutional data stewards and their coordination network at UP provide support with data-management planning, repository selection, metadata, DMPs and access arrangements. Their early involvement is recommended as early as the project-planning stage, especially where data, ethical, security or FAIR requirements are complex. They help identify sustainable and interoperable solutions, trusted repositories and, depending on the nature of the project, appropriate European infrastructures including EOSC.

How to proceed:

Prepare a Data Management Plan (DMP; DSWizard is recommended) already when planning the research and update it throughout the project. Before sharing data, use a decision checklist and verify with a data steward whether the data may be made open in accordance with FAIR principles.

2.2 Research involving human participants

For research involving human participants, human biological material, or data relating to an identified or identifiable person, the following must be determined before the research begins: the nature and degree of risks; whether the data are personal data, special categories of personal data, pseudonymised data or anonymised data; the legal basis and purpose of processing; the scope and

retention period; and the rules governing access, sharing, secondary use, international transfers, and any processing using AI tools. Pseudonymisation is a protective measure, not anonymisation; if data can be attributed again to a specific person by means reasonably likely to be used, they remain personal data. Unlike pseudonymised data, anonymised data fall outside the scope of the GDPR, although they may still be subject to ethical approval, DMP requirements, contractual obligations and disciplinary rules. The distinction between pseudonymisation and anonymisation is therefore essential for determining the legal regime governing the data, setting access rights, and determining whether further sharing is possible.

Depending on the nature of the study, risk assessment in research involving people should cover physical, psychological, social, economic, legal, reputational and informational risks and assess their proportionality in relation to the expected benefit. Particular attention is required in research involving minors, persons with limited capacity to give informed consent, persons in a dependent or hierarchical relationship with the researcher, and other vulnerable groups. For each group, the specific ethical and legal regime must be determined before the research begins, and recruitment, provision of information, obtaining consent or the consent of a legal representative, protection of privacy, and mechanisms for withdrawal from participation must be adapted accordingly; requirements should be verified with the relevant ethics committee and, depending on the matter, also with the legal office or another specialist UP unit.

2.2.1 Voluntary informed consent, privacy protection and processing of personal data

Informed consent to participate in research is primarily an ethical prerequisite for a person's voluntary involvement in research and for the prospective collection of their biological material or identifiable data, unless legislation or the applicable ethical framework provides otherwise. It must be distinguished from consent to the processing of personal data under the GDPR: the legal basis for processing personal data and any applicable exception for processing special categories of data must be determined separately, and consent under the GDPR is neither automatically the only nor always the appropriate legal basis. Informed consent to participation should be freely given, understandable, sufficiently specific and appropriately documented.

The form in which informed consent is recorded depends on the nature of the research, legal requirements and any opinion of the ethics committee. If a written or otherwise identifying record of consent would itself increase the risk to the participant, another properly documented procedure may be used where permissible under the applicable legal and ethical regime.

When obtaining informed consent, it is useful to check that the participant:

- understands the purpose of the research, the nature of their participation, the foreseeable risks and the expected benefits;
- has sufficient information and time to consider their situation and can ask questions;
- makes the decision freely, without undue pressure, dependency or deception;

- can express their decision clearly in a manner appropriate to their abilities;
- knows that they may refuse or discontinue participation without giving a reason and without undue disadvantage or harm.

For the secondary use of previously collected data or biological material, ethical acceptability, the legal basis under the GDPR and Czech law, and any contractual or purpose-related restrictions must be assessed separately.

Information about research participants and other persons encountered by the researcher during the research process must be handled confidentially, sensitively and in a manner proportionate to the purpose of the research. Practical safeguards include in particular data minimisation, access controls, separate storage of identifiers where appropriate, secure storage, predefined sharing rules, and a procedure for responding to a security incident.

Special categories of personal data require enhanced protection. Researchers must truthfully inform participants how and for how long the data will be protected, retained and shared, and whether anonymity can be ensured or only confidentiality and pseudonymisation. Researchers must not promise anonymity where identification or re-identification is possible by means reasonably likely to be used. Before using an external informed-consent template, it should be verified whether the relevant UP constituent part has its own current template; templates and methodological support are provided, among others, by the Faculty of Arts (FF) and the Faculty of Physical Culture (FTK) of UP.

