

Declaration of the Research Integrity Assurance Policy at Mendel University in Brno

Introduction

Research at Mendel University in Brno (hereinafter just “MENDELU”) has undergone rapid development in the last ten years, not only as regards year-to-year funding, but also as regards the quality of its results. The aim of this statement is to declare a policy for ensuring the integrity of research so that domestic and foreign providers of financial support, contracting entities and entities that commission other types of research as well as co-recipients of financial support and other cooperating organisations can have full confidence in MENDELU. This Declaration sets out principles and procedures that MENDELU follows when promoting and ensuring the integrity of research and is based on The European Code of Conduct for Research Integrity¹.

Commitments to promoting and ensuring the integrity of research

Within this declaration regarding the policy of ensuring the integrity of research, MENDELU has accepted the following commitments:

- (1) We are committed to ensuring the highest standards of integrity in all aspects of research on the basis of the main principles of good research practices which will be complied with by all researchers and research groups at the university.
- (2) The basis for the integrity of research is education and support of good research practices. We are committed to respecting the national research environment that is based on a culture of integrity and adopts the internationally recognized good research practices, a positive and proactive approach to promoting the integrity of research, including supporting the development of research workers through education and promotion of good research practices. We are determined to work on strengthening and protecting the integrity of the research system in the Czech Republic and we will periodically evaluate our progress in this matter.
- (3) We are determined to use transparent, robust and fair processes to address accusations of misconduct in research if they arise.

In the following sections, these commitments are specified in detail, along with a description of how they will be fulfilled.

Commitment 1

Standards

We are committed to ensuring the highest standards of integrity in all aspects of research on the basis of the main principles of good research practices which will be complied with by all researchers and research groups at our university.

The European Code of Conduct for Research Integrity (hereinafter referred to as "The European Code of Conduct") provides eight main principles that form the basis of the integrity of all research and that underlie the best practices to be followed when conducting research. We too follow these principles. They are binding for all our researchers and cooperating experts from practice, both directly during their own research and in negotiations with research partners and recipients of research reports.

Eight principles of research integrity and practice

- (1) Honesty during the presentation of the research objectives and intentions – with precise and detailed reporting on research methods and procedures and communicating the substantiated interpretations and claims with regard to the possible use of research results.

¹ The European Code of Conduct for Research Integrity, the European Science Foundation and ALLEA (All European Academies), March 2011

- (2) Reliability when carrying out research (accuracy, thoroughness and paying attention to detail) and in the publication of the results of research (full and impartial reporting).
- (3) Objectivity. Interpretation of the results and conclusions must be substantiated by facts and data that serve as proof and that can be independently verified; it is necessary to safeguard the transparency in the collection, analysis and interpretation of data and to ensure verifiability of scientific arguments.
- (4) Impartiality and independence of the entities that commission the research, of any other stakeholders, of ideological and political pressure groups and of economic or financial interests.
- (5) Open communication in negotiations with other researchers in expanding public knowledge through publication of the findings and honest dialogue with the general public. This openness comes with an expectation of proper preservation and availability of data and accessibility for involved co-workers.
- (6) Responsibility to take care of the participants and subjects of the research, whether this involves human beings, animals, the environment or cultural objects. Research on human beings and animals must always be based on the principle of respect and on the responsibility to take care of them.
- (7) Fairness with proper crediting of other persons whose work has contributed to the achievement of the results, and with honest and fair treatment of co-workers.
- (8) Responsibility for future generations of researchers and scientists. The education of young scientific and academic staff requires binding standards for their mentoring and guidance.

Furthermore, we are aware that research must always be proposed and implemented in accordance with ethical principles, which must be ensured by establishing appropriate processes of review.

These principles are in line with The Singapore Statement on Research Integrity, which was drafted in 2010 during the Second World Conference on Research Integrity and is intended to serve as a guide to a global approach to the responsible conduct of research². The principles set out in the report of the InterAcademy Council and InterAcademy Panel from 2012 entitled “Responsible Conduct in the Global Research Enterprise” are also reflected in these principles.

