English translation of the unofficial reading version. The German version of this document is the only legally binding version. This English translation is for your convenience only.

# The University of Konstanz's Guidelines to ensure good research practice

(from 25 July 2023, as amended on 20 February 2024

#### **Preface**

I. In its meeting on 14 February 2018, the Senate of the university adopted the first version of its Statutes to ensure good scientific practice (Amtliche Bekanntmachungen no. 9/2018 on 26.02.2018) which also defined procedures for handling research misconduct and measures for preventing such misconduct. The University of Konstanz continually informs its members and affiliated members about these guidelines, the corresponding statutes and the recommendations of the German Research Foundation (DFG), for example, on university websites.

These guidelines supplement the university's current Statutes to ensure good research practice.

II. In the Statutes to ensure good research practice, the Senate defines what the university considers as research misconduct and what procedures it has in place to respond to this misconduct. With these guidelines, the Senate reinforces the content of the statutes and supplements them as described below.

# § 1 Adoption of the DFG Guidelines for Safeguarding Good Research Practice

# **Section 1: Principles**

#### **Guideline 1: Commitment to the general principles**

With these guidelines adopted by the Senate, the University of Konstanz lays out the rules of good research practice and informs its members and affiliated members accordingly as per § 2. University members and affiliated members are required to follow the guidelines with due regard for the type of research undertaken in the relevant subject area. Each individual researcher is responsible for ensuring that their own conduct complies with the standards of good research practice. In particular, the 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. The principles of good research practice are explained in the following guidelines.

#### **Guideline 2: Professional ethics**

Researchers at the University of Konstanz are responsible for putting the fundamental values and norms of research into practice and advocating for them. Education in the principles of good research begins at the earliest possible stage in academic teaching and research training. Researchers at all career levels regularly update their knowledge about the standards of good research practice and the current state of the art. The University of Konstanz expects and promotes action by its experienced as well as early career researchers to support each other in a process of continuous mutual learning and ongoing training and to maintain regular dialogue.

#### **Guideline 3: Organizational responsibility of the Rectorate**

The Rectorate and corresponding university bodies at the University of Konstanz create and uphold the basic framework for research. They are responsible for ensuring adherence to and the promotion of good research practice, as well as for appropriate career support for all researchers. The Rectorate and corresponding university bodies guarantee the necessary conditions to enable researchers to comply with legal and ethical standards. The basic framework includes clear written policies and procedures for staff selection and development as well as for early career support and equal opportunity. The Rectorate and the corresponding central university bodies are responsible for ensuring that an appropriate organizational structure is in place. This structure ensures that the tasks of leadership, supervision, quality assurance and conflict management are clearly allocated in accordance with the size of individual research work units and are suitably communicated to members and affiliated members. With regard to staff selection and development, due consideration is given to gender equality and diversity. The relevant processes are transparent and avoid implicit bias as much as possible. Suitable supervisory structures and policies are established for early career researchers and will be expanded further as necessary. Honest career advice, training opportunities and mentoring are offered to researchers and academic support staff.

#### Guideline 4: Responsibility of the heads of research work units

Heads of research work units at the University of Konstanz are responsible for their entire units at their respective management levels. Collaboration within the unit is designed such that the group as a whole can perform its tasks, the necessary cooperation and coordination can be achieved, and all members understand their roles, rights and duties. The leadership role includes ensuring adequate individual supervision of early career researchers, integrated in the overall institutional policy, as well as career development for researchers and academic support staff. To prevent the abuse of power and exploitation of dependent relationships, suitable organizational measures are in place at the levels of the individual unit, the Rectorate, and the leadership of the respective faculty or department. This requires that the size and the organization of the unit are designed to allow leadership tasks to be performed appropriately. This includes particularly skills training, support for researchers and supervisory duties. The performance of leadership tasks is associated with a corresponding responsibility. At the University of Konstanz, researchers and academic support staff benefit from a balance of support and personal responsibility suitable for their career level. They are given adequate status with corresponding rights of participation. Through gradually increasing autonomy, they are empowered to shape their career.

