

## **Guidelines for Good Scientific Practice** in the Leibniz Association

Adopted by the General Assembly of the Leibniz Association on 27 November 2015. Present version adopted by the General Assembly of the Leibniz Association on 28 November 2019.

#### Preamble

The Leibniz Association and its member institutions are conscious of the responsibility to inform their scientists of the rules of good scientific practice and to use appropriate methods and measures to protect themselves against scientific misconduct.

Honesty in the search for truthful findings is the basis for valid scientific work. The rules of good scientific practice stem from this principle, and safeguarding their validity and application is a key responsibility of the scientific community.

The member institutions of the Leibniz Association hereby commit themselves to the rules and procedures set down in these guidelines and recognise the latest version of the DFG Code of Conduct "Guidelines for Safeguarding Good Research Practice" as the legally binding framework for applying them.

#### § 1 Subject-matter and scope

These guidelines set out the rules of good scientific practice and define scientific misconduct. They also describe the role and duties of the central Ombuds Committee of the Leibniz Association and define the procedure for dealing with allegations of scientific misconduct at Leibniz Association level.

The member institutions of the Leibniz Association manage the election and duties of their ombudspersons and their procedures for safeguarding good scientific practice and dealing with allegations of scientific misconduct in accordance with these guidelines. They also define the possible sanctions at institution level for scientific misconduct committed by employees.

#### § 2 Rules of good scientific practice

- 1) Good scientific practice includes, in particular:
  - a. Working lege artis, observing current professional and discipline-specific standards,
  - b. Fully documenting all steps and results of an experiment or research study and keeping protocols and research data securely. Experimental protocols must record the aim, conditions, procedures and results of the experiment in a replicable form that cannot be altered after the event,
  - c. Critically and systematically checking the validity and replicability of all results of experiments and other research designs,

- d. Practising honesty in recognising the contributions of everyone involved and transparency in disclosing third-party funding providers,
- e. Respecting the intellectual property of others in all publications and properly acknowledging all citations and borrowings,
- f. Taking responsibility, as an author of a scientific publication, for the content and presentation of the results and their discussion in general and explicitly identifying and justifying cases in which responsibility covers only a part of the publication,
- g. Providing appropriate supervision for scientists working towards qualifications, including sufficient teaching of skills, ongoing individual supervision and an appropriate and documented academic assessment of theses and dissertations,<sup>1</sup>
- h. Working responsibly with others and carrying out scientific leadership tasks responsibly within the institution as a whole and in its individual work units, including ensuring transparent organisational forms, a sufficiently clear division of responsibilities and duties, and systematic avoidance of any abuse of power or exploitation of dependent relationships,
- i. Prioritising the originality and quality of scientific work as evaluation criteria for promotions, recruitment, appointments and resource allocations.
- 2) Scientific publications should describe scientific findings and how they were reached comprehensively and in a way that can be replicated. Previously published results may be included in later publications only if they are essential for understanding the context of the publication and if reference is made to the first publication.
- 3) Only someone who has made a significant personal contribution to the design of the research studies or experiments, to drawing up, analysing or interpreting the data and writing the manuscript itself, and who has agreed to the publication may be listed as an author of an original scientific publication, i.e. share responsibility for it. So-called 'honorary authorships' are not admissible. Where appropriate, the authorship arrangements should form the subject of a collaboration agreement.
- 4) Research data must be kept in their entirety in an accessible form for at least ten years. Data for which publicly accessible repositories exist should be made available to these repositories. Information about workflows and about the materials, methods and software employed should be made accessible, insofar as this is possible and reasonable.

#### § 3 Scientific misconduct

1) Scientific misconduct includes misrepresentation and misstatements in a scientifically relevant context, in particular:

<sup>&</sup>lt;sup>1</sup> The conditions for academic careers in the Leibniz Association are subject to separate guidelines and recommendations.

- a. inventing data,
- falsifying data (for instance, by selecting desirable results or evaluation methods or dismissing unwanted results or evaluation methods, without disclosing this decision, or by manipulating diagrams or illustrations),
- c. including incorrect information in publication lists or funding applications (including false information about the publication medium or about forthcoming publications),
- d. undisclosed duplication of publication of data or texts.
- 2) Scientific misconduct includes the infringement of intellectual property rights, in particular:
  - a. in relation to works of others that are protected by copyright, or to significant scientific findings, hypotheses, theories or research approaches of others:
    - the unauthorised appropriation or other use of passages without proper acknowledgement (plagiarism),
    - exploitation of research approaches or ideas without approval, especially as a reviewer,
    - assuming or unjustifiably claiming scientific authorship or co-authorship, or refusing the same,
    - falsifying content or
    - unauthorised publication or unauthorised sharing with third parties while the work, findings, hypothesis, theory or research approach has not yet been officially published;
  - b. using another person's name as (co-)author without their permission.
- Scientific misconduct includes sabotaging the research activities of others including damaging, destroying or manipulating experiment installations, equipment, documents, hardware, software, chemicals or other things that the other person needs to conduct an experiment.
- 4) Deleting research data is a form of scientific misconduct insofar as it violates legal requirements or established principles of scientific practice, as is the unlawful failure to delete data (especially personal data).
- 5) The neglect of scientific leadership responsibility or supervision duties by a leader of a work group or institute in a way that promotes violations of good scientific practice is a form of scientific misconduct.
- 6) Agreeing to be a co-author while risking involvement in a falsified publication is a form of scientific misconduct.
- 7) The deliberate pretence of having carried out or made use of quality assurance measures and methods (e.g. peer review) is a form of scientific misconduct.