How to proceed:

Use approved UP informed-consent templates as your primary source. Adapt the language to the target group. Store digital and physical versions of signed consent forms securely and separately from research (pseudonymised) data and re-identification keys.

2.2.2 Ethical and regulatory requirements for biomedical and clinical research

Biomedical and clinical research includes in particular clinical trials of medicinal products, clinical investigations of medical devices, performance studies of in vitro diagnostic medical devices, non-interventional clinical studies, research using medical records, research involving human biological material, and other studies focused on prevention, diagnosis, therapy, care and health.

Research involving human participants, human biological material or personal data must be conducted in accordance with applicable legislation, general principles of research ethics, and relevant discipline-specific ethical standards. In biomedical and clinical research, the principles of the Declaration of Helsinki apply in particular and, depending on the nature of the research, other international standards may also apply, such as the Council for International Organizations of Medical Sciences (CIOMS) guidelines or the principles of Good Clinical Practice (ICH-GCP). In psychological, social-science, educational and other areas of research involving human participants, the relevant discipline-specific codes of

ethics and professional standards should be followed (e.g. European Federation of Psychologists' Associations, American Psychological Association or Czech-Moravian Psychological Society in psychology). In addition to the general rules for research involving human participants, the following principles apply in particular to biomedical and clinical research:

- a. The rights and interests of individual participants must always take precedence over scientific interests.
- b. The health, well-being and rights of research participants must be promoted and protected.
- c. Clinical research may be conducted only by persons with appropriate ethical and scientific qualifications.
- d. Clinical research must be preceded by a careful assessment of foreseeable risks to participants.
- e. Measures must be introduced to minimise risks, and the risks must be monitored continuously.
- f. The design and conduct of every biomedical or clinical study must be clearly described in a research protocol.
- g. The research protocol must be submitted to the relevant ethics committee for review before the study begins.
- h. The manufacture, import and quality control of investigational medicinal products must comply with Good Manufacturing Practice and applicable legislation.

As a general rule, scientific research on human beings may be conducted only if all of the following conditions are met:

- a. there is no alternative to research on human beings of comparable effectiveness;
- b. the risks of the research are not disproportionate to the potential benefit of the research;

- c. the research project has been approved by the competent body following independent review;
- d. persons involved in the research have been informed of their rights and safeguards;
- e. the necessary consent has been given expressly and specifically and is documented. Such consent may be freely withdrawn at any time;
- f. where the law permits research on embryos in vitro, appropriate protection of the embryo must be ensured in accordance with the law. The creation of human embryos for research purposes is prohibited.

2.3 Research involving animals, biological material and biosafety

Research involving experimental animals, biological material of non-human origin, infectious material, genetically modified organisms (GMOs), genetic products, biological toxins or other biologically hazardous procedures must, before it begins, be assigned to the appropriate biosafety regime and may be conducted only in accordance with legislation, the relevant ethical, safety and other approvals, the 3Rs principles for experimental animals (Replace, Reduce and Refine), and relevant discipline-specific reporting guidelines.

For GMOs, it is necessary in particular to determine whether the activity constitutes contained use, deliberate release into the environment or placing on the market, and to ensure any required notification, permit or other authorisation, risk assessment, approved facilities, staff training, records, labelling, rules for storage, transport and disposal, and management of related documentation.

Ethical review of a project does not replace permits or other obligations under rules governing GMOs, occupational health and safety, biosafety, public-health protection or animal protection. Where results have dual-use potential, the risk of misuse must be assessed proportionately and rules set for access, sharing, publication, storage of material and related documentation.

How to proceed:

Before starting a project, verify whether it is subject to approval or registration for work with animals, GMOs, infectious material or other biological hazards; designate a responsible person, identify required training and the applicable facility regime, determine rules for storage and disposal of material, and establish an incident-response procedure. Always verify the specific requirements with the relevant unit and under the local rules of UP.