#### Guideline 5: Dimensions of performance and assessment criteria

To assess the performance of researchers, a multidimensional approach is called for; in addition to academic and scientific achievements, other aspects may be taken into consideration. Performance is assessed primarily on the basis of qualitative measures, while quantitative indicators may be incorporated into the overall assessment only with appropriate differentiation and reflection. Where provided voluntarily, individual circumstances stated in curricula vitae – as well as the categories specified in the German General Act on Equal Treatment (AGG) – are taken into account when forming a judgement. At the University of Konstanz, there is awareness as well as willingness to raise this awareness further that high-quality research is oriented towards criteria specific to individual disciplines. In addition to the generation of and critical reflection on findings, other aspects of performance are taken into consideration in the evaluation process. Examples include involvement in teaching, academic self-governance, public relations, and knowledge and technology transfer; contributions to the general good of society may also be recognized. An individual's approach to research, such as an openness to new findings and a willingness to take risks, is also considered. Appropriate allowance is made for periods of absence due to personal, family or health reasons or for prolonged training or qualification phases resulting from such periods, and for alternative career paths or similar circumstances.

#### **Guideline 6: Ombudspersons**

With its Statutes to ensure good research practice, the University of Konstanz ensures there are multiple ombudspersons to whom university members and affiliated members can turn with questions relating to good research practice and in cases of suspected misconduct. In addition to this, there are ombudspersons who specifically support doctoral researchers. Ombudspersons also investigate substantiated anonymous reports of suspected misconduct (see guideline 18 below). The university takes care to ensure that people are aware of who the ombudspersons at the university are. As per the Statutes to ensure good research practice, there is a designated deputy for each ombudsperson in case there is any concern about conflicts of interest or in case the ombudsperson is unable to carry out their duties. When these persons are appointed, the university ensures that the ombudsperson and their deputy are not members of a central governing body of the university while serving in this role. An ombudsperson has a set term of office. One further term of office is permissible. Researchers who are persons of integrity and who have management experience are eligible to be selected as ombudspersons. As neutral and qualified contact persons, they advise on issues relating to good research practice and in suspected cases of research misconduct and, where possible, contribute to solution-oriented conflict mediation. Ombudspersons maintain confidentiality in dealing with queries, conduct a preliminary examination of allegations of misconduct (see § 4 para. 5 of the Statutes to ensure good research practice) and, if necessary, notify the body responsible for further investigation. At the University of Konstanz this is either the respective Doctoral Committee (for doctoral researchers), the corresponding Habilitation Committee (for Habilitation researchers), or the commission of inquiry into research misconduct; when allegations clearly involve a crime, the ombudsperson also/only informs the Rectorate. The university gives ombudspersons and members of the commission of inquiry the support and acceptance they need to carry out their duties. The university will take measures to release the ombudspersons from other duties to ensure the functionality of the ombudsperson system. University members and affiliated members have the right to choose between contacting any of the university's ombudspersons or contacting the national German Research Ombudsman instead.

#### **Section 2: Research process**

#### Guideline 7: Cross-phase quality assurance

At the University of Konstanz, researchers carry out each step of the research process *lege artis*. When research findings are made publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels), the quality assurance mechanisms used have to be explained. This applies especially when new methods are developed. The university understands that continuous quality assurance during the research process includes, in particular, 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, and the keeping of laboratory notebooks.