#### § 4 Central and decentralised ombudspersons

- Up to four central ombudspersons are proposed by the Executive Board and elected by the Senate of the Leibniz Association. Together, they form the Ombuds Committee of the Leibniz Association. Ombudspersons are elected for four years and may be re-elected once. The ombudspersons should possess the personal integrity and objective power of judgment in matters of good scientific practice required to fulfil their duties.
- 2) The Senate may deselect central ombudspersons if three-quarters of its members vote in favour of the move, in the event that it no longer appears possible for them to fulfil their duties reliably in the long term, or if there is no longer any trust that they will fulfil their duties properly. The ombudsperson in question is to be granted the option of a hearing before such a decision is taken.
- 3) The Ombuds Committee of the Leibniz Association advises ombudspersons and scientists within the member institutions and helps establish a culture of good scientific practice and scientific integrity within the Leibniz Association. It can submit position statements to the institutions, the Executive Board and President of the Leibniz Association. In addition, the Ombuds Committee investigates allegations of scientific misconduct levelled at employees and former employees of member institutions of the Leibniz Association on the basis of these Leibniz Association guidelines. The Ombuds Committee appoints one of its members as a spokesperson and governs other particulars of its working methods independently. Its work is supported by Leibniz Headquarters.
- The scientists of each member institution of the Leibniz Association elect one or more 4) ombudspersons as a point of contact for discrepancies, suspicions and matters of dispute (decentralised ombudspersons). These ombudspersons should possess the personal integrity and objective power of judgment required to fulfil their duties and may not be members of their institution's central management board. The length of their term of office is set by the member institution. One or more deputy ombudspersons may also be elected for the same period. The institute's management board arranges for a secret ballot to be held following proper rules, and ensures that the work of the ombudspersons is sufficiently visible and independent and receives adequate support. The member institution should adopt a provision in its rules of good scientific practice (see § 1) on deselection of the ombudspersons in the event that it no longer appears possible for them to fulfil their duties reliably in the long term, or if there is no longer any trust that they will fulfil their duties properly. This provision must provide for the ombudspersons to be deselected only if at least two-thirds of the scientists in the member institution are in favour of the deselection. Before a deselection decision is taken, the ombudspersons must be given a hearing.
- 5) The decentralised ombudspersons advise the scientists in the member institution and arbitrate in conflicts relating to good scientific practice. They may submit position statements to the management of the Leibniz institution in question, and they help establish a culture of good scientific practice and scientific integrity within the Leibniz institution. They also investigate allegations of scientific misconduct in a formal procedure. If, during the course of the investigation, it emerges that it is not possible to fully resolve the allegations at the level of the member institution, or if the process is hindered by

exceptional circumstances, the decentralised ombudspersons should submit the case to the Leibniz Ombuds Committee. The option of contacting the German Research Ombudsman remains unaffected by this provision.

### § 5 Investigations by the Leibniz Association's central Ombuds Committee of allegations of scientific misconduct, and setting up a committee of inquiry

- 1) Notifications and information relating to scientific misconduct that are pertinent to the inquiry must be addressed in writing to the central Ombuds Committee of the Leibniz Association, which will generally confirm receipt within one month.
- 2) The central Ombuds Committee deals with allegations submitted by a decentralised ombudsperson (see § 4, para. 5) or if it is notified by affected persons, third parties, or even anonymously, of a suspicion of scientific misconduct at a member institution of the Leibniz Association. As a general rule, the processing of cases by the decentralised ombudsperson takes precedence. In each case, the allegations must be specific enough to give rise to reasonable grounds for an initial suspicion of misconduct.
- 3) The name of any whistleblower will be treated in confidence. As a rule, disclosing the name to the accused person is only necessary if the accused is not able to defend themselves properly against the allegations in any other way. The central Ombuds Committee also has a duty as far as possible to prevent the whistleblower suffering disadvantages in terms of their scientific and professional advancement, and to protect accused persons against unjustified allegations. This duty also applies to any additional individuals or bodies involved in the investigation later on.
- 4) If sufficiently specific allegations have been made and there are grounds for initial suspicion of scientific misconduct, the central Ombuds Committee will conduct a preliminary investigation. To carry out this preliminary investigation, it will, as a rule, give a hearing to at least the accused and the whistleblower, either orally or in writing. It can also consult other individuals and seek expert opinions to help clarify the situation. Following the preliminary investigation, the central Ombuds Committee determines whether there is a need to set up a committee of inquiry.
- 5) The accused and the whistleblower are informed of the result of the preliminary investigation by the central Ombuds Committee. As a rule, the result of the preliminary investigation is presented to the Executive Board of the Leibniz Association at its next meeting.
- 6) A committee of inquiry to investigate allegations of scientific misconduct is set up by a resolution taken by the Executive Board. If the Executive Board deviates from the result of the preliminary investigation by the central Ombuds Committee, it must have good reasons for doing so, e.g. consideration of circumstances that were not taken into account in the preliminary investigation, and must disclose this justification to those involved.