2.4 Misconduct and other shortcomings in research data management and handling

Departures from good research practice in data management may be intentional or negligent, and their seriousness is assessed according to their nature, degree of fault and impact. A distinction must be made between honest error, legitimate scientific disagreement, negligence, questionable research practices, and serious breaches of research integrity. Even an unintentional incident – such as inadequate security, data loss, unauthorised access, leakage or improper sharing – may require immediate remediation, reporting under the applicable rules, and modification of working procedures. Intentional or grossly negligent conduct is assessed

under the relevant UP internal policies and methodologies, in particular the Code of Conduct for Employees and Students of Palacký University Olomouc. The primary aims are to protect human participants, data subjects and research data, correct the scientific record, protect whistleblowers, and prevent recurrence.

Typical forms of misconduct or problematic practice in data handling and related research integrity include:

- a. intentional misuse, theft, destruction or concealment of research data; and grossly negligent failure to secure data resulting in their loss, unauthorised access, leakage, unauthorised alteration or disclosure;
- b. fabrication, falsification, plagiarism or improper manipulation of any kind (see Section 3.4.2 for details);
- c. unjustified attribution or omission of authorship or inventorship in relation to a result;
- d. misuse of statistical analysis with the aim of influencing the statistical significance of results (‘p-hacking’);
- e. HARKing (hypothesizing after the results are known), i.e. formulating a hypothesis after seeing the results and presenting it as if it had been specified in advance without disclosing its post hoc nature;
- f. unjustified withholding of research data or results;
- g. destruction of research data or materials with the intention of preventing the investigation of misconduct in research, development, innovation or knowledge transfer;
- h. allowing funders to compromise the independence and impartiality of the research process;
- i. failure to comply with legal, ethical and professional obligations, for example in research involving human participants or in clinical research.

3

Publication of research results and research data

3.1 Authorship

Scientific authorship recognises a significant scholarly contribution to a research output and at the same time entails acceptance of responsibility for its content. It is governed by the relevant disciplinary standards, publisher rules, the actual scholarly contribution, and responsibility for the output. Author order and specific criteria differ across disciplines and should be agreed transparently. Contributions by authors and other contributors may usefully be described, for example, through the CRediT taxonomy (<https://credit.niso.org/>), which describes contributor roles but does not itself determine who meets the criteria for authorship. Scientific authorship must be distinguished from authorship under copyright law and from inventorship of subject matter protected by industrial property rights, which are governed by the applicable legislation and UP internal policies. One person may be assigned multiple CRediT roles and one role may be assigned to multiple persons; where supported by the system used, the degree of contribution may be indicated as lead, equal or supporting.

3.2 Planning authorship

The team should agree on preliminary authorship criteria and the expected order of authors at an early stage of the research and update the agreement as actual contributions develop. In larger, interdisciplinary or long-term projects, the team should regularly review the roles and contributions of all members, including junior, technical, data and support staff, so that work is appropriately recognised and changes in expectations do not lead to disputes. An author should make a substantial contribution to the conception or design of the research, the acquisition, analysis or interpretation of data, or the creation of a substantial part of the output; should participate in drafting the output or in an intellectually significant critical revision; approve the final version; and accept responsibility for their own contribution and for the integrity of the output to the extent they can reasonably assess it. Technical, administrative, linguistic or material assistance alone, general supervision or obtaining funding do not establish authorship, but such contributions must be appropriately acknowledged. Significant methodological, statistical, data-related or interpretative work may qualify for authorship if the other applicable criteria are also met. Responsibility for managing key datasets, and a contact person or role for questions concerning their provenance, documentation, correction and access, should also be designated when the project is planned; such data responsibility alone does not establish authorship of a publication.

How to proceed:

Discuss and record in writing the expected authorship and contributions of team members (preferably using the CRediT taxonomy) at the very beginning of the research. If someone's actual contribution changes during the work, revise the agreement in good time.

3.3 Misuse of authorship

The most common forms of misconduct in scientific authorship are the inclusion of persons who do not meet the applicable authorship criteria and the omission of persons who do meet them. It is particularly unethical to claim authorship automatically on the basis of seniority, hierarchical position, securing funding, ownership of infrastructure or general management of a workplace. Power imbalances and relationships of dependency can increase the risk of unethical authorship; managers and supervisors should therefore support transparent agreements, mentoring, and safe routes for consultation or dispute resolution without retaliation. Supporting junior staff is a legitimate part of mentoring, but must not result in false representation of their contribution or that of others to an output.

