ETH Zurich Guidelines¹ on scientific integrity (Integrity Guidelines)

of 1 January 2022 RSETHZ 414

The ETH Zurich Executive Board

based on Article 20*a* paragraph 1 of the Federal Act on the Federal Institutes of Technology (ETH Act) of 4 October 1991², Article 26 paragraph 1b of the Federal Act on the Promotion of Research and Innovation (RIPA) of 14 December 2012³ as well as Art. 4 Paragraph 1g of the "ETH Organization Ordinance of 16 December 2003"⁴ issues the following guidelines:

Chapter 1: General Provisions

Art. 1 Subject matter

- ¹ These guidelines outline the basic principles of scientific integrity in research and education at ETH Zurich, in particular for:
 - a. the planning and execution of research work;
 - b. the handling of research data and materials;
 - c. the publication and exploitation of research work;
 - d. the peer review and professional evaluation.

Art. 2 Scope of application

These guidelines apply to all members of ETH Zurich who are involved in scientific activities (hereinafter "scientists").

² They also list the supporting bodies that are available to members of ETH Zurich for questions relating to scientific integrity and good scientific practice.

¹ These Guidelines have been elaborated particularly on the basis of the following documents:

a) Swiss Academies of Arts and Sciences (2021): <u>Code of conduct for scientific integrity</u>. go.swiss-academies.ch/integrity.

b) All European Academies (ALLEA) (2017): The European Code of Conduct for Research Integrity. Revised edition.

c) Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) <u>Guidelines for Safeguarding Good Research</u>
Practice.

² SR 414.110 (Fedlex, The publication platform for federal law; <u>www.fedlex.admin.ch</u>)

³ SR 420.1

⁴ RSETHZ 201.021 (Rechtssammlung der ETH Zürich, www.rechtssammlung.ethz.ch)

Chapter 2: Basic Principles of Scientific Integrity

Art. 3 Definition of scientific integrity

- ¹ Scientific integrity is based on adherence to fundamental principles and their manifold, context-related concretisations. These guide scientists and scholars in their work and in their engagement with the practical, ethical and intellectual challenges that arise in their research and teaching activities.
- ² Conduct with scientific integrity is committed to the Fundamental Principles and adheres to the concretisations of these Fundamental Principles that apply within a particular frame of reference.
- ³ Good scientific practice is defined as discipline-specific concretisations in the form of standards derived from the Basic Principles. These can concern, among other things, specifications regarding study design, source references or authorship of publications. Corresponding standards are formulated by professional societies, academies, research funding organisations, publishers and universities and are to be followed by the scientists interacting with these organisations or belonging to these organisations.

Art. 4 Basic principles of scientific integrity

- ¹ The basic principles form the prerequisite for the independence and credibility of science and its disciplines, the comprehensibility and reproducibility of research results and their acceptance by society.
- ² The basic principles of scientific integrity are:
 - a. *Reliability* with regard to ensuring the quality of research and teaching as a basis for credibility and trust in science. Reliability here refers to all phases of scientific work, i.e. from conception (incl. selection of the project and project partners) to publication and curation of data. It includes transparency and traceability;
 - b. *Honesty* in the development, design and implementation, review and evaluation, reporting and communication of research and teaching. These shall be carried out in a transparent manner and in an effort to achieve the greatest possible impartiality;
 - c. *Respect* for colleagues in academia, staff, persons in training, students and research participants, as well as for society, cultural heritage and the environment;
 - d. *Responsibility* for the consequences of one's own actions in research, teaching and all related areas, in particular also for the safety of employees and for the careful use of resources.

Art. 5 Responsibilities

All scientists:

- a. bear responsibility for ensuring that their conduct conforms to the standards of good scientific practice;
- b. regularly update their knowledge of the discipline-specific standards of good scientific practice;
- c. who hold a leadership and/or supervisory role:
 - 1. exercise their role model function,
 - 2. pass on the basic principles of scientific integrity and the binding standards of good scientific practice in education and training,
 - 3. are responsible for ensuring that these guidelines and any discipline-specific standards of good scientific practice are known and implemented in their team.

