Rules of Good Scientific Practice of the University of Münster of 5 May 2020

The University of Münster is committed to safeguarding good scientific practice and, to this end, it has laid down the following rules in accordance with the resolutions passed at the General Assembly of the German Research Foundation (DFG) on 3 July 2019:

§ 1 General Principles

- (1) Every member of the academic staff at the University of Münster is obliged to comply with the principles of good scientific practice in their field of activity. These principles include working *lege artis*, maintaining strict honesty in attributing one's own contributions and those of others, rigorously questioning all findings, and permitting and promoting critical discourse within the research community.
- (2) In particular, this includes the following:
 - verifiable description of applied methodology
 - no falsification or invention of data
 - complete documentation of all publication-relevant research data obtained during the research process
 - endeavouring to present verifiable research findings
 - the correct use of descriptions or illustrations
 - correct citing of sources
 - refraining from blind citations (anonymous sources)
 - respecting the rights of third parties with regard to copyrighted material they have produced, or to major scientific insights, hypotheses, teachings or research approaches originating from them by refraining from
 - unauthorised use under the pretence of authorship (plagiarism),
 - unauthorised exploitation of other people's research methods and ideas (theft of ideas).
 - pretence of authorship or of co-authorship of another person's academic publication
 - falsification of content or
 - any unauthorised publication and unauthorised granting of access to scholarly research to third parties, provided that the work, scientific finding, hypothesis, teaching or research approach has not yet been made public
 - asserting (co-)authorship of another person's academic publication only with their permission
 - in no way hindering another's research activity, e.g. through sabotage (including damaging, destroying or manipulating literature, archival and source materials, experiments, equipment, documents, hardware, software, chemicals or any other items which they require to conduct a research project).
- (3) All members of the academic staff of the University of Münster are obliged to comply with these rules.

§ 2 Professional Ethics

- (1) Researchers are responsible for advocating and practically applying the fundamental values and norms of research. Teaching the fundamentals of good scientific work begins at the earliest possible stage in academic teaching and research training. Researchers at all career levels should regularly update their knowledge regarding the standards of good scientific practice and the current state of research.
- (2) Both senior and junior researchers should provide mutual support in a process of continuous learning and ongoing training, and engage in regular dialogue.

§ 3 Responsibility of the Rectorate

- (1) The Rectorate of the University of Münster is responsible for creating the overall conditions for academic work. These conditions include clearly-defined, written methods and guidelines as regards the selection and development of staff, the promotion of junior researchers and equal opportunity.
- (2) The Rectorate is responsible for ensuring that good scientific practice is observed and propagated, and that appropriate career support is provided to all researchers. The Rectorate shall guarantee the conditions enabling academics to comply with legal and ethical standards.
- (3) The Rectorate is responsible for an appropriate institutional-organisational structure. This ensures that, depending on the size of the individual research units, tasks relating to management, supervision, quality assurance and conflict settlement are clearly assigned and are communicated in an appropriate way to the members and associates in question.
- (4) Gender equality and diversity are to be taken into account with respect to staff selection and career development. The relevant processes should be transparent and avoid any unconscious bias to the greatest possible extent. Appropriate supervision structures and concepts should be established for junior researchers. Researchers and research support staff are to be offered honest advice with respect to career opportunities, further training and mentoring.

§ 4 Responsibility of Heads of Research Units

- (1) The head of each research unit is responsible for the entire unit. Collaboration within research units must be organised in such a way that the group as a whole can carry out its work, that the collaboration and coordination necessary for this are in place, and that all members of the group understand their roles, rights and duties. The leadership role includes ensuring adequate individual supervision of junior researchers integrated in the overall policy of the institution in question as well as career development for researchers and research support staff.
- (2) The size and organisation of the research unit should be designed in such a way that the head's tasks in particular, imparting competence, supporting research and discharging supervisory duties can be undertaken in an appropriate way.
- (3) Researchers and research support staff should enjoy a balance of support and individual responsibility in line with their career level. They should be given a suitable status with

- corresponding participatory rights. Through increasing degrees of autonomy, they should be empowered to shape their careers.
- (4) Suitable organisational measures are to be put in place at the level of the individual unit and of the leadership of the institution to prevent any abuse of power and exploitation of dependent relationships.
- (5) Undergraduate, graduate and doctoral students are to be given adequate supervision during their activities in research units. A primary contact person in the research unit is to be named for each of them. The supervision includes imparting good scientific practice, including the use of the guidelines to this effect drawn up by the University of Münster.