The status of supervisor or head of a workplace, securing funding, or general supervision does not by itself establish authorship. However, if a supervisor or another person meets the applicable criteria for scientific authorship, they must not be excluded from the list of authors.

3.3.1 Gift authorship

Gift, guest or courtesy authorship means granting scientific authorship to a person who does not meet the criteria for scientific authorship under the applicable disciplinary standards and publisher rules. Reasons for doing so may include:

- a. adding older or better-known colleagues as authors in the belief that this will increase the credibility of the research team and the chances of publication;
- b. rewarding colleagues or collaborators for previous assistance;
- c. seeking to maintain good relationships and expecting reciprocal treatment in the future;
- d. granting authorship to supervisors or managers as a sign of loyalty;
- e. recognising formal leadership or material or non-material support, or otherwise expressing gratitude.

Language, stylistic or editorial reading of a manuscript alone does not establish authorship. A substantial critical revision that materially affects the scholarly content, interpretation or argument of the work may constitute one contribution supporting authorship, provided that the other applicable authorship criteria are also met. The order of authors should respect disciplinary conventions and the transparently agreed actual contributions of individual authors; support for a junior team member must not obscure the true extent of contributions. Disputes are best prevented by an early agreement recorded in a durable form and updated on an ongoing basis, a description of roles using CRediT, and a pre-defined route for impartial consultation or dispute resolution.

Example from practice:

The head of a department demands to be added automatically as an author of a doctoral student's new publication even though they did not participate in the research or writing and merely formally approved the use of a faculty laboratory. This is unethical practice.

3.3.2 Ghost authorship

Ghost authorship occurs when a person who clearly meets the criteria for authorship or made a significant contribution to the research is deliberately omitted from the author list or even from the acknowledgements. This may concern colleagues who ended their collaboration with the research team during the project, students who are (actually or supposedly) not pursuing an academic career, and others. At first sight such omission may appear minor, but it may conceal ethically problematic issues, for example conflicts of interest; the practice is sometimes used deliberately to obscure the involvement of an individual or institution (e.g. a private company sponsoring the research). A particularly serious related malpractice occurs when studies (e.g. pharmacological studies) are conducted by employees of private companies in order to promote a product within the professional community, while the true authors remain undisclosed and the output is associated with authors who appear at first sight to be impartial and thereby lend it credibility.

Example from practice:

A private company funds a research project and its own analyst performs the key statistical calculations on which the entire study depends. The analyst is nevertheless omitted from the final publication so that the article appears to be an independent academic output.

3.4 Availability, publication and dissemination of results

Research results and research data should be made available to the greatest appropriate extent unless ethical, legal, contractual, security or other legitimate reasons prevent this. The access regime should be selected according to the nature of the output and the risks: (1) internal availability within the team or UP infrastructure; (2) controlled or restricted access for authorised users; or (3) open publication in a trusted repository. Restrictions may be justified in particular by the protection of personal data, intellectual property and trade secrets, contractual confidentiality, security interests, export controls, dual-use risks, or a legitimate knowledge-transfer plan. The reasons for restrictions and the selected regime should be documented in the DMP and the Data Availability Statement. Availability and openness should support the verifiability, replicability and reusability of results and the contribution of research to society. Details of the concept of availability and the selection of an access regime are set out in particular in UP Policy R-B-24/08 and its methodological materials; information on open science is available at <https://openscience.upol.cz/>. When publishing, authors must ensure completeness, truthfulness, verifiability and objective interpretation of results,

including critical reflection on study limitations and due regard to disciplinary specificities.

How to choose an access regime: open access is appropriate where there is no legitimate obstacle; controlled access is used in particular where data may be shared only with authorised users under specified conditions; an internal regime is justified only for the time and to the extent necessary to protect rights, security, confidentiality or legitimate knowledge transfer.

3.4.1 Back-to-back publication

Coordinated back-to-back publication may be useful when two or more groups independently obtain similar results and, by mutual agreement, wish to publish them simultaneously. Its main benefit is the transparent demonstration of independent confirmation of a result without an unnecessary race for priority. Such an approach must respect the confidentiality of peer review, authorship, rights in data, and any intellectual property protection; the initiative for coordinated publication must come from duly authorised authors and must not be forced by disclosure of confidential information.

