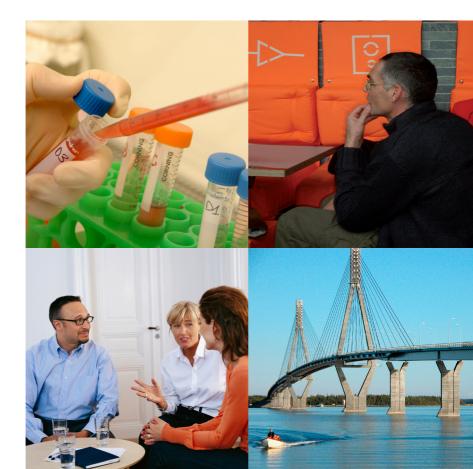


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## Integrity in scientific research

#### **Principles and procedures**



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# Integrity in scientific research

**Principles and procedures** 

#### Science at the service of society

The Swiss Academies of Arts and Sciences are an association of the four Swiss scientific academies: the Swiss Academy of Natural Sciences SCNAT, the Swiss Academy of Medical Sciences SAMS, the Swiss Academy of Humanities and Social Sciences SAHS, and the Swiss Academy of Technical Sciences SATS.

The Swiss Academies of Arts and Sciences network the various sciences at the regional, national and international levels. They represent the scientific community on both the disciplinary and interdisciplinary levels, independently of the institutions and the individual specialities. Their network is long-term oriented and is committed to scientific excellence. They provide the political world and society in general with information and advice on science-based and socially relevant questions.

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## Preface

Integrity is a positive asset in our personal life and in society in general. Scientific behaviour of integrity is therefore of prime importance in all research activity. We understand scientific integrity as the commitment of researchers to adhere to the basic rules of good scientific practice. Honesty and sincerity, self-discipline, self-criticism and fairness are indispensable for behaviour of integrity. They form the basis for all scientific activity and are prerequisites for the credibility and acceptance of science.

The increased administrative tasks, time pressure, financial constraints, the pressure of competition and social changes are all factors which today increase the temptation to attract more attention and to achieve rapid scientific success through questionable and unfair means. In the face of such trends, the ethical reflection of scientific activity must set certain limits in order to increase its credibility.

The Swiss Academies of Arts and Sciences (hereinafter called swissacademies) have therefore drawn up a «Memorandum on scientific integrity and the handling of misconduct in the scientific context» and «Principles and procedures concerning integrity in scientific research». The memorandum is intended to remind researchers, research institutions and research-promoting institutions of their responsibility for scientific integrity. The principles and rules of procedure contain recommendations for the creation of an integrity-protection organisation and for the procedure to be adopted when scientific indiscretion is suspected. They require that already existing rules be checked or revised. The swiss-academies have also appointed an ombudsperson and a «Scientific Integrity Committee», who are available primarily to provide research institutions and research-promoting institutions, but also political instances, with advice on basic questions of scientific integrity. Further information is to be found on the website, www.swissacademies ch

With the memorandum and the principles and rules of procedure, the swiss-academies wish to make their own contribution, in order that problems of scientific integrity are perceived consciously and the rules of good scientific practice are implemented with conviction.

R. Dandlihn

Prof. René Dändliker President of the Swiss Academies of Arts and Science

Prof. Emilio Bossi President of the Working-group «Scientific Integrity»

## Memorandum on scientific integrity and the handling of misconduct in the scientific context

### 1. Scientific integrity is indispensable for researchers and their institutions.

This memorandum is addressed to researchers, research institutions under public law, private research institutions and research-promoting institutions. It is intended to strengthen their sense of responsibility regarding scientific integrity, in the sense of veracity, openness and self-discipline in research. Without scientific integrity, scientific progress is at risk. Furthermore, in society integrity enhances the reputation of scientific research, and promotes understanding for new developments and the acceptance of innovations.

## 2. Intellectual honesty is a precondition for a sustainable dialogue between science and society.

Science is in fact part of society and draws considerable material resources from it. It is accountable to society for its objectives and its actions and for how it uses its material resources. Only those who act with responsibility can claim the right to freedom of research. Scientific progress can appear ambivalent to the general public and can provoke scepticism and apprehension. Only scientists who act with professional and human integrity can convincingly meet such ethical challenges.

