

As of January 1, 2016 **Prof. Dr. Frank Große** is the appointed FLI ombudsman. His mandate is to advise and assist scientists and scholars in questions of good scientific practice and its impairment through scientific dishonesty. It is the job of the ombudsperson in particular to be available to all concerned as a confidential advisor in cases where there is suspicion of a violation of the principles of good scientific practice.

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Further information is available on http://www.leibniz-fli.de/research/ombudsman/

# FLI Rules of Good Scientific Practice

Regulations for ensuring good scientific practice and procedures for dealing with scientific misconduct at the Leibniz Institute on Aging - Fritz Lipmann Institute (FLI)

### Preamble

All research institutions are requested, within the scope of their own responsibilities, to protect the science and the institution from forgery and to take action against misuse and manipulation of scientific results.

The commitment to abide by the regulations of good scientific practice is also a criterion for funding by Deutsche Forschungsgemeinschaft (DFG). Therefore the following regulations are based upon the Proposals for Safeguarding Good Scientific Practice by the DFG's Commission on Professional Self Regulation in Science and the respective suggestions by the Leibniz Association.

All employees that are performing scientific tasks are obliged to abide by these regulations. Employees are instructed in writing to comply with the regulations. The regulations, including information about the incumbent ombudsman, are also made available to the public on the institute's website.

### I. Regulations for good scientific practice

### § 1 Definitions

1. Good scientific practice means to work *lege artis* (from Latin: meaning according to the rules of the "business") and to act in accordance with the latest state of knowledge. This requires knowledge and utilisation of the current literature and the application of the newest methods and findings.

2. Good scientific practice is characterised by self-criticism, by critical examination and control of the findings obtained, for instance mutual controls by colleagues within the research groups. The research work of colleagues, technicians, competitors and predecessors need to be reproduced prior to developing experiments based on their results.

3. Careful quality management is an important characteristic of scientific honesty. Together with the ethical norm of honesty towards yourself and towards others,

quality management is the basis for scientific professionalism. This scientific professionalism is ensured by critical cooperation in the scientific research groups which have clear structures of responsibility.

4. Ensuring good quality and consequently good scientific practice also includes documenting all steps of your work and the secure storage of all records (obligatory requirements for documentation and safe document storage) as well as ensuring the ability to reproduce the findings prior to publication (criteria of reproducibility and traceability) as well as granting access to authorised third parties.

5. An important aspect of good scientific practice is the responsibility with respect to coauthorship. The authors of scientific publications are jointly responsible for the content. Honorary authorships are excluded. The author is accountable for the scientific results and takes responsibility for the correctness of the content of the publication.

# § 2 Organisational Structure

The group leaders are responsible for guidance and supervision as well as for settling conflicts and for ensuring a high quality of the scientific work at FLI.

Adhering to FLI's constitution law (Betriebsverfassungsgesetz), they give appropriate instructions to ensure that:

- the research objectives and the assignments of each scientist are determined, defined and allotted
- each employees' responsibilities (rights and duties) are clearly assigned to him / her
- regular controls of the accomplishment of the set objectives are carried out
- there are set regulations on keeping records and on data documentation
- younger scientists / PhD students / diploma students and vocational trainees will receive appropriate guidance and advice

# § 3 Documentation

Original data and lab books remain the property of FLI. Employees who leave the institute are obliged to hand them over to the group leader or to the Scientific Director when the research group has resolved. The data has to be kept for ten years. Employees who leave the institute can make copies of the original data and of lab books at FLI's expense.

# § 4 Education

The regulations for ensuring good scientific practice shall be introduced to the trainees. The good scientific practice should receive special attention during vocational training, advanced vocational training and supervision of young researchers.

### § 5 Criteria for evaluation

When compiling the criteria for evaluation and assessing achievements, FLI prioritises originality and quality over quantity.

# § 6 Settling conflicts

1. FLI's scientists and technicians elect an ombudsman from the post-doctoral researchers to settle conflicts relating to good scientific practice. The ombudsman's term of office is 4 years. Re-election is possible. The employees shall be informed about the incumbent ombudsman and the information shall be posted on the intranet. Members of the ombudsman's research group shall contact FLI's Scientific Director in case of conflicts regarding good scientific practice.