3.4.2 Misconduct and other shortcomings in the creation and publication of results

Fabrication, falsification and plagiarism are serious breaches of research integrity. They may arise during the creation, analysis or documentation of results and subsequently become apparent upon publication; definitions and examples are

provided below. Correcting or supplementing the scientific record is not in itself a sign of failed integrity, but a normal part of the self-correcting nature of science. UP supports timely corrections and an environment in which researchers are not motivated to conceal errors out of fear of disproportionate reputational consequences; this does not excuse deliberate concealment of misconduct.

- Fabrication: Making up non-existent data or results and presenting them as genuine. For example, creating data for an experiment that was never performed.
- Falsification: Manipulating research materials, equipment or processes, or omitting data or results without proper scientific or statistical justification. For example, modifying data in order to change the statistical significance of a result.
- Plagiarism: Plagiarism means using another person's work, verbal or visual expression, data, code, structure, methodological solution or idea without proper acknowledgement of the original source in a way that creates the impression that it is one's own contribution. Assessment of plagiarism as a breach of research integrity must be distinguished from assessment of whether use of a work is lawful under copyright law. An example is paraphrasing another person's ideas without an appropriate reference. Stating generally known facts, including discipline-specific facts that can be found in a large number of available sources, is not considered plagiarism.
- 'Self-plagiarism': Self-plagiarism means presenting one's own previously published text, data, results or visual material as a new original contribution without properly referring to the original output and without transparently explaining the extent of reuse. Legitimate forms of secondary publication are not considered impermissible duplicate publication provided that they are transparently identified, properly

refer to the original output, and comply with the rules of the publishers concerned and applicable legislation.

- ‚Salami‘ publication: ‚Salami‘ publication is the unjustified division of one coherent body of results into several partial publications primarily in order to increase their number. A substantively justified division of extensive research is not problematic if the individual outputs address distinct questions or analyses and transparently refer to related publications and shared data. Institutions and evaluators should at the same time avoid incentives based simply on the number of outputs and apply the principles of responsible research assessment set out in Section 1.5. Example: a researcher tests a total of 20 parameters. The results are non-significant, but the researcher artificially splits the data into three smaller studies and, in one of them, highlights only the two parameters that happened to be positive (p-hacking).
- Misinterpretation: Misinterpretation means drawing incorrect, misleading or disproportionate conclusions from data, analyses or other evidence, whether deliberately or negligently. It may consist in particular of concealing relevant results, ignoring significant study limitations, unjustified generalisation, or making claims that are not supported by the available evidence.
- ‚Paper mills‘: Commissioning, purchasing, selling or submitting fabricated or falsified data, a fraudulent manuscript, or authorship without a genuine scholarly contribution constitutes a serious breach of good research practice. Such services are commonly referred to as ‚paper mills‘. Warning signs may include unexplained similarities between manuscripts, inconsistent data or figures, undocumented data provenance, or offers to purchase authorship. If there are doubts, the matter should be discussed with the publisher or the relevant UP unit and handled in accordance with the rules for addressing suspected misconduct.

- Predatory journals: Pressure to publish quickly and the diversity of contemporary publishing models may be exploited by fraudulent or professionally unreliable publishers commonly described as predatory publishers. Predatory publishing should not be equated with open access or with charging publication fees. Warning signs include, in particular, misleading information, inadequate or fictitious peer review, unrealistically short or non-transparent review processes, an editorial board that cannot be verified or lacks credibility, aggressive solicitation of authors, and departures from recognised editorial and publishing standards. Predatory publishers often also fail to ensure long-term preservation of digital content.

Publishing in predatory journals may seriously damage an author's professional reputation and the standing of their workplace. It may also adversely affect success in grant competitions or efforts to obtain academic employment. The time and effort invested in a research project may thereby be wasted. Membership of the editorial boards of disreputable or clearly questionable journals, and participation in predatory conferences, are similarly problematic. Researchers who are uncertain about the choice of a trustworthy journal, open access, or publication procedures can seek assistance from the UP Library and the relevant research-support units.

