A Practical Model of the Self-Regulation of Academic Integrity: a Chinese-English edition of the Code of Conduct for Research Integrity in Finland

学术诚信自律的应用模式：
芬兰学术诚信准则之汉英版
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Preface

A framework for self-regulation in research integrity: the Finnish model step by step, by Sanna-Kaisa Spoof

Responsible conduct of research and procedures for handling allegations of misconduct in Finland. Guidelines of the Finnish National Board on Research Integrity. A version edited in 2019 for the international research community.

Introduction

The responsible conduct of research

Violations of the responsible conduct of research

Research misconduct

Disregard for the responsible conduct of research

Other irresponsible practices

Guidelines for handling alleged violations of the responsible conduct of research

The process of handling alleged violations of the responsible conduct of research, otherwise known as the RCR process

Preface

学术诚信自律框架：芬兰模式·循序渐进

芬兰负责任的科研行为和处理不端行为指控的程序。

年芬兰国家科研诚信委员会准则。

2019年针对国际科研界编辑的版本。简介

负责任的研究方式

违反负责任的研究方式的行为

学术不端行为

对负责任的研究方式的忽视

其他不负责任的做法

对涉嫌违反负责任的研究方式的行为的处理准则

处理对违反负责任的研究方式的指控的程序（RCR程序）
Preface

This volume introduces the framework of academic integrity in Finland for the international audience, especially for Chinese readers. The work consists of two parts: 1) an introduction of the Finnish research integrity guidelines and its practical application in Finland, and 2) the code of conduct for research integrity in Finland. Apart from the preface, the contents are side by side in Chinese and in English.

The first section is an introduction by Sanna-Kaisa Spoof, Secretary General of the Finnish National Board on Research Integrity TENK. This section outlines the basis of the self-regulation model that is used to monitor academic integrity in the Finnish research community, and the requirements for establishing a similar framework in other countries. The Finnish model is one of the oldest national frameworks, in place since 1994, and as such a pioneering model of scientific self-regulation in Europe.

The second section introduces the guidelines on responsible conduct of research (RCR) in Finland. How is it defined? What constitutes research misconduct? How are allegations of research misconduct investigated in Finland? This information of the Finnish framework of academic integrity is intended especially for the benefit of Chinese students and researchers in Finland. The guidelines presented here are based on a lightly edited version of the Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland. Guidelines of the Finnish Advisory Board on Research Integrity (2012), published also in Finnish and Swedish.

This volume has been produced and published by TENK. TENK has the mandate to monitor research misconduct and promote the responsible conduct of research in Finland; see www.tenk.fi/en for more information.

The translation and publication of this volume was made possible by the Responsible Research project (www.responsibleresearch.fi), funded by the Ministry of Culture and Education in Finland. TENK and the Responsible Research project would like to express their gratitude to Mr Ni Jiamu and Mr Jani Kohonen for language-checking the Chinese translation.
A framework for self-regulation in research integrity: the Finnish model step by step

Sanna-Kaisa Spoof

One of the oldest sets of guidelines on the national level for research integrity, which define and investigate scientific misconduct, have been established in Finland. The Finnish model is a pioneering, internationally recognised and respected model of a European self-regulation framework on research integrity concerning the scientific community. This article introduces the background and the main features of the model as well as how it works in practice. This article also provides steps on how a similar framework can, where applicable, be launched in another country or research culture. It provides an overview of the Finnish method for investigating scientific misconduct, written with the international reader in mind. It can be read in conjunction with the Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland, or the so-called RCR guidelines, drawn up by the Finnish National Board on Research Integrity TENK.

In 2019, various national approaches are in place in Europe for investigating violations of research integrity. Some countries still do not have any national framework for these investigations. There are two courses of action for determining scientific misconduct, investigating allegations, and imposing sanctions: a model based on legislation, and a self-regulation model overseen by the scientific community. When an RCR investigation is based on national academic integrity, it is not always clear whether the findings are legally binding.

In 2019, a Finnish model was also adopted by the Finnish National Board on Research Integrity TENK. This model is based on national academic integrity, and it is used for investigating violations of research integrity. The model is similar to the RCR model, but it is more detailed and specific. The model includes a series of steps for investigating scientific misconduct, including the collection of evidence, the assessment of the evidence, and the imposition of sanctions. The model also includes a series of guidelines for handling allegations of misconduct, including the selection of investigators, the conduct of the investigation, and the reporting of the findings.

The Finnish model is a pioneering, internationally recognised and respected model of a European self-regulation framework on research integrity concerning the scientific community. This model is used for investigating violations of research integrity, and it is based on national academic integrity. The model includes a series of steps for investigating scientific misconduct, including the collection of evidence, the assessment of the evidence, and the imposition of sanctions. The model also includes a series of guidelines for handling allegations of misconduct, including the selection of investigators, the conduct of the investigation, and the reporting of the findings.
legislation, serious research misconduct is, in this case, also a crime. This is not the case in a self-regulation framework. In a self-regulation framework, the scientific community itself rectifies the situation in accordance with academic practices. The scientific community carries out an investigation and imposes sanctions, using mutually agreed rules.

Finland employs a framework which is based on the national guidelines, first published in 1994, on the identification and investigation of responsible conduct of research (RCR) violations. In addition to the internal regulations within the scientific community, the Finnish model is based on the openness and transparency of science as well as the mutual trust between researchers and research organisations. The framework would work well in democracies akin to Finland.

**TENK monitors academic integrity and the quality of research in Finland**

The activities of Finnish universities are based on self-administration and academic freedom. The Ministry of Education and Culture directs the activities of higher education institutions and research institutes in Finland and also serves as their primary financer. The Finnish National Board on Research Integrity TENK was founded in 1991 by parliamentary decree. TENK is an autonomous body of experts under the Ministry of Education and Culture, and its duty is to promote research integrity and to prevent scientific misconduct in Finland.

