

Rules for Ensuring Good Scientific Practice

and Procedures for Dealing with Scientific Misconduct at the Leibniz Institute on Aging – Fritz Lipmann Institute

Preamble

Research institutions are obliged, within the framework of their own responsibilities, to observe and implement the principles of good scientific practice in order to protect science and themselves from dishonesty in scientific work and counterfeiting and to take action against misuse and manipulation of scientific results.

As a member organization of the Leibniz Association, the following rules of the FLI are based on the "Guideline for Safeguarding Good Scientific Practice and Dealing with Allegations of Scientific Misconduct in the Leibniz Association" of 29 November 2018¹, the framework of which is set out in the memorandum "Securing Good Scientific Practice" of the German Research Foundation².

All employees of the FLI who are entrusted with scientific tasks are obliged to comply with these rules. New employees are obliged to comply with these rules when they are hired. The rules, including information about the current ombudsperson³ and his or her representative, are publicly accessible on the FLI website⁴

I. Rules of Good Scientific Practice

§ 1 Definition

- 1) Good scientific practice means working *lege artis* and always following the latest state of knowledge. It requires knowledge and exploitation of current literature, the application of the latest methods and findings.
- 2) It is characterised by self-criticism, by critical examination of the knowledge gained and its control, for example by mutual examination within the research groups, but also by honesty regarding the contributions of colleagues, co-workers, competitors and predecessors.
- 3) Careful quality assurance is an important characteristic of scientific probity. It is - in addition to honesty towards oneself and others as an ethical norm - the basis for scientific professionalism. It is guaranteed by (critical) cooperation in scientific research groups and clear structures of responsibility.
- 4) The assurance of quality and thus good scientific practice also includes the documentation of all work steps and the safe storage of all records (documentation obligation and security), the assurance of reproducibility before publication (criteria of repeatability and traceability) as well as the creation of access possibilities for authorised third parties.
- 5) An essential aspect of good scientific practice is responsibility for (co-)authorship. The authors of scientific publications are jointly responsible for their contents; honorary authorships are excluded. The author is accountable, identifies himself with the scientific result and assumes responsibility for the content of the publication.

¹ https://www.leibniz-gemeinschaft.de/fileadmin/user_upload/downloads/Forschung/Gute_wissenschaftliche_Praxis/Guidelines_on_Safeguarding_Good_Scientific_Practice_2018.pdf

² https://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/empfehlung_wiss_praxis_1310.pdf

³ <https://www.leibniz-fli.de/research/good-scientific-practice/ombudsperson/>

⁴ <https://www.leibniz-fli.de/research/good-scientific-practice/>

§ 2 Organizational Structures

The research group leaders, also in their function as Scientific Supervisor of a Core Facility, are responsible for the management, supervision, conflict resolution and quality assurance of the scientific work at FLI.

By means of appropriate directives and in compliance with the provisions of the Works Constitution Act, they ensure that

- the objectives of the research work and tasks of the individual scientist are determined, defined and distributed,
- each employee is clearly assigned his or her responsibilities (rights and duties),
- regular checks on compliance with targets are carried out,
- rules on recording and data documentation are laid down, insofar as they go beyond the institute-wide rules and guidelines,
- the appropriate supervision and counselling of younger scientists, doctoral students, diploma students and trainees is guaranteed.

§ 3 Documentation

Original data and laboratory books (paper and electronic) are the property of FLI. Retiring employees must hand these over to the research group leader or, if the group is terminated, to the Scientific Director. The data must be kept for 10 years. Retiring employees can make copies of the original data and (electronic) laboratory books at the expense of the FLI and take them with them.

§ 4 Authorship

The authors of an original scientific publication should be all, but also only those, who have contributed substantially to the conception of the studies or experiments, to the elaboration, analysis and interpretation of the data, to the formulation of the manuscript itself and have agreed to its publication, i.e. who are responsible for its entirety.

§ 5 Training

The responsible group leader shall ensure that the rules of good scientific practice are taught and that special attention is paid to compliance with them during training, professional advancement and supervision of young scientists.

§ 6 Evaluation criteria

When establishing performance and evaluation criteria, the FLI ensures that originality and quality always take precedence over quantity.

§ 7 FLI ombudspersons and conflict resolution

- 1) The scientists and technical staff of the FLI elect an ombudsperson and a deputy ombudsperson from among the scientists with a doctorate who should not belong to the same research group. Ombudspersons may not be members of the Institute's management. The FLI Board is responsible for conducting the secret ballot. The term of office of the ombudspersons is four years. Re-election is possible. The acting ombudspersons will be notified to the employees and announced on the Institute's internal website.