Before submitting a manuscript to an unfamiliar journal, it is advisable to check the journal using available resources (e.g. <https://thinkchecksubmit.org/>).

Check whether:

- the journal has a valid ISSN, for example in the ISSN Portal (<https://portal.issn.org>);

- it is indexed in recognised databases such as Web of Science (<https://jcr.clarivate.com/jcr/home>) or Scopus (<https://www.scopus.com/search/form.uri?display=basic#basic>), while bearing in mind that questionable journals may occasionally enter these databases;
- a journal presenting itself as open access is listed in the Directory of Open Access Journals (DOAJ; <https://www.doaj.org>), while bearing in mind that questionable journals may occasionally enter this database as well;
- the scientometric indicators presented are genuine, for example by checking <https://jcr.clarivate.com/jcr/home> or <https://scopus.com>.

It is advisable to examine the journal's website, the quality of published articles, and the composition of its editorial board in detail for signs of predatory publishing. Decisions on where to publish research results require caution and critical assessment of attractive or flattering invitations to review articles for unfamiliar journals or to publish in them. The same applies to invitations to join editorial boards of unverified journals or to publishers whose practices are close to predatory or otherwise raise doubts. Such offers should be discussed with more experienced colleagues in the field.

How to proceed:

Before submitting a manuscript, use the Think. Check. Submit tool. Check the journal's ISSN, verify that it is genuinely indexed in recognised databases (Web of Science, Scopus, DOAJ), and examine the legitimacy of the editorial board in detail.

3.5 Citation

Acknowledging the work of others is important for maintaining a collegial culture and is a prerequisite for accountability and criticism. Proper citation is also a prerequisite for lawful use of another person's copyrighted work to the extent permitted by copyright law. Researchers should provide accurate references to all sources used, to the extent and in the form required by disciplinary citation standards. Depending on the nature of the output, this applies not only to publications but also to datasets and digital databases, software, source code, methods, visual and audiovisual sources, and other relevant digital or non-academic materials. It also applies when reusing text from one's own publications. References must be sufficient to enable others to locate, assess and interpret the content in its original context. Researchers who build on the ideas and research of others, whether published or unpublished, must acknowledge this accurately so that their own contribution is clear. Relevant work should be cited in a balanced manner, including work that does not support one's own assumptions or interpretations of results. The UP Library provides guidance on citation and on tools for creating and managing references at <https://ezdroje.upol.cz/citace/?lang=en>.

How to proceed:

Use reference managers consistently to manage sources (e.g. Zotero, Mendeley, EndNote). Cite accurately and in a balanced manner – do not conceal relevant studies that contradict your own conclusions.

3.5.1 Unethical citation practices

Citation practices are unethical where they involve:

- a. obtaining citations to one's own work through an informal agreement with other authors to cite one another reciprocally;
- b. deliberately citing colleagues or outputs from particular journals in order to increase their scientometric indicators;
- c. selective or inaccurate citation;
- d. unnecessarily expanding the bibliography in order to please editors, reviewers or colleagues, or to manipulate bibliometric indicators.

3.6 Affiliation

A correct and complete affiliation, i.e. assigning an author to the appropriate organisation, is an essential prerequisite for correct reporting of research outputs, just like other metadata. Author affiliations are used by various evaluation systems through citation and abstracting databases such as Web of Science and Scopus, and an incorrect form of affiliation that leads to misidentification of the author's home institution may cause such outputs not to be counted in evaluations of that institution, such as international rankings, national R&D assessment under Methodology For Evaluating Research Organisations (Methodology 2025+), distribution of research funding, etc. It is therefore essential to comply with the requirement to report the correct affiliation with every research output, at least at the highest institutional level, namely ,Univerzita Palackého v Olomouci' in Czech and ,Palacký University Olomouc' in English.

The University's persistent identifier in the Research Organization Registry (<https://ror.org/04qxnmv42>) can also be used, in applications that support it, to ensure correct identification of the institution.

An affiliation expresses an author's relevant institutional relationship to the research or output. By itself, it neither establishes nor proves research funding, ownership of results, or the exercise of intellectual property rights. Multiple affiliations may be stated where they correspond to genuine and relevant institutional relationships of the author to the research or output and comply with publisher rules. Any contractual, employment-law and property relationships between the author and the institutions concerned are assessed separately. Each affiliation should be stated separately and in a form that enables unambiguous identification of the institution.