Commitment 2

Education

The basis for the integrity of research is education and support of good research practices. We are committed to maintaining the national research environment that is based on a culture of integrity and that adopts the internationally recognized good research practices and a proactive approach to promoting the integrity of the research including supporting the development of research workers through education and the promotion of good research practices.

2.1 Education

The basis for the integrity of research is education and support of good research practices. Effective education leads to an increased awareness of the problem of the integrity of research, to a positive approach to the integrity of research as a fundamental factor of the research mission and to a proactive approach to the prevention of misconduct in research. If misconduct occurs, it needs to be resolved using a transparent and objective approach.

For enshrining the principles and approaches to the integrity of research, we will specify relevant education and training programmes consisting of:

- Trainings about the integrity of research for new and existing research workers
- Inclusion of good research practices into teaching at master’s and doctoral levels

Modules focused on the integrity of research in university education are a useful means of support for the integrity of research. We will create a common module for the principles and procedures for research and we will apply it in the context of the follow-up master’s studies and doctoral studies. We will create conditions for specifically adapted education and support for existing research and academic staff who might not always be fully aware of the related issues and of the resulting obligations and who have a

² <http://www.singaporestatement.org>

fundamental impact on the definition of acceptable research practices for the next generation of researchers.

At the master's level, this will open up an excellent opportunity to lay the foundations for the promotion of the integrity of research practice. When assessing the students' theses, a great emphasis is already placed on the detection and prevention of plagiarism. Of course, this is only one of the aspects of the integrity of research.

Probably the most important period for ensuring the integrity of research occurs during the doctoral studies, when it is necessary to place particular emphasis on the following areas:

- The issue of intellectual property, including the conventions on co-authorship
- Ethical aspects and the definition of misconduct in research

If not done previously, it is necessary for the doctoral candidates to become familiar with the standards and guidelines regarding professional conduct, ethics, plagiarism and proper use of citations and be aware of the importance of the explicit recognition of the work of others. It is no less important to record information and data related to research, which shall be carried out in accordance with the best practices in the relevant scientific field.

Graduates of doctoral programmes must specifically know and apply in their research the principles of ethical conduct of research and the best research practices, including the correct attribution of merit and authorship and avoidance of misconduct in research.

With regard to the above, we are determined to strengthen our efforts to educate students and employees regarding principles and procedures that underpin the integrity of research.

2.2 Best practices for storage and archiving of data

The definition of "data" for these purposes includes the methodology used to obtain results, the results of research themselves and analyses and interpretations conducted by research workers. The primary responsibility for compliance with the best practices in the use, storage and archiving of data lies with each individual researcher who is supported by MENDELU and who is obliged to comply with the following principles:

- Data must be recorded in a clear and precise format. Special attention should be paid to the completeness, integrity and security of these records.
- Data must be stored in a secure and accessible form. They must be kept for a longer period of time – depending on the type of data it is usually recommended to keep them for a minimum period of five years from the date of publication, unless MENDELU has implemented its own principles for storage and archiving of records.
- Data need to be arranged in a way that allows quick verification, in paper or in electronic form. For original data it is necessary to verify authenticity so that MENDELU (and any other cooperating research institution) and the research worker are protected from accusations of falsification of data.
- Research data and records may be used as evidence in the event of litigation. This means that the research data and records can be accessed by MENDELU (or other cooperating research institutions) and by its legal advisers to assess their relevance for potential legal proceedings.
- Research data related to publications are available to discussion with other researchers, provided that this is not prohibited by provisions regarding confidentiality. The provisions regarding the confidentiality of the research data and records shall apply in when MENDELU (or other cooperating research institutions or researchers) have pledged to a third party to protect confidentiality or if the disclosure of such information would constitute an undue disclosure of information relating to a private matter of any person (including a deceased person) or if the confidentiality is necessary to protect intellectual property rights. Support is provided for storage of data in repositories with open access related to publications, whenever feasible. This will lead to greater integrity in the collection, analysis and presentation of data, since they are accessible to experts from all around the world who can check them.

