

GUIDELINES

Recommendations made by the Leibniz Association for safeguarding good scientific practice and handling complaints concerning scientific misconduct¹

Preamble

The basis for scientific work is the honesty of scientists towards themselves and others. This is the ethical standard and the basis for the rules of good scientific practice. Validating and applying these rules in practice is a key task for the sciences.

The Leibniz Association and its member institutes are aware of their responsibility to convey the standards and rules of good scientific practice to all scientists, especially those currently in the qualification stage.

It is the duty of all member institutes to use appropriate rules and measures to protect themselves against scientific misconduct and appropriately sensitise their staff in this regard. The headquarters of the Leibniz Association assist the member institutes in this task. These recommendations serve the commitment to and description of procedures within the Leibniz Association. The framework for formulating and implementing the Leibniz Association's regulations and procedures is provided by the respective current edition of the memorandum "Safeguarding Good Scientific Practice" issued by the German Research Foundation (DFG).

1) Scope

The recommendations in this document define principles of good scientific practice, and describe the procedure for handling complaints concerning scientific misconduct.

The Leibniz Association's member institutes set their own internal guidelines for safeguarding good scientific practice and handling complaints concerning scientific misconduct. To this end, they can adopt the recommendations in this document either in whole or in part. The member institutes should also establish possible sanctions for any scientific misconduct on the part of its staff.

¹ These recommendations replace the "Recommendations for safeguarding good scientific practice in the institutes of the Leibniz Association" (1998) and the "Rules for safeguarding good scientific practice" (1999).

2) Rules of good scientific practice

- (1) The rules of good scientific practice in particular include:
 - (a) - to work *lege artis*;
 - to fully document all stages and results of an experiment or study, and securely store the records and primary data;
 - to critically and consistently examine the validity and reproducibility of all experimental results and other research projects;
 - to be stringently honest with regard to the contributions of collaborators as well as towards external funding providers;
 - to observe the intellectual property of others and appropriately highlight all citations and appropriations in all publications;
 - (b) the appropriate supervision of scientists during the creation and academic evaluation of theses/dissertations for the purpose of obtaining a qualification (the framework conditions for scientific careers within the Leibniz Association are the subject of separate guidelines and recommendations);
 - (c) responsible collaboration within working groups and the responsible fulfilment of managerial tasks within these, including the appropriate supervision of the groups' members;
 - (d) the responsibility of authors of scientific publications regarding the content, including the representation of results and their discussion;
 - (e) to always give precedent to originality and quality over quantity as performance and assessment criteria for promotions, appointments, hiring staff and the allocation of funding.
- (2) Scientific publications should describe scientific results and how they were derived in a comprehensive and comprehensible manner. Results and texts published previously can only be made a part of later publications when clearly identified as such (duplicate publication) and only when absolutely required for the purposes of comprehending the context of the publication.
- (3) Only those who themselves substantially contributed to the design of the study or experiments, to the generation, analysis and interpretation of data and to the formulation of the manuscript, and have agreed to its publication – i.e. assumed responsibility for it – should be named as the authors. A so-called honorary authorship is not permitted. These regulations should form the substance of a collaboration agreement for e.g. major collaborative research projects.
- (4) Primary data must be stored in an accessible format for a minimum of 10 years. Data for which there are central, public repositories should be made accessible to the same.

3) Scientific misconduct

Scientific misconduct has occurred when deliberate or grossly negligent misrepresentations are made, rights to intellectual property are violated or the research activities of others are impaired.

Alongside violations of scientific ethics, in particular through inhumane or misleading practices, scientific misconduct above all includes the following:

(1) Misrepresentation – in particular:

- (a) the fabrication of data;
- (b) the falsification of data (e.g. by selecting desired results or rejecting unwanted results or evaluation procedures without making this public, or by manipulating figures or diagrams);
- (c) false information in publications lists or a funding application (including misrepresentations regarding the publishing body and forthcoming publications);
- (d) multiple publication of data or texts without making this public.

