Helmholtz-Centre Potsdam

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DFG

CODE OF CONDUCT

GFZ

Helmholtz-Zentrum
POTSDAM

Helmholtz-Centre Potsdam DFG Code of Conduct

SECTION A: PRINCIPLES

Guideline 1: Commitment to the general principles

The GFZ, with the participation of their members, works to define rules of good research practice, ensure that their employees are made aware of these guidelines and related policies and regulations, and require their employees to comply with them with due regard for the type of research undertaken in the relevant subject area. Individual researchers are responsible for ensuring that their own conduct complies with the standards of good research practice.

Explanations:
This includes in particular:

- *to work lege artis (according to the recognized rules of science).*
- *to maintain strict honesty with regard to one's own contributions and those of others*
- *to consistently doubt all results yourself and*
- *to allow and promote critical discourse in the scientific community.*
- *The GFZ is based on the framework guidelines adopted by the general meeting of the HGF to ensure good scientific practice (GWP) and procedures in the event of scientific misconduct*
- *(https://www.helmholtz.de/assets/helmholtz_gemeinschaft/Bilder/Cover/22_Helmholtz_Rahmenleitlinie_gwP_Stand300722.pdf).*

Guideline 2: Professional ethics

Researchers are responsible for putting the fundamental values and norms of research into practice and advocating for them. Education in the principles of good research begins at the earliest possible stage in academic teaching and research training. Researchers at all career levels regularly update their knowledge about the standards of good research practice and the current state of the art.

Explanations:
Experienced scientists and young scientists support each other in the continuous learning and further education process and are in regular contact. Doctoral candidates and doctoral supervisors at the GFZ deal with the rules of good scientific practice at an early stage as part of the onboarding process and as part of the mandatory supervision agreements and undertake to comply with them. Regulations of the respective universities are included. This guideline corresponds to the "GFZ management guidelines" (https://intranet.gfz-potsdam.de/en/services/human-resources/personnel-development/gfz-management-guidelines)

In addition, the GFZ will develop an online module on good scientific practice to be completed annually and integrate it into the existing training portal at the GFZ and accompany the discussion process at the centre with a multi-part lecture series.

Guideline 3: Organisational responsibility of heads of research institutions

The heads of the GFZ create the basic framework for research. They are responsible for ensuring adherence to and the promotion of good practice, and for appropriate career support for all researchers. The heads of research institutions guarantee the necessary conditions to enable researchers to comply with legal and ethical standards. The basic framework includes clear written policies and procedures for staff selection and development as well as for early career support and equal opportunity.

Explanations:
The GFZ has developed clear, written procedures and principles for

- *standards for advertising and filling positions,*
- *structured personnel selection procedures taking gender equality (F/M/D) and diversity into account*
- *an equal opportunities plan in accordance with the State Equal Opportunities Act,*
- *a transparent fixed-term policy that provides for mandatory perspective discussions,*
- *transparent fixed-term guidelines,*
- *a conflict counselling and complaints centre with regular consultation hours,*
- *comprehensive annual interviews for all employees,*
- *an offer of confidential individual career advice,*
- *access for employees from science, administration and management to mentoring offers as well*
- *standards for structured doctoral training.*

The knowledge and use of these instruments for personnel selection and personnel development, with particular consideration of equal opportunities and the promotion of young scientists, are evaluated through employee surveys.

Guideline 4: Responsibility of the heads of research work units

The head of a research work unit is responsible for the entire unit. Collaboration within the unit is designed such that the group as a whole can perform its tasks, the necessary cooperation and coordination can be achieved, and all members understand their roles, rights and duties. The leadership role includes ensuring adequate individual supervision of early career researchers, integrated in the overall institutional policy, as well as career development for researchers and research support staff. Suitable organisational measures are in place at the level of the individual unit and of the leadership of the institution to prevent the abuse of power and exploitation of dependent relationships.

Explanations:
The GFZ has developed management guidelines that serve as a framework for orientation and action for all employees and managers at the centre. These guidelines aim, among other things, to ensure that managers at the GFZ reflect on and further develop their leadership activities.
The annual review includes management feedback as part of this. Leadership behaviour is also discussed in regular employee surveys. Employees at the GFZ further have the

opportunity to visit the conflict counselling centre and receive support in the event of conflicts in dependency relationships.
Managers with disciplinary management responsibility have the opportunity to further educate themselves and network within the framework of the GFZ's internal management training courses and the Helmholtz Academy's programs for managers.

Guideline 5: Dimensions of performance and assessment criteria

To assess the performance of researchers, a multidimensional approach is called for; in addition to academic and scientific achievements, other aspects may be taken into consideration. Performance is assessed primarily on the basis of qualitative measures, while quantitative indicators may be incorporated into the overall assessment only with appropriate differentiation and reflection. Where provided voluntarily, individual circumstances stated in curricula vitae – as well as the categories specified in the German General Equal Treatment Act *(Allgemeines Gleichbehandlungsgesetz)* – are taken into account when forming a judgement.

Explanations:
In addition to gaining insights and critically reflecting on them, other performance dimensions are taken into account in the assessment, for example commitment:

- *during the apprenticeship*
- *in academic self-administration*
- *in the provision and preparation of research data*
- *in public relations*
- *in knowledge and technology transfer*

Aspects of scientific attitude such as openness to knowledge and willingness to take risks are also included. Personal family or health-related downtime, extended training or qualification periods, alternative career paths or comparable circumstances will be taken into account appropriately.
When assessing scientific performance, the GFZ follows the concept of "informed peer review". Quantitative indicators are always used in the context of other qualitative and quantitative indicators. This is also taken into account in centre-internal assessments by scientific groups (QUIBS quantitative-qualitative internal assessment system), as well as Helmholtz-wide within the framework of program-oriented funding (centre progress reports). The GFZ is guided by the „San Francisco Declaration on Research Assessment (DORA)" and aims to sign it.

Guideline 6: Ombudspersons

The GFZ appoints at least one independent ombudsperson to whom their members and employees can turn with questions relating to good research practice and in cases of suspected misconduct. They take sufficient care to ensure that people are aware of who the ombudspersons at the institution are. For each ombudsperson there must be a designated substitute in case there is any concern about conflicts of interest or in case the ombudsperson is unable to carry out his or her duties.

Explanations:

- *on the recommendation of the Scientific Council, the board appoints at least three experienced scientists with management experience as ombudspersons and contact*

persons in questions of scientific misconduct for three years each, as well as one scientist as a representative. The ombudspersons are represented by the designated representative and also represent each other in the event that an ombudsperson is biased or prevented from doing so.

- *the term of office of ombudspersons at the GFZ is limited to three years. Another term is possible.*
- *Ombudspersons may not be a member of a central governing body of their institution while exercising this office.*
- *Ombudspersons advise on questions of good scientific practice and in suspected cases of scientific misconduct and, as far as possible, contribute to solution-oriented conflict mediation.*
- *Ombudspersons accept inquiries while maintaining confidentiality and, after preliminary clarification of the matter, forward a written report to the investigative commission.*
- *Ombudspersons receive the necessary support and acceptance from the GFZ in carrying out their tasks. In order to increase the functionality of the ombudsman system, the GFZ provides for measures to relieve the burden on the ombudspersons in other ways.*
- *GFZ employees can either contact the GFZ ombudsperson or the Ombudsman Committee for Scientific Integrity in Germany and the central ombudsperson of the Helmholtz Association.*

SECTION B: RESEARCH PROCESS

Guideline 7: Cross-phase quality assurance

Researchers carry out each step of the research process *lege artis*. When research findings are made publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels), the quality assurance mechanisms used are always explained. This applies especially when new methods are developed.

Explanations:
Continuous quality assurance in the GFZ refers in particular to compliance subject-specific standards, established methods and processes such as

- *standardized documentation of all relevant metadata, such as the methods, devices, sensors, tools, samples and processes used*
- *calibrating devices, tools and sensors*
- *collection, processing and analysis of research data,*
- *selection and use of research software, its development and programming as well*
- *keeping laboratory and field books*
- *Documentation of parameters/data/settings of scientific modelling*

An essential part of quality assurance is the requirement that results or findings can be replicated or confirmed by others. Therefore, the origin of the data, organisms, materials and software used is identified and subsequent use is documented; Original sources are cited. The type and scope of the resulting research data are described and the handling of them is designed in accordance with the requirements of the subject concerned. The source code of publicly available software must be persistent, citable and documented.

In order to support this culture, various guidelines in the GFZ provide orientation and further detailed information:

- *Guidelines for scientific publications (open access as standard, open data publication as standard, open licenses as standard with a view to subsequent use, use of persistent identification for publications, people, projects, samples, devices)*
- *Principles for handling research data at the GFZ*
- *Guidelines for the exploitation and licensing of research software*

If findings have been made publicly available and discrepancies or errors subsequently become apparent, these will be corrected. The scientists work with the relevant publisher, infrastructure provider, etc. as quickly as possible to ensure that the correction or, if necessary, the withdrawal takes place and is indicated accordingly. The same applies if third parties point out such discrepancies or errors. Corrected publications are also recorded in the GFZpublic publication database.

Guideline 8: Stakeholders, responsibilities and roles

The roles and responsibilities of the researchers and research support staff participating in a research project must be clear at each stage of the project.

Explanations:

- *those involved in a research project communicate regularly.*
- *they define their roles and responsibilities appropriately. These will be adjusted if necessary.*
- *the GFZ role descriptions are defined in detail within the framework of the signature and representation rules (https://intranet.gfz-potsdam.de/en/services/policies-and-forms/internal-regulations/general/regulations-governing-signatures-and-representation/representation-unit-4)*

Guideline 9: Research design

Researchers take into account and acknowledge the current state of research when planning a project. To identify relevant and suitable research questions, they familiarise themselves with existing research in the public domain. The GFZ ensures that the necessary basic framework for this is in place.

Explanations:

- *the GFZ provides a range of infrastructure to support the research design process (e.g., library and information services).*
- *the GFZ provides structured assistance for the preparation, implementation and follow-up of processes during the course of an expedition or field operation (https://intranet.gfz-potsdam.de/services/expeditions)*
- *Scientists examine whether and, if so, to what extent gender and diversity can be significant for the project (with regard to methods, work program, goals, etc.). When interpreting findings, the respective framework conditions are taken into account.*
- *as far as possible, the GFZ uses methods to avoid (unconscious) biases when interpreting findings.*

Guideline 10: Legal and ethical frameworks, usage rights

Researchers adopt a responsible approach to the constitutionally guaranteed freedom of research. They comply with rights and obligations, particularly those arising from legal requirements and contracts with third parties, and where necessary seek approvals and ethics statements and present these when required. With regard to research projects, the potential consequences of the research should be evaluated in detail and the ethical aspects should be assessed. The legal framework of a research project includes documented agreements on usage rights relating to data and results generated by the project.

Explanations:

- *Scientists are continually becoming aware of the danger of instrumentalizing research results.*
- *Your responsibility includes compliance with legal requirements, as well as the obligation to use your knowledge, experience and skills in such a way that risks can be identified, assessed and evaluated.*
- *Scientists pay particular attention to the aspects associated with security-relevant research (dual use).*
- *The GFZ is responsible for the compliance of the actions of its members and their relatives and promotes this through appropriate organizational structures.*
- *The GFZ develops binding principles for research ethics and procedures for the appropriate assessment of research projects.*
- *Scientists make documented agreements on usage rights in the research project as early as possible. This is ensured, among other things, by the employees of the technology transfer and the GFZ legal department.*
- *Documented agreements are the rule at the GFZ if several institutions are involved in a research project or if it is foreseeable that a scientist will change research institution and would like to use the data generated by him/her for his/her own research purposes.*
- *Copyright belongs to the scientist who collects it. The employer (GFZ) is generally entitled to the rights of use. The GFZ coordinates with the scientists (and science support staff) about possible exploitation of the usage rights. The GFZ ensures that scientists can use the data they have collected themselves in a research project, at least until the project is completed. As part of an ongoing research project, the GFZ decides in consultation with the scientists (and science support staff) whether third parties should have access to the data. This is usually the case when usage rights are required by project partners for the successful implementation of research projects.*

Guideline 11: Methods and standards

To answer research questions, researchers use scientifically sound and appropriate methods. When developing and applying new methods, they attach particular importance to quality assurance and the establishment of standards.

Explanations:

The use of a method requires specific skills, which may be covered through appropriate collaborations. The establishment of standards for methods, the use of software, the collection of data and the description of results are prerequisites for the comparability and

transferability of research results. The GFZ promotes this methodological competence and standardization, for example, through participation in national and international committees, but also through close cooperation within Helmholtz, for example through participation in initiatives such as the Data Hub of the Earth and Environment research area or in the platforms of the Helmholtz Incubator.

Guideline 12: Documentation

Researchers document all information relevant to the production of a research result as clearly as is required by and is appropriate for the relevant subject area to allow the result to be reviewed and assessed. In general, this also includes documenting individual results that do not support the research hypothesis. The selection of results must be avoided. Where subject-specific recommendations exist for review and assessment, researchers create documentation in accordance with these guidelines. If the documentation does not satisfy these requirements, the constraints and the reasons for them are clearly explained. Documentation and research results must not be manipulated; they are protected as effectively as possible against manipulation.

Explanations:
An important basis for enabling replication is the information about

- *research data used or created,*
- *Method, evaluation and analysis steps,*
- *if necessary, to document the origin of the hypothesis,*
- *Traceability of citations*
- *Where possible, third parties will be permitted access to this information. When developing research software, the source code is documented. In order to support this culture, various guidelines in the GFZ provide orientation and further detailed information:*
- *Guidelines for scientific publications (open access as standard, open data publication as standard, open licenses as standard with a view to subsequent use, use of persistent identification for publications, people, samples, devices)*
- *Principles for handling research data at the GFZ*
- *Guidelines for the exploitation and licensing of research software*

The GFZ supports scientists in implementing this guideline with various information and research infrastructures. This includes services that accompany the entire life cycle of research data from measurement to publication.

Guideline 13: Providing public access to research results

As a rule, researchers make all results available as part of scientific/academic discourse. In specific cases, however, there may be reasons not to make results publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels); this decision must not depend on third parties. Researchers decide autonomously – with due regard for the conventions of the relevant subject area – whether, how and where to disseminate their results. If it has been decided to make results available in the public domain, researchers describe them clearly and in full. Where possible and reasonable, this includes making the research data, materials and information on which the results are based, as well as the methods and software used, available and fully explaining the work processes. Software programmed by researchers themselves is made publicly available along with the

source code. Researchers provide full and correct information about their own preliminary work and that of others.

Explanations:

- *The GFZ supports open access publishing. This is documented, for example, in the "Guidelines for scientific publications".*
- *In addition, as the centre of the Helmholtz Association, the GFZ is guided by the Open Access Guidelines of the Helmholtz Association (https://os.helmholtz.de/open-access/open-access-policies/open-access-guideline-2016 /) and the position paper on the handling of research data "Making resource information more usable" (https://forschungsdaten.info/nachrichten/nachrichten-anzeige/position-der-helmholtz-gemeinschaft-zu-forschungsdaten-1/)*
- *The principle of open data is anchored in the joint research program of the Earth and Environment research area "Changing Earth – Sustaining our Future".*
- *The "Principles for handling research data at the GFZ" are based on the FAIR principles for research data management - data should be findable, accessible, interoperable and reusable.*
- *Whenever possible, scientists make the research data and central materials on which the publication is based accessible in recognized archives and repositories. With GFZ Data Services, the GFZ offers a corresponding recognized service to the Library and Information Services department.*
- *Restrictions may arise in the context of patent applications and contract research carried out solely on behalf of a private client.*
- *If specially developed research software is to be made available to third parties, it will be provided with an appropriate license. See also*
- *Guidelines for scientific publications (https://intranet.gfz-potsdam.de/services/regelen-und-formulare/interne-regelen/uebergreifdes/wissene-veroeffentlichungen)*
- *Guideline for the exploitation and licensing of research software (https://intranet.gfz-potsdam.de/fileadmin/intranet/doc/Communities/AK_Software/GFZ-Wahlir-zur-Verwalt-und-Licensing-von-forschungssoftware-v1.0 .pdf)*
- *Taking into account the idea of "quality over quantity", scientists avoid inappropriately small-scale publications.*
- *They limit the repetition of the content of their publications to the extent necessary to understand the context.*

Guideline 14: Authorship

An author is an individual who has made a genuine, identifiable contribution to the content of a research publication of text, data or software. All authors agree on the final version of the work to be published. Unless explicitly stated otherwise, they share responsibility for the publication. Authors seek to ensure that, as far as possible, their contributions are identified by publishers or infrastructure providers such that they can be correctly cited by users.

Explanations:

The contribution must be made to the scientific content of the publication. Whether a contribution is genuine and comprehensible depends on the subject area concerned and must

be examined in each individual case. A comprehensible, genuine contribution is particularly important when there is significant participation:

- *the development and conception of the research project or*
- *the development, collection, procurement and provision of data, software, sources or*
- *the analysis/evaluation or interpretation of the data/sources and the conclusions drawn from them or*
- *writing the manuscript*

An honorary authorship where no such contribution has been made is not permitted. A management or supervisory position does not in itself constitute co-authorship. If a contribution does not justify co-authorship, support can be appropriately acknowledged in footnotes, in the foreword or in the acknowledgment.
The scientists involved agree on authorship. The order of the authors is usually agreed upon at the latest when the manuscript is formulated, based on comprehensible criteria and taking into account the conventions of each subject area.
The necessary consent to publish results may not be refused without sufficient reason. The refusal must be justified with verifiable criticism of data, methods or results. The contribution of an individual to a research achievement should be communicated transparently whenever possible. The best way to do this is to use the credit taxonomy, which many magazines already support (https://casrai.org/credit/). Further information can be found in the "Guidelines for scientific publications".

Guideline 15: Publication medium

Authors select the publication medium carefully, with due regard for its quality and visibility in the relevant field of discourse. Researchers who assume the role of editor carefully select where they will carry out this activity. The scientific/academic quality of a contribution does not depend on the medium in which it is published.

Explanations:
In addition to publications in books and specialist journals, specialist repositories, data and software repositories of the GFZ can also be considered. A new or unknown publication is checked for its reliability. A key criterion in the selection decision is whether the publication organization has established its own guidelines for good scientific practice.
The GFZ Library and Information Services department offers suitable repositories for all research products. In the text area, this is GFZpublic, which not only functions as a publication database and open access repository, but also serves as an electronic publishing platform. The GFZ Data Services data repository is available for research data and software publications. In addition, the Library and Information Services department offers assistance and testing services in selecting publications and assessing their reliability. In the guidelines for scientific publications, "predatory publishing" is specifically excluded.

Guideline 16: Confidentiality and neutrality of review processes and discussions

Fair behaviour is the basis for the legitimacy of any judgement-forming process. Researchers who evaluate submitted manuscripts, funding proposals or personal qualifications are obliged to maintain strict confidentiality with regard to this process. They disclose all facts that could give rise to the appearance of a conflict of interest. The duty of confidentiality and disclosure of facts that could give rise to the appearance of a conflict of interest also applies to members of research advisory and decision-making bodies.

Explanations:
The confidentiality of third-party content precludes passing it on to third parties and your own use. Scientists should immediately report any conflicts of interest or bias that may exist in relation to the research project or the person or subject of the assessment/advice to the responsible body.

Guideline 17: Archiving

Researchers back up research data and results made publicly available, as well as the central materials on which they are based and the research software used, by adequate means according to the standards of the relevant subject area, and retain them for an appropriate period of time. Where justifiable reasons exist for not archiving particular data, researchers explain these reasons. The GFZ ensures that the infrastructure necessary to enable archiving is in place.

Explanations:
When scientific findings are made publicly available, the underlying research data (usually raw data) are generally kept accessible and traceable for a period of ten years at the institution where they were created or in multi-site repositories. In justified cases, shortened retention periods may be appropriate; the corresponding reasons are described in a comprehensible manner. The retention period begins on the date of public access. The GFZ supports scientists by providing suitable infrastructure, e.g., backup, long-term archiving of physical samples or for research data publication.

SECTION C: NON-COMPLIANCE WITH RESEARCH PRACTICE, PROCEDURES

Preamble:

Scientific misconduct occurs when principles of good scientific practice are intentionally or grossly negligently violated or circumvented for non-scientific purposes. The spectrum of possible scientific misconduct can range from criminal, criminal acts to marginal violations of principles of scientific ethics. At the same time, it can be a violation of civil law obligations, particularly employment contractual obligations.

The following are particularly considered scientific misconduct:

Falsification of scientific facts, for example
- Invention/faking results,
- Distorting results, for example by concealing and hiding “undesirable” results,
- knowingly ignoring the contrary relevant results of others,
- intentionally distorted interpretation of results,
- intentionally distorted reproduction of third-party research results,

Misleading through knowingly providing false information, for example
- applications,
- Funding applications and reports on the use of funding,
- Publications, such as multiple publications without corresponding citations,

Infringement of intellectual property, for example

- unauthorized use under pretence of authorship (plagiarism),
- Presumption or unfounded assumption of scientific authorship or co-authorship
- Denial of the right of others to co-authorship acquired through appropriate contributions,
- Exploiting, publishing or otherwise making available third-party, unpublished concrete ideas, methods, research results or approaches without the consent of the authorized party (idea theft),
- scientific concealment of essential, relevant preparatory work by others,

Sabotage through malicious damage, destruction or manipulation of work equipment without the consent of the authorized person, for example

- devices and experimental setups,
- Data, documents and electronic software,
- Consumables (e.g., chemicals),

Shared responsibility for scientific misconduct by others can arise, for example

- active involvement in the misconduct of others,
- Knowing and tolerating the misbehaviour of others,
- Co-authorship of publications containing falsifications,
- Gross neglect of the duty of supervision.

Within the framework of proportionality, the proceedings can be discontinued for marginal violations if the guilt of the person concerned is considered to be low and there is no public interest in prosecution.

Guideline 18: Complainants and respondents

The responsible bodies at the GFZ examining allegations of misconduct take appropriate measures to protect both the complainant and the respondent. The investigation of allegations of research misconduct must be carried out in strict confidentiality and adhere to the presumption of innocence. The information disclosed by the complainant must be provided in good faith. Knowingly false or malicious allegations may themselves constitute misconduct. The disclosure should not disadvantage the research or professional career prospects of either the complainant or the respondent.

<u>Explanations:</u>
Protection of the whistle-blower:
The whistle-blowers who acted in good faith must not suffer any disadvantage as a result of their reporting. Informants are considered to be bona fide if they had reason to believe that the information is correct. This is particularly true if the suspicion is actually unfounded.
The protection of the person providing the information begins when the information is received and continues after the process has been completed and beyond the employment relationship.
Disadvantaging and/or intimidating a person who provides information has consequences under labour law and, if necessary, criminal law.
Protection of those affected, presumption of innocence

The employee who has come under suspicion (hereinafter: the person affected) will be given the opportunity at an early stage to comment on the allegation and to refute any allegations, provided that involving the person concerned does not jeopardize the later investigations.

A person affected is considered innocent at any stage of the proceedings until proven otherwise. He/she will be treated in accordance with this presumption of innocence during investigations based on information provided by all persons involved in an investigation. The person concerned is free to contact the staff council or another employee representative or person they trust at any time.

- *If possible, the report should not lead to delays in the qualification of the informant; the preparation of theses and doctorates should not be disadvantaged; This also applies to working conditions and possible contract extensions.*
- *In principle, the person affected by the allegations should not suffer any disadvantages as a result of the verification of the suspicion until scientific misconduct has been formally established.*
- *The whistle-blower must have objective evidence that standards of good scientific practice may have been violated.*
- *If the whistle-blower cannot assess the accuracy of the information available to him or her or if there is uncertainty, the whistle-blower should contact a local ombudsperson or higher-level bodies such as the Ombudsman Board for Scientific Integrity in Germany (ombudsperson for the Science) or the central ombudsperson of the HGF.*
- *The GFZ also allows anonymous advertisements. An anonymous complaint can only be examined in proceedings if the person providing the information provides the investigating body with reliable and sufficiently concrete facts.*
- *If the informant's name is known, the investigating body will treat the name confidentially and will not release it to third parties without the appropriate consent. Anything else only applies if there is a legal obligation to do so or if the person affected by the allegations cannot otherwise properly defend themselves because, in exceptional cases, the identity of the person providing the information is important.*
- *Before the name of the whistle-blower is disclosed, he/she will be informed immediately; The informant can decide whether to withdraw the report if the name is expected to be disclosed.*
- *The confidentiality of the procedure is restricted if the whistle-blower goes public with his suspicions. The investigating body decides on a case-by-case basis how to deal with the breach of confidentiality by the informant.*
- *The whistle-blower must be protected even in the event of unproven scientific misconduct, provided that the allegations were not reported against their better knowledge.*

Guideline 19: Procedures in cases of alleged research misconduct

The GFZ has established procedures to handle allegations of research misconduct. They define policies and regulations on the basis of a sufficient legal foundation. The regulations define the circumstances that constitute misconduct, procedural rules and the measures to take should an allegation be upheld. Regulations are applied in addition to relevant higher-level laws.

Explanations:

• Not every violation of the rules of good scientific practice constitutes scientific misconduct.
• Only intentional or grossly negligent violations that are laid down in a set of rules can be considered as scientific misconduct. The offenses include in particular the invention and falsification of data and plagiarism.
• The procedural regulations of the GFZ include in particular regulations on responsibility for each individual stage of the procedure, on the assessment of evidence, on the representation of the ombudspersons and the members of the investigative commissions, on bias and on constitutional procedural principles.
• The principles of confidentiality and presumption of innocence postulated in Guideline 18 apply throughout the entire procedure.
• The person affected by the allegations and the whistle-blower are given the opportunity to comment at every phase of the procedure.
• Until scientific misconduct is proven, information about those involved in the procedure and previous findings will be treated confidentially.
• The GFZ ensures that the entire procedure is carried out as quickly as possible.
• The regulations outline various measures that are to be applied depending on the severity of the proven scientific misconduct.
• If the revocation of an academic degree comes into consideration as a measure after scientific misconduct has been established, the responsible authorities will be involved.
• Once the investigation has been completed, the result will be communicated to the scientific organizations concerned and, if necessary, to third parties who have a legitimate interest in the decision.

Procedure in the GFZ in suspected cases:

It is part of scientific ethics not to tolerate scientific misconduct by others in silence. The usual procedure when suspected misconduct should be to raise the possible misconduct with its perpetrators and seek clarification and, if necessary, correction.

However, this can be difficult for many reasons. The GFZ is therefore institutionalizing a procedure that must be followed if a suspicion or accusation of scientific misconduct arises against a GFZ employee that cannot be clarified in a direct conversation or using the usual personnel management tools.

This procedural regulation is subject to an inherent legal tension: internal company procedural regulations, for example, may not invalidate the obligations/instruments under labour law. Of course, they also have to comply with the constitutionally protected freedom of science.

Ombudsperson preliminary information:

- *In the event of concrete suspicions of scientific misconduct, the responsible ombudsperson should first be informed orally or in writing - if necessary, including evidence or documentary evidence.*
- *Those suspected of misconduct themselves can also contact the responsible ombudspersons to request clarification and assistance.*

- *The ombudspersons immediately take the steps they deem appropriate or necessary to clarify the details of the matter as comprehensively and discreetly as possible.*
- *The person affected by the suspicion must be given the opportunity to comment as early as possible.*
- *As soon as the suspicion is confirmed and if it is also likely that labour law measures will be initiated, the ombudspersons can inform the board of directors in order to meet the deadline. Otherwise, the ombudspersons are obliged to maintain silence.*
- *In cases where the suspicion is not substantiated, the ombudspersons are left with the discretion to take clarifying steps.*

Result of the preliminary investigation - final report of the ombudspersons:

- *The ombudspersons finally draw up a report on the results of the preliminary investigation and forward it, together with a suggestion for further action, to the chair of the Scientific Council.*
- *There is no internal complaint procedure against the ombudspersons' report.*
- *The ombudspersons decide after consultation with the chair of the Scientific Council based on the ombudsperson's report*
- *about the completion of the process, provided the suspicion of scientific misconduct has not been substantiated;*
- *the establishment and composition of an investigative commission if they consider further clarification of the matter to be necessary;*
- *the imposition of necessary sanctions or the initiation of necessary procedures if the suspicion of scientific misconduct has been confirmed,*

Investigative commission:

- *The investigative commission is composed as follows:*
- *Three (3) scientists appointed by the Scientific Council. A representative is provided for each member of the investigative commission in the event of concerns about bias or impediment. The members of the investigative commission must not suffer any negative consequences from the investigative work.*
- *If necessary, internal or external experts/evaluators can be brought in to the deliberations of the investigative commission. In suspected cases that are brought to the attention of the GFZ from outside the centre, the investigative commission must be supplemented by an external member.*
- *The investigative commission must clarify the facts by freely assessing the evidence, taking into account all those involved and all other conceivable sources of knowledge.*

Procedural principles:

- *The deliberations of the investigative commission are not public. Those involved are obliged to maintain secrecy with regard to all information relating to the case.*
- *The results of the investigations will be summarized by the investigative committee and communicated in writing to the person concerned and, at his/her request, to the person who expressed suspicion.*
- *Based on the results of the investigative commission, the board decides on the necessary measures.*
- *There is no internal complaint procedure against decisions made by the investigative commission or the board.*

<u>Possible consequences of scientific misconduct:</u>

Depending on the circumstances of the individual case, scientific misconduct can have the following consequences:

- *criminal consequences,*
- *academic consequences in the form of revocation of academic degrees,*
- *Revocation of scientific publications,*
- *Consequences under labour law, such as warnings or termination,*
- *Civil law consequences, such as the issuance of a ban on entry, claims for return or damages,*
- *After weighing up the interests of those affected, the decision of the investigative commission can be communicated to the scientific organizations concerned and, if necessary, cooperation partners who have a legitimate interest in the decision.*

Violations of the principles of good scientific practice are identified in the GFZ employment contracts as a possible reason for sanctions.

Note: The binding nature of the rules of good scientific practice and the procedure for dealing with scientific misconduct in the GFZ is ensured by the involvement of the committees and bodies (staff council, scientific council, board resolution, directorate resolution, information to the board of trustees) and the announcement.

Potsdam, 20th September 2023

Prof. S. Buiter Dr. St. Schwartze