## Official

## Announcements

## Content:

## Regulations for Safeguarding Good Research Practice at the University of Bonn

dated February 12, 2021

English version for reference only!

Disclaimer: This translation of the " Ordnung zur Sicherung guter wissenschaftlicher Praxis an der Rheinischen Friedrich-Wilhelms-Universität Bonn vom 12. Februar 2021 " published in " Amtliche Bekanntmachungen Nr. 13/2021 " is not legally binding.

# Regulations for Safeguarding Good Research Practice at the University of Bonn 

dated February 12, 2021

By virtue of § 2, para. 4 and § 4, para. 4 of the NRW Higher Education Act (Gesetz über die Hochschulen des Landes Nordrhein-Westfalen, Hochschulgesetz, HG) of September 16, 2014 (Legal and Regulatory Gazette of North Rhine-Westphalia, p. 547) as last amended by Article 1 of the Act Concerning Further Measures for Management of the Coronavirus Pandemic in Higher Education Institutions (Gesetz hinsichtlich weiterer Maßnahmen zur Bewältigung der Corona-Pandemie im Hochschulbereich), dated December 1, 2020 (Legal and Regulatory Gazette of North-Rhine Westphalia, p. 1110), the University of Bonn issued the following Regulations:

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## Preamble

As a research university, the University of Bonn is committed to research and research-guided teaching. Good research work is based on a basic principle of honesty towards oneself and others and requires the principles for safeguarding research practice be observed, while taking into account special factors applicable to the field in question. Compliance with and communication of these principles by all of its members is of key importance to the University of Bonn. To this end, the University of Bonn develops binding principles for research ethics, and for assessing research projects on this basis.

The faculties are required to adequately address the Principles for Safeguarding Good Research Practice in their teaching curricula, and to inform students and persons working as early-career researchers in their area of responsibility about the principles applicable at the University of Bonn. The faculties guarantee that the heads of the research institutions will create the conditions required for researchers to comply with legal and ethical standards.

In addition to measures for identifying and punishing scientific misconduct, suitable measures should also be taken or strengthened to prevent scientific misconduct from occurring. As a place of research, teaching and the promotion of early-career researchers, the University has institutional responsibility in this respect.

The German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) supports higher education institutions in these efforts. In 2019, it issued new "Guidelines for Safeguarding Good Research Practice" (Code of Conduct) that the University of Bonn recognizes as legally binding for all of its members.

The University of Bonn is confronting the changes due to digitalization and addressing the challenges arising due to the introduction of information processing methods in all scientific disciplines. Addressing the challenge presented by the digital transformation involves the use and (further) development of semantic standards. The University of Bonn considers itself an active partner in the research system and its development and strives to develop standards for the management of research data with the members of scientific communities and research institutions.

## Part I:

Principles of Good Research Practice

## § 1

## Guiding Principles

Persons actively involved in research at the University of Bonn shall

1. Work lege artis in all phases
2. Use scientifically sound and verifiable methods to answer research questions
3. Prove that they have any specific skills required to apply these methods, or ensure their availability through close research cooperations
4. Place particular importance on quality assurance and the establishment of standards when developing and applying new methods
5. Obtain any approvals required for the research project
6. Document results, the steps taken to obtain them and the quality assurance mechanisms used, present them in publications, and rigorously question all findings themselves
7. Identify the source of all data, organisms, materials and software used in the research process, provide proof that they were reused and cite the original sources
8. Maintain strict honesty with respect to their own contributions and the contributions of research partners, competitors and predecessors and provide full and correct information on their own preliminary work and that of others
9. Observe regulations on the handling of primary data and generated knowledge
10. Observe ethical standards when collecting data and performing experiments, assess the ethical implications of the specific research project concerned and obtain any ethics committee statements required
11. Assess the impacts of research, particularly in the area of security-related research
12. Prevent scientific misconduct and regularly update their knowledge of the standards of good research practice and the current state of research
13. Observe the rules set down in these Regulations.