### 3. Behaviour of integrity in the scientific context requires veracity and openness.

Scientific research is based on further development and the exchange of knowledge. Truthfulness and openness, self-discipline, self-criticism and ethical reflection are indispensable for scientific integrity. Researchers are duty-bound to openness towards the other members of their research group, and to transparency and dialogue with the scientific community and the general public. The research remains subject to the legal and con-

tractual obligations regarding secrecy. Scientists of integrity respect the limitations of freedom of research and through constant further training they keep pace with scientific development. The originality of a problem, the accuracy of the data, the reliability of the findings and the relevance of the conclusions are to be considered as more important than rapid results and a large number of publications.

## 4. Scientific misconduct is based on deception, either intentional or due to negligence.

Although it is not easy to define dishonest scientific activity exactly, the basic fact is that through scientific misconduct, either intentional or due to negligence, society and in particular the scientific community is deceived and possibly harmed.

In the framework of research projects this can happen in the planning and realisation, in the analysis, in reflexions concerning sources and ideas, in the procurement of research data, as well as in scientific expert appraisals or in the assessment of research projects and results. Violation of confidentiality or of intellectual property, fraudulent claims of authorship, dishonest impairment of a research activity, retaliatory measures against socalled whistle-blowers and incitement to dishonesty and its concealment also amount to scientific misconduct.

## 5. The Swiss Academies of Arts and Sciences are committed to scientific integrity.

The Swiss Academies of Arts and Sciences are understood to form a connecting link between science and society and they consider the assurance of scientific integrity in accordance with international standards to be one of their basic missions.

The Swiss Academies of Arts and Sciences establish basic principles regarding integrity in scientific research and make recommendations to the individual research institutions regarding procedural regulations.<sup>1</sup> They give the research institutions their support in the implementation of these principles and procedural regulations. For this purpose, they have set up an interdisciplinary committee<sup>2</sup> which provides advice and have also appointed an ombudsperson.

<sup>1</sup> www.akademien-schweiz.ch

<sup>&</sup>lt;sup>2</sup> The Committee for Scientific Integrity is made up of representatives of the Swiss Academies of Arts and Sciences. www.swiss-academies.ch

## 6. Universities, institutes and other public and private institutions must draw up binding regulations with the aim of ensuring scientific integrity and combatting scientific misconduct.

The Swiss Academies of Arts and Sciences welcome the regulations that already exist in individual universities and institutes. These sometimes require adjustment in order to ensure on the one hand that they meet the needs of the individual fields of research and on the other that they represent an interdisciplinary understanding of scientific integrity. In particular, however, they should be extended to all universities and institutes, as well as private research institutes. The individual academies and professional associations, but also the private research institutes, are required, for their part, to formulate or to adopt appropriate regulations and to revise them if they are contradictory or incomplete.

In addition to the code of conduct regarding scientific integrity, all institutions that are active in or promote research should also draw up regulations regarding how to react in cases of scientific misconduct, how to impose sanctions against them and how to report them in an appropriate manner. The principles of scientific integrity and the recommendations for procedural rules put forward by the Swiss Academies of Arts and Sciences can serve as the basis for this. Based on these principles, researchpromoting institutions, foundations, sponsors and other private promoters of research can also lay down their particular requirements with regard to scientific integrity.

Applications for research should contain a statement concerning the procedural guidelines on scientific integrity on which they are based.

The ethical committees, which are necessary for the appraisal of scientific misconduct, must never be judges in their own case. They must, however, be guided by the principle that there can be no neutrality without competence.

## 7. Commitment to scientific integrity must be integrated into graduate and postgraduate training and must be actively encouraged.

The teaching institutions undertake to increase their lecturers' and students' awareness of scientific integrity and, by suitable measures, to contribute to a working climate that promotes and encourages scientific integrity. These measures include, for example, regular reflection on scientific integrity in research seminars and conferences, the accepting a role model function by observance of an exemplary behaviour by researchers in leading positions and passing on the principles of scientific integrity in graduate and postgraduate education.

The Delegate Conference of the Swiss Academies of Arts and Sciences adopted this Memorandum on 28 June 2007.

## Principles and procedures concerning integrity in scientific research

#### A. Introduction

In their «Memorandum on scientific integrity and the handling of misconduct in the scientific context», the Swiss Academies of Arts and Science require that all research institutions and all institutions that promote research should draw up principles of good scientific practice and regulations on the handling of misconduct in the scientific context and that they should bind their employees to observance of these principles and regulations.

The swiss-academies are conscious of the fact that scientific research comprises more than the sum of individual research projects. Scientific integrity in the widest sense cannot be dissociated from a responsible attitude to the human thirst for knowledge and scientific curiosity. However, in order that they may remain practicable, these principles and regulations have to be restricted to the conception, the realisation and the scientific reflexion of research projects. The principles of scientific integrity also extend analogously to other aspects of scientific activity.

The Swiss Academies of Arts and Science have drawn up principles and regulations for the handling of scientific misconduct. These model regulations are based on already existing national and international regulations and recommendations, in particular the guidelines of the SAMS<sup>1</sup>, the Ethics-Codex of the SATS<sup>2</sup>, the regulations of the Swiss universities (especially the University of Geneva<sup>3</sup>), the recommendations of the

<sup>&</sup>lt;sup>1</sup> Swiss Academy of Medical Sciences: Integrity in Science. Guidelines of the SAMS for scientific integrity in medical and biomedical research and for the procedure to be followed in case of misconduct, 1 June 2002. www.samw.ch

<sup>&</sup>lt;sup>2</sup> Swiss Academy of Technical Sciences: Ethik im technischen Handeln, June 2003. www.satw.ch

<sup>&</sup>lt;sup>3</sup> Intégrité dans la recherche scientifique. Directives relatives à l'intégrité scientifique dans le domaine de la recherche et à la procédure à suivre en cas de manquement de l'intégrité, 12. April 2005. www.unige.ch

 $\mathsf{DRC}^4$  and the European Science Foundation  $^5,$  and the Memorandum of the ALLEA  $^6.$ 

#### B. Principles of scientific integrity

#### 1. Conditions

#### 1.1. Veracity and transparency

Scientific research is based on the elaboration and exchange of knowledge. Veracity, self-discipline and self-criticism are therefore essential for behaviour of integrity in the field of science. Researchers are bound to a spirit of openness and transparency with regard to the other members of their research groups and to self-critical dialogue with the scientific community and the general public. Active communication is essential for the building up of trust and confidence. However it is subject to the legal and contractual obligations to maintain contractual professional secrecy.

Persons, who are responsible for supporting research or for the expert appraisal of applications for research projects or of research results, must declare any possible conflicts of interests<sup>7</sup> and, if necessary, they must not take part in the project in question or must abstain from voting on the project.

#### 1.2. Exemplary behaviour and fairness

Decision-makers in research institutes and institutions that promote research are committed to scientific integrity. They actively contribute to the creation of a working environment that promotes scientific integrity, are conscious of their function as examples to others and pass on the principles of scientific integrity in the context of pregraduate and postgraduate training.

<sup>&</sup>lt;sup>4</sup> Deutsche Forschungsgemeinschaft (German Research Community): Empfehlungen der Kommission «Selbstkontrolle in der Wissenschaft». Vorschläge zur Sicherung guter wissenschaftlicher Praxis, January 1998. www.dfg.de

<sup>&</sup>lt;sup>5</sup> European Science Foundation: Good Scientific Practice in research and scholarship, December 2000. www.esf.org

<sup>&</sup>lt;sup>6</sup> All European Academies: Memorandum on Scientific Integrity, 2003. www.allea.org

<sup>7</sup> See Point 2.3.2.

The obligation to display fairness must be guaranteed especially towards persons who, on the basis of internal knowledge within the institution, may express a suspicion of scientific misconduct.

#### 1.3. Promotion of the coming generation of young scientists

Researchers in positions of authority coach their subordinate co-workers in an appropriate manner and place the necessary means at their disposal. They also recognise good, but perhaps unconventional ideas, which may not necessarily correspond to their own research objectives or to the current trend.

#### 2. Planning of research projects

#### 2.1. Definition of research objectives

«The freedom of scientific teaching and research is guaranteed.»<sup>8</sup> A responsible perception of this freedom does, however, also set certain limits, especially in the choice of ethically questionable research objectives and methods, with possibly harmful effects on individuals, society in general or the environment, or in the case of a disproportionate demand on the means available.

#### 2.2. Integrity and quality of the research project

The integrity and quality of the research presuppose self-critical judgment and ethical reflection on the part of the individual researcher and the scientific community. In particular, unrealistic objectives, unfounded claims regarding scientific relevance or the raising of unjustified expectations are to be avoided. The originality of a problem, the accuracy of the data, the reliable and complete evaluation of the materials and the findings and the relevance of the conclusions are to be considered as more important than rapid results and a large number of publications. This also applies, by analogy, to recruitment, appointments and promotions, as well as the award of academic degrees.

<sup>&</sup>lt;sup>8</sup> Art. 20 of the Swiss Federal Constitution.

#### 2.3. Project plan<sup>9</sup>

#### 2.3.1. Documentation

The research plan and all subsequent modifications to it must be available in writing. They must be fully comprehensible for all the participants and for persons who wish to check the research results. The plan must provide information on the persons responsible for the project and their specific roles, on the financing and its sources and on the handling of the data or materials. It must establish, as far as is possible, which persons have access to which data during the course of the research project, and which participants will continue to have access to the data after they have eventually left the project or the research institute concerned.

#### 2.3.2. Conflicts of interests

The promoters and sponsors of the research and external principals undertake to respect the freedom of action of the researchers. If under certain circumstances they nevertheless do have an influence on the research, it must be established, in detail, under what conditions and to what extent they have this right (planning, realisation, evaluation and publication). These agreements must be set down in writing and made available to the superior instance and to any appropriate ethical committee. This also applies in the case of research projects, which are financed by private institutions.<sup>10</sup>

All persons participating in a research project must make their financial and other interests and relationships known to their superiors, to the responsible authorities and to other authorised persons<sup>11</sup>, insofar as these could come into conflict with their research activity.

Personal interests must not be allowed to influence an individual's objectivity in the evaluation of projects or publications.

<sup>&</sup>lt;sup>9</sup> With research projects in which several institutions participate, special attention must be paid to the aspects presented below and appropriate agreements must be drawn up in writing.

<sup>&</sup>lt;sup>10</sup>On this point, see SAMS guidelines, «Zusammenarbeit Ärzteschaft–Industrie» («Collaboration between the Medical Profession and Industry»), New Version 2006. Clinical Research.

<sup>&</sup>lt;sup>11</sup> The justification may be based on a legal disposition, an agreement or a directive of an institution.

#### 2.3.3. Patenting

If a patent application is to be considered, the relevant rights and obligations must be established in good time, in the form of an agreement between all the participants.

#### 3. Realisation of research projects

#### 3.1. Data and materials

In order that research can be checked, tests and experiments can be reproduced and data can be reevaluated differently, all data (incl. raw data) must be fully, clearly and accurately documented. Data and materials must be stored in such a way that damage, loss or manipulation is excluded. This applies to both hand-written and electronic data. Special situations, e.g. loss of data and deviations from the original research plan, must be documented.

The project management is responsible for ensuring that after the completion of the project the data and materials are stored for a period of time appropriate for the specific field. It is also responsible for ensuring their durability and protection.

#### 3.2. Disclosure of information relating to the project

The persons participating in the project are obliged to exercise discretion.<sup>12</sup> However, within the research group there must be open and free exchange of ideas. As long as a project is ongoing, what may or may not be communicated to outsiders must be discussed with all the participants.

After completion of the project and after the results are available, the data and materials that are necessary for carrying out a check or a repetition of the project, must possibly be made available.

#### 3.3. Publications<sup>13</sup>

The publication of research results is the primary medium through which researchers give an account of their work. Publications communicate new knowledge and provide an important stimulus for the further development of research and for possible applications for the benefit of society.

<sup>&</sup>lt;sup>12</sup> Subject to possible legal obligation to provide information.

<sup>&</sup>lt;sup>13</sup>Publications are understood to be not only written texts, but also oral contributions and sound and picture documents.

The following principles apply for the publication of research results:

- The results are to be communicated impartially and in their entirety.
- The person who, through his personal scientific work, has made an important contribution to the planning, the realisation and the evaluation or checking of the research work must be listed as author. A leading position in the research institution alone and financial and organisational support of the project do not justify the nomination of anyone as author of the publication. The concept of honorary authorship does not exist. It is therefore recommended to establish the authorship of the publication as early as possible.
- If the authors do not agree that they are jointly responsible for the content of the publication, it is the head of the research project that guarantees the correctness of the whole publication. In this case the other authors are responsible for those contents which they have formulated or which they are able to check on the basis of their function within the research project.
- Presentation of the knowledge obtained in several different publications, only for the purpose of increasing the number of titles published, is to be avoided.

#### 4. Misconduct in the scientific context

In principle, misconduct in the scientific context can be interpreted very broadly. It is obvious when legal standards have been infringed (e.g. through violation of human dignity and of the personal rights or through damage to health). However, less obviously but nevertheless effectively, scientific research can also destroy cultural assets, harm public interests, use resources in a manner not compatible with sustainable development or it can provide knowledge that constitutes a threat to humanity and the environment. These dangers cannot be eliminated by regulations, but they do show that the responsibilities of science extend beyond all the positively established standards.

The conditions detailed below are restricted to scientific misconduct in the planning, realisation and evaluation of research projects. Misconduct in the scientific context consists of deliberate or negligent deception to the detriment of the scientific community and society in general. Conduct is considered to be negligent if generally and specifically recognised duties of care are infringed. Incitement is considered as misconduct just as much as is tolerated joint knowledge.

#### 4.1. Infringement of relevant legal regulations

Scientific misconduct can infringe relevant legal regulations, e.g. in criminal law and civil law, copyright, patent rights and legislation on therapeutic products, organ transplantation, environmental protection and genetic engineering, or the law on animal protection. Such infringements can be punished in accordance with the law, irrespective of the recommendations presented in this document.

#### 4.2. Dishonest behaviour

Scientific misconduct can occur in all fields of research. That is:

- in the theoretical conception and in the realisation especially of experiments, and in scientific reflection;
- in the dissemination of research data (e.g. through unauthorised authorship);
- in the expert appraisal of applications for grants and of the results of research which are submitted for publication;
- through the violation of intellectual property;
- through dishonest damage to, and obstruction of, research activity;
- through retaliatory measures, taken openly or covertly, against persons who make allegations on the basis of inside knowledge obtained in the research institute or through the checking of scientific data (so-called whistle-blowers).

A comprehensive list of dishonest activities does not exist. The rules of good practice for the particular specialist field may serve as reference in this connection. The following lists of infringements are based on experience in cases that have occurred up to now.

#### 4.2.1. Infringements against scientific interests

- invention of research results;
- deliberate falsification of data, false presentation and deliberately misleading processing of research results, arbitrary weighting of data:
- exclusion of data and findings without declaration and without justification (falsification, manipulation);
- concealment of the sources of data;
- elimination of data and materials before expiry of the statutory period of retention of records;
- refusal to guarantee authorised third parties' access to the data.

#### 4.2.2. Infringements against individual interests

In the planning and realisation of research projects:

- copying of data without the permission of the responsible project leader (data piracy) for purposes not related to the project;
- damage to, and obstruction of the research work of others, within or outside one's own research group;
- violation of duties of discretion;
- disregard of the duty of surveillance.

In the publication of research results:

- plagiarism, i.e. copying or other forms of theft of intellectual property;
- claiming of authorship, without having made a significant contribution to the research work;
- deliberate non-mention of participants who have made significant contributions to a project; deliberate mention, as co-author, of a person who has not made any significant contribution;
- deliberate non-mention of significant contributions of other coauthors;
- intentionally false citations;
- incorrect information on the publication status of one's own work (e.g. «Publication in Press», when the manuscript has not yet been accepted).

In expert appraisals and peer reviews:

- deliberate concealment of conflicts of interests;
- violation of duties of discretion (professional secrecy);
- negligent or intentional wrong assessment of projects, programmes or manuscripts;
- unfounded judgments in order to create advantages, either personal or for the benefit of third parties.

Against persons who make allegations:

 The nature and the extent of retaliatory measures can differ very considerably (e.g. passing-over of the person concerned with regard to possible promotion; notice to quit).

## C. Recommendations on the handling of misconduct in the scientific context

Scientific misconduct must not be tolerated. If there is suspicion of an infringement of scientific integrity it must be verified by means of a specific procedure, whether there is any misconduct. It is primarily the base institutions<sup>14</sup> that are responsible for carrying out this procedure. These institutions must plan a procedure that takes into account the current legislation. They are especially recommended to set up their own organisation for the protection of integrity or to come to an agreement on cooperation to this end with another institution.

If there is suspicion of an infringement of scientific or individual interests, the procedure will be initiated by the base institution on its own initiative or by notification. The base institution must also check and verify the suspicions and allegations made by the public against a co-researcher. The following procedural rules apply, irrespective of procedures under-

taken by legal authorities on the basis of relevant legal regulations (see also Point 5.2.1., in particular).

#### 5. Organisation and procedure

The following proposal defines the various procedural steps that are necessary and assigns them to the individual authorities. An institution can, however, assign several procedural steps to an individual person or to a single instance, provided the objectivity and the independence of the procedure are guaranteed.

#### 5.1. Competence

The base institution where the infringement has presumably taken place is responsible for the assessment of allegations, provided there are no other organisational constraints. It best knows the local circumstances, it has the necessary specialist competence and its involvement promotes self-control. It passes on its decision to the superior instance.

<sup>&</sup>lt;sup>14</sup> «Base institution» is understood to be an institution within which one or more research establishments are operating (examples: an university or also individual faculties and private companies where research is carried out).

#### 5.2. Organisation of integrity protection

The base institution organises the protection of integrity, taking into account the relevant federal and cantonal regulations. With an integrity protection organisation in the sense of these procedural recommendations, the various procedural steps are shared between the following persons or panels: the ombudsperson, the integrity protection commissioner, a factfinding panel and a decision-making panel, who intervene case by case. The members of the integrity protection organisation are independent in respect of the handling of cases of scientific misconduct.

#### 5.2.1. Ombudsperson

Each base institution must nominate an ombudsperson, who is appointed for a certain period of office, acts as contact person in the case of suspected scientific misconduct and functions as advisor and arbitrator. He or she must also draw the attention of persons who allege violation of relevant legal regulations to the fact that they must observe the procedural regulations relevant for the jurisdiction concerned, regarding deadlines for example, independently of an integrity protection procedure of the institution responsible.

#### 5.2.2. Integrity protection commissioner

Each base institution must nominate an integrity protection commissioner, who is appointed for a certain period of office, is responsible for directing the procedure and sets up a fact-finding panel.

#### 5.2.3. Fact-finding panel

The fact-finding panel must consist of at least two persons. These are designated by the integrity protection commissioner, case by case, and establish the facts of the case. For specialist support or in order to increase the acceptance of their decisions they may call in external experts.

#### 5.2.4. Decision-making panel

The base institution, case by case, nominates the members of the decisionmaking panel. Persons who are not members of the base institution may also belong to the decision-making panel.

The decision-making panel makes the decision on the matter on behalf of the base institution, i.e. it assesses whether misconduct has occurred or not, justifies its decision and can recommend measures of a personnel and/or organisational nature.

#### 5.3. Conditions of the procedure

#### 5.3.1. Hearing

In every case, the person incriminated must be given a hearing and may call in a person of confidence or a legal advisor.

#### 5.3.2. Documentation

Written minutes are kept on all stages of the procedure. All the documents relating to the case are to be kept on file by the integrity protection organisation or the base institution.

#### 5.3.3. Confidentiality

All the parties involved in the procedure are bound to confidentiality. In particular, the person making the allegation also has the right to confidentiality. The base institution takes steps to protect this person against any reprisals or discrimination, especially if the person making the allegation is in a dependent relationship to the person incriminated.

#### 5.3.4. Partiality

Persons who, because of close relationship, close friendship or enmity, a former or present competitive situation, financial or organisational dependency on the incriminated person, the person making the allegation or other persons and institutions directly or indirectly involved, may be considered to be potentially partial, may not participate in the procedure. Not only actual partiality but also any appearance of partiality is to be avoided.

At the beginning of each phase of the procedure, both the incriminated person and the person making the allegation will be informed of the composition of the responsible panel. They are free to refuse the presence of partial individuals on the panel, and if this refusal is found to be justified the composition of the panel will be changed accordingly.

#### 5.4. Course of the procedure

#### 5.4.1. Advice

The ombudsperson is available to all persons who seek his advice on matters relating to dishonesty or who make allegations of scientific misconduct. If it is possible that the scientific misconduct violates the relevant legal regulations (see Point 4.1.), the ombudsperson must inform the person making the allegation accordingly. Without the express authorisation of the person seeking his advice, the ombudsperson observes silence regarding the information obtained in the course of his discussions. He or she does not take any action against persons who incriminate themselves during these discussions, unless they expressly authorise him to do so, in the sense of a self-incrimination. This does not apply in situations where there is a legal obligation to make a declaration.

#### 5.4.2. Allegation

If scientific misconduct is suspected, an allegation can be raised with the ombudsperson, who gives a hearing to both the person making the allegation and the person incriminated.

In the case of minor infringements, the ombudsperson can settle the matter by taking appropriate measures. If the incriminated person or the person making the allegation is not in agreement with this decision, they may contest it with the integrity protection commissioner, within 30 days after notification.

If on the basis of his preliminary examination the ombudsperson considers that the initiation of a procedure is justified, he or she submits the case to the integrity protection commissioner. The allegation must be submitted in writing by this time, at the latest.

#### 5.4.3. Establishment of the facts

The integrity protection commissioner is responsible for the fact-finding procedure and sets up a fact-finding panel. In order to guarantee the availability of evidence or to prevent possible damage, he or she can prescribe appropriate preventive measures (e.g. confiscation of documents, closing of the laboratory etc.).

The fact-finding panel proceeds with the necessary investigations. As a rule, it has six months in which to do this. It gives the incriminated person the opportunity to speak about the allegations and comments of third parties, to submit evidence and to ask for additional investigations to be carried out.

If there is danger to the general public, the integrity protection commissioner informs the corresponding superior instance and proposes appropriate measures.

#### 5.4.4. Suspension of the procedure

In the absence of scientific misconduct, the fact-finding panel asks the integrity protection commissioner, in writing, to suspend the procedure. After hearing the incriminated person and the person making the allegation, the integrity protection commissioner decides on the request of the fact-finding panel for suspension of the procedure. If one of these persons raises an objection to the suspension of the procedure, the integrity protection commissioner refers the case on to the decision-making panel.

#### 5.4.5. Referral to the decision-making panel

If the allegation of scientific misconduct is considered to be fully or partly justified, the fact-finding panel submits the dossier to the integrity protection commissioner with the request that the base institution sets up a decision-making panel.

#### 5.4.6. Arriving at a decision on the issue

The decision-making panel does not carry out any investigations, but arrives at its decision on the basis of the documents provided by the fact-finding panel and after giving a hearing to the incriminated person and the case-reporting person as well as the integrity protection commissioner. If the hearing results in new viewpoints, the decision-making panel can get the fact-finding panel to make further investigations and to supplement the dossier.

The work of the decision-making panel should not take longer than three months.

If the allegation proves to be unfounded, this will be established in the context of a decision, in writing.  $^{\rm 15}$ 

If the allegation is found to be fully or partly justified it will be stated, in the decision, which persons acted dishonestly and what the scientific misconduct in fact involved.

Furthermore, the decision-making panel may recommend to the base institution measures of a personnel and/or organisational nature, which should reduce the risks of dishonest behaviour in the future. Provided such measures are not directed against the incriminated person either directly or indirectly, they do not have to be contained in the decision, but can be communicated in another way.

<sup>&</sup>lt;sup>15</sup> It must also be established whether a procedure was initiated with malicious intent. If this was the case, the person making the allegation will be considered responsible.

#### 5.4.7. Notification

The decision-making panel, together with the integrity protection commissioner, makes its decision known, in writing, to the incriminated person, to the person making the allegation and to the management of the base institution.

Possible information to the general public is a matter for the base institution or its superior instance.

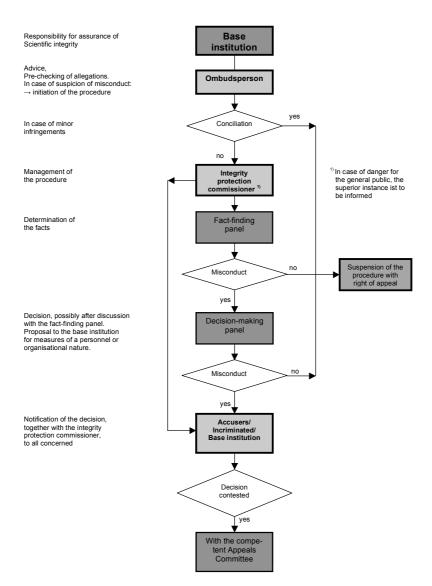
#### 5.4.8. Sanctions

The sanctioning of misconduct is to be in accordance with the law applicable to the institution and the measures established for such situations.

#### 5.4.9. Appeal

The incriminated person or the person making the allegation may contest the decision of the decision-making panel with the competent Appeals Committee, in writing, within 30 days of its notification.

#### 6. Procedure in case of suspicion of scientific misconduct



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