(2) Violating intellectual property rights – in particular:

- (a) with regard to a legally protected work created by another party, or to another party's substantial scientific findings, hypotheses, models or research approaches:
 - the unauthorised appropriation or other utilisation of passages of text without appropriately crediting the author (plagiarism);
 - the exploitation of research approaches and ideas without consent, in particular as reviewer;
 - the untruthful claim to or unjustified acceptance of scientific authorship or co-authorship, as well as the refusal of a justified co-authorship;
 - the falsification of content or
 - the unauthorised publication of, and provision to third parties of access to, a work, finding, hypothesis, model or research approach that has not yet been lawfully published;
- (b) claiming the (co-)authorship of another person without their consent.

(3) Impairing the research activities of others (including damaging, destroying or manipulating research set-ups, devices, documents, hardware, software, chemicals or any other materials required by another party for conducting an experiment).

(4) The destruction of primary data when this represents a violation of legal requirements or recognised principles of scientific work. This also applies for unlawful failure to destroy data (in particular personal data).

Joint responsibility for scientific misconduct can result from participating in the misconduct of others, gross negligence with regard to supervisory duties, or the co-authorship of forged publications.

4) Ombudspersons

Decentralised ombudspersons

- (1) The scientists of each member institute elect an ombudsperson to be the point of contact regarding inconsistencies, suspicions and disputes (decentralised ombudsperson). The ombudsperson is not allowed to be a member of the institute's management. The member institute determines the term of office. A deputy ombudsperson is also elected for the same period. The institute's management is responsible for implementing the secret ballot.
- (2) The procedure to be followed by a decentralised ombudsperson when investigating allegations of scientific misconduct is decided by the member institute using an appropriate guideline.
- (3) If a decentralised ombudsperson decides during their decentralised enquiry that an additional investigation of the accusations is necessary, then the enquiry is forwarded to the centralised ombudsperson.

Centralised ombudsperson

- (1) Upon the recommendation of the executive board, the senate of the Leibniz Association elects an ombudsperson for the Leibniz Association (centralised ombudsperson) and a deputy. The centralised ombudsperson and their deputy are generally elected for a term of three years. They can be re-elected for one additional term.
- (2) The centralised ombudsperson becomes involved when he or she is contacted by a decentralised ombudsperson. He or she can become involved in justified cases when informed by a third party about suspicions of scientific misconduct insofar as this suspicion is related to the activities at a member institute of the Leibniz Association.
- (3) The centralised ombudsperson investigates accusations of scientific misconduct against staff members and former staff members of the Leibniz Association's member institutes.

5) Investigation by the centralised ombudsperson into accusations of scientific misconduct

- (1) Accusations of scientific misconduct must generally be addressed in writing to the centralised ombudsperson of the Leibniz Association.
- (2) The investigation of anonymous complaints is at the discretion of the ombudsperson. In principle, an appropriate investigation requires that the name of the informant be known.
- (3) The name of an informant is to be treated confidentially. The revelation of the informant's name to the accused may be necessary in isolated cases if the accused cannot otherwise appropriately defend themselves. However, an informant's name may only ever be revealed if they not thereby suffer any disadvantages in terms of their own future scientific and professional career.
- (4) The ombudsperson confirms the receipt of a complaint to the informant within one week of receiving it.
- (5) The ombudsperson reports his or her involvement to the executive board of the Leibniz Association, the responsible section speaker and the management of the institute involved. All personal details are anonymised at this point.

- (6) The centralised ombudsperson conducts a preliminary investigation. For the purposes of this preliminary investigation, the ombudsperson should at least hear the accused and, where appropriate, the informant.
- (7) The centralised ombudsperson can hear additional persons and commission external reviews.
- (8) Based on the result of the preliminary investigation, the centralised ombudsperson decides whether to discontinue the enquiry, or whether it is necessary to set up a committee of enquiry (cf. 6).
- (9) The centralised ombudsperson informs the informant in writing of the result of the preliminary investigation.
- (10) The centralised ombudsperson informs the executive committee in writing of the result of the preliminary investigation and its justification.
- (11) If the centralised ombudsperson discontinues the enquiry, the executive committee deliberates on the decision and its justification no later than at its next board meeting (following receipt of the information). In the event that the executive committee disagrees with the decision to discontinue the enquiry, it can decide to set up a committee of enquiry (cf. 6).

