

**Guidelines to Safeguard Good Scientific Practice
and
Measures to Be Taken in Case of Suspicion of Scientific Misconduct
at the
University of Veterinary Medicine Hannover**

*Not an official announcement!
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of the University of Veterinary Medicine Hannover*

Preamble

Scientific work is based on principles observed in all countries and in all scientific disciplines. First among these is honesty toward oneself and others. This is also the ethical norm and foundation of the various rules that apply in the different disciplines defining scientific professionalism, or good scientific practice. One of the core tasks of scientific teaching and academic self-regulation is to instruct students in these principles and to safeguard their validity and application in practice. Good scientific practice is also a prerequisite for highly productive research that is recognized in international competition. Violation of these principles is scientific misconduct. In case of suspicion of scientific misconduct, it is the responsibility of the University to clarify the facts in an orderly way, and if necessary to impose the sanctions stipulated by law.

§ 1

Obligation to uphold the general principles of scientific work

- (1) Scientists working at the University of Veterinary Medicine Hannover are obliged to uphold the general principles of scientific work and the corresponding rules set out in Paragraphs 2 , 3 and 4 below.
- (2) The general principles of scientific work include, in particular, the following obligations: observation of the rules of the medical arts; documentation of results; consistent questioning and critical review of all of one's own results; strict honesty in regard to the work of co-workers, competitors, and predecessors.

§ 2

Responsibility to uphold the organizational principles of good scientific practice

- (1) In areas of research in which several people collaborate on scientific questions, the head of the working or research group is responsible for a suitable organization which guarantees that responsibilities for administration, supervision, conflict resolution, and quality control are clearly assigned and in fact observed.
- (2) The leader of a working group is responsible for adequate supervision of all participating undergraduate, graduate, and doctoral students. Each of these students must be assigned a single primary supervisor, who is also responsible for instructing the student in the principles of safeguarding good scientific practice at the University of Veterinary Medicine Hannover.
- (3) In their statement of intent to earn a doctorate, doctoral students must include affirmation that they will uphold the principles to safeguard good scientific

practice. The doctoral student's supervisor must confirm by her or his signature that she or he instructed the student in the guidelines to safeguard good scientific practice.

- (4) Primary data on which publications are based upon must be stored for ten years in a durable, secure form in the facility where they originated. These data, and at least one copy, must be stored securely in separate places. The scientist in question is responsible for storage and proper documentation. Furthermore, the details of every step of every experiment and every numerical calculation are to be documented so that any other knowledgeable person can reproduce the work and understand the underlying calculations. Reproducibility is the primary test of any scientific experiment.

§ 3

Standards for quality control by performance and evaluation criteria

Originality and quality always have precedence over quantity as criteria for performance and evaluation of test results, awarding academic degrees, promotion, employment, appointments, and appropriation of funds.

§ 4

Scientific publications

- (1) Responsibility for the content of scientific publications is always borne jointly by the authors. There will be no so-called "honorary authorship". In particular, this means that the only people to be named as authors of an original scientific publication are those who made substantial contributions to the conception of the studies or the experiments; or to the development, analysis, and interpretation of the data and to the formulation of the manuscript; and who agreed to the joint publication.
- (2) Particularly in publications presenting new scientific results, these must be described completely and comprehensibly. Preliminary work of one's own and others must be indicated completely and correctly (as quotations). Previously published results must be indicated clearly as such and repeated as needed for understanding in context.

§ 5

Scientific misconduct

- (1) Scientific misconduct is such behavior in a scientific context, in particular as described in Appendix 1, involving intentional or grossly negligent falsification, the theft of intellectual property, or any behavior that compromises scientific research.
- (2) Scientific misconduct is also behavior resulting from co-responsibility for misconduct of others, particularly active involvement, knowledge of fraud, co-authorship of fraudulent publications, or gross negligence of supervisory duties.

§ 6

Investigation and clarification of scientific misconduct

- (1) The University of Veterinary Medicine Hannover will investigate every concrete suspicion of scientific misconduct at this institution. Should clarification of the facts confirm the suspicion of misconduct, appropriate measures will be taken as specified for the case in question.
- (2) These measures have no effect on any other existing measures specified by law.

§ 7

Trusted third party

- (1) The University administration will appoint upon recommendation of the Senate, an experienced member of the faculty of the University of Veterinary Medicine Hannover to act as a trusted third party for members and affiliates of the University of Veterinary Medicine Hannover for a term of four years. A proxy trusted third party will also be appointed for the same term. Both appointments may be extended once.
- (2) The trusted third party will advise those persons who are informed about the suspected case of scientific misconduct, and will actively follow up on pertinent information which they may receive from other parties. The trusted third party will test the plausibility of accusations in terms of their concreteness and seriousness, consider possible motives for, and refutation of the accusations, and will communicate the results of these investigations in the matter to the committee described in Paragraph 8.

§ 8

Committee for scientific self-regulation

- (1) Accusations of scientific misconduct will be investigated by the committee for scientific self-regulation (here: the committee) previously appointed by the Senate as specified in the Constitution of the University of Veterinary Medicine Hannover for the preservation of good scientific practice. The committee is comprised of the Vice-president for Research and two further professors, as well as one representative of each of the following groups: scientific staff, students, and technical/administrative employees. The committee elects one of its members to serve as chair.
- (2) The trusted third party serves on the committee in an advisory capacity.
- (3) The committee may also appoint additional members with particular scientific knowledge or experience in such procedures to serve in an advisory capacity.