- 2) If it no longer seems possible for an ombudsperson to fulfil his or her duties reliably on a permanent basis or if confidence in the proper fulfilment of his or her duties is no longer justified, an ombudsperson may be voted out of office. An ombudsperson is deselected if at least 2/3 of the scientists of the FLI agree to the deselection. The ombudsperson must be given the opportunity to make a statement (hearing) before the Scientific Director of the FLI has scheduled a de-selection. The reasons for the execution of a de-selection and the hearing of the ombudsperson concerned must be recorded in writing.
- 3) The ombudsperson is the contact for questions of good scientific practice. The ombudsperson has no formal rules of procedure, but is guided by the principles of confidentiality, procedural fairness and transparency for the parties involved. Conflict resolution is - as far as possible - carried out in consensus with the parties involved and with the aim of finding an amicable solution for all parties (mediation) and in compliance with good scientific practice.
- 4) The ombudsperson subjects allegations of scientific misconduct to a preliminary examination. If this results in a concrete initial suspicion of scientific misconduct (Section II, §8), a "procedure for dealing with scientific misconduct" (Section II, §§ 9 ff) is initiated.
- 5) The identification of scientific misconduct and the imposition of sanctions is not the task of the ombudsperson. In the case of justified initial suspicion of scientific misconduct, the ombudsperson shall call in the Scientific Director or the Chairman of the Scientific Advisory Board of the FLI.
- 6) Employees from the research group of an ombudsperson shall address questions on good scientific practice and allegations of scientific misconduct by an elected ombudsperson to the ombudsperson who is not the head of their own research group or, if applicable, to the Scientific Director of the FLI.

II. Procedure for dealing with scientific misconduct

§ 8 Scientific misconduct^{1,2}

- 1) Scientific misconduct includes false declarations and misrepresentations in a scientifically relevant context, in particular through
 - the invention of data,
 - the falsification of data (for example, by selecting, without disclosing it, or by manipulating a representation or illustration, or by rejecting unwanted results or evaluation procedures),
 - incorrect information in publication lists or in an application for funding (including incorrect information on the publication organ and publications in print),
 - Multiple publication of data or texts without appropriate disclosure.
- 2) Scientific misconduct includes the infringement of intellectual property rights, in particular:
 - a) in respect of a legally protected work created by others or of essential scientific findings, hypotheses, teachings or research approaches originating from others:
 - the unauthorized adoption or other use of passages without adequate proof of authorship (plagiarism),
 - the exploitation of research approaches and ideas without consent, in particular as experts,
 - the presumption or unfounded acceptance of, or refusal to accept, scientific authorship or co-authorship,
 - falsification of the content; or
 - unauthorised publication and making available to third parties as long as the work, knowledge, hypothesis, teaching or research approach has not been lawfully published;
 - b) the use of authorship or co-authoring by another person without their consent.

- 3) Scientific misconduct shall include the unfair obstruction of the research activities of others - including the damaging, destruction or manipulation of experimental set-ups, equipment, documents, hardware, software, chemicals or other items required by others to carry out an experiment.
- 4) If this violates legal provisions or recognized principles of scientific work, the removal of research data as well as the unlawful non-removal of (in particular personal) data shall be deemed scientific misconduct.
- 5) The neglect of the scientific management responsibility and the supervision duty by research group or institute management in a way that promotes violations of good scientific practice is scientific misconduct.
- 6) Co-authoring by accepting participation in a forged publication is scientific misconduct.
- 7) Deliberately pretending to carry out or make use of quality assurance measures and procedures (such as peer review) is scientific misconduct.