6) Committee of enquiry to investigate accusations of scientific misconduct

- (1) The centralised ombudsperson uses his or her own discretion, or acts on the decision of the executive committee, to set up a committee of enquiry to investigate the accusations of scientific misconduct. The ombudsperson selects its members and invites their involvement.
- (2) The committee of enquiry comprises at least three members, including the chairperson of the scientific advisory board of the affected member institute and/or the responsible section speaker. The committee of enquiry must also include a further member, who possesses the necessary professional experience to fully understand the scientific facts of the enquiry, and who is not a member of the affected member institute. In addition, a fully qualified lawyer should be appointed to the committee of enquiry. The committee of enquiry appoints a chairperson from among its members.
- (3) The centralised ombudsperson is a non-voting member of the committee of enquiry.
- (4) All voting members of the committee of enquiry have an equal vote. The rules of impartiality of the Leibniz Competition apply.
- (5) The committee of enquiry conducts its sessions orally and in private. In its first session, it agrees upon the rules of the enquiry.
- (6) The headquarters of the Leibniz Association provides the committee of enquiry with organisational support.
- (7) All data and documents requested by a committee of enquiry must be made available to it by the member institutes and the headquarters.
- (8) The members of the committee of enquiry, the headquarters' staff members involved in the committee's work, as well as all those involved in or informed about the enquiry, are obliged to maintain confidentiality.
- (9) The committee of enquiry uses reasonable discretion to investigate whether scientific

misconduct has occurred. It listens to the accused and the informant, and determines the context of the conduct forming the subject of the complaint. The committee of enquiry can question further persons, as well as commission experts and consult them in an advisory capacity.

- (10) As a rule, the investigation conducted by the committee of enquiry should be completed no later than six months following the committee's constitutive session.
- (11) The committee of enquiry can decide to discontinue the enquiry.
- (12) The committee of enquiry writes a report which either justifies the discontinuation of the enquiry or which determines that scientific misconduct has occurred.
- (13) If the committee of enquiry comes to the conclusion that scientific misconduct has occurred, i.e. if the majority of the committee of enquiry's members believe that there is sufficient proof of scientific misconduct, the report must in particular:
 - determine whether such conduct is the result of gross negligence or whether it is deliberate, and
 - assess the gravity of the scientific misconduct.
- (14) The report also documents what further actions the committee of enquiry recommends (the involvement of additional institutes and bodies, the initiation of appropriate measures, etc.)
- (15) The report is submitted to the executive committee of the Leibniz Association. At its next meeting (following receipt), the executive committee will deliberate on the report and, if necessary, decide on further measures (cf. 7).

7) Conclusion of the enquiry

- (1) Based on the report submitted by the committee of enquiry, the executive committee of the Leibniz Association decides on the required measures in the event that scientific misconduct has occurred, or decides to discontinue the enquiry. The executive committee can decide to take the following measures against the person or persons involved:
 - written reprimand;
 - exclusion from the Leibniz Association's internal competition for research funding for a period of one to five years (depending on the gravity of the scientific misconduct);
 - demand for (an) incriminated publication(s) to be withdrawn in whole or in part, and for erroneous data to be corrected (in particular through the publication of an erratum);
 - withdrawal of the passive voting right on committees of the Leibniz Association for a period of one to five years (depending on the gravity of the scientific misconduct).
- (2) If, on the basis of the report, the executive committee determines that the scientific misconduct may result in the withdrawal of academic titles, it forwards the enquiry to the awarding university.
- (3) The report submitted by the committee of enquiry and the decisions made by the executive committee of the Leibniz Association respectively represent the conclusion of the enquiry within the Leibniz Association.
- (4) The management of the member institute is responsible for initiating any disciplinary

consequences or proceedings under employment law, civil law or criminal law.

- (5) The fundamental reasons which have led to the discontinuation of the enquiry or to the decision by the executive committee regarding the implementation of measures, must be related to the person or persons involved, as well as to all informants, by the centralised ombudsperson.
- (6) The executive committee of the Leibniz Association decides whether or not to make public its decisions and the report of the committee of enquiry on an individual basis under consideration of whether a legitimate public interest exists.

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