If researchers at the University of Konstanz have made their findings publicly available and subsequently become aware of inconsistencies or errors in them, they make the necessary corrections. If the inconsistencies or errors constitute grounds for retracting a publication, the researchers will promptly request the publisher, infrastructure provider, etc. to correct or retract the publication and make a corresponding announcement. The same applies if researchers at the university are made aware of such inconsistencies or errors by third parties. The origin of the data, organisms, materials and software used in the research process is disclosed and the reuse of data is clearly indicated; original sources are cited. The nature and the scope of research data generated during the research process are described. Research data are handled in accordance with the requirements of the relevant subject area. The source code of publicly available software must be persistent, citable and documented. Depending on the particular subject area, it is an essential part of quality assurance that results or findings can be replicated or confirmed by other researchers (for example with the aid of a detailed description of materials and methods).

# Guideline 8: Stakeholders, responsibilities and roles

At the University of Konstanz, the roles and responsibilities of the researchers and academic support staff participating in a research project must be clear at each stage of the project. To this end, the participants in a research project must engage in regular dialogue. They 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.

#### Guideline 9: Research design

At the University of Konstanz, researchers thoroughly take into account and acknowledge the current state of research when planning a project. To identify relevant and suitable research questions, they familiarize themselves with existing research in

the public domain. The University of Konstanz ensures that the necessary basic framework for this is in place. Methods to avoid (unconscious) distortions in the interpretation of findings, e.g. the use of blinding in experiments, are used where possible. Researchers examine whether and to what extent gender and diversity dimensions may be of significance to the research project (with regard to methods, work programme, objectives, etc.). The context in which the research was conducted is taken into consideration when interpreting findings.

#### Guideline 10: Legal and ethical frameworks, usage rights

At the University of Konstanz, researchers adopt a responsible approach to the constitutionally guaranteed freedom of research. They comply with rights and obligations, particularly those arising from legal requirements and contracts with third parties, and where necessary seek approvals and ethics statements 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. The legal framework of a research project includes documented agreements on usage rights relating to data and results generated by the project. Researchers have to 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 such that risks can be recognized, assessed and evaluated. They pay particular attention to the aspects associated with security-relevant research (dual use). The university is responsible for ensuring that the actions of its members and affiliated members comply with regulations and promote this through suitable organizational structures. It develops binding ethical guidance and policies and define procedures to assess ethical issues relating to research projects. Where possible and practicable, the university's researchers conclude documented agreements on usage rights at the earliest possible point in a research project. Documented agreements are especially useful when multiple academic and/or non-academic institutions are involved in a research project or when it is likely that researchers will move to a different institution and continue using using, for their own purposes, the data they have generated. In particular, the researcher who collected the data is 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).

#### **Guideline 11: Methods and standards**

To answer research questions, researchers at the University of Konstanz use scientifically sound and appropriate methods. When developing and applying new methods, they attach particular importance to quality assurance and the establishment of standards. To this end, the application of a method normally requires specific expertise that is ensured, where necessary, by suitable cooperative arrangements. 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.

#### **Guideline 12: Documentation**

At the University of Konstanz, researchers 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 to allow the result to be reviewed and assessed. In general, this also includes documenting individual results that do not support the research hypothesis. The selection of results must be avoided. Where subject-specific recommendations exist for review and assessment, researchers create documentation in accordance with these guidelines. If the documentation does not satisfy these requirements, the constraints and the underlying reasons are clearly explained. Documentation and research results must not be manipulated; they are protected as effectively as possible against manipulation.

An important basis for enabling replication is to make available the information necessary to understand the research (including 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 is documented.

## Guideline 13: Providing public access to research results

As a rule, researchers at the University of Konstanz make all results available as part of scientific/academic discourse. In specific cases, however, there may be reasons not to make results publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels); this decision must not depend on third parties. Researchers decide autonomously – with due regard for the conventions of the relevant subject area – whether, how and where to disseminate their results. If it has been decided to make results available in the public domain, researchers describe them clearly and in full. Where possible and reasonable, this includes making the research data, materials and information on which the results are based, as well as the methods and software used, available and fully explaining the work processes. Software programmed by researchers themselves is made publicly available along with the source code in due time after considering aspects such as the safeguarding of work towards a qualification, protection of intellectual property and economic issues, e.g. in the context of research and development. Researchers provide full and correct information about their own preliminary work and that of others.