2.2.1 Legal obligations

Researchers need to be aware of the fact that under the Czech Freedom of Information Act (No. 106/1999 Coll.) MENDELU and/or other cooperating research institutions are required in specified circumstances to allow other persons to access MENDELU's documents (documents that MENDELU

has in its possession). Researchers must always know and observe the provisions of the Czech Personal Data Protection Act, which among other things limits the use of sensitive and personal data.

To ensure the integrity of research through compliance with the legislation on data protection, researchers shall:

- Obtain and process personal data in a lawful manner.
- Keep such data only for specified and lawful purposes.
- Process such data only in a manner consistent with the purposes for which they were originally provided voluntarily.
- Keep such data securely stored.
- Ensure that such data are accurate and up to date.
- Ensure that such data are reasonable, relevant and not unreasonably extensive.
- Not store such data longer than necessary for the particular purposes.
- Provide each person with a copy of their personal data upon request.

2.3 Improving practices

We are committed to encourage continued improvement of best practices through the gradual adoption of the following principles:

- The integrity of research should be reinforced through formal training courses, both in the follow-up master's study programmes and doctoral study programmes as well as when conducting professional instruction of research and academic staff. The result of a training programme focused on the integrity of research is the enshrining of a culture of best practices in the research conducted by students, research staff and employees of MENDELU.
- Additional training focused on the integrity of research will be provided through mentoring by experienced research and academic staff who are responsible for the guidance of doctoral and post-doctoral students.
- Training of staff will be conducted as an integral part of further professional development – for example through courses, seminars, etc.
- The primary responsibility for the provision of education and training programmes to researchers and academic staff shall rest with MENDELU.

Commitment 3

Procedures for the resolution of misconduct

We are determined to use transparent, robust and fair processes to address accusations of misconduct in research if they arise.

3.1 Definition of misconduct in research

If the principles and best practices that form the basis of the integrity of research are not followed, it may result in misconduct in research. First of all, it must be emphasised that misconduct in research does not include errors and differences that have arisen in good faith in the proposal, implementation, interpretation or judgement and during the evaluation of research methods or results, or errors unrelated to the research process. Nor does it include poor quality research in general, unless there has been an intention to deceive.

As regards the substance of misconduct in research, we follow Best Practices for Ensuring Scientific Integrity and Preventing Misconduct issued by the OECD³ (see also Table 1 below). A breach of integrity of research can take many forms and can have varied severity. The most severe types of misconduct are:

- Inventing data, i.e. the creation of non-existent results and their subsequent recording or reporting.

³ OECD, *Best Practices for Ensuring Scientific Integrity and Preventing Misconduct: based on a workshop held on 22–23 February 2007 in Tokyo, Japan* presented at the 1st World Conference on Research Integrity, Lisbon, September 2007

- Falsification of data, i.e. tampering with research, materials, equipment or processes or alteration or omission of data or results so that the research is not properly recorded in the research documents.
- Plagiarism, i.e. the appropriation of ideas, procedures, results or formulations of another person without due acknowledgement of authorship or credit, including in cases where they have been obtained in a confidential assessment of research proposals or manuscripts of other researchers.

Each of these types of misconduct is a violation of the integrity of the research records, and it is therefore extremely necessary to prevent them. The falsification and inventing of data represent the most serious forms of misconduct that can be committed, as they undermine the development of knowledge itself. In contrast to these two types of misconduct, plagiarism can be seen as somewhat less serious, because the core of knowledge as such is not damaged. However, it has a detrimental effect on the principle of open communication and sharing knowledge.

While inventing of data, falsification and plagiarism (hereinafter referred to as "IFP") represent the most serious examples of misconduct, there are other types of bad practices which – although not in individual cases as serious as IFP – can occur and (in total) may be equally harmful to the overall reputation of research and the integrity of the researchers.