The Ministry appoints ten members for a three-year term in TENK. These members are a group of experts nominated by the scientific community on the basis of their academic – not political – expertise. TENK’s members are appointed for a three-year term. The Ministry is required to nominate representatives of different disciplines and research fields to ensure that the composition of the Board reflects the diversity of research in Finland. The Board is composed of experts, who are appointed on the basis of their academic competence and experience in the field of research integrity. The Board carries out its activities in accordance with the guidelines for responsible conduct of research (RCR) and the Code of Conduct for Researchers in Finland. The Board’s decisions are based on the principles of transparency, accountability, and fairness.
political – merits. They are respected members of the scientific community, of both genders. According to the decree, TENK members must represent different academic disciplines and research methods as well as research integrity and jurisprudence.

TENK matters are managed by a small secretariat. Even though TENK is financed by the Ministry, the members are not paid a salary. They attend meetings and deal with misconduct cases alongside their own jobs.

Surveys have shown that citizens in Finland have a high level of trust in science and in researchers. TENK has the important social duty of ensuring that this trust in science and research is maintained. To ensure scientific credibility and impartiality, it is vital for TENK to operate independently outside of research institutes, higher education institutions, and the Ministry of Education and Culture. The Ministry does not interfere with TENK’s activities or ethical courses of action.

In addition to monitoring scientific misconduct, TENK plays an important role in preventing it. This objective is supported by a local advisory system launched in Finland in 2017. In this system, research organisations appoint research integrity advisers, who are trained by TENK. The research integrity advisers report to their organisation on RCR matters and provide confidential, low-threshold counselling for the researchers in their organisations.

**Applying the Finnish model and defining RCR violations**

In Finland, the definitions of responsible conduct of research and the investigations of alleged misconduct are based on the Responsible Conduct of Research and Procedures for
Handling Allegations of Misconduct in Finland, also known as the RCR guidelines. TENK has drawn up these guidelines together with the scientific community in Finland. Finland has over twenty years’ experience in the application and functionality of the guidelines. They were last updated in 2012.

The effectiveness of these guidelines is based on the voluntary commitment to adhere to them by all universities, universities of applied sciences and other research organisations in Finland, in the sphere of public funding as well as regarding the most important financers.

The first section of the guidelines defines the premise for the responsible conduct of research, for example taking into due account the work and accomplishments of other researchers, the principles concerning authorship in a research group, the principle of not having a conflict of interest or bias, or the description of an employer’s informative responsibilities and other obligations. The guidelines then define RCR violations and explain the process of investigating misconduct allegations in Finland.

In Finland, there are two categories of violation regarding responsible conduct of research. The more serious category or misconduct includes the three subcategories fabrication, falsification and plagiarism, internationally known as FFP. An additional distinguished Finnish feature in this category is the misappropriation of another researcher’s research idea, dataset, or observation.

The second, less severe category is the disregard for responsible conduct of research, which refers to gross negligence in various stages of the research process. This includes, for example, self-plagiarism or the intentional omission of a researcher’s name from the list of
Investigation of misconduct in Finland: the RCR process

When there is an allegation of scientific misconduct, the investigation is always a strenuous ordeal. A researcher’s career – their reputation and honour – is at stake. The process is strenuous for both the person making the allegation, usually the “victim” of the case, and the person suspected of the violation, even if the allegation is ultimately proven to be unfounded. It is therefore extremely important to resolve the case thoroughly and impartially and to hear all the parties in the investigation. The Finnish RCR process ensures the legal protection of all the parties involved.

Under the Finnish RCR process, the investigation of an allegation is carried out in the research organisation where the suspected researcher works. Every serious allegation of misconduct is investigated by its own
investigation committee. This committee includes experts from the academic discipline in question, qualified legal persons and at least two members outside the organisation. The process is led by the head of the research organisation in question – usually the rector of a university – whose duty it is to oversee the interests of the whole organisation and to put them before those of individual departments, faculties or academic disciplines. The head can resolve clear misconduct or less severe cases through the quicker process of a preliminary inquiry. It is in the interest of the organisation whose actions have been brought under suspicion that all allegations taken into consideration are investigated transparently through the RCR process. At the same time, the scientific credibility and reputation of the organisation must be ensured. In the Finnish model, the investigating organisation is responsible for all of the costs resulting from the investigation.

If the investigation finds a severe RCR violation, the reputation of the researcher implicated of misconduct is tarnished. Furthermore, any errors and unfairness found must be rectified as defined in the RCR guidelines, for example concerning authorship questions. The parties involved, the scientific community of the discipline in question, TENK and the funders of the research must be provided with a report on the findings of an investigation. The research organisation will make the decision concerning other consequences. If the case includes, for example, suspected financial abuse or other legal infractions, these issues will be handled in separate judicial proceedings under Finnish law.

One crucial part of the RCR process is that parties dissatisfied with the procedure or the outcome may submit a request for a

| investigation committee. This committee includes experts from the academic discipline in question, qualified legal persons and at least two members outside the organisation. The process is led by the head of the research organisation in question – usually the rector of a university – whose duty it is to oversee the interests of the whole organisation and to put them before those of individual departments, faculties or academic disciplines. The head can resolve clear misconduct or less severe cases through the quicker process of a preliminary inquiry. It is in the interest of the organisation whose actions have been brought under suspicion that all allegations taken into consideration are investigated transparently through the RCR process. At the same time, the scientific credibility and reputation of the organisation must be ensured. In the Finnish model, the investigating organisation is responsible for all of the costs resulting from the investigation.

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One crucial part of the RCR process is that parties dissatisfied with the procedure or the outcome may submit a request for a
statement from an unaffiliated outside party, in other words TENK, within six months. The final decision-making on the case is then given to TENK. When issuing statements, TENK will only take a stance on matters concerning research integrity. TENK does not interfere in differences in scientific opinion or employment disputes that are often associated with the cases.