In the interest of transparency and to enable research to be referred to and reused by others, whenever possible researchers make the research data and principal materials on which a publication is based available in recognized archives and repositories in accordance with the FAIR principles (Findable, Accessible, Interoperable, Reusable). Restrictions may apply to public availability in the case of patent applications. If self-developed research software is to be made available to third parties, an appropriate licence is provided. In line with the principle of "quality over quantity", researchers avoid splitting research into inappropriately small publications. They limit the repetition of content from publications of which they were (co-)authors to that which is necessary to enable the reader to understand the context. They cite results previously made publicly available unless, in exceptional cases, this is deemed unnecessary by the general conventions of the discipline.

#### **Guideline 14: Authorship**

At the University of Konstanz, an author is an individual who has made a genuine, identifiable contribution to the content of a research publication of text, data or software. All authors agree on the final version of the work to be published. Unless explicitly stated otherwise, they share responsibility for the publication. Authors seek to ensure that, as far as possible, their contributions are identified by publishers or infrastructure providers such that they can be correctly cited by users.

The contribution must add to the research content of the publication. 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 particularly in instances in which a researcher – in a research-relevant way – takes part in

- the development and conceptual 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 acknowledgement. Honorary authorship where no such contribution was made is not permissible. A leadership or supervisory function does not itself constitute co-authorship. Collaborating researchers agree on authorship of a publication. The decision as to the order in which authors are named is made in good time, normally no later than when the manuscript is drafted, and in accordance with clear criteria that reflect the practices within the relevant subject areas. Researchers may not refuse to give their consent to publication of the results without sufficient grounds. Refusal of consent must be justified with verifiable criticism of data, methods or results.

## **Guideline 15: Publication medium**

At the University of Konstanz, authors select the publication medium carefully, with due regard for its quality and visibility in the relevant field of discourse. Researchers who assume the role of editor carefully select where they will carry out this activity. The scientific/academic quality of a contribution does not depend on the medium in which it is published.

In addition to publication in books and journals, authors may also consider academic repositories, data and software repositories, and blogs. A new or unknown publication medium is evaluated to assess its seriousness. A key criterion to selecting a publication medium is whether it has established guidelines on good research practice.

Guideline 16: Confidentiality and neutrality of review processes and discussions Fair behaviour is the basis for the legitimacy of any judgement-forming process. Researchers who evaluate submitted manuscripts, funding proposals or personal qualifications are obliged to maintain strict confidentiality with regard to this process. They 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 sharing the material with third parties or making personal use of it. Researchers immediately disclose to the responsible body any potential or apparent conflicts of interest, bias or favouritism relating to the research project being reviewed or the person or matter being discussed.

## **Guideline 17: Archiving**

Researchers at the University of Konstanz back up research data and results made publicly available, as well as the central materials on which they are based and the research software used, by adequate means according to the standards of the relevant subject area, and retain them for an appropriate period of time. Where justifiable reasons exist for not archiving particular data, researchers explain these reasons. The university ensures that the infrastructure necessary to enable archiving is in place. When research findings are made publicly available, the research data (generally raw data) on which they are based are generally archived in an accessible and identifiable manner, generally for a period of ten years, at the institution where the data were produced or in cross-location repositories. This practice may differ depending on the subject area. In justified cases, shorter archiving periods may be appropriate; the reasons for this have to be described clearly and comprehensibly. The archiving period begins on the date when the results are made publicly available.

## Section 3: Non-compliance with good research practice, procedures

#### **Guideline 18: Complainants and respondents**

At the University of Konstanz, the bodies responsible for examining allegations of misconduct (normally ombudspersons and Commissions of Inquiry into Research Misconduct) take appropriate measures to protect both the reporting person (complainant) and the person under suspicion (respondent). The investigation of allegations of research misconduct must be carried out in strict confidentiality and adhere to the presumption of innocence. The information disclosed by the complainant must be provided in good faith. Knowingly false or malicious allegations may themselves constitute misconduct. The disclosure should not disadvantage the research or professional career prospects of either the complainant or the respondent.