## § 2 <br> Responsibilities of the Heads of Research Institutions, Work Units and Stakeholders

(1) The Rectorate of the University of Bonn shall create the necessary framework conditions for research work. It is jointly responsible with the faculties and the Bonn Center for Teacher Education (BLZ) for ensuring compliance with and communication of good research practice and for providing appropriate career support for all researchers. The Rectorate, heads of the faculties, the BZL and the research work units shall guarantee the necessary conditions to enable researchers to comply with legal and ethical standards. These conditions include:

1. Clear written policies and procedures for personnel selection and development, taking into account equal opportunity and diversity and avoiding unconscious bias as far as possible
2. Established supervisory structures and concepts for the promotion of early-career researchers
3. Appropriate career support for researchers and research support personnel
4. Suitable organizational measures for preventing abuses of power and the exploitation of dependent relationships.
(2) Those responsible for managing early-career researchers must conduct themselves in an exemplary manner with respect to research and are responsible for ensuring that quality assurance is actually performed and for ensuring individual supervision. In the interests of their own plans for the future, earlycareer researchers must also be vigilant against potential misconduct in their environment.
(3) The roles and responsibilities of the researchers and research support personnel involved in a research project must be clear at all times during the research project and must be adapted where necessary if there are changes in the research project.
(4) Researchers who evaluate submitted manuscripts, funding applications or personnel qualifications must maintain strict confidentiality in this regard. They must disclose all facts that could give rise to the appearance of a conflict of interest. The duty of confidentiality and disclosure of facts that could give rise to the appearance of a conflict of interest also applies to members of research advisory and decision-making bodies. The confidentiality of third-party material to which a reviewer or committee member gains access precludes unauthorized sharing of the material with third parties or making personal use of it. Researchers must immediately disclose to the responsible body any conflicts of interest or apparent conflicts of interest related to the research project being reviewed or the person or matter being discussed.
(5) Researchers must take into account and acknowledge the current state of research when planning a project. To identify relevant and suitable research questions, they must familiarize themselves with existing research in the public domain. The University of Bonn shall ensure that the necessary basic framework for this is in place, including (digital) access to specialized literature and periodicals through the University and State Library. When planning and carrying out research projects, methods to avoid (unconscious) distortions in the interpretation of findings, e.g. the use of blinding in experiments, shall be used where possible. Researchers must examine whether and to what extent gender and diversity may be of significance to the research project (with regard to methods, work program, objectives, etc.). The context in which the research was conducted must be taken into consideration when interpreting findings.

## § 3 <br> Supervision of Early-Career Researchers

(1) Those who supervise doctoral students, postdoctoral researchers and Habilitand candidates, are responsible for ensuring that supervision is performed appropriately. This also includes career advancement. Further requirements are specified in the faculty doctoral degree and habilitation regulations.
(2) The faculties maintain a list of all doctoral students and habilitation candidates.

## § 4

Performance and Assessment Criteria

A multidimensional approach shall be used to assess the performance of researchers. Originality and quality must always take precedence over quantity as performance and assessment criteria for research work. Other aspects, such as involvement in teaching, academic self-governance, public relations and knowledge and technology transfer, can also be taken into consideration. Where provided voluntarily, individual circumstances stated in curricula vitae-as well as the categories specified in the German AntiDiscrimination Act (Allgemeines Gleichbehandlungsgesetz)—can be taken into account when forming a judgment.

## § 5

Handling of Primary Data, Software and Knowledge: Access, Security and Archiving
(1) The data collected and knowledge generated in research projects must, whenever possible, be (digitally) Findable, (digitally) Accessible, Interoperable and Reusable (FAIR). The rules for access must be transparent and clearly described. The data and knowledge generated shall be provided promptly taking into account disciplinary requirements in order to enable follow-up research and verification of the results. An appropriate description of the materials and methods used must be provided to ensure that the research results can be replicated. To provide a basis for enabling replication, the information necessary to understand the research must be made available (including the research data used or generated, the methodological, evaluation and analytical steps taken, and, if relevant, the development of the hypothesis), citations must be clear, and, as far as possible, third parties must be permitted to access this information. The establishment of standards for methods, the use of software, the collection of research data and the description of research results is essential for the comparability and transferability of research outcomes.