§ 5 Dimensions of Performance and Assessment Criteria

- (1) Originality and quality should take precedence over quantity as performance and assessment criteria, for the conferral of academic titles, for promotions and hiring, and for appointing professors and allocating funding. Quantitative indicators can only be included in an overall assessment with appropriate differentiation and reflection.
- (2) In addition to academic performance, other aspects can be taken into consideration such as engagement in academic self-governance, public relations, and knowledge and technology transfer; contributions to the general interests of society may also be recognised. An individual's approach to research, such as an openness to new findings and a willingness to take risks, should also be taken into account.
- (3) Appropriate allowance is to be made for periods of absence for personal, familial or health reasons, or for prolonged training or qualification phases resulting from such periods, and for alternative career paths and similar circumstances.
- (4) Where provided voluntarily, individual circumstances stated in curricula vitae as well as the categories specified in the German General Equal Treatment Act are to be considered when forming a judgement.

§ 6 Cross-Phase Quality Assurance

- (1) Researchers should carry out each step of the research process *lege artis* and ensure continuous quality assurance during their research, especially with regard to:
 - compliance with subject-specific standards and established methods
 - processes such as equipment calibration
 - the collection, processing and analysis of research data
 - the selection and use of research software, software development and programming
 - the keeping of laboratory notebooks.
- (2) If scientific findings are made publicly accessible, the mechanisms used for quality assurance should always be presented. This especially applies when new methods are developed.
- (3) If, after any publication, inconsistencies or errors become apparent, these must be rectified. If the inconsistencies or errors constitute grounds for retracting a publication, the researchers

- must, as quickly as possible, request that the publisher, infrastructure provider etc. correct or retract the publication and make a corresponding announcement. The same applies if researchers are made aware of such inconsistencies or errors by third parties.
- (4) The origin of the data, organisms, materials and software used in the research process should be disclosed and the re-use of data should clearly indicated; original sources are to be cited. The nature and scope of research data generated during the research process should be described. Research data are to be handled in accordance with the requirements of the relevant subject area. The source code of publicly available software must be persistent, citable and documented.

§ 7 Stakeholders, Responsibilities and Roles

(1) The roles and responsibilities of researchers and research support staff participating in a research project must be clear at each stage of the project. The participants in a research project should engage in regular dialogue. They should define their roles and responsibilities in a suitable way and adapt them where necessary. Adaptations are especially likely to be needed if the focus of a participant's work changes.

§ 8 Research Design

- (1) Researchers should consider and acknowledge the current state of research when planning a project. Identifying relevant and suitable research topics requires careful investigation of existing research which has already been made publicly accessible.
- (2) Methods to avoid (unconscious) distortions in the interpretation of findings, e.g. the use of blinding in experiments, are to be used wherever possible. Researchers should examine whether and to what extent gender and diversity may be of significance to the research project (with regard to methods, work programme, objectives etc.). The context in which the research was conducted should be considered when interpreting findings.

§ 9 Legal and Ethical Requirements; Usage Rights

- (1) Researchers should observe rights and obligations, particularly those arising from legal requirements as well as from contracts with third parties, and, where necessary, obtain permission and approval from ethics committees, and present these when required. With regard to research projects, the potential consequences of the research should be evaluated in detail and the ethical aspects should be assessed.
- (2) Researchers should maintain a continual awareness of the risks associated with the misuse of research results. Their responsibility is not limited to compliance with legal requirements, but also includes an obligation to use their knowledge, experience and skills in such a way that risks can be recognised, assessed and evaluated. They should pay particular attention to the aspects associated with security-relevant research (dual use).

(3) Where possible and practicable, researchers should conclude written agreements on usage rights as early as possible. The researcher who collected the data is particularly entitled to use them. During a research project, those entitled to use the data decide whether third parties should have access to them (subject to data protection regulations).

§ 10 Methods and Standards

Researchers should use scientifically sound, plausible methods to answer research questions. If necessary, the specific expertise required for the application of a method should be ensured by suitable cooperative arrangements.

In the development and application of new methods, researchers should attach particular importance to quality assurance and the establishment of standards.

§ 11 Documentation

- (1) Researchers should document all information relevant to the production of a research result as clearly as is required by, and is appropriate for, the relevant subject area so that the result can be reviewed and assessed. This includes, in particular, making available the research data used or generated, the methodological, evaluation and analytical steps taken, and, if relevant, the development of the hypothesis, to ensure that citations are clear, and, as far as possible, to enable third parties to access this information. Where research software is being developed, the source code should be documented. In general, this includes documenting individual results that do not support the research hypothesis. Any selection of results in this connection must be avoided. If the documentation does not satisfy these requirements, the constraints and the reasons for them are to be clearly explained.
- (2) Where subject-specific recommendations exist for review and assessment, the documentation must comply with the relevant stipulations.
- (3) Documentation and research results must not be manipulated; they are to be protected as effectively as possible against manipulation.