Chapter 3: Integrity in research work

Section 1: General

Art. 6 Responsibility towards society and the environment

Scientists at ETH Zurich freely choose their research objectives and methods. They design, conduct, analyse and document research carefully and in awareness of their responsibility towards society and the environment by:

- a. observing ethical standards and the legal limits of research freedom when choosing their research objectives and methods (cf. exemplary list in the Appendix);
- b. refraining from relocating research projects abroad that would be inadmissible in Switzerland due to legal standards;
- c. treating living beings in research and research objects with respect care and in accordance with legal, ethical and disciplinary regulations;
- d. analysing in advance possible risks that may result from their research work for ETH members, for ETH Zurich, for third parties and/or for the environment (e.g. in the life sciences in the case of dual use research of concern⁵). The acceptance of identifiable risks is weighed up against the gain in knowledge, justified and the risks minimised to the best of one's knowledge;
- e. considering social responsibility and technology impact assessment in projects and in the case of social interest, participate in appropriate public discussions.

Art. 7 Research collaborations

In the case of research cooperations going beyond ETH Zurich all participants are responsible for scientific integrity and compliance with discipline-specific standards of good scientific practice.

Art. 8 Definition of responsibilities and avoidance of conflicts of interest

The persons scientifically involved in a research project shall be in regular contact with each other. When planning and conducting a research project, they shall:

- a. define their roles and responsibilities in an appropriate manner, make them transparent and adjust them as necessary;
- b. be transparent about their commercial interest or other interests, sources of funding for the research and other circumstances that may affect the independence of the research and avoid conflicts of interest. If conflicts of interest cannot be avoided, they are disclosed, discussed and dealt with.

⁵ Dual use research of concern (DURC): Research that, based on current under-standing, can be reasonably anticipated to provide knowledge, information, products, or technologies that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, material, or national security. [Definition from the United States government policy for institutional oversight of life sciences dual use research of concern]. Swiss Academies of Arts and Sciences (2017) Misuse potential and biosecurity in life sciences research. Swiss Academies Reports 12 (3).

Art. 9 Promotion of young academics and staff members

Scientists and scholars who hold a leadership and/or supervisory position shall ensure the best possible individual support for junior scientists and scholars and for scientific staff in their academic or professional careers by:

- a. maintaining a balance of support and personal responsibility in supervision that is appropriate to the career stage and enabling junior researchers to develop into independent scientists through increasingly independent work;
- b. creating a respectful and supportive working climate in their area of responsibility with adequate opportunities for development, participation and shaping;
- c. providing, as far as possible, the necessary material and spatial resources;
- d. promote integration into the scientific community as well as personal professional and interdisciplinary further qualification through appropriate measures⁶;
- e. adhering to the regulations⁷ relevant to the supervision of doctoral students.

Section 2: Handling research data and materials

Art. 10 Reproducibility

¹ The persons collaborating on a research project are responsible for the accuracy of the research data⁸ and materials they contributed, collected or developed, as well as for compliance with the relevant regulations.

² To ensure reproducibility, reliability and accuracy, the relevant research data and key materials on which the results of a publication are based, shall follow the FAIR principles⁹ and:

- a. are documented in an appropriate manner (including, but not limited to, the methods used, the software employed or the description of the work processes) and according to the applicable regulations or specifications of research funding organisations;
- are securely stored in repositories and data archives during an appropriate period of time relevant to the subject area, unless there are further-reaching institutional requirements or statutory regulations;
- c. are accessible, unless there are reasons of confidentiality, data protection, protection of personality, protection of intellectual property or security to the contrary.

³ If specific formats are required for the documentation of data pursuant to paragraph 2 letter a, these formats shall be specified as far as possible from the outset.

⁴ The *Research Data Guidelines of ETH Zurich (RDM Guidelines)* regulate further details of research data management.

⁶ Examples of suitable measures are an open exchange with other research groups, attendance at courses or summer schools, participation in congresses or temporary stays at other institutions.