§ 9 Procedure for dealing with scientific misconduct

- 1) The Scientific Director of the FLI shall be informed immediately in the event of a justified initial suspicion of scientific misconduct. If he himself is affected, the Chairman of the Scientific Advisory Board should be called in. As a rule, the Scientific Director or the Chairman of the Scientific Advisory Board shall be informed in writing; in the case of oral information, the Scientific Director or the Chairman of the Scientific Advisory Board shall draw up a written note.
- 2) The facts on which the initial suspicion is based shall be ascertained. The exact determination of the events shall take place without avoidable delay. The investigations shall be initiated by the Scientific Director and, if the Scientific Director himself is concerned, by the Chairman of the Scientific Advisory Board. For the clarification of facts, competent experts may be called in. These investigations shall be conducted with strict confidentiality and protection of all parties concerned.
- 3) The person affected by the suspicion of misconduct shall be given the opportunity to comment, stating the incriminating facts and evidence. The time limit for this shall not exceed one week. The identity of an informant shall not be disclosed to the person concerned at this stage of the proceedings without his consent.
- 4) After receipt of the statement of the person concerned or after expiry of the time limit, the Scientific Director or the Chairman of the Scientific Advisory Board shall make a decision within a period of one week as to whether the findings so far have invalidated the suspicion of misconduct, whether further investigations are necessary or whether misconduct is to be regarded as proven. This decision must be recorded in writing in a note. In particular, the note should be based on the Leibniz Guideline:
 - a) describe and evaluate the extent of such scientific misconduct and
 - b) establish and justify whether such conduct was negligent, grossly negligent or intentional.
- 5) The individual steps shall be completed, accurately recorded and documented without avoidable delay or within the specified deadlines.
- 6) If, in the course of the proceedings, it becomes apparent that the FLI is unable to conclusively clarify the allegations or that extraordinary circumstances prevent the conduct of the proceedings, the FLI ombudsperson in accordance with §4(2) of the Leibniz Guideline¹ shall submit the procedure in written form in accordance with §5(1) of the Leibniz Guideline¹ to the central ombudsperson of the Leibniz Association, who shall take over the proceedings in accordance with §5(2)-(6) of the Leibniz

Guideline¹. Within the framework of this procedure, the central ombudsperson pursuant to §5(5) of the Leibniz Guideline¹ may decide on the necessity of establishing a committee of inquiry, which is appointed pursuant to §5(7) of the Leibniz Guideline¹ by resolution of the Executive Board of the Leibniz Association.

§ 10 Committee of Inquiry of the Leibniz Association¹

- 1) The Association's central ombudsperson shall, in agreement with the headquarters select the members of the Committee of Inquiry. A designated member may refuse to cooperate for important reasons. The Committee of Inquiry shall consist of at least three members entitled to vote, including
 - a) the Chairman of the Scientific Advisory Board of the member institution concerned and / or the responsible Section Spokesperson,
 - b) another member who has the professional competence to fully understand the scientific facts of the case and who is not a staff member of the member organisation concerned,
 - c) a fully qualified lawyer.

The central ombudsperson shall be a member of the Committee of Inquiry without voting rights.

- 2) All voting members of the Committee of Inquiry shall have equal voting rights. The rules of bias apply in accordance with the rules of the Leibniz Competition.
- 3) The Committee of Inquiry deliberates in non-public and oral hearings. At its first meeting it agrees on rules of procedure. It appoints a chairperson from among its members to chair the meetings. It shall also instruct one of its professionally qualified members to search for exculpatory arguments in the sense of a lawyer for the accused and to introduce these into the discussion of the committee.
- 4) The members of the Committee of Inquiry and the employees of the headquarters involved in supporting the Committee as well as all persons involved in the proceedings or informed about the proceedings are obliged to maintain confidentiality.
- 5) A committee of inquiry shall have access to all data and documents requested by it from member institutions and the central office.
- 6) The Investigative Committee shall hear the accused person and the whistleblower and determine the context of the conduct complained of. The Investigation Committee may question other persons and obtain expert opinions or consult experts.
- 7) As a rule, the review by the investigating commission should be completed within a period of no more than six months from the constituent meeting of the investigating commission.
- 8) The investigating committee shall prepare a report to the Leibniz Association Executive Board in which it assesses the existence of scientific misconduct. If the committee of inquiry comes to the conclusion that scientific misconduct exists, i.e. if the majority of the committee of inquiry considers the scientific misconduct to be sufficient, the report shall in particular:
 - a) describe and evaluate the extent of such scientific misconduct; and
 - b) establish and justify whether such conduct is negligent, grossly negligent or intentional.
- 9) The report may also state what further action or measures the Committee of Inquiry recommends.