# § 6 Committee of inquiry to investigate allegations of scientific misconduct

- 1) A committee of inquiry to investigate allegations of scientific misconduct has the duty to investigate in full any allegations of scientific misconduct that fall within the scope of these guidelines. The committee is bound by the standards of good scientific practice and the definitions of scientific misconduct set out in these guidelines. It also takes account of established professional standards that go beyond the scope of these guidelines and its work is guided by the common principles for finding the truth.
  - 2) The Ombuds Committee selects the members of the committee of inquiry in consultation with the Executive Board. A designated member may refuse to take part if they have good cause. At least three voting members must belong to the committee of inquiry, including
    - a. the chairperson of the scientific advisory council of the member institution in question and/or the spokesperson of the Section in question,
    - b. another member with the expertise necessary to fully understand the scientific facts of the case and who is not an employee of the member institution in question,
    - c. a fully qualified lawyer.

At least one member of the central Ombuds Committee, usually the spokesperson, is a non-voting member of the committee of inquiry.

- 3) All voting members of the committee of inquiry have the same voting rights. The rules of bias apply, in accordance with the Leibniz Competition regulations.
- 4) The committee of inquiry deliberates in private, oral proceedings. In its first meeting, it agrees on the rules of procedure. It appoints a chairperson from among its members, who is responsible for chairing the meetings. The committee of inquiry also instructs one of its members with suitable expertise to search for exonerating arguments, like a lawyer for the accused, and to contribute these arguments to the committee's discussion.
- 5) The members of the committee of inquiry and the staff from Leibniz Headquarters involved for the purpose of supporting the committee, and all individuals involved in, or informed of, the proceedings are under an obligation of confidentiality.
- 6) A committee of inquiry must be given access to all data and documents it requests from the member institutions and Leibniz Headquarters.
- 7) The committee of inquiry will give the accused person and the whistleblower a hearing and will establish the context of the conduct forming the subject of the complaint. The committee of inquiry may question other people and request expert opinions or bring in assessors in an advisory capacity.

- 8) As a rule, the committee of inquiry should complete its investigation within six months of the meeting called to set up the committee.
- 9) The committee of inquiry will produce a report for the Executive Board of the Leibniz Association in which it assesses whether a case of scientific misconduct exists. If the committee of inquiry concludes that there is a case of scientific misconduct, i.e. if the majority of the committee of inquiry believes there is sufficient evidence of scientific misconduct, the report must, in particular:
  - a. present and evaluate the extent of the scientific misconduct and
  - b. determine and justify whether the misconduct was a result of negligence or gross negligence, or whether it was wilful.
- 10) The report may also record what further steps or measures the committee of inquiry recommends.

#### § 7 Conclusion of the process

- The Executive Board of the Leibniz Association will deal with the committee of inquiry's report in the meeting following receipt of the report. It establishes the existence of scientific misconduct or takes a decision to close the case. If its decision deviates from the opinion in the committee of inquiry's report, this must be adequately justified.
- 2) If the misconduct is the result of negligence, the Executive Board may decide on the following measures against the individual in question:
  - a. A written reprimand,
  - b. A demand to withdraw incriminating publications or in less severe cases to correct incorrect information by publishing an erratum.
- 3) If the misconduct was premeditated or the result of gross negligence, the Executive Board may decide on the following measures against the individual in question:
  - a. A written reprimand,
  - b. A demand to withdraw incriminating publications or in less severe cases to correct incorrect information by publishing an erratum,
  - c. Loss of passive voting rights for Leibniz Association bodies for one to five years (depending on the severity of the scientific misconduct),
  - d. Exclusion of the individual in question from leading roles in projects for which funding applications have been submitted through the internal Leibniz competition process for one to five years (depending on the severity of the scientific misconduct).
- 4) If the Executive Board determines, based on the committee of inquiry's report, that the scientific misconduct may result in the individual being stripped of their academic qualification, it will forward the case to the university that awarded the qualification. The



management board of the member institution is responsible for instigating any disciplinary consequences or consequences under employment, civil or criminal law.

- 5) The key reasons that led to the case being closed or to decisions by the Executive Board regarding measures to be taken must be communicated to those involved and to any whistleblowers.
- 6) The Executive Board of the Leibniz Association will decide on a case by case basis whether to pass on or publish its resolutions and the committee of inquiry's reports, taking into account the existence of legitimate third-party interest.
- 7) As far as proceedings within the Leibniz Association are concerned, the decisions taken by the Executive Board of the Leibniz Association on the basis of the report submitted by the committee of inquiry are final.