⁷ In particular, the Ordinance on the Doctorate at the Swiss Federal Institute of Technology Zurich (ETH Zurich Ordinance on the Doctorate) (RSETHZ 340.31en) and the Rector's Implementation Provisions for the ETH Zurich Ordinance on the Doctorate (RSETHZ 340.311en).

⁸ The term "research data" encompasses all data and materials that are generated in the course of a research process through measurements, experiments, surveys, simulations, etc.; Depending on the scientific question and the discipline, these data are generated, processed, archived and published in different ways and are therefore very heterogeneous.

⁹ FAIR = findable, accessible, interoperable and re-usable: Wilkinson et al. (2016), The FAIR Guiding Principles for scientific data management and stewardship, Scientific Data 3, doi:10.1038/sdata.2016.18.

Art. 11 Access and use

- ¹ Research data and materials developed within the scope of research projects at ETH Zurich shall in principle remain at ETH Zurich or shall be stored securely in accordance with Section 9 Para. 2 b), unless other arrangement¹⁰ is made with external project partners.
- ² After consultation with the members of the project team, the persons responsible for the management of a research project shall determine as early as possible, taking into account authorship, legal provisions (in particular copyright, patent law, protection of personality and data protection) and any contractual obligations, to what extent research data and materials:
 - a. are made available to persons outside the project team prior to their own processing, evaluation and publication;
 - b. may be further used by persons of the project team who leave the project team or ETH Zurich.
- ³ Before professors leave ETH Zurich, they shall arrange with the department responsible for them the possible further use of data and materials as well as the responsibilities for the data and materials remaining at ETH Zurich.
- ⁴ Any intended or further use of research data or materials for commercial purposes must be agreed with ETH transfer before leaving ETH Zurich.

¹⁰ Cf. Guidelines concerning Contracts in the Field of Research at ETH Zurich (RSETHZ 440.31en)

Section 3: Publication and exploitation of research results

Art. 12 Principles

¹ Scientists at ETH Zurich

- a. contribute all research results to the scientific discourse, provided that no interests of confidentiality (e.g. ongoing research projects and patent procedures¹¹), legal or contractual obligations prevent publication;
- b. disclose the sources of funding for the research as well as any conflict of interest;
- c. publish their work according to the "principle of open access" as much as possible in accordance to the guidelines defined in the Open Access Policy¹² of ETH Zurich;
- d. observe the basic principles of scientific integrity and the standards of good scientific practice also in funding applications and newer forms of information dissemination (e.g. social networks and other communication channels) of research results;
- e. publish also research results of unsuccessful experiments and projects as far as possible, provided that this:
 - 1. is of scientific interest
 - 2. prevents the waste of resources through repetition of research that does not achieve its objectives,
 - 3. is deemed necessary for ethical reasons.

Art. 13 Rules on authorship

¹ In the case of publication, participation to the preparation of manuscript, authorship and order of authors should be discussed as early as possible and in a meaningful way with every person involved in the project. In doing so, the guidelines for authorship of publication organs (e.g. journals and publishers) must be observed.

² The discussion must be resumed as soon as new people become scientifically involved in the project or the tasks of people already scientifically involved in the project change in a relevant way.

² As a rule, all those involved in a research collaboration are informed and consulted in advance about all forms of publication (including in social networks and non-traditional publication formats), the submission and revision of research results. This includes, in particular, the handling of prepublications.