§ 11 Conclusion of the Leibniz Procedure¹

- 1) The Executive Board of the Leibniz Association deals with the report of the investigative committee in the meeting following the receipt of the report. It determines the existence of scientific misconduct or decides to discontinue the procedure. If it deviates from the vote on the report of the Committee of Inquiry, this shall be adequately justified.
- 2) If the misconduct is based on negligence, the Executive Board may take the following measures against the person or persons concerned:
 - a) written reprimand.
 - b) Request to withdraw incriminated publications or - in less serious cases - to correct false data by publishing an erratum.
- 3) If the misconduct rests on intent or rough negligence, then the presidency can decide the following measures against the concerned person:
 - a) written reprimand.
 - b) Request to withdraw incriminated publications or - in less severe cases - to correct wrong data by the publication of an Erratums.
 - c) Withdrawal of the right to stand as a candidate for committees of the Leibniz Association for one to five years (depending on the severity of the scientific misconduct).
 - d) Exclusion of the person(s) concerned from the lead management of projects applied for in the Leibniz-internal competition for research funds for one to five years (depending on the severity of the scientific misconduct).
- 4) If, on the basis of the report of the Committee of Inquiry, the Executive Board finds that scientific misconduct may result in the withdrawal of academic degrees, it shall forward the matter to the awarding university. The management of the member institution is responsible for initiating any disciplinary, labor, civil or criminal consequences.
- 5) The main reasons which have led to the suspension of the proceedings or to resolutions of the Executive Board on measures to be implemented shall be communicated to the person concerned and to any whistleblowers.
- 6) The Executive Board of the Leibniz Association decides on the passing on and publication of its decisions and the reports of the investigating committee on a case-by-case basis, taking into account the existence of a legitimate public interest.
- 7) The decisions taken by the Leibniz Association Executive Board on the basis of the report submitted by the Investigating Committee shall be considered on a case-by-case basis.

§ 12 Consequences of Scientific Misconduct

- 1) If scientific misconduct is to be regarded as proven, the Scientific Director or the Chairman of the Scientific Advisory Board shall decide on the necessity of further measures, if required by obtaining legal expertise.

Depending on the circumstances of the individual case and in particular on the severity of the identified misconduct, sanctions may be imposed from a wide variety of legal fields, or cumulatively, as the case may be, e.g.:

- a) Consequences under labor law:
 - Warning notice,
 - Extraordinary or ordinary termination,
 - Termination of the contract;
 - b) Academic consequences:
 - Information of FSU Jena about serious scientific misconduct in connection with the acquisition of an academic qualification, so that FSU Jena can withdraw the doctoral degree or the teaching authorisation if necessary;
 - c) Consequences under civil law:
 - Issuing a house ban,
 - claims for restitution against the person concerned, e.g. for the publication of stolen scientific material,
 - Removal and injunctive relief claims under copyright law, personal rights law, patent law, competition law,
 - claims for reimbursement, such as scholarships or third-party funding,
 - claims for damages by the institution or third parties;
 - d) Consequences under criminal law;
 - e) Revocation of scientific publications.
- 2) Scientific publications which are flawed due to proven scientific misconduct shall be withdrawn if they are still unpublished and corrected if they have already been published (revocation, retraction). Cooperation partners shall be informed in an appropriate manner, if necessary. In principle, the author(s) and participating editors are obliged to do so; if they do not act within a reasonable period of time, the Scientific Director or the Chairman of the Scientific Advisory Board shall initiate the appropriate measures possible to him to achieve a correction or retraction.
 - 3) In cases of serious scientific misconduct, the Scientific Director or the Chairman of the Scientific Advisory Board shall inform other affected research institutions or research organisations, including professional organisations if necessary.
 - 4) The Scientific Director or the Chairman of the Scientific Advisory Board may be obliged to inform affected third parties and the public in order to maintain confidence in scientific honesty, to protect third parties, to restore scientific reputation, to prevent consequential damage and in the general public interest.

§ 13 Supplementary regulations

In order to ensure good scientific practice at the FLI, in addition to the above provisions, the following binding regulations apply, which can be downloaded in their current form from the website of the ombudspersons of the FLI⁵:

- Guideline Quality Control
- Rules for archiving publication-relevant data
- Rules for publishing research articles
- Accompanying form for publications
- How To: Archiving and computer-based checking of publications/theses

⁵ <https://www.leibniz-flj.de/research/good-scientific-practice/gsp-measures-at-flj/>

§ 14 Entry into force

The present "Rules for Ensuring Good Scientific Practice and Procedures for Dealing with Scientific Misconduct at the FLI" shall enter into force with the internal announcement and replace the version of May 2018.

Jena, 23rd of May, 2019



Prof. Dr. Alfred Nordheim
Scientific Director