In general, individual results that do not support the research hypothesis must also be documented. Selecting results must be avoided in this regard. Where subject-specific recommendations exist for review and assessment, researchers shall create documentation in accordance with these requirements. If the documentation does not satisfy these requirements, the constraints and the reasons for them must be clearly explained. Documentation and research results must not be manipulated; they must be protected as effectively as possible against manipulation.
(2) The source code of publicly available software must—as far as possible and reasonable—be persistent, citable and documented; when research software is developed, the source code must-as far as possible and reasonable-be documented. If self-developed research software is made available to third parties, it shall, as a rule, be provided under fee-based licenses. Further details shall be governed by license agreements.
(3) The provisions of the EU General Data Protection Regulation, as amended, and NRW Data Protection Act (Datenschutzgesetz NRW), as amended, and legal and contractual obligations to third parties (cooperation partners, funding providers) concerning the protection of personal data must be observed.
(4) Primary data used as a basis for publications must be archived on durable, secure media at the institution where they were produced for a period of ten years after being made publicly available. Whenever possible, preparations produced using the primary data shall be archived for the same period. If more than one institution is involved in the data collection process, provisions governing archiving, access rights and usage rights must be contractually stipulated. The University of Bonn shall ensure that the infrastructure required for archiving is available.

## § 6

## Scientific Publications and Authorship

(1) Unless explicitly stated otherwise, the authors of scientific publications shall always share responsibility for their content. They shall agree on the final version of the work to be published. Only an individual who has made a genuine, verifiable contribution to the content of a scientific publication (text, data or software publication) can be an author. This must be evaluated on a case-by-case basis and shall depend on the field in question. Researchers shall reach agreement on who should be an author of the research results. Agreement on the order in which the authors are named shall be reached in good time, normally no later than when the manuscript is drafted, and in accordance with verifiable criteria that reflect the practices in the field concerned. The consent required for the publication of results shall not be refused without sufficient grounds. A refusal of consent must be justified by verifiable criticism of the data, methods or results.
(2) Research findings can be published in a variety of ways in scientifically recognized media, both analog and digital. The different publication options shall be considered of equal value. The publication of negative results shall be encouraged. Authors shall seek to ensure that their publications can be correctly cited.
(3) The following contributions on their own do not justify authorship of a scientific publication:

1. Organizational responsibility for raising funding
2. Providing standard experimental materials
3. Instructing employees in standard methods
4. Technical assistance with data collection
5. Technical support, e.g. providing equipment, experimental animals, data records
6. Reading the manuscript without contributing substantively to the content
7. Heading an institution or organizational unit in which the publication originated, or holding a supervisory function.
(4) A genuine, verifiable contribution is deemed to exist if a researcher contributes in a scientifically significant way to

- The development and design of the research project, or
- The gathering, 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.

If a contribution is not sufficient to justify authorship, the individual's support may be properly acknowledged in footnotes, a foreword or an acknowledgment. Honorary authorship is not permissible.
(5) The freedom of the researchers to decide whether, how and where to make their results publicly available shall remain unaffected (negative freedom of publication) Authors shall select the publication medium carefully, with due regard for its quality and visibility in the relevant field of discourse. A key criterion to selecting a publication medium is whether it has established its own guidelines on good research practice. A new or unknown publication medium must be evaluated to assess its seriousness. The scientific quality of a contribution does not depend on the medium in which it is published.
(6) Researchers who assume the role of editor shall carefully select the publication media where they will carry out this activity.

## § 7

## Scientific Misconduct

(1) A person shall, in particular, have committed scientific misconduct if they, in scientifically significant circumstances, deliberately or with gross negligence

1. Provide false information
2. Unjustifiably appropriate the academic achievements of others as their own
3. Interfere with the research activities of others.

The following, in particular, shall constitute scientific misconduct within the meaning of sentence 1 :