¹¹ Cf. article 7 of the Federal Act on Freedom of Information in the Administration (Freedom of Information Act, FoIA) (SR 152.3)

¹² RSETHZ 134en

Art. 14 Criteria for authorship

- ¹ An author of a scientific publication shall fulfill all following criteria:
 - a. makes a significant scientific contribution to the planning, execution, control or evaluation of the research through personal work,
 - b. is involved in the preparation of the manuscript, and
 - c. approves the final version of the manuscript.
- ² Anyone who made a significant contribution in accordance with paragraph 1 letter a must be given the opportunity to fulfill the criteria in accordance with letter b and letter c cumulatively.
- ³ Consent to the final version of a manuscript can be withheld but with substantial scientific justification. The refusal of approval must be presented to the other authors with a verifiable criticism of data, methods or results.
- ⁴ Contributors who only partially fulfill the criteria of authorship mentioned in paragraph 1 shall be listed in the "Acknowledgements" section of the publication, naming their contributions.
- ⁵ Authorship does not result from the mere function of a person. The provision of instruments or infrastructure, financial participation or a position of authority is not a significant contribution to a manuscript and does not entitle a person to be an author. It follows that honorary authorship is not permissible.
- ⁶ Concerning scientific publications, all individuals who have contributed as authors must be acknowledged as such.

Art. 15 Contributions and order of authors

- ¹ The contributions of the individual authors to a publication should be declared as transparently as possible.
- ² In the case of several authors, the order in which they are named shall be determined by the discipline-specific regulations or practices, in particular with regard to the role of first and last author.
- ³ It must be ensured that the meaning of the order of authors is also comprehensible to readers and reviewers. If this is not already specified by the editors, footnotes or acknowledgements can be used for this purpose, in which the respective contributions of the authors to the publication is declared.

Art. 16 Responsibility for the accuracy of the content

- ¹ In principle, all authors are responsible for the content of a publication. In particular, they are responsible for the accuracy of those statements which they can verify.
- ² If doubts arise within an author team about the accuracy of results or their interpretation in a publication, the doubts must be communicated to the co-authors and justified.
- ³ If it becomes apparent that errors were made in the preparation of published research results, authors shall publish corrections or withdraw the papers concerned.

Art. 17 References

- ¹ The sources (texts, data, images, videos, ...) used in research and teaching must be clearly identifiable, comprehensible and traceable in professional publications, in presentations as well as in non-public presentations of research work and its results, such as in funding applications. This also includes published sources of which one is the author.
- ² In general, when publishing, the ETH internal recommendations and guidelines, such as the information sheet on plagiarism, must be observed in addition to the subject-specific citation rules.

Art. 18 Indication of institutional affiliation

- ¹ When research papers are published, ETH Zurich is indicated as an affiliation if the author was a member of ETH Zurich during the conductance of significant parts of the research work.
- ² When publishing research work that was carried out and completed prior to the start of employment at ETH Zurich, the author may only state ETH Zurich as the postal address, but not as the affiliation.
- ³ Double professors¹³ and members of joint institutes shall indicate both institutions as affiliation in publications. The analogous application of paragraph 2 is reserved if the affiliation to one of the two institutions only began after completion of the research work.
- ⁴ The indication of institutional affiliation is based on the uniform ETH address format ¹⁴.

Art. 19 Economic exploitation of research results

- ¹ Persons who are employed by ETH Zurich and have contributed to the creation of intellectual property (e.g. inventions, computer programs) (inventors and creators) must immediately report the creation of intellectual property to ETH transfer.¹⁵
- ² In doing so, they shall observe the relevant regulations, in particular the legal provisions and guidelines listed in the Appendix under point 1 regarding intellectual property rights.
- ³ If students participate in the creation of intangible property in projects of a professorship, it must be ensured that the question of a possible transfer of rights to intangible property is clarified in advance.

¹³ Gemeinsame Richtlinien für Publikationen (Doppelprofessuren) (RSETHZ 430.2

¹⁴ See information under "Scientific publishing" https://ethz.ch/services/en/service/communication/communications-consulting/scientific-publishing.html

¹⁵ Art. 1 Verordnung des ETH-Rates über die Immaterialgüter im ETH-Bereich vom 9. Juli 2014 (SR 414.172)

Chapter 4: Integrity in assessment and evaluation

Art. 20 Principles

- ¹ Scientists shall participate in professional decision-making, assessment or evaluation processes within ETH Zurich and the wider scientific community, in particular in:
 - a. Submissions for funding of research projects, persons or scientific equipment;
 - b. Submissions for publication;
 - c. Proposals for appointment or promotion;
 - d. Nominations for awards;
 - e. Evaluations of academic units or research infrastructures.