Table 1: Description of the types of misconduct committed by researchers, scientists and academic staff (according to OECD)

<p>Basic “misconduct in research”</p> <ul style="list-style-type: none"> • Inventing data • Falsifying data • Plagiarism <p>IFP typically includes the following:</p> <ul style="list-style-type: none"> - Selective exclusion of data from the analysis - An incorrect interpretation of the information in order to obtain the required results (including the inappropriate use of statistical methods) - Alteration of photos in publications - Creation of false data or results under pressure from the sponsor 	<p>Misconduct related to research procedures</p> <ul style="list-style-type: none"> - Use of unsuitable (e.g. harmful or dangerous) research methods - Poor quality of research proposals - Errors in experiments, analyses or calculations - Alteration of the records of human subjects - Misuse or abuse of laboratory animals
<p>Misconduct related to data</p> <ul style="list-style-type: none"> - Failure to archive primary data - Poor management/storage of data - Failure to grant access to the data to the scientific community <p>Notice: The above also applies to physical research materials.</p>	<p>Misconduct related to publishing activities</p> <ul style="list-style-type: none"> - Claiming undeserved authorship - Depriving contributors of authorship recognition - Artificial distribution of publications (duplicate or partial publications) - Failure to correct records of publication - Inclusion of authors without their permission
<p>Personal misconduct in the research environment</p> <ul style="list-style-type: none"> - Inappropriate personal behaviour, harassment 	<p>Financial and other misconduct</p> <ul style="list-style-type: none"> - Misuse of the peer review process, e.g. failure to inform about a conflict of interest or

<ul style="list-style-type: none"> - Unsatisfactory guidance/training of students - Insensitivity to social or cultural norms 	<ul style="list-style-type: none"> undue delay of the publication of works by competing researchers - Distortion of a personal reputation or publication record - Misuse of funds for research for an unauthorised purchase or for personal gain - Making unfounded or intentionally false allegations of misconduct
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Adapted from the OECD publication entitled "Best Practices for Ensuring Scientific Integrity and Preventing Misconduct": <http://www.oecd.org/sti/scienceandtechnologypolicy/40188303.pdf>

3.2 Resolution of misconduct in research

Although maximum effort is made to support education, to reinforce the best practices and to prevent misconduct, a certain number of cases of misconduct are inevitable. If misconduct occurs, there must be a suitable procedure for the identification and examination of the offence. The following principles of investigations are in their substance based on the principles laid down in The European Code of Conduct, and serve as a guide for the bodies of MENDELU, which will lead the investigation in accordance with their own detailed and individual procedures.

Integrity of the process

- Investigation into allegations of misconduct in research must be carried out fairly, comprehensively and effectively, with the highest possible level of accuracy, objectivity and thoroughness.
- The participants in the investigation must ensure that everyone has declared all their potential interests which could give rise to a conflict of interests.
- It is necessary to keep detailed and confidential records of all aspects of the investigation.

Uniformity

- The procedures for dealing with misconduct must be specified in sufficient detail so as to ensure the transparency of the process and the consistency of the assessment of the different cases falling within the same area of competence.

Fairness

- Investigation into allegations of misconduct in research must be carried out in a way which is fair toward all parties and which is in accordance with applicable legislation.
- Those accused of misconduct in research must be informed in writing of all details about the accusations, and they must be guaranteed the right to a fair trial in the investigation and the right to respond to the accusations and to the presence of a person selected to represent them or of a co-worker at each meeting or conversation connected to the investigation or disciplinary proceedings.
- Appropriate reasonable measures need to be taken against persons who have been found to have committed misconduct in research.
- All measures taken shall be subject to the right of appeal.