2. There is no formal code of procedure for the ombudsman, yet he/she shall be guided by the principles of confidentiality, fairness of procedure and transparency for all parties involved. As far as possible, the procedure will be conducted in mutual agreement.

3. Detecting scientific misconduct and imposing sanctions are not tasks of the ombudsman. If there is a justified initial suspicion of scientific misconduct, the ombudsman shall inform the Scientific Director or the Chairman of FLI's Scientific Advisory Board.

# § 7 Authorship

All those - but only those - shall be mentioned as authors of a scientific original publication, who have:

- themselves contributed significantly to the concept of the studies or the experiments, acquiring, analysing and interpreting the data
- themselves contributed significantly to preparing the manuscript
- agreed to publish it, which means they share responsibility for the publication

# II. Procedures for dealing with scientific misconduct

### § 8 Scientific misconduct

1. Definition: Giving intentionally or grossly negligently false statements in a science relevant context, violating other scientist's intellectual property, or impairing other's work in any way - are considered scientific misconduct.

- 2. Catalogue of behaviour which is considered to be misconduct:
- 2.1. False statements
- 2.1.1. Fabrication of data
- 2.1.2. Forging data, for instance by:
  - Selecting and rejecting undesired results without disclosing it
  - Manipulating data or figures
- 2.1.3. False statements in a job application or in an application for funding (including giving false statements on the source of publication or about publications in press).
- 2.2. Violating intellectual property
- 2.2.1. Relating to work produced by another party and protected by copyrights or to scientific findings, hypotheses, teachings or research concepts primarily acquired by another party:
  - unauthorised utilisation while untruthfully claiming to be the author(plagiarism)
  - misappropriation of research concepts and ideas, in particular as reviewer (theft of intellectual property)
  - untruthful claim or unjustified acceptance of scientific authorship or coauthorship
  - falsification of content
  - unauthorised publication and unauthorised disclosure to third parties of a paper, finding, hypothesis, teaching or research concept which has not been published yet

2.2.2. Claiming a third party as (co-)author without this person's consent

2.3. Impairing other's research work by:

2.3.1. sabotaging research work (including damaging, destroying or manipulating experimental set-ups, equipment, documents, hardware, software, chemicals or other materials another party requires for conducting their experiments)

2.3.2. giving a grossly flawed, intentionally false or misleading review of a third party's research work or out of courtesy endorsing a review.

3. Joint responsibility has to be assumed for scientific misconduct, if:

- actively taking part in the misconduct of others
- knowing about forgery committed by others
- co-authorship in forged publications
- gross negligence in supervisory duty

### § 9 Initiating the procedure

1. The Scientific Director has to be informed about concrete suspicions of scientific misconduct. If the charges relate to the Scientific Director, the Chairman of the Scientific Advisory Board shall be consulted. The information shall be presented in writing, when the information is passed on orally the Scientific Director shall make a written note.

2. The facts on which the voiced suspicion is based shall be determined. The incident shall be immediately thoroughly examined. The Scientific Director or the Chairman of the Scientific Advisory Board initiates the investigation; confidentiality and protection of all those involved must be strictly guaranteed while carrying out the investigation.

3. The person charged with the suspicion of misconduct shall be given the opportunity to comment on the incriminatory charges and evidence laid against him / her no later than one week after it became known. The deadline for this must not be more than a week. During the procedure the name of the informant shall not be disclosed to the person concerned without the consent of the informant.

4. After receipt of the statement of the person concerned or after expiration of the given time limit, the Scientific Director or the Chairman of the Scientific Advisory Board shall make a decision within a week on whether the findings so far have weakened, substantiated or proven the suspicion of misconduct. The decision has to be laid down in writing. If the suspicion was substantiated, the Scientific Director or the Chairman of the Scientific Advisory Board decides on whether it is necessary to take further measures, in particular whether the spokesperson of the Section C has to be informed or the Leibniz Association's committee of inquiry shall be called in.

5. The individual steps of the procedure shall be concluded within the given periods of time and they shall be recorded in the protocol and documented.