² Reviewers:

- a. review and evaluate transparently and comprehensibly;
- b. strive for the greatest possible objectivity, impartiality and, in particular, shall minimise explicit bias as well as implicit, subliminal bias (such as gender, origin or other biases);
- c. write expert reports in a well-founded, constructive and timely manner;
- d. commit themselves to confidentiality;
- e. take into account relevant recommendations on research assessment¹⁶, namely the San Francisco Declaration on Research Assessment¹⁷ (DORA recommendations) signed by ETH Zurich.
- ³ Reviewers respect the intellectual property of unpublished ideas, data or interpretations and:
 - a. therefore treat all information to be assessed as confidential as long as it has not been published by the authors;
 - b. seek further opinions on the subject matter of the assessment only after obtaining the consent of the responsible body from which the request for the opinion originated;
 - c. do not make use of confidential information to which they have access in the course of their appraisal activities.

¹⁶ Examples are the Leiden Manifesto for Research Metrics (http://www.leidenmanifesto.org/) or the Hong Kong Principles for assessing researchers (https://wcrif.org/guidance/hong-kong-principles).

¹⁷ San Francisco Declaration on Research Assessment (https://sfdora.org/)

Art. 21 Conflicts of interest

- ¹ When a person participates in a decision-making, assessment or evaluation process in accordance with Article 19 paragraph 1, a conflict of interest exists if the person involved could have an interest in the outcome of a decision whether personally, professionally, or financially, or as representative of an institution, namely because he or she or the institution he or she represents could gain an advantage or disadvantage from the decision.
- ² Researchers who participate in a decision-making, assessment or evaluation process shall:
 - a. disclose actual and potential conflicts of interest as well as any resulting bias to the commissioning body or the body to which they belong, in particular if:
 - 1. they have worked closely with the person concerned in the last five years,
 - 2. they could be biased in the matter for other reasons or there could be an appearance of bias.
 - b. must decline or recuse themselves from participation if they:
 - 1. are an applicant for the proposed project or are indicated as a partner(s) for collaboration,
 - 2. have a close family or personal relationship with the applicant (relationship, marriage, partnership, close friendship),
 - 3. are in a relationship of professional dependence with the applicant, have been until recently or will be in the foreseeable future.

Chapter 5: Implementation and Final Provisions

Art. 22 Supporting bodies

The following are available as supporting bodies to members of ETH Zurich:

- a. the GSP delegates¹⁸ of the departments for questions regarding the relevant rules of good scientific practice or the discipline-specific standards;
- b. the Confidants¹⁹ in case of questions or conflicts related to scientific integrity or suspected cases of scientific misconduct;
- c. the ethics committee in the event of ethical questions in connection with research collaborations.
- d. the ETH Library:
 - 1. by offering advice and courses on research data management,
 - 2. by providing advice and support on the Open Access publication of research results;
- e. the Office of Research for the planning (e.g. formats, methodology, teaching content) and implementation of events on scientific integrity.

Art. 23 Procedure in the event of violations of these guidelines

In the event of a suspected violation of these guidelines, the procedure shall be in accordance with the Procedure to address allegations of research misconduct at the ETH Zurich²⁰.

Art. 24 Entry into force

These guidelines shall enter into force on 1 January 2022 and replace the previous version of 25 October 2011.