Confidentiality

- Investigation into allegations of misconduct in research must be conducted as confidentially as possible, to ensure the protection of the participants in the investigation. Such confidentiality will be maintained provided that this does not compromise the investigation into the accusations, health and safety, or the security of research participants.
- Whenever necessary, any information will be provided to third parties as strictly confidential.
- If MENDELU and/or its employees have a legal obligation to inform any third parties regarding allegations of misconduct in research, this obligation must be fulfilled at the appropriate times and via the proper channels.

Prohibition of injury

- The presumption of innocence shall apply to everyone who is accused of misconduct in research.
- No person accused of misconduct in research may suffer unnecessary penalisation before the allegations have been proved.
- No person may be issued a punishment for having in good faith accused another person of misconduct in research. Measures will be taken against persons who have been found to have accused someone else of misconduct in bad faith.

3.2.1 Process

The European Code of Conduct extensively deals with the severity of poor and dubious practices. In many cases, the boundary between a wrong practice and serious misconduct may be very thin, especially if the misconduct is committed repeatedly by an experienced researcher. In some cases (e.g. in cases of misuse of research funds or intimidation of subordinates), the infraction can be considered extremely serious and as such will be addressed using the relevant procedures in accordance with the applicable legislation. However, the offence itself cannot be regarded as misconduct in research, because it has no influence on the integrity of the research records.

For such bad practices, the situation can often be effectively remedied with using MENDELU's internal mechanisms, without the need for formal investigation. However, there are also moderately severe categories of misconduct that may require a more drastic intervention.

The general rule is that any reaction to cases of misconduct shall be proportionate to the seriousness of the misconduct. Specifically, it must be proved that the person committed the misconduct deliberately, knowingly or recklessly. The burden of proof must be met.

MENDELU protects the integrity of research by properly addressing cases of misconduct and creating an environment that promotes integrity.

3.2.2 Commitments relating to the adoption of measures

a) Quick measures

MENDELU undertakes to use active management and if necessary to apply disciplinary procedures in order to quickly and effectively address misconduct in research, with due reference to applicable regulations.

b) Avoidance of conflicts of interests

MENDELU will take the necessary steps to ensure solutions to any possible conflicts of interests.

c) Transparency and objectivity – panels of experts and reporting

MENDELU undertakes to ensure the transparency of the process, with due regard for the rules and the requirements of natural and institutional fairness. It also recognises that the effective investigation of a case of misconduct in research can lead to issues of specifically scientific and technical nature.

Reporting

MENDELU is aware that providers of financial support are entitled to information about the way in which the integrity of behaviour connected with the research in question is ensured. MENDELU undertakes to submit to relevant bodies (including for example bodies associated with financial control or publishers) a report on the findings in all proven cases of misconduct in research resulting from formal disciplinary proceedings. However, if the accusations of misconduct in research are of a particularly serious nature and substantially affect the progress of research, it can be contractually established or in the particular circumstances considered desirable for MENDELU to inform the providers of the financial support already in an earlier phase of determining the misconduct in research. It is also assumed that if the provider of financial aid notifies MENDELU of a suspicion of misconduct as a result of its evaluation procedures or on the basis of its management of the financed research, then such suspicion will be addressed by MENDELU in a manner similar to the way in which all other accusations are addressed.

d) Punishment and appeals

The purpose of formal disciplinary measures (e.g. disciplinary proceedings) is to examine and evaluate all relevant facts and to determine whether misconduct in research has been committed and to identify the person responsible as well as to establish the seriousness of the misconduct. This shall be carried out as a disciplinary measure and in the manner laid down by MENDELU's internal rules.

The findings of the formal process shall be outlined in a submitted report in accordance with the rules, and a report will also be submitted regarding appropriate disciplinary measures that need to be taken.

The report will contain provisions on appeals against decisions and penalties. These appeal procedures shall be conducted in accordance with MENDELU's internal regulations.

It applies generally that if the investigation commission has conducted a formal investigation and a disciplinary punishment has been imposed, then it is possible to appeal in accordance with MENDELU's internal regulations.

In Brno 23/09/2019

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