Rules for Safeguarding Good Scientific Practice and Dealing with Scientific Misconduct

At its meeting on July 13, 1999, the Scientific Council adopted the following rules:

Rules of the German Cancer Research Center Heidelberg for Safeguarding Good Scientific Practice and Dealing with Scientific Misconduct

Preliminary Remarks

Conscious of its responsibility in research and the directly related tasks of teaching and fostering junior scientists, the German Cancer Research Center is taking measures, within the framework of existing legislation, to deal with cases of scientific misconduct so that it can fulfill the expectations placed in it. The Management Board, with the consent of the Scientific Council, has therefore adopted the following rules:

§ 1 Scientific Misconduct – Definition

Scientific misconduct exists if, whether deliberately or through gross negligence, false information is provided, the intellectual property of third parties infringed, or their research activity otherwise intentionally harmed in the course of scientific work. Misconduct includes the following in particular:

a) Falsification · fabrication of data · distortion of data, e.g. by reporting selectively and rejecting undesirable results without declaring them – by manipulating illustrations or images – by providing incorrect information in an application or funding proposal (including false information about the publication organ and publications in print);

b) Infringement of intellectual property with regard to copyrighted work done by other persons or of the significant scientific findings, hypotheses, theories, or research approaches of other persons: – unauthorized appropriation under the pretense of authorship (plagiarism) – the use of other persons’ scientific approaches and ideas, especially as a peer reviewer (theft of ideas), – the pretense or unsubstantiated appropriation of scientific authorship or co-authorship, – the misrepresentation of contents, – the arbitrary delay of publication of a scientific paper, especially as publisher or peer reviewer, – or the unauthorized publication and unauthorized granting of access to third parties prior to the publication of the work, finding, hypothesis, theory or research approach;

c) claiming authorship or co-authorship without the author’s/authors’ consent;

d) sabotage of research activity (including damaging, destroying, or manipulating trial set-ups, equipment, documents, hardware, software, chemicals, cell and microorganism cultures, or other materials needed by another person to conduct an experiment);
e) misappropriation of funds and private grant benefits;

f) deletion of original data insofar as this infringes legal provisions or accepted principles of scientific work in the discipline;

A scientist may also bear responsibility for misconduct as a result of:
· participation in the misconduct of others;
· co-authorship of falsified publications;
· gross negligence of his/her supervisory obligations.

§ 2 Individual Regulations

1. All persons engaged in scientific work undertake to comply with the rules of good scientific practice. These rules shall be a constituent part of the education and training of junior scientists. For research projects, observance of these rules by all project participants shall be the responsibility of the project manager.

2. By organizing their area of work accordingly, all supervisors must ensure that the tasks of management, supervision, conflict resolution, and quality assurance are clearly allocated, and that their effective fulfillment is verifiable.

3. The project manager must ensure that the primary data used as the basis for publications is securely stored in durable form for ten years. This is without prejudice to any additional storage obligations prescribed by legal provisions or measures to protect personal data.

4. The authors of a scientific publication bear joint responsibility for its contents. Any exceptions must be clearly indicated. All scientists who make a significant contribution to the idea, planning, execution, or analysis of the research work must be named as co-authors. Persons who have made small contributions shall be mentioned in the Acknowledgements.

5. The Scientific Council will appoint three ombudsmen for a three-year term of office to be contact persons for all DKFZ staff. The ombudsmen will belong to different disciplines of basic and applied research. The ombudsmen may co-opt additional experts as consultants. They shall advise persons who have informed them about alleged scientific misconduct. They shall examine the plausibility of the allegations. The ombudsmen shall meet at least once a year and report to the Management Board.

6. In addition, the Management Board in consultation with the Scientific Council will appoint an Investigation Committee to examine allegations of scientific misconduct. The members of the Committee are as follows:
   - the Chairman of the Scientific Council (as Chairman)
   - two department heads
   - an external lawyer
   - a research associate
   - the ombudsmen as guests in an advisory capacity
   - experts in an advisory capacity (at the request of the Investigation Committee).

There will be a three-year term of office, and re-election will be possible. The Investigation Committee will take action at the request of an ombudsman or the Committee chairman.
7. In the event of suspected scientific misconduct, scientists may contact the ombudsmen or the Investigation Committee chairman without going through official channels.