1. Providing false information by
a) Fabricating data and/or research results
b) Falsifying data and/or research results, in particular by
(i) Concealing and/or excluding data and/or results obtained during research without disclosing this
(ii) Manipulating a chart or figure
c) Presenting images/graphics/tables and corresponding statements in an incongruous manner
d) Providing incorrect information in a funding application or in required reports (including false information on the publication medium and publications in print), provided the information is science-related
e) Claiming the (co-)authorship of another person without their consent
2. Unjustifiably appropriating the academic achievements of others as their own by:
a) Unidentified use of third-party content without the required source citation ("plagiarism")
b) Exploiting research approaches and ideas ("idea theft")
c) Unauthorized disclosure of data, theories and findings to third parties
d) Presumption or unjustified assumption of authorship or co-authorship, particularly when no genuine, verifiable contribution was made to the scientific content of the publication
e) Falsification of content
f) Unauthorized publication and unauthorized disclosure to third parties as long as the work, findings, hypothesis, principles or research approach have not yet been published
3. Interfering with the research activities of others, in particular by
a) Sabotage of research activities (including damaging, destroying or manipulating experimental setups, equipment, documents, hardware, software, chemicals or other items required by others for research purposes)
b) Falsification or unauthorized removal of research data or research documents
c) Falsification or unauthorized removal of documentation of research data.
(2) Scientific misconduct also includes conduct that creates joint responsibility for misconduct by others, in particular through active participation (including aiding and abetting), co-authorship of publications containing falsifications, or gross neglect of supervisory duties.
(3) A reviewer shall have committed scientific misconduct while performing reviewer activities if they, deliberately or with gross negligence,
4. Make unauthorized use of data, theories or findings they gain knowledge of during the course of their reviewer activities for their own academic purposes
5. Violate the confidentiality of the review process during their reviewer activities by unauthorized disclosure of submissions or the data, theory or findings they contain to third parties
6. Fail to disclose facts or circumstances in connection with their reviewer activities that could give rise to the appearance of a conflict of interest.
(4) Relevant provisions of the DFG Rules of Procedure for Dealing with Scientific Misconduct, as amended, shall also be applied when assessing scientific misconduct.

## Part II: <br> Procedure in Case of Suspected Scientific Misconduct

## § 8 <br> Prosecution of Scientific Misconduct

The University of Bonn will investigate any suspicion of scientific misconduct in the University, provided specific objective indications exist. If investigation of the circumstances confirms the suspicion of misconduct, appropriate measures will be taken within the range of possibilities available in each case. The investigation of allegations of scientific misconduct must be carried out in strict confidentiality and adhere to the presumption of innocence. The complainant and respondent must have the opportunity to be heard at each stage of the process.
(1) The University of Bonn and the bodies it appoints to investigate scientific misconduct shall ensure that persons who report specific information on suspected scientific misconduct do not suffer any professional or other disadvantages at the University as a result. This also applies in cases where scientific misconduct cannot be established, unless the allegation was made against the person's better knowledge.
(2) Reports of scientific misconduct must be made in "good faith." Reckless allegations of scientific misconduct, in particular reporting knowingly false or malicious allegations, can itself constitute a form of scientific misconduct.

## § 10 <br> Appointment and Duties of the Ombudsperson

(1) The Rectorate shall appoint a researcher (Ombudsperson) with international experience, integrity and management experience as a contact person for members of the University of Bonn who have allegations of scientific misconduct to put forward. The Rectorate shall also appoint a Deputy Ombudsperson to perform the duties of the Ombudsperson in the event of possible conflicts of interest or if the Ombudsperson is unable to carry out his or her duties. Their respective terms of office shall be three years. A further term of office is permissible. The Rectorate shall give the Ombudspersons the support and acceptance they need to carry out their duties and shall publicly announce them. Members of the Senate, Rectorate, deans and persons holding management positions in University institutions cannot be appointed Ombudsperson or Deputy Ombudsperson. Instead of the Ombudsperson at the University of Bonn, University members can also contact the national "German Research Ombudsman" committee.
(2) The Ombudsperson shall advise persons who provide information about suspected scientific misconduct and examine the allegations for plausibility with respect to details and significance and the possibilities available to resolve the allegations (preliminary investigation procedure). The Ombudsperson may already contact the respondent at this point to clarify the situation; he or she must be given the opportunity to be heard. If the Ombudsperson cannot resolve the allegations, he or she shall request that an investigation be initiated by the Investigative Commission in accordance with $\S 12$ and shall report the findings of his or her preliminary investigation to the Rectorate and Investigative Commission. The examination and preliminary investigation by the Ombudsperson shall take no longer than three months.

## § 11 <br> Investigative Commission

The Rectorate shall establish a permanent Investigative Commission to investigate scientific misconduct. The Rectorate shall appoint five full-time professors of the University who belong to different faculties as members for a period of three years, in accordance with $\S 11 \mathrm{~b}$ HG. The chairperson shall be a professor of law who is qualified to hold the position of judge. The Investigative Commission can call on the Ombudsperson and other persons with special experience in handling such cases to act in an advisory capacity.