§ 12 Providing Public Access to Research Results

- (1) As a rule, researchers should make all results available as part of scientific/academic discourse. Researchers should decide autonomously with due regard for the conventions of the relevant subject area whether, in specific cases, there may be reasons to diverge from this principle and not make results publicly available; this decision must not depend on third parties.
- (2) If research results are published, they must be described clearly and in full. Where possible and reasonable, this includes not only making the research data, materials and information on which the results are based, as well as the methods and software used, available, but also fully explaining the work processes. Software programmed by researchers themselves is to be made

- publicly available along with the source code. Researchers must provide full and correct information about their own preliminary work, as well as that done by others.
- (3) Inappropriately small publications are to be avoided. Researchers should limit the repetition of content from publications of which they were (co-)authors to what is necessary for the reader to understand the context. They should cite results previously made publicly available unless, in exceptional cases, this is deemed unnecessary by the conventions of the discipline.

§ 13 Archiving

Primary data used as a basis for publications are to be stored on durable, secure media for a period of ten years at the institution where the data were produced. More detailed information on handling research data can be found in the "Guidelines for Handling Research Data at the University of Münster".

§ 14 Authorship

- (1) An author is someone who has made a genuine, identifiable contribution to the content of a research publication of text, data or software. All authors are to agree on the final version of the work to be published. Unless explicitly stated otherwise, they share responsibility for the publication.
- (2) What constitutes a genuine and identifiable contribution must be evaluated on a case-by-case basis and depends on the subject area in question. An identifiable, genuine contribution is deemed to exist in instances in which a researcher in a manner relevant to the research takes part in:
 - the development and conceptual design of the research project, or
 - the production, collection, acquisition or provision of data, software or sources, or
 - the analysis/evaluation or interpretation of data, sources and conclusions drawn from them, or
 - the drafting of the manuscript.
- (3) Honorary authorship where no such contribution was made is not permissible. A leadership or supervisory function does not itself constitute co-authorship.
- (4) Authors must seek to ensure that, as far as possible, their contributions to the research are identified by publishers or infrastructure providers in such a way that they can be correctly cited by users. The contribution must add to the research content of the publication.
- (5) Researchers should agree on who should be the author of the research results. The decision as to the order in which authors are named is to be made in good time, normally no later than when the manuscript is drafted, and in accordance with clear criteria that reflect the conventions within the relevant subject areas. Researchers may not refuse to give their consent to publication of the results without sufficient reason. Refusal of consent must be justified with verifiable criticism of data, methods or results.

(6) If a contribution is not sufficient to justify authorship, the individual's support may be properly acknowledged in footnotes, a foreword or an acknowledgement.

§ 15 Publication Medium

Authors should select the publication medium carefully with due regard to its quality and visibility in the relevant field of discourse. Researchers who assume the role of editor should carefully consider for which publication media they will fulfil this task. A new or unknown publication medium should be evaluated to assess its seriousness. A key criterion in selecting a publication medium is whether it has established its own guidelines on good research practice.

§ 16 Confidentiality and Neutrality of Review Processes and Discussions

- (1) Researchers who evaluate submitted manuscripts, funding proposals or the personal qualifications of others are obliged to maintain strict confidentiality in this respect. The confidentiality of third-party material to which a reviewer or committee member gains access precludes sharing the material with third parties or making personal use of it.
- (2) Researchers must immediately disclose to the responsible body any possible conflicts of interest or bias relating to the research project being reviewed or to the person or matter under discussion. They must disclose all facts which could give rise to concern with regard to possible bias.
- (3) The duty of confidentiality and disclosure of facts that could give rise to concern with regard to possible bias also applies to members of research advisory and decision-making bodies.

§ 17 Ombudsperson

- (1) In consultation with the University Senate, the Rectorate selects an experienced and upstanding academic staff member of the University of Münster with management experience to serve as an independent ombudsperson, as well as a deputy. The ombudsperson is appointed for three years, and a second term of office is possible. The same applies to his/her deputy, who serves in his/her stead in the case of possible bias or absence. The deputy is called to fulfil this role in the case of bias or absence of the ombudsperson. The ombudsperson and his/her deputy may also confer for consultation purposes unless there is an explicit request to the contrary. The ombudsperson and his/her deputy should not be members of the same faculty.
- (2) The ombudsperson should be a neutral and qualified person who can be contacted regarding questions of good scientific practice and cases of suspected academic misconduct and, as far as possible, should provide solution-oriented conflict mediation.
- (3) All members and staff of the University of Münster may contact the ombudsperson to mediate in cases of conflict or consult him/her on matters related to the rules of good scientific practice. Furthermore, the ombudsperson can be contacted by members and staff of the University of Münster to discuss suspected academic misconduct or to provide advice in such cases. Also,