§ 3 Procedure in the Event of Suspected Scientific Misconduct

1. If the ombudsmen receive a report of alleged scientific misconduct as defined in § 1 above, they will investigate the allegations according to their best judgment. If they come to the conclusion that there are sufficient grounds for suspecting scientific misconduct, they will inform the Investigation Committee.

2. The Investigation Committee is convened by the chairman. The chairman convenes the Investigation Committee at the request of an ombudsman. The Investigation Committee will also take action if a report of scientific misconduct comes to its attention directly.

3. The Investigation Committee will examine the facts within the scope of its remit and will report to the Management Board. It will proceed according to the rules of procedure in Annex 2.

The present rules enter into effect upon approval by the Scientific Council and the Management Board.

Heidelberg, September 30, 1999

Professor Harald zur Hausen
Chairman of the Management Board

Professor Werner W. Franke
Chairman of the Scientific Council
Additional Recommendations of the Scientific Council:

Taking into consideration the Memorandum of the German Research Foundation (DFG) “Safeguarding Good Scientific Practice,” the Scientific Council, at its meeting on July 13, 1999, adopted the following recommendations:

1. Particular attention must be paid to the education and fostering of junior scientists. Suitable mentoring must be ensured. This must include regular discussions and supervision of the progress made.

2. The performance and evaluation criteria for testing, career advancement, hiring, appointments, and the allocation of funding shall be defined in such a way that originality and quality take precedence over quantity.

Annex 1

Following approval of the Rules of the German Cancer Research Center Heidelberg for Safeguarding Good Scientific Practice and Dealing with Scientific Misconduct, the Scientific Council, at its meeting on September 21, 1999, appointed three ombudsmen pursuant to § 2 para. 5 and, after consultation with the Management Board, approved the appointment of an Investigation Committee pursuant to § 2 para. 6.

a) Ombudsmen (2006–2009)

Professor Ingrid Grummt
PD Dr. Ingrid Hoffmann
Professor Peter Krammer

b) Investigation Committee

Professor Christof Niehrs (Chairman of the Scientific Council as Chairman of the Investigation Committee)
PD Dr. Petra Boukamp
Professor Werner W. Franke
Professor Peter Lichter
Professor Lutz Gissmann
Dr. Wolfgang Henkel (lawyer)

Ombudsmen as guests in an advisory capacity

Experts in an advisory capacity (at the request of the Investigation Committee)
Annex 2

Rules of Procedure in the Event of Suspected Scientific Misconduct

I. Preliminary Inquiry

1. The person suspected of misconduct ("respondent") shall be informed by the Investigation Committee of the alleged facts and evidence and given an opportunity to state his/her position. The information must be conveyed in writing. The respondent shall be given a maximum of two weeks in which to state his/her position. The name of the complainant may not be revealed to the respondent without the complainant's consent.

2. On receipt of the respondent's response or after the two-week period has elapsed, the Investigation Committee will decide immediately whether, and if so which additional information is required as part of the preliminary inquiry.

3. Once this information has been obtained, or if it is deemed unnecessary, the Investigation Committee will decide immediately whether the preliminary inquiry should be terminated or whether a formal investigation should be instituted.

   a) The preliminary inquiry shall be terminated, and the respondent informed of the grounds, if the evidence of the suspected misconduct is inconclusive, or the allegations prove groundless.

   b) If the results of the preliminary inquiry demonstrate that misconduct has taken place, the Investigation Committee shall immediately issue a recommendation as to whether it regards penalties and sanctions as appropriate, and if so which (Annex 3), and shall thereupon conclude the preliminary inquiry.

   c) If the preliminary inquiry confirms the existence of sufficiently concrete grounds to suspect misconduct without being able to prove the said misconduct, the Investigation Committee shall decide immediately to institute formal investigation proceedings.

4. Provided the gathering of information is not compromised, the respondent shall be allowed to respond to the allegations throughout the preliminary inquiry, but at the latest prior to the definitive decision taken in the preliminary inquiry.

5. A written record must be kept of the reasons for, and results of, the individual steps of the preliminary inquiry, and of the grounds for ending it. The final outcome of the preliminary inquiry, along with the main grounds, shall be communicated in writing to the respondent, the Management Board and, on request, to the complainant.