Date: 7 December 2021

On behalf of the Executive Board:

President: Joël Mesot

Secretary General: Katharina Poiger Ruloff

 $^{^{\}rm 18}$ Cf. Function description of the GSP delegates in Annex 1 to RSETHZ 414.1

¹⁹ Cf. Procedure to address allegations of research misconduct at the ETH Zurich (RSETHZ 415)

²⁰ RSETHZ 415en

Appendix (as of December 2021)

Für die Forschung an der ETH Zürich relevanten Rechtsvorschriften und Richtlinien sind insbesondere:

- 1) bezüglich der Immaterialgüterrechte
 - a. Bundesgesetz vom 9. Oktober 1992 über das Urheberrecht und verwandte Schutzrechte (Urheberrechtsgesetz, URG)²¹, insbesondere Art. 7 (Miturheberschaft), Art. 10 (Verwendung des Werks), Art. 11 (Werkintegrität) und Art. 19 (Eigengebrauch) und Art. 25 (Zitat);
 - b. Bundesgesetz vom 25. Juni 1954 über die Erfindungspatente (Patentgesetz, PatG)²²;
 - c. Bundesgesetz über die Förderung der Forschung und der Innovation vom 14. Dezember 2012 (FIFG)²³ und Verordnung zum Bundesgesetz über die Förderung der Forschung und der Innovation (Forschungs- und Innovationsförderungsverordnung, V-FIFG) vom 29. November 2013²⁴;
 - d. Bundesgesetz vom 4. Oktober 1991 über die Eidgenössischen Technischen Hochschulen (ETH-Gesetz)²⁵, Art. 36 (Rechte an Immaterialgütern);
 - e. Verordnung des ETH-Rates über die Immaterialgüter im ETH-Bereich²⁶ vom 9. Juli 2014;
 - f. Richtlinien über Verträge im Bereich Forschung der ETH Zürich (Forschungsvertragsrichtlinien)²⁷ und Richtlinien für die wirtschaftliche Verwertung von Forschungsergebnissen an der ETH Zürich (Verwertungsrichtlinien)²⁸;
 - g. Verordnung der ETH Zürich über Lerneinheiten und Leistungskontrollen an der ETH Zürich (Leistungskontrollenverordnung ETH Zürich)²⁹ vom 22. Mai 2012, Art. 23;
 - h. Verordnung der ETH Zürich über das Doktorat an der ETH Zürich (Doktoratsverordnung ETH Zürich)³⁰ vom 23. November 2021, Art. 49 (Urheberrechte) und Art. 50 (Übrige Immaterialgüter);
- 2) bei Forschungsprojekten an und mit Menschen
 - a. Bundesgesetz über die Forschung am Menschen (Humanforschungsgesetz, HFG)³¹ vom 30. September 2011, Verordnung über die Humanforschung mit Ausnahme der klinischen Versuche (Humanforschungsverordnung, HFV)³² vom 20. September 2013, Verordnung über klinische Versuche in der Humanforschung (Verordnung über klinische Versuche; KlinV)³³ vom 20. September 2013;
 - b. Bundesgesetz vom 15. Dezember 2000 über Arzneimittel und Medizinprodukte (Heilmittelgesetz, HMG)³⁴, insbesondere Art. 53-56;

²¹ SR 231.1

²² SR 232.14

²³ SR 420.1

²⁴ SR 420.11

²⁵ SR 414.110

²⁶ SR 414.172

²⁷ RSETHZ 440.31

²⁸ RSETHZ 440.4

²⁹ SR 414.135.1

³⁰ SR 414.133.1

³¹ SR 810.30

³² SR 810.301

³³ SR 810.305

³⁴ SR 812.21

- c. Kantonale Gesetze (wie z.B. das Patientinnen und Patientengesetz des Kantons Zürich³⁵) und Verordnungen;
- d. Bundesgesetz vom 19. Dezember 2003 über die Forschung an embryonalen Stammzellen (Stammzellenforschungsgesetz, StFG)³⁶ und die Verordnung vom 2. Februar 2005 über die Forschung an embryonalen Stammzellen (Stammzellenforschungsverordnung, VStFG)³⁷;
- e. Bundesgesetz vom 19. Juni 1992 über den Datenschutz (DSG)³⁸ und Bundesgesetz vom 4. Oktober 1991 über die Eidgenössischen Technischen Hochschulen (ETH-Gesetz)³⁹ namentlich Art. 36c Bearbeiten der Daten, Art. 36d Anonymisierung, Aufbewahrung und Vernichtung der Daten sowie Art. 36e Informationspflicht;
- f. Reglement der Ethikkommission der ETH Zürich⁴⁰ vom 30. Juni 2020;
- g. Aktuell gültige Ethikrichtlinien der SAMW⁴¹.