3.7 Conflicts of interest

A conflict of interest arises where a financial, personal, professional, academic or institutional interest or commitment may unduly influence professional judgement, decision-making, evaluation, the conduct of research, or its communication. This also includes conflicts of commitment, for example where a person holds concurrent roles, multiple affiliations, or participates in international collaborations. The mere existence of a conflict of interest need not constitute misconduct; what is essential is timely disclosure, impartial assessment, proportionate management and, where appropriate, publication. Contract research and externally funded projects require particular attention. The project leader must ensure objective and responsible disclosure of results, and the agreement between the

commissioning party and UP must allow compliance with ethical principles, research integrity, and rules for managing conflicts of interest.

Another form is commissioned contract research. To ensure sufficient transparency, the following should apply:

- a. the research institution and the project leader bear overall responsibility for the selection of methods, generation of results and their interpretation;
- b. the conditions governing publication, protection of confidential information and any exclusive use of results must be agreed in advance and must not, without a legitimate reason, compromise research integrity. The regime for sharing results is governed by the principles set out in Section 3.4;
- c. the duration and scope of any publication delay or exclusive use of results must be proportionate to the purpose of protecting intellectual property, confidential information and the legitimate interests of the partners, and must comply with binding funder conditions.

How to proceed:

Always disclose transparently, in a Conflict of Interest statement, all sources of funding as well as personal, contractual and institutional relationships that could externally appear to influence the objectivity of your professional judgement.

3.8 Assistive tools, including artificial intelligence

AI and other assistive tools may be used as supporting means for initial literature searches, language editing, translation, structuring documents, programming, data analysis, visualisation, annotation, preparation of working drafts, and administrative support. They must not, however, replace professional judgement, authorial responsibility, methodological justification, ethical approval, informed consent, peer review, or responsibility for the interpretation of data.

Generative AI must not be listed as an author or co-author of a scientific, professional, artistic or administrative output. Persons listed as authors remain responsible for factual accuracy, integrity, originality, sources, data, methods, interpretation, and the legitimacy of AI use. Significant use of AI that has affected content, method, analysis, code, visualisation, translation, structure or interpretation must be disclosed appropriately in the text, methods, acknowledgements, cover letter, or another section as required by the publisher, funder or workplace.

A person reviewing a manuscript, grant proposal, habilitation or professorial dossier, student work, internal project, public procurement submission, or other non-public material must not enter that material, confidential research data, personal data, unpublished results, trade secrets or other protected information into a public AI tool or another unsuitable tool. Such content may be processed only with a tool approved by UP or by the commissioning body for the relevant type of information and providing appropriate contractual and technical safeguards for confidentiality, personal data and intellectual property. AI may be used in evaluation only where the rules of the commissioning body permit it, confidentiality is

not compromised, and the evaluator does not transfer their own responsibility for the assessment to the AI tool.

More detailed and continuously updated rules for the use of AI at UP – in particular the data classification system (data traffic-light), permitted modes of use, incident-response procedures, handling of personal and non-public data, AI agents, synthetic media, and practical scenarios for teaching, research and administration – are set out in the Recommendations on the Use of Artificial Intelligence Tools at UP and related methodological materials on the AI at UP portal: <https://ai.upol.cz>.

Who this applies to: anyone who uses AI or another assistive tool in research, teaching, evaluation or administration; persons handling personal data, confidential research data, non-public reviews and unpublished results bear particular responsibility.

How to proceed:

Use AI preferably in a secure mode. Transparently disclose any significant use of generative AI that assisted with structure, code or translation in the methods section or acknowledgements. Never list artificial intelligence as a co-author.

4

Breaches of research integrity and procedures for addressing breaches of good research and publication practice

When addressing a suspicion, it is necessary to distinguish honest error, methodological or administrative negligence, questionable research practices, and serious breaches of research integrity, in particular fabrication, falsification, plagiarism, serious breaches of confidentiality, deliberate concealment of a conflict of interest, or intentional obstruction of remedial action. This distinction is not intended to prevent investigation, but to enable a proportionate response, timely correction, learning from unintentional errors, protection of the rights of both the whistleblower and the person concerned, and prevention of recurrence.