## Investigative Proceedings in the Commission

(1) The Investigative Commission shall act upon request by the Ombudsperson or one of its members. The chairperson of the Commission shall inform the Rectorate of this. The possibility of conflicts of interest affecting members of the Commission must be checked before the investigative proceedings begin. Commission members with conflicts of interest shall be replaced by substitutes appointed by the Rectorate.
(2) The Investigative Commission meetings shall take place in camera. The Investigative Commission shall treat information on the parties to the proceeding and its findings as strictly confidential, until culpable misconduct has been proven. The respondent shall not suffer any professional or other disadvantages until scientific misconduct has been formally established.
(3) The Investigative Commission shall be authorized to take all appropriate steps to clarify the situation. It can obtain necessary information and statements for this purpose and may also call on experts from the scientific field concerned on a case-by-case basis.
(4) The respondent must be informed of the incriminating facts and any evidence. Both the respondent and complainant must be given the opportunity to make written and oral statements. The Investigative Commission shall decide, according to its independent conviction and taking into account the entire contents of all written and oral statements in accordance with paragraph 3 and paragraph 4 sentences 1 and 2 and any evidence obtained, whether scientific misconduct has been proven or not. The decision by the Investigative Commission shall include the reasons that guided the decision.
(5) If the identity of the complainant is not known to the respondent, this information shall be disclosed to the respondent if this appears necessary for proper defense of the respondent; this shall apply, in particular, if the credibility of the complainant is of considerable importance for establishing misconduct. Before the identity of the complainant is disclosed, he or she must be informed of the planned disclosure of this information. The University of Bonn will only investigate anonymous reports if incriminating, sufficiently specific and verifiable facts are provided.
(6) If the Investigative Commission finds that scientific misconduct has occurred, it shall also discuss the possibilities for further action, in particular possible consequences. In addition to disciplinary sanctions, the initiation of academic, civil-law or criminal-law consequences shall be considered. If the Investigative Commission cannot establish that scientific misconduct has occurred, the proceedings shall be discontinued.
(7) The chairperson of the Investigative Commission shall report to the Rectorate in writing on the results of the Commission's work and shall provide a draft resolution within a period of six months after commencement of the investigative proceedings. If scientific misconduct was found to have occurred, the resolution should include a proposal for further action by the Rectorate.

## § 13 <br> Proceedings in the Rectorate

(1) Based on the report and recommendation by the Investigative Commission, the Rectorate shall decide within a period of three months whether the proceedings should be discontinued because scientific misconduct has not been proven, or sufficient proof of scientific misconduct exists. In the latter case, the Rectorate shall also decide on the consequences.
(2) For matters concerning the administration of academic degrees, the Rectorate shall forward the report and recommendation by the Investigative Commission without delay to the body responsible for awarding and revoking academic degrees in the faculty concerned. The responsible body shall decide whether the degree should be revoked. The members of the Investigative Commission and members of the national Commission on "Professional Self-Regulation in Science" (Selbstkontrolle in der Wissenschaft) can be called on to act as advisory members at meetings of the responsible body.
(3) The respondent and complainant must be informed of the Rectorate's decision. They must also be informed of the main reasons that led to the decision. The Rectorate can announce the decision in an appropriate manner. After conclusion of the investigations, the results shall be communicated to the scientific organizations concerned and any third parties that have a justified interest in the decision.
(4) The entire investigative proceeding, including the decision by the Rectorate, shall not take longer than one year.

## Part III: <br> Entry into Force

## § 14

Final Provisions and Entry into Force
(1) To the extent not already implemented in these Regulations, the DFG Guidelines for Safeguarding Good Research Practice dated September 2019 (Code of Conduct) shall apply mutatis mutandis. The University of Bonn shall ensure the necessary framework for full implementation of the Code of Conduct.
(2) These Regulations shall enter into force on the day following the date of their publication in the Official Announcements of the University of Bonn. They shall supersede the Rectorate's Guidelines for Safeguarding Good Research Practice at the University of Bonn (Richtlinien zur Sicherung guter wissenschaftlicher Praxis an der Rheinischen Friedrich-Wilhelms-Universität Bonn) dated September 1, 2014 (Official Announcements of the University of Bonn, $44^{\text {th }}$ year, no. 26, dated September 3, 2014), which shall become inoperative.

## R. Hüttemann

Chairman of the Senate
of the University of Bonn
University Professor Dr. Rainer Hüttemann

Prepared on the basis of the University of Bonn Senate resolution of February 4, 2021.
Bonn, February 12, 2021

> M. Hoch
> The Rector
> of the University of Bonn
> University Professor Dr. Dr. h.c. Michael Hoch