3) bei Forschungsprojekten mit Tieren

- a. Tierschutzgesetz vom 16. Dezember 2005 (TSchG)⁴², Tierschutzverordnung vom 23. April 2008 (TSchV)⁴³, Verordnung des BVET über die Haltung von Versuchstieren und die Erzeugung gentechnisch veränderter Tiere sowie über die Verfahren bei Tierversuchen vom 12. April 2010 (Tierversuchsverordnung)⁴⁴ und die Verordnung des EVD über Ausbildungen in der Tierhaltung und im Umgang mit Tieren vom 5. September 2008⁴⁵;
- b. Kantonale Bestimmungen (Gesetze und Verordnungen) sowie Reglemente der Tierversuchskommissionen.
- 4) bei Forschungsprojekten mit gentechnisch veränderten Organismen
 Bundesgesetz vom 21. März 2003 über die Gentechnik im Ausserhumanbereich
 (Gentechnikgesetz, GTG)⁴⁶, Verordnung vom 10. September 2008 über den Umgang mit
 Organismen in der Umwelt (Freisetzungsverordnung, FrSV)⁴⁷ und Verordnung vom 9. Mai
 2012 über den Umgang mit Organismen in geschlossenen Systemen
 (Einschliessungsverordnung, ESV)⁴⁸.

5) bei Forschungspartnerschaften

- a. Verhaltenskodex für wissenschaftliche Kooperationen der ETH Zürich vom 20. August 2014⁴⁹
- b. Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations, 2013.⁵⁰

³⁵ LS 813.13

³⁶ SR 810.31

³⁷ SR 810.311

³⁸ SR 235.1

³⁹ SR 414.110

⁴⁰ RSETHZ **413**

⁴¹ https://www.samw.ch/de/Publikationen/Richtlinien.html

⁴² SR 455

⁴³ SR 455.1

⁴⁴ SR 455.163

 $^{^{45}}$ 455.109.1

⁴⁶ SR 814.91

⁴⁷ SR 814.911

⁴⁸ SR 814.912

⁴⁹ RSETHZ 416

⁵⁰ https://wcrif.org/guidance/montreal-statement

- c. Schweizerische Kommission für Forschungspartnerschaften mit Entwicklungsländern (KFPE) der Akademie der Naturwissenschaften, 2012: Leitfaden für grenzüberschreitende Forschungspartnerschaften⁵¹, 11 Prinzipien.
- d. Ursina Bentele (2020) Guidelines to conflict sensitive research, 2020⁵². *Swiss academies communications*, Vol. 15 N° 5.
- 6) bei Forschungsprojekten die den Zugang und die Nutzung von genetischen Ressourcen und traditionellem Wissen betreffen
 - a. Bundesgesetz vom 1. Juli 1966 über den Natur- und Heimatschutz (NHG)⁵³ sowie Verordnung über den Zugang zu genetischen Ressourcen und die ausgewogene und gerechte Aufteilung der sich aus ihrer Nutzung ergebenden Vorteile (Nagoya-Verordnung, NagV)⁵⁴
 - b. Susette Biber-Klemm, Sylvia Martinez, Anne Jacob (2016): Agreement on Access and Benefit-sharing for Academic Research. Swiss academies reports, Vol. 11 N° 3, ISSN (online): 2297-1572
 - c. Swiss Academies of Sciences (SCNAT) (2016): Utilization of genetic resources and associated traditional knowledge in academic research. A good practice guide for access and benefit-sharing. Swiss academies reports, Vol. 11 N° 4, ISSN (print): 2297-1564 ISSN (online): 2297-1572.

⁵¹ https://kfpe.scnat.ch/de/11 principles 7 questions

⁵² DOI: 10.5281/zenodo.3601000

⁵³ SR 451

⁵⁴ SR 451.61