Suspected breaches of research integrity must be addressed promptly, effectively and proportionately. The aim is to establish the facts, protect the rights of the persons concerned, remedy the consequences of any misconduct, and adopt measures to reduce the risk of recurrence.

Suspected breaches of research integrity are addressed, according to the nature of the matter and the applicable UP internal policies, by the head of the workplace, the dean or director of a constituent part, the Rector, the competent disciplinary body, the relevant faculty ethics committee or panel where one exists and has jurisdiction over the matter, or the UP Ethics Board. The choice of procedure must

respect the remit of the respective bodies, prevent conflicts of interest, and ensure impartial assessment. The Ombudsperson may be approached with matters falling within their remit but does not replace the procedural route designated for assessing research misconduct.

A submission to the UP Ethics Board is made and considered in accordance with the procedure laid down in its Statute. A matter for decision may be referred to the chair of the Board by a person or body specified in Article 7(3) of the Statute of the Ethics Board of Palacký University Olomouc ; faculty ethics committees or panels proceed under the relevant faculty rules.

Every case under consideration must be assessed individually, impartially and responsibly, on the basis of specific facts and, where necessary, with the assistance of external experts in the field. In such assessments, it is advisable to use the recommendations set out in Recommendations for the investigation of research misconduct (European Network of Research Integrity Offices).

Other practices that are wholly unethical and unacceptable include attempts to conceal evidence, retaliation against whistleblowers, breaches of rules laid down in particular by the Code of Conduct for Employees and Students of Palacký University Olomouc, or failure to follow procedures under the Statute of the Ethics Board of Palacký University Olomouc when clarifying potential research misconduct.

4.1 Remedial measures and sanctions for breaches of good research practice

Honest error, legitimate scientific disagreement and a less serious deficiency arising without intent or gross negligence must be distinguished from research misconduct. They may require correction of the scientific record, explanation, learning, mediation, expert guidance or changes to working procedures, but do not necessarily in themselves give rise to sanctionable liability.

Suspicion must be assessed fairly, impartially, confidentially, professionally and without undue delay. Until the assessment is concluded, the person concerned must be regarded as a person whose misconduct has not been established. They must be informed of the substance of the allegation and given a reasonable opportunity to respond and submit relevant evidence. At the same time, whistleblowers acting in good faith, the confidentiality of the proceedings, and the personal rights of all persons involved must be protected. Conclusions and measures must be based on verified evidence and be proportionate to the nature, seriousness, degree of fault and impact of the conduct established.

The person concerned has the right to comment on the submission, propose and submit relevant evidence, and respond to findings alleged against them. The burden of proof must not simply be shifted to the person concerned.

Where misconduct or a serious error has affected the scientific record, an appropriate form of correction must be selected in cooperation with the publisher, repository or information-system administrator. Depending on the nature and

extent of the defect, this may include correction of data or metadata, a corrigendum, an expression of concern, withdrawal of a preprint, or retraction of a publication. Records in national and institutional databases (such as RIV or OBD), repositories and other information systems should be updated accordingly. In light of the seriousness, circumstances and context of the case, proportionate organisational, personnel, technical or educational measures should be introduced to reduce the risk of recurrence.

The competent body must decide in a timely and impartial manner, with due regard to statutory time limits and the principle of proportionality.

5

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The sources listed below have different normative weight. Binding force derives from legislation, UP internal policies and standards, and specific contractual or project requirements; European strategic and methodological documents, professional codes and methodological resources serve as frameworks and recommendations unless otherwise specified for a particular requirement.

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Recommended resources

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- When preparing an informed consent form and participant information sheet, use only currently verified templates or guidance appropriate to the discipline and type of study; if in doubt, consult the relevant ethics committee and, depending on the nature of the personal-data processing, also the Data Protection Officer (<https://www.upol.cz/en/university/data-protection-information>).

Acknowledgements: ChatGPT 6 Astra Medium and Gemini 3.1 Pro were used to process comments and feedback and to translate original Czech text to English.