- anyone who has been accused of academic misconduct may contact the ombudsperson for consultation or advice.
- (4) If necessary, the ombudsperson passes on any cases of suspected academic misconduct to the investigating committee in line with the "Guidelines for Procedures in Cases of Suspected Academic Misconduct" issued by the University of Münster.
- (5) Members and staff of the University of Münster are at liberty to contact the German Research Foundation's supraregional "German Research Ombudsman" instead of the University of Münster ombudsperson.
- (6) The ombudsperson must assess the plausibility of any accusations with regard to their certainty and significance and must provide assistance to those seeking advice by suggesting options on how to proceed.
- (7) The ombudsperson must observe strict confidentiality when discharging his/her duties.
- (8) The appointment of the ombudsperson and his/her deputy is announced publicly within the University along with their contact details, e.g. through the Internet, intranet, official announcements issued by the University administration, and circulars sent to the Dean's Offices and the academic facilities of the University of Münster.
- (9) The ombudsperson and his/her deputy are to be granted appropriate relief from their other duties.

§ 18 Procedures in Cases of Suspected Academic Misconduct

The Rectorate will set up an investigating committee for procedures in cases of suspected academic misconduct at the University of Münster. The committee's activities will be governed by the latest version of the guidelines adopted by the Rectorate and published in the Official Announcements (AB Uni 98/1).

§ 19 Complainants and Respondents

- (1) All bodies examining allegations of academic misconduct, in particular the ombudsperson and the investigating committees, must take appropriate measures to protect both the complainant and the respondent. The respondent should not suffer any disadvantage as a result of the investigation into the allegations as long as academic misconduct, if any, has not been formally established. The complainant must not suffer any disadvantage for his/her research or professional career prospects if the allegations were not made demonstrably against his/her better knowledge.
- (2) The investigation into allegations of academic misconduct must be carried out explicitly in strict confidentiality at all stages of the process and must adhere to the principle of the presumption of innocence.
- (3) Any allegation should not, if at all possible and in particular in the case of junior researchers lead to any delays during the complainant's qualification phase. Moreover, complainants should

- suffer no disadvantage when writing dissertations or doctoral theses. This also applies to working conditions or to possible contract extensions.
- (4) The complainant must have objective reasons for suspecting that an infringement of the standards of good scientific practice may have occurred. If the complainant is unable to verify the facts personally, or if there is uncertainty with regard to the interpretation of the guidelines on good scientific practice in relation to an observed set of circumstances, the complainant should contact the ombudsperson or the "German Research Ombudsman" at the German Research Foundation to clarify the suspicion.
- (5) An allegation made anonymously can only be investigated in a proper process if the complainant provides the investigating body with reliable, sufficiently concrete facts.
- (6) If the complainant's identity is known, the investigating body must keep the individual's name confidential and not share it with third parties without the individual's consent. Different requirements apply only if there is a legal obligation or if the respondent cannot otherwise properly defend himself or herself because, exceptionally, the case depends on the identity of the complainant. Before the complainant's name is disclosed, he/she is to be informed of this immediately. The complainant can decide whether to withdraw the allegation due to the impending disclosure of his/her name. Should academic misconduct not be proven, the complainant must continue to be protected, assuming that the allegations cannot be shown to have been made demonstrably against his or her better knowledge.
- (7) The confidentiality of the process is limited if the complainant makes his or her suspicion public. The investigating body will decide on a case-by-case basis how to handle the breach of confidentiality on the part of the complainant.

§ 20 Implementation

These rules take effect on the day following their publication in the Official Announcements of the University of Münster. At the same time, the University of Münster's rules governing good scientific practice, dated 7 January 2002, cease to be valid.

Issued (in the original German version) upon resolution by the Senate of the University of Münster on 29 April 2020. These regulations (in the original German version) are hereby announced.

Please note that in accordance with § 12 (5) of the Higher Education Act of the State of North Rhine-Westphalia (HG NRW) violations of procedural regulation as put forth by regulatory laws or other legal provisions pertaining to university autonomy may no longer be claimed after one year following this announcement, unless

- 1. the regulations were not properly announced,
- 2. the Rectorate previously raised an objection to the resolution passed by the deciding committee,

- 3. the University received a previous reprimand for the formal or procedural defect, and was informed of the violated legal provision and the fact that resulted in the defect,
- 4. the legal consequence of exclusion resulting from such reprimand was not included in the public announcement of the regulations.

Münster, 5 May 2020

The Rector Prof. Johannes Wessels