§ 9

General regulations for preliminary investigations and for the official investigation

- (1) Committee meetings are not open to the public.
- (2) Decisions of the committee are made by a simple majority.
- (3) The committee is authorized to undertake all appropriate steps needed for clarification of the facts of the case. It may collect all necessary information and expert opinions in individual cases, including those of the equal opportunity officer and experts from the field in question.
- (4) Persons suspected of misconduct are to be informed of any incriminating facts or evidence.
- (5) Both the person suspected of misconduct and the person providing information are to be given the opportunity to speak [to the committee]; and if desired, in the presence of a trusted person as an advisor.
- (6) If the identity of the informant is not known to the suspect, this must be made known to him or her as necessary for the suspect's proper defense, particularly when the credibility of the informant seems essential to determine whether the suspect is guilty of misconduct.
- (7) The committee makes its decisions freely on the basis of its convictions under consideration of the facts discovered in the investigation and the evidence submitted.

§ 10

Preliminary investigations

- (1) As soon as the commission receives concrete evidence of the suspected scientific misconduct, it will give the suspect the opportunity to respond within two weeks. The incriminating and exonerating facts and evidence are to be documented in writing.
- (2) After receipt of the suspect's response or after the two weeks have elapsed, the committee will meet and make its decision as to whether the preliminary investigation is to be concluded due to lack of evidence, or if a formal investigation is to be conducted. The reasons for the committee's decision are to be communicated in writing to the suspect and the informant.

§ 11

Procedure for the formal investigation

- (1) The chair of the committee will inform the University administration of the opening of the formal investigation.
- (2) If the committee comes to the conclusion during the formal investigation that the suspicion has not been sufficiently confirmed, the procedure will be discontinued.
- (3) If the committee considers misconduct to have been proven, it will report the results of its investigation to the University administration, with a recommendation for further decisions and actions, including those involving protection of the rights of third parties.

- (4) The substantial reasons for ending the investigation or referring it to the University administration are to be communicated in writing to the suspect(s) and the informant.
- (5) No internal complaint will be admitted against the decision of the committee.
- (6) Upon conclusion of the formal investigation, all parties who were or are involved are to be identified by the trusted third party, who will also advise all those innocently parties connected to the procedures concerning scientific misconduct as to safeguarding their personal and scientific integrity.
- (7) Records of formal investigations are to be stored for 30 years.

§ 12

Further procedures/policies/actions

- (1) If scientific misconduct has been determined, the University administration must decide whether further action should be taken to maintain scientific standards at the University and protect the rights of all parties involved both directly and indirectly. Any penalty imposed for scientific misconduct depends on the circumstances of the individual case.
- (2) Any academic consequences within the University are to be determined by the responsible employees. The University administration must determine whether and to what extent other parties should or must be informed: other employees, former and potential collaborators, co-authors; scientific institutions, publications, and publishers; funding, scientific, and professional organizations; ministries; and the public.
- (3) Depending on the circumstances, appropriate legal measures (according to labor, civil service, civil, criminal, or administrative law see Appendix 2) will be taken and the corresponding procedures implemented.

Appendix 1:

Scientific misconduct

In particular, the following behaviors are considered scientific misconduct:

1. Production and use of false information, particularly by

- fabrication and suppression of data;
- falsification of data, e.g. the use of incomplete data and failure to include undesired results without explicitly indicating such exclusion and by manipulating presentations or figures; and
- giving incorrect information in a job application, grant proposal, or publication, including false information about place of publication and publications in press, etc.

2. Violation of intellectual property

regard to copyrighted work of another person or fundamental scientific findings, interpretations, hypotheses, teachings, or research approaches of others, particularly by:

- unauthorized utilization by presumed authorship or co-authorship (plagiarism);
- exclusion of legitimate authorships;
- exploitation (theft) of research approaches and ideas of others, particularly as an expert evaluator;
- unauthorized publication and dissemination to third parties before publication of the work, results, hypothesis, teachings, or research approach; and
- claiming (co-)authorship of a person without his or her permission.

3. Elimination of primary data in such a way as to infringe on legal regulations or recognized principles of scientific work within the discipline.

4. Impairment of the research of others, for example by work sabotage, including damage, destruction, or manipulation of literature, archival, and source material, research protocols, devices, records, hardware, software, chemicals, or other things needed by another person for completion of a research project.

Appendix 2:

Catalog of possible legal consequences of scientific misconduct according to current legal regulations

Consequences according to labor or civil service law include

- warning,
- termination without notice due to cause or reasonable suspicion,
- due notice of termination,
- nullification of contract,
- removal from office.

Consequences according to civil law include

- ban on entering the house,
- demands for delivery by the person in question,
- demands for removal or to cease and desist,
- demands to return funds (scholarships, grants, etc.), and
- demands for compensation.

Consequences according to criminal law include

- criminal charges or complaint because of
- copyright violation,
- forgery,
- property damage,
- financial damage,
- violation of the realms of personal or private life, and
- causing danger to life or bodily harm.

Consequences for students include

- refusal to issue certificates, etc., in connection with scientific misconduct and
- partial ban on entering the house.