6. Until culpable misconduct on the part of the respondent is proven, information about the persons involved in the proceedings and the findings of the preliminary inquiry shall be kept strictly confidential. Statements about the status or outcome of the preliminary inquiry must
be authorized by the chairman of the Investigation Committee together with the Management Board.

7. The decisions taken during the preliminary inquiry must be by a majority vote. In the event of a tie, the Investigation Committee chair shall have the casting vote.

II. Formal Investigation

1. Responsibility

The Investigation Committee is responsible for the formal investigation.

In individual cases, the Investigation Committee may co-opt referees from the relevant scientific field as well as experts with experience in dealing with such cases as additional members in an advisory capacity.

2. Procedure

a) The Investigation Committee holds closed hearings. It investigates, in a free evaluation of the evidence, whether scientific misconduct has taken place. The departments affected by the alleged misconduct must be given an opportunity to state their position in an appropriate manner. On request, the respondent must be given a hearing, for which he/she may co-opt a person whom he/she trusts for support. Any other person offered a hearing may do likewise.

b) It may be necessary to reveal the name of the complainant if the respondent cannot otherwise defend himself/herself properly, especially if the complainant’s credibility is crucial to assessing whether misconduct has taken place.

c) If the majority of the Investigation Committee considers that misconduct has been sufficiently proven, it will submit the outcome of its investigation to the Management Board with a recommendation for further steps. Otherwise, the proceedings will be terminated.

d) The respondent and the department concerned, as well as the complainant, if he/she so requests, shall be advised immediately of the main grounds for terminating the proceedings or for submitting the case to the Management Board.

e) No internal appeal against this decision is possible.

Annex 3

List of Possible Penalties and Sanctions in the Event of Scientific Misconduct

The following list of possible penalties and sanctions for scientific misconduct is intended as guidance only. Since each case is likely to be different and the seriousness of the scientific misconduct must also be taken into consideration, there can be no standard guidelines for appropriate responses. The penalty should rather be based on the circumstances of each case.
I. Penalties under Labor Law

Since in the vast majority of cases of scientific misconduct at the German Cancer Research Center (DKFZ) the respondent is likely to be an employee of the DKFZ, the first penalties to be considered should be those affecting the person’s employment.

1. Warning
2. Extraordinary notice of dismissal
3. Contractual notice of dismissal
4. Termination of employment contract

II. Academic Penalties

The German Cancer Research Center (DKFZ) is not itself authorized to impose academic penalties such as the rescinding of academic titles; this can only be done by the body that awarded the titles, usually a university. The degree-awarding body concerned must be informed of any serious scientific misconduct if this is – or was in the past – in any way related to the attainment of an academic title.

The possible penalties are:
1. rescinding of a doctorate; or
2. withdrawal of the license to teach.

III. Penalties under Civil Law

The following penalties under civil law may be considered:

1. Debarment from the institution
2. Claims for restitution of property against the respondent, for instance the restitution of stolen scientific material
3. Claims for removal and injunction arising from copyright law, personal law, patent law, and competition law
4. Claims for the return of funds, for instance of grants, external funding, etc.
5. Claims for damages by the German Cancer Research Center or third parties in the event of damage to persons or property, etc.

IV. Penalties under Criminal Law

Penalties under criminal law will be considered if it is suspected that the scientific misconduct also constitutes a criminal or administrative offence for the purposes of the German Penal Code (StGB) or other criminal law provisions. Involvement of the law enforcement authorities must be initiated by the Management Board.

Some examples constituting criminal acts are:
1. Violation of the Realm of Personal Privacy and Confidentiality
   - § 202a StGB: Data Espionage
   - § 204 StGB: Exploitation of Secrets of Another

2. Crimes against Life and Bodily Integrity
   - § 222 StGB: Negligent Homicide
   - §§ 223, 230 StGB: Intentional and Negligent Bodily Injury

To protect third parties, uphold trust in scientific honesty, restore its scientific reputation, avert consequential damages, and if it is in the general public interest, the German Cancer Research Center (DKFZ) may be obliged to inform affected third parties and the public at large, and to take whatever steps are necessary.