### § 10 Leibniz Association's Committee of Inquiry

1. The Leibniz Association's Committee of Inquiry consists of a chairman and his / her deputy, the Chairman of the Scientific Advisory Board and / or the spokesperson of the respective section of the Leibniz Association, two arbitrators who are members of different sections and one representative with legal expertise. The chairman and the deputy shall not be affiliated with any Leibniz institute and are elected for a term of 3 years by the Leibniz Association's senate. The other members are appointed for the respective case by the Leibniz Association's president and in agreement with the chairman.

2. In individual cases the Committee of Inquiry can call in experts from the scientific field related to the case and experts in dealing with such cases as additional advisory members.

3. A conflict of interest of a Committee member can at all times be reported by the member him-/ herself, by the person concerned or other parties concerned. A conflict of interest results in the exclusion from the procedure; the Committee of Inquiry decides on that matter.

4. The Committee of Inquiry discusses the case in closed sessions. In agreement with the Scientific Director or the Chairman of the Scientific Advisory Board, the Committee initiates further investigations and examines in an independent assessment whether it is a case of scientific misconduct. The initiated inquiries and steps of the procedures as well as the detected facts, findings and results have to be

disclosed to the person concerned; he / she shall be granted access to all documents at all times and has the right to request information. The person concerned shall be given the opportunity to make a statement in each phase of the procedure and he / she can call in a person he / she trusts for support. The hearing of additional persons is permitted.

5. All parties involved are obliged to treat all documents of the Committee and all findings of the cases as strictly confidential.

6. The Committee of Inquiry shall conduct and conclude his investigations within 2 weeks. Each step of the procedure has to be recorded in the protocol and documented.

7. If the Committee of Inquiry decides that a scientific misconduct cannot be proven, it ceases its investigations and informs the persons involved.

8. If the Committee on Inquiry decides that a scientific misconduct is proven, it will present the result of its investigations to the Scientific Director or the Chairman of the Scientific Advisory Board.

# § 11 Consequences of scientific misconduct

1. If a scientific misconduct is considered to be proven, the Scientific Director or the Chairman of the Scientific Advisory Board, if necessary after consulting a legal expert, decide whether further measures need to be taken.

2. Depending on the circumstances of the individual case and on the severity of the detected misconduct, sanctions could be imposed according to various areas of the law, if necessary also cumulatively, such as:

2.1. Consequences according to employment law:

- warning
- extraordinary dismissal
- dissolving the employment contract
- 2.2. Academic consequences
  - informing the FSU Jena about the severe scientific misconduct related to obtaining an academic degree, so that the FSU may, if appropriate, withdraw the doctoral degree and / or the teaching qualification.
- 2.3. Consequences according to civil law:
  - issue an order to stay away [from the institute]
  - the concerned person's obligation to handover, for instance, stolen scientific material
  - claims for removal and for injunctive relief according to copyright, personal rights, patenting rights, competition law

- claims for repayment, e.g. of scholarships / grants and third party funding
- claims for compensation filed by the institute or by a third party

#### 2.4. Consequences according to criminal law

#### 2.5. Withdrawal of scientific publications

3. Scientific publications, which have been proven to be faulty due to proven scientific misconduct, are to be withdrawn if they have not been published yet and to be corrected if they have already been published. If necessary, cooperation partners have to be informed in an appropriate way. In principle, the author(s) and the involved editors are obliged to do that, if they do not perform this duty within an adequate period of time, the Scientific Director or the Chairman of the Scientific Advisory Board shall initiate appropriate measures that are available to him.

4. In cases of severe scientific misconduct the Scientific Director or the Chairman of the Scientific Advisory Board shall inform other research institutes or research associations and if necessary professional associations that are affected by the case.

5. The Scientific Director or the Chairman of the Scientific Advisory Board may be obliged to inform involved third parties or the public:

- to protect third parties
- to preserve confidence in the scientific honesty
- to restore the scientific reputation
- to avoid consequential damages or in the general interest of the public.
- in the general interest of the public

### § 12 Entry into effect

The "Regulations for ensuring good scientific practice and procedures for dealing with scientific misconduct at FLI" will take effect with its in-house announcement.

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