Particularly in the case of early career researchers, the disclosure should not lead to delays in the complainant's own qualification phase and no disadvantage should arise to the writing of final theses or doctoral theses; the same applies to working conditions and possible contract extensions. The body investigating allegations of misconduct must take care to act accordingly. The investigating body will respect the presumption of innocence vis-à-vis the respondent at each stage of the process when considering each case. The respondent should not experience any disadvantage resulting from the investigation of the allegation until such time as research misconduct has been formally established. The complainant must have objective reasons for suspecting that an infringement of the standards of good research 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 research practice in relation to an observed set of circumstances, the complainant should consult the local ombudsperson or the

German Research Ombudsman to clarify the suspicion. Disclosures made anonymously can only be investigated if the complainant provides the body investigating the allegation with solid and sufficiently concrete facts. If the complainant's identity is known, the investigating body will keep the individual's name confidential and will 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 themselves because, as an exception, the case concerns the identity of the complainant. The investigating body will promptly inform the complainant if their name is to be disclosed; the complainant can decide whether to withdraw the allegation due to the impending disclosure. The confidentiality of the process is limited if the complainant makes their 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. Should research misconduct not be proven, the complainant must continue to be protected, unless they evidently made the allegations against their better knowledge.

## Guideline 19: Procedures in cases of alleged research misconduct

With its Statutes to ensure good research practice, the University of Konstanz has established procedures to handle allegations of research misconduct. The regulations define the circumstances that constitute misconduct, procedural rules and the measures to take should an allegation be upheld. These regulations are applied in addition to relevant higher-level laws.

When examining complaints, the investigating bodies assume that not every breach of good research practice constitutes misconduct. Only deliberate or grossly negligent infringements as defined in the university's regulations or other higher-level norms are considered to be research misconduct. Particular examples of misconduct include fabrication of data, falsification of data and plagiarism. The University of Konstanz's Statutes to ensure good research practice define responsibility for each step of a procedure, the consideration of evidence, deputies for ombudspersons and members of a commission of inquiry into research misconduct, conflicts of interest and the procedural principles of the rule of law. The respondent and the complainant are each given the opportunity to be heard at each stage of the process. Until such time as it is demonstrated that misconduct has occurred, information relating to the individuals involved in the process and the findings of the investigation is treated in confidence. The university ensures that the entire process is conducted as promptly as possible and the bodies responsible implement the steps necessary to complete each stage of the procedure within an appropriate time frame. The Statutes to ensure good research practice stipulate various measures to be applied according to the seriousness of the research misconduct ascertained. If, after it has been established that misconduct has occurred, the revocation of an academic degree is being considered, the bodies responsible are included in deliberations (e.g. the respective Doctoral or Habilitation Committee). In accordance with data protection regulations and with consideration for the protection of personal privacy, the result is announced to affected research organizations and, if relevant, third parties with a justified interest in the decision once the inquiries have been completed.

# § 2 Specific instruction of academic staff

When they are hired, all new academic staff members will be given the most current version of these guidelines as well as the university's Statutes to ensure good research practice. This action must be documented.

In cases where (post)doctoral researchers are not employed by the university, they will receive this information from the persons responsible in their department when they are accepted as (post)doctoral researchers.

# § 3 Coming into effect

These guidelines come into effect the day after their publication in the "Amtliche Bekanntmachungen" (official announcements) of the University of Konstanz.

#### Note:

The German version of these regulations was published in the "Amtliche Bekanntmachungen" (official announcements) of the University of Konstanz no. 65/2023 on 25 July 2023.

The first amendment to these regulations was published in the "Amtliche Bekanntmachungen" of the University of Konstanz no. 9/2024 on 20 February 2024.