TENK must be informed of all allegations and inquiries so that it can monitor the state of scientific misconduct in Finland.

The special features of the Finnish self-regulation framework

How to create a framework for self-regulation that is credible and trustworthy? In comparison to other countries, the unique aspect of the Finnish model is that Finnish universities and research institutes have voluntarily signed and committed to following the guidelines. Today, it would be completely unthinkable in Finland that a university would not make this commitment. Finnish research organisations also comply with the RCR guidelines and the recommendations of TENK statements, usually to the letter.

In order to build a successful system of self-regulation within the scientific community there must be a national-level organisation that oversees the functionality of the framework and to whom complaints can be submitted. In Finland, TENK serves in this capacity. TENK does not investigate cases itself, because it cannot process complaints about its own activities: that would be a conflict of interest. Costwise, the Finnish framework is rather conservative, taking into consideration that the reputation of research organisations is on the line. A framework
comparable to the Finnish one can be launched anywhere, in small steps and at a low cost.

For a framework for self-regulation to work, at least the following four factors are required:

1. National, regularly revised guidelines that define both scientific misconduct and the process used for investigating allegations of misconduct

2. Universities and research organisations that have committed themselves to the guidelines (and will investigate suspected allegations in accordance with the guidelines)

3. Researchers who are aware of the guidelines and adhere to them

4. A national committee that draws up the guidelines and handles complaints involving them

**Building a self-regulation framework for the investigation of research misconduct step by step**

How would a self-regulation framework like the Finnish model be launched? How does this framework work in practice, and how is it revised? The following steps show how to start implementing the framework.

- A national decision should be made to launch a self-regulation framework for research integrity and to establish a research integrity committee amongst the scientific community and the ministry that sees to matters in science and higher education, or a similar national body that handles matters in science. The scientific

2. 大学和研究组织承诺遵守这些准则（并将根据准则调查嫌疑指控）

3. 研究人员了解并遵守这些准则

4. 一个起草准则并处理相关投诉的全国委员会

逐步制定调查学术不端行为的自律制度
如何启用芬兰模式自律框架？该框架如何运作？实际中如何修改？以下步骤展示如何实施该框架：

- 应做出一项关于在学术诚信方面启用自律框架的国家性决定，并在学术界及负责监督科学和高等教育事务的部门或国内其他处理科学事务的类似国家机构中设立学术诚信委员会。学术团体包括研究人员、大学及其他高等教育机构、科学研究机构以及为科学事业提供资助的重要国家机构。

- 学术诚信委员会的建立可基于法律或议会决定，以此确保其活动的连续性，这些活动可基于
community includes researchers, universities and other higher education institutions, science and research institutes, and important national bodies that finance science.

- The existence of a research integrity committee can be legislated by law or established by a parliamentary decision to ensure the continuity of its activities. These activities may be based on, for example, a common body that is established and financed by a network of research organisations and universities, such as what is found in Austria.

- The position of a research integrity committee secretary-general should be filled and an office established. The office should be physically located outside of organisations carrying out research; in the beginning, a one- to two-person secretariat should be enough for planning and implementing committee matters.

- Research integrity committee procedural rules should be drafted, and permanent financing for the committee should be confirmed.

- A chair and several other members should be appointed on the basis of research and science policy for this scientific committee.

- The secretary-general should produce a draft of national RCR guidelines together with the committee. These guidelines would include, at the very least, the definition of research misconduct and the procedure for carrying out an investigation. The committee should ask for feedback from the scientific community and the ministry or similar body that handles science
matters. The committee would make the final approval of the guidelines.

- The guidelines should be made publicly available in the national language(s) of the country and (at least) in English.

- Higher education institutions and research organisations should begin to adhere to the guidelines by signing a commitment form. A collective signing event could be organised.

- This commitment would obligate research organisations to promote responsible conduct of research and research integrity, to offer research integrity training for their members, and to begin the RCR process if a member is suspected of research misconduct. All parties must be heard in this process.

- The names of the organisations that commit themselves to the guidelines, recommendations and other activities of the research integrity committee should all be displayed on the committee’s website.

- The national research integrity committee would oversee the RCR processes and serve as a body that handles appeals.

- The RCR guidelines would be revised as needed.

- Alongside the RCR guidelines, other national recommendations on special issues regarding research integrity could be drafted.

Dr. Sanna-Kaisa Spoof, Secretary General, Finnish National Board on Research Integrity TENK
Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland. Guidelines of the Finnish National Board on Research Integrity. A version edited in 2019 for the international research community.

Introduction

The Finnish National Board on Research Integrity (TENK) has drawn up the guidelines for the responsible conduct of research and for handling alleged violations of conduct (the RCR guidelines) in co-operation with the Finnish research community. The guidelines were taken into use in 1994 and the most recent update took place in 2012. The objective is to promote the responsible conduct of research while ensuring that any alleged violations are handled with competence and fairness and as quickly as possible.

The RCR guidelines provide researchers with a model for the responsible conduct of research. The effectiveness of these guidelines is based on a voluntary commitment by the research community to adhere to them, and to increase awareness of the principles of research integrity. The RCR guidelines apply to all academic disciplines in Finland, and a list of the organisations that have committed to these guidelines can be found on TENK’s website www.tenk.fi.

The objective of these guidelines is to promote the responsible conduct of research
and to prevent misconduct in research in all organisations involved in research work, such as universities, universities of applied sciences and research institutes under public funding. These guidelines are also to be adhered to, whenever applicable, when co-operating with enterprises and other partners, either nationally or internationally.

The premise of the RCR guidelines is that promoting the responsible conduct of research and handling alleged violations of the responsible conduct of research are primarily the responsibility of the organisations conducting research. When the RCR process has been finalised by the organisation, if any party is dissatisfied with the ruling, it may request a statement from TENK. In its other activities, TENK focuses on promoting the responsible conduct of research, as well as formulating and publicising common guidelines in co-operation with the research organisations.

In addition to the RCR guidelines, TENK has published other national guidelines, such as Ethical principles of research in the humanities and social and behavioural sciences and proposals for ethical review and, in co-operation with the research community, has formulated a model CV for researchers, Template for researcher’s curriculum vitae.

In Finnish, the term research ethics is a general concept that covers all the ethical viewpoints and evaluations that are related to science and research. The scope of these guidelines is, however, narrower and refers to following and promoting an ethically responsible and proper course of action in research, as well as identifying and preventing violations and dishonesty in all research. In English, this concept is usually referred to as academic integrity.
research integrity, a term that emphasises the honesty and integrity that all researchers are required to adopt in their research activities.

TENK does not intervene when there are violations of the norms of a specific academic discipline if these violations do not at the same time constitute a violation as described in the RCR guidelines. Furthermore, TENK does not address alleged violations of the law, such as copyright law or patent law.

As TENK focuses solely on the research integrity issues mentioned above, its statements comment only on whether the RCR investigation has been conducted in compliance with these guidelines, and whether there has been a violation of the responsible conduct of research. In other words, TENK does not comment on matters of opinion regarding science, disputes between different schools of thought, or issues of professional ethics.

In Finland, certain academic disciplines have their own ethical norms and governing bodies, such as the National Advisory Board on Social Welfare and Health Care Ethics (ETENE), the National Committee on Medical Research Ethics (TUKIJA) and the Advisory Board on Biotechnology (BTNK). These boards and committees offer advice on professional ethics in more detail, for example, by offering information on the relationship between the researcher and the research subject. In addition, some institutions, such as hospitals, universities, universities of applied sciences and research institutes, have regional and organisation-specific advisory boards on research integrity.

Moreover, there has been extensive international debate on the common principles of research integrity and on how to identify violations of the responsible conduct of research.
Codes of conduct that have been jointly created and agreed upon include The European Code of Conduct for Research Integrity (ALL European Academies ALLEA, Revised edition 2017), the Singapore Statement on Research Integrity (World Conference on Research Integrity 2010, Singapore), the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (International Committee of Medical Journal Editors, ICMJE), and the Code of Conduct and Best Practice Guidelines for Journal Editors (Committee on Publication Ethics, COPE 2011).

The RCR guidelines are in accordance with the international codes of conduct. The RCR guidelines also provide the guidelines for investigating alleged RCR violations in Finland.

**The responsible conduct of research**

In order for research to be ethically acceptable and reliable and for its results to be credible, the research must be conducted according to the responsible conduct of research. Applying the guidelines for the responsible conduct of research within the research community constitutes a form of self-regulation that is bound by legislation. Furthermore, the responsible conduct of research is an integral part of the quality assurance of research organisations.

From the point of view of research integrity, the premises for the responsible conduct of research are the following:

1. The research follows the principles that are endorsed by the research community: that is, integrity, meticulousness, and accuracy in conducting research, and in recording, presenting, and evaluating the research results.

**负责任的研究方式**

为了使学术研究能够在伦理上被接受且值得信赖，并使其结果可信，该研究必须在遵守负责任的研究方式准则的基础上开展。在学术界团体内部应用负责任的研究方式准则可以构成一种受立法约束的自律形式。此外，负责任的研究方式是研究机构质量保证必不可少的一部分。

从学术诚信的角度来看，负责任的研究方式的前提如下：

1. 在开展研究及记录、展示和评估研究结果方面，遵循学术界认可的原则：即诚信、细致和准确。

2. 数据采集、研究和评估所采用的方法既符合科学标准，也符合道德规范。公布研究结果时，要以传播科学知识固有的方式：即公开和负责任的方式公布。
2. The methods applied for data acquisition as well as for research and evaluation conform to scientific criteria and are ethically sustainable. When publishing the research results, the results are communicated in an open and responsible fashion that is intrinsic to the dissemination of scientific knowledge.

3. The researcher takes due account of the work and achievements of other researchers by respecting their work, citing their publications appropriately, and by giving their achievements the credit and weight they deserve in carrying out the researcher’s own research and publishing its results.

4. The researcher complies with the standards set for scientific knowledge in planning and conducting the research, in reporting the research results and in recording the data obtained during the research.

5. The necessary research permits have been acquired and the preliminary ethical review that is required for certain fields of research has been conducted.

6. Before beginning the research or recruiting the researchers, all parties within the research project or team (the employer, the principal investigator, and the team members) agree on their rights, responsibilities, and obligations, principles concerning authorship, and questions concerning archiving and accessing the data in a manner that is approved by all parties. These agreements may be further specified during the course of the research.

3. 研究人员必须对其他研究者的工作和成就给予充分的重视，具体表现为：尊重他人的工作，适当引用他人发表的论文；在开展自己的研究及发布成果时，给予他人的成果足够的肯定与重视。

4. 研究人员在规划和开展研究，以及在公布研究结果及记录研究期间获得的数据时，遵守针对科学知识制定的标准。

5. 已获得必要的研究许可，并已按照规定对某些研究领域进行了初步的伦理审查。

6. 在开始研究或招募研究人员之前，研究项目或团队（雇主，主要调查人员和团队成员）内的各方就下列事项达成一致：各自的权利，责任，义务，著作权的相关原则和以各方认可的方式归档及访问数据等。这些协议可能会在研究过程中得到进一步明确。

7. 向研究项目的所有成员和研究对象宣布资金来源，利益冲突或与开展研究有关的其他承诺，并在公布研究结果时公布上述事项。

8. 当有理由怀疑利益冲突存在时，研究人员避免参与所有科学相关和研究相关的评估和决策。

9. 研究机构遵守良好的人事和财务管理常规，并考虑到与数据保护相关的问题。

此外，研究人员在担任教师或导师时，在申请研究职位或研究经费时，以及在研究机构内外担任
7. Sources of financing, conflicts of interest or other commitments relevant to the conduct of research are announced to all members of the research project and the research subjects and reported when publishing the research results.

8. Researchers refrain from all science- and research-related evaluation and decision-making situations when there is reason to suspect a conflict of interest.

9. The research organisation adheres to good personnel and financial administration practices and takes into account questions related to data protection.

In addition, researchers also need to comply with the practices listed above when working as teachers or instructors, when applying for research positions or for research funding, as well as when functioning as experts in their field both inside and outside the research community.

Besides research activity, the principles of responsible conduct of research apply to teaching materials, written and spoken statements, evaluations, CVs and publication lists, as well as to societal interaction in both printed and electronic publication channels, including social media.

Each individual researcher and research group member is primarily responsible for complying with the principles of the responsible conduct of research. Nonetheless, the responsibility also rests on the whole research community: research groups and their principal investigators, the directors of research units and the management of research organisations.

Besides research activity, the principles of responsible conduct of research apply to teaching materials, written and spoken statements, evaluations, CVs and publication lists, as well as to societal interaction in both printed and electronic publication channels, including social media.

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22
Universities and universities of applied sciences should ensure that their students are well-versed in the principles of the responsible conduct of research and that the teaching of research integrity is integrated into their graduate and postgraduate programmes. Research institutes, for their part, should ensure that research integrity training is available for their staff. In addition, it is the task of every doctoral research training unit to handle special questions regarding the responsible conduct of research that are pertinent to the respective field of education as part of their doctoral research training programme. In order to guarantee the practice of the responsible conduct of research, universities and universities of applied sciences should offer continuing education in research integrity to their teachers, thesis supervisors, researchers, heads of research groups and other experts.

Learned societies in Finland can promote the responsible conduct of research, for example, through a peer review system for scholarly and scientific publications. In addition, research funding organisations, such as foundations, funds, the Academy of Finland, the Finnish Funding Agency for Technology and Innovation (Tekes), as well as Finland's Prime Minister's Office, can also encourage the researchers on projects funded by these organisations to commit themselves to the responsible conduct of research, and consequently, when feasible, to follow the RCR guidelines in the handling of alleged violations of the responsible conduct of research.
Violations against the responsible conduct of research

For a researcher to be professionally competent, they need to master the knowledge and the methodology associated with their field as well as to comply with ethically sustainable research practices.

Lack of competence in the field and negligence in conducting research and in recording, archiving and reporting research results are a sign of the poor professional skills of a researcher, decrease the reliability of the results obtained by the researcher, and may even invalidate the research itself. However, negligence and shortcomings in knowledge do not necessarily mean that a researcher’s professional practices are questionable in terms of research integrity.

Violations of the responsible conduct of research refer to unethical and dishonest practices that damage research and, in the worst cases, invalidate the research results. Violations of the responsible conduct of research consist of actions that may have been committed either intentionally or through negligence. While it is difficult to define these types of violations in detail and unambiguously, it is possible to characterise ethically irresponsible practices with the help of examples.

In Finland, violations of the responsible conduct of research can be classified into the following two categories:

- Research misconduct
- Disregard for the responsible conduct of research

违反负责任的研究方式

为了使研究人员具备胜任的专业能力，他们需要掌握与其领域相关的知识和方法，并遵循道德伦理上可持续研究的惯例。

缺乏相关领域的专业能力，在研究、记录、归档和公布研究结果上有所疏忽，是研究人员专业技能差的体现，会降低研究人员所得出的结果的可靠性，甚至可能导致研究本身无效。然而，知识方面的疏忽和缺陷并不一定意味着研究人员的专业实践存在学术诚信方面的问题。

违反负责任的研究方式是指会损害学术，而且在最坏的情况下会导致研究结果无效的、不道德、不诚实的做法。违反负责任的研究方式包括可能有意或因为疏忽而导致的行为。虽然很难详细而明确地定义这种违规行为，但可以通过实例来描述这种不道德的、不负责任的行为的特征。

在芬兰，违反负责任的研究方式的行为可被分为以下两类：

- 学术不端行为
- 对负责任的研究方式的忽视

在规划和执行研究及展示研究结果和结论时，可能会发生学术不端行为和对负责任的研究方式的忽视。关于学术不端行为和对负责任的研究方式的忽视的指控，可通过处理涉嫌违反负责任的研究方式的程序予以处理，该程序被称为RCR程序。对负责任的研究方式的忽视和学术不端行为不但违反负责任的研究方式准则，同时也可能违法。

除了不端行为和疏忽之外，学术界还可能会
Research misconduct and disregard for the responsible conduct of research may occur in planning and performing the research and in presenting the research results and conclusions. Allegations of research misconduct and disregard for the responsible conduct of research are dealt with through the procedure for handling alleged violations of the responsible conduct of research. This is referred to as the RCR process. Disregard for the responsible conduct of research and research misconduct violate the responsible conduct of research, but they may also violate the law.

In addition to misconduct and disregard, other types of ethically irresponsible research practices may occur in the research community. However, sincere differences of opinion that result from the interpretations and assessments of research results belong to academic and scientific debate and do not violate the responsible conduct of research.

**Research misconduct**

Research misconduct refers to misleading the research community and often also to misleading decision-makers. This includes presenting false data or results to the research community or spreading false data or results in a publication, in a presentation given at a scientific or scholarly meeting, in a manuscript that is intended to be published, in study materials or in applications for funding. Furthermore, misconduct refers to misappropriating other researchers’ work and to representing other researchers’ work as one’s own.

Research misconduct is further divided into the following four subcategories:

- **Plagiarism**: Misrepresenting another researcher’s work as one’s own.
- **Non-participation in the research process**: This includes granting credentials to persons who have not participated in the research process.
- **Data manipulation**: This includes falsifying data or results to influence decisions.
- **Ethical and legal violations**: This includes providing false information or misleading others about the research process.
- Fabrication refers to presenting invented observations to the research community. In other words, the fabricated observations have not been made by using the methods as claimed in the research report. Fabrication also means presenting invented results in a research report.

- Falsification (misrepresentation) refers to modifying and presenting original observations deliberately so that the results based on those observations are distorted. The falsification of results refers to the scientifically unfounded modification or selection of research results. Falsification also refers to the omission of results or information that are essential for the conclusions.

- Plagiarism, or unacknowledged borrowing, refers to representing another person’s material as one’s own without appropriate references. This includes research plans, manuscripts, articles, other texts or parts of them, visual materials, or translations. Plagiarism includes direct copying as well as adapted copying.

- Misappropriation refers to the unlawful presentation of another person’s result, idea, plan, observation or data as one’s own research.

In international guidelines, misconduct is usually divided into three categories: fabrication, falsification and plagiarism, which is also referred to as the FFP categorisation. The tradition in Finland has been to maintain a more comprehensive and analytical categorisation; hence, misappropriation is separated from plagiarism and is considered to be a distinct category.
Disregard for the responsible conduct of research

Disregard for the responsible conduct of research manifests itself as gross negligence and carelessness during the research process. This type of behaviour can be identified when researchers engage in:

- denigrating the role of other researchers in publications, such as neglecting to mention them, and referring to earlier research results inadequately or inappropriately;

- reporting research results and methods in a careless manner, resulting in misleading claims;

- inadequate record-keeping and archiving of results and research data;

- publishing the same research results multiple times ostensibly as new and novel results (also referred to as self-plagiarism);

- misleading the research community in other ways in terms of one’s own research work.

Other irresponsible practices

Other irresponsible practices may also occur in research. For example, researchers may engage in:

- manipulating authorship, for example, by including in the list of authors persons who have not participated in the research, or by taking credit for work produced by what is referred to as ghost authors;
- exaggerating one's own scientific and scholarly achievements, for example, in a CV or its translation, in a list of publications, or on one's homepage;

- expanding the bibliography of a study to artificially increase the number of citations;

- delaying the work of another researcher, for example, through refereed peer reviewing;
- falsely and maliciously accusing a researcher of RCR violations;

- hampering inappropriately the work of another researcher by other means;

- misleading the general public by publicly presenting deceptive or distorted information concerning one's own research, its results or the scientific importance or applicability of those results.

In their most serious forms, these practices may meet the criteria of an RCR violation mentioned above.

- 在简历或简历译文中、在出版物列表中、或在个人主页上夸大自己的科学和学术成就

- 扩大研究所涉及的的参考书目，以此人为地增加引用的数量

- 拖延另一位研究人员的工作，例如，通过参评同行评审

- 虚假和恶意地指控某位研究人员违反RCR准则

- 以其他方式不适当地妨碍其他研究人员的工作

- 公开显示涉及自己的研究、其结果、其科学重要性以及其适用性的欺骗或歪曲的信息，以此误导公众

此类行为中情节严重的可能符合上述违反RCR准则的行为标准。
Guidelines for handling alleged violations of the responsible conduct of research

It is in the mutual interests of society, the research community, and the researchers, to resolve all allegations of research misconduct. The RCR guidelines published by TENK are internal ethical guidelines for the Finnish research community and are used to address allegations of violations of the responsible conduct of research at universities, universities of applied sciences, research institutes, and in other research organisations under public funding. The research organisations that have signed the agreement have committed themselves to applying the procedures in question to cases of alleged violations of the responsible conduct of research.

The guidelines apply to investigations into the alleged violations of the responsible conduct of research. In addition to research and publications, they also apply to all other types of written works in conjunction with academic activities, irrespective of their form of publication. These works include textbooks, funding applications, project applications, poster presentations, evaluations of academic theses, and referee statements.

These guidelines also apply to investigations of alleged RCR violations in academic theses submitted for a Master’s degree or a higher academic degree, including the higher degrees in the universities of applied sciences, even when the thesis is not published. If the approval of the thesis is pending, or the candidate has not yet been granted permission to defend the thesis, the institution can investigate the allegations by following another procedure, unless the researcher suspected of an RCR violation has signed the agreement.
violation insists on an investigation according to these guidelines.

Research misconduct and disregard for the responsible conduct of research will not expire. However, universities, universities of applied sciences or research institutions can decide not to conduct an RCR investigation when a significant amount of time has passed since the alleged violation and the investigation would no longer affect ethically sustainable research practices, research quality assurance or the legal protection of other parties. On request, TENK will provide a statement regarding the decision made by the institution (see guidelines for the RCR Process).

In addition to following these guidelines, investigations into alleged RCR violations also need to take general legislation into account. Investigations into alleged RCR violations do not handle issues that are related to criminal law, copyright law, or labour law, or into other legal issues that may be related to the alleged violation.

The investigation procedure for alleged violations of the responsible conduct of research involves three steps:

- A written notification
- A preliminary inquiry
- The investigation proper

The most crucial factors ensuring legal protection are:

- The fairness and the impartiality of the process
- The hearing of all the involved parties
- The competence and quickness of the process

RCR准则的行为的调查不会处理与刑法、版权法或劳动法有关的法律问题，也不会处理其他与涉嫌违规的行为有关的法律问题。

对涉嫌违反负责任的研究方式的调查程序包括三个步骤：

- 书面通知
- 初步调查
- 彻底调查

确保获得法律保护的最关键因素是：

- 程序的公平性和公正性
- 所有相关方的听证
- 程序的权限和高效

这就要求对程序的每个阶段进行细致的记录，并且尊重当事各方的信息权和其他权利。如果其中一方对芬兰语或瑞典语的掌握不够熟练，那么在调查过程中使用的语言（例如听证会和文件）应是研究人员与其组织之间日常使用的语言。

大学院校负责人、名誉校长（如果大学有这样的安排）、专科院校负责人或研究机构负责人将负责遵守程序准则，并负责在整个程序过程中作出决定。该决定不能委托他人做出。

关于涉嫌违反RCR准则的通知将被发送至开展研究的大学、专科院校或研究机构。如果涉嫌违规的人员曾在多个研究领域工作过，涉嫌违规行为的处理需各机构相互合作，并就如何进行调查达成协议。

在芬兰进行的RCR调查程序必须遵循《芬兰行政程序法》(434/2003) 法则。这些法则还是判
This requires that each phase of the procedure be carefully documented and that the parties’ right to information and their other rights concerning the procedure are respected. If a party of the procedure does not have a sufficient command of Finnish or Swedish, then the language used during the investigation, for example, in hearings and documents, is the language commonly used by the researcher with the organisation.

The person responsible for adhering to the guidelines of the procedure and for making the decisions during the whole process is the rector of the university, or if the university so decides, the chancellor, or the rector of a university of applied sciences, or the director of the research organisation. The decision-making cannot be delegated to another person.

The notification of an alleged RCR violation is to be sent to the respective university or university of applied sciences or to the research institute at which the research has primarily been conducted. If those alleged to have committed a violation have worked in several research communities, the handling of the alleged violation requires co-operation between the respective organisations, which are to agree amongst themselves as to how to conduct the investigation.

Any RCR investigation procedure that takes place in Finland must follow the principles of the Finnish Administrative Procedure Act (434/2003). These principles determine, among other matters, the grounds for good administration and for disqualification.

An allegation regarding an RCR violation and the decisions related to this allegation during the various phases of the RCR process are to be reported to TENK, so that it can monitor
compliance to the guidelines and the state of research integrity in Finland. Although all documents sent to the authorities or produced by them are generally public, in accordance with the Finnish Act on Openness of Government Activities (621/1999), the research organisation is, when sending the documents to TENK, obliged to take into account the secrecy obligations that apply to the information included in the documents.

For joint international projects that include researchers working in Finnish research communities, in special cases, the investigation does not have to adhere to the Finnish guidelines, but may be conducted according to the guidelines used by the foreign organisation in charge of the project. The Finnish party participating in the project is obliged to contribute to the appropriate investigation of the alleged RCR violation.

Additional information on applying the RCR guidelines can be obtained from the Secretary General of TENK.

The process for handling allegations of the responsible conduct of research, otherwise known as the RCR process

1. The allegation of a violation of the responsible conduct of research must be communicated in writing to the rector or to another person responsible for the decision-making as stated above (hereafter the rector). This notification must be submitted to the organisation at which the alleged violation has occurred or is presumed to occur. The notification must specify the type of the alleged violation of responsible conduct of research, as well as the
grounds for the allegation. The notification cannot be submitted anonymously.

The rector can also initiate an investigation of allegations that have come to their attention from other channels. TENK can also recommend an investigation if it has reason to suspect a violation within the organisation in question.

2. The rector decides whether to initiate a preliminary inquiry. A preliminary inquiry is unnecessary when:
- the allegation does not constitute a violation that falls within the scope of the RCR guidelines
- it becomes clear without further action that the notification is unfounded, or
- there is another justified reason for not proceeding, such as a preliminary inquiry that has already been initiated by another research organisation

A reasoned decision not to initiate a preliminary inquiry must be communicated to the instigator of the allegation, to the person alleged of a violation, and to TENK. If any party is dissatisfied with the decision, they may request a statement from TENK within six months of the date of being notified of the decision (see Point 12).

If a decision is made to conduct a preliminary inquiry, the instigator of the allegation, the person alleged to have committed a violation and TENK must be notified immediately of the inquiry and of the grounds for it.

3. The purpose of the preliminary inquiry is to initially determine the validity of the allegations of a violation that are stated in the
notification and the evidence that has been presented to support these allegations. The instigator of the allegation, the person alleged to have committed a violation, and, if necessary, experts and other persons involved, will be heard during the preliminary inquiry. The preliminary inquiry must be conducted within three months of receiving the notification, unless there are specific reasons to grant additional time for the completion of the inquiry.

4. On the basis of the preliminary inquiry, if the allegation turns out to be unfounded, the rector will make a reasoned decision to discontinue the investigation process. This decision must be communicated to the person alleged to have committed a violation, to the instigator of the allegation, as well as to TENK. This decision may also be made public if so requested by the person alleged to have committed a violation or if the publishing of it is otherwise deemed necessary.

This decision must state that any party dissatisfied with the decision can request a statement from TENK within six months of being notified of the decision (see Point 12).

The rector will decide on the potential consequences should the allegations regarding the violation of the RCR be unfounded.

5. If after the preliminary inquiry, there is still reason to suspect disregard for the responsible conduct of research or research misconduct, the rector must initiate the investigation proper. Conducting this investigation is unnecessary when the preliminary inquiry has revealed that a violation of the RCR has occurred, the person alleged to have

要)和其他相关人员的意见。除非有具体理由确信完成调查需要额外的时间，初步调查必须在收到通知后的三个月内完成。

4. 在初步调查的基础上，如果指控被证明是毫无根据的，那么机构负责人将作出合理决定来终止调查程序。这一决定必须传达给被控方、指控方以及TENK。如果被控方提出要求，或者出于其他原因认为有必要公布相关决定，则该决定也有可能被公布。

该决定必须声明，任何对决定不满的当事方可在收到决定通知后的6个月内请求TENK发表声明(参见第12点)。

如果对违反RCR准则的指控是毫无根据的，则机构负责人将决定后续的处理结果。

5. 如果在初步调查完成后，仍有理由怀疑可能存在对负责任的研究方式的忽视或学术不端行为，则机构负责人必须启动进行彻底调查。如果初步调查发现违反RCR准则的行为确实存在，被控方同意初步调查结果且没有其他开展进一步调查的具体理由，则没有必要开展彻底调查。在这种情况下，机构负责人将依据第9点的规定，基于
committed a violation agrees with the results of the preliminary inquiry, and there is otherwise no other specific reason to conduct the investigation. In this case, the rector will make the decision based on the preliminary inquiry, as stipulated in Point 9.

An investigation proper is, however, warranted if the preliminary inquiry has revealed indications of wider-ranging misconduct than was initially suspected.

6. For the investigation proper, the rector will establish an investigation committee and invite expert members to join, one of whom will be appointed as head of the committee. The investigation committee must have the necessary expertise in the academic discipline in question, as well as the legal or other expertise required. At least two members of the committee must be external to the organisation conducting the investigation. The appointment of the investigation committee and its activities must be in accordance with the Finnish Administrative Procedure Act and its general stipulations about disqualification. The parties concerned and TENK must be notified of the initiation of the investigation proper.

7. The investigation needs to be conducted as quickly as possible. Each phase, such as the hearing of the different parties, must be carefully documented. If the investigation committee has not completed the investigation within six months of it being established, it must submit a report concerning the delay to the rector, who will then make a decision regarding the additional time required.
8. The investigation committee is to submit a final report on its work. This report needs to include:
- An account of the events prior to establishing the investigation committee, such as an account of the research or the activities alleged to represent a violation, as well as the evidence for the allegation
- An account of the investigation committee’s tasks and activities and of the hearing of the parties
- A reasoned assessment of the investigation committee to determine whether the suspected activity in each specific allegation in the written notification constitutes research misconduct or disregard for the responsible conduct of research. If a violation has been uncovered, a reasoned assessment needs to be included concerning the nature, severity and frequency of occurrence of the violation of the responsible conduct of research.
- When necessary, a list of the research material, results and publications that, in the opinion of the investigation committee, contain research misconduct or disregard for the responsible conduct of research
- A proposal concerning the publishing of the conclusions of the final report as stipulated in Point 9, and possible proposals on how the consequences of the violation should be rectified.

The rector will ask that both the person alleged to have committed a violation and the instigator of the allegation submit responses to the final report.
9. The rector will decide on whether or not a violation of the responsible conduct of research has occurred. This decision must be communicated to the person alleged to have committed a violation, to the instigator of the allegation, as well as to TENK. This decision must mention that any party dissatisfied with the decision can request a statement from TENK within six months of the decision (see Point 12).

If the investigation finds that research misconduct has occurred, measures must be taken to publish the conclusions of the final report in a manner deemed appropriate by the investigation committee and, when possible, at least in the publication channel where the fraudulent research findings or results based on fraudulent means have already been published.

In addition, the reported RCR violation can lead to other sanctions that the rector is justified or obligated to impose on the basis of, for instance, administrative, criminal, or labour law or on the grounds of contract law.

If a violation of the responsible conduct of research has occurred, the sanction for that violation must be in just proportion to the severity of the violation.

10. If the investigation finds that the person alleged to have committed a violation has not violated the responsible conduct of research, the person alleged to have committed a violation and the instigator of the allegation must be notified of this decision. Furthermore, an effort must be made to publish the findings of the investigation in an appropriate publication channel if the person alleged to have committed a violation so desires, or if there are other compelling reasons.
11. If the person alleged to have committed a violation works at a research organisation other than the one in which the allegation has been handled or receives external research funding, the final report of the investigation must be submitted to the employer or the funding organisation.

12. The person alleged to have committed a violation or the instigator of the allegation can request a statement from TENK if said party is dissatisfied with the rector’s decision, with the procedures adopted in the preliminary inquiry or the investigation proper, or with the conclusions of the final report. This request must be justified and it must address the specific questions that are the basis for the statement requested. If the RCR process is not yet completed, no statement regarding the procedures or decisions of the interim phases can be requested. The request for a statement must be submitted within six months of the decision.

11. 如果被控方在处理指控的机构以外的研究机构工作，或者在获得外部研究经费的研究机构工作，则必须向相关雇主或资助机构提交调查的最终报告。

12. 如果上述当事人对机构负责人的决定、初步调查或彻底调查所采用的程序或最终报告的结论感到不满，则被控方或指控方可以请求TENK发表一份声明。该请求必须合理且必须阐明声明请求所基于的具体问题。如果RCR程序尚未完成，则不得请求提供有关中间阶段程序或决定的声明。声明请求必须在收到决定后的六个月内提交。
TENK must process the matter without delay, within five months of receiving the request for a statement, on the basis of the documents submitted to it. Furthermore, TENK must issue a statement addressed to the party that has contacted TENK, and this statement must also be delivered to the rector and to the other parties involved.

When compiling the statement, TENK may, if needed, request a written response to the request for a statement from the parties concerned and from the organisation with whose decision or procedures the person requesting the statement is dissatisfied. The person requesting the statement is to be given an opportunity to comment on these responses. TENK's statement and the documents, including the appendices, used in compiling this statement are, in principle, publicly available after the statement has been issued.

In its statement, TENK may propose that the rector conduct an additional investigation if there are well-founded reasons for this in the material provided for the preliminary inquiry, in the final report of the investigation proper, or in the information provided by an involved party in its request for a statement.

TENK may, for well-founded reasons, recommend an additional investigation without a request for a statement.

TENK does not take part in the preliminary inquiry or the investigation proper and it does not arrange hearings.

The guidelines for formulating a request for a statement can be found on TENK's website, www.tenk.fi/en.
The Finnish National Board on Research Integrity TENK is a body of specialists as appointed by the Ministry of Education and Culture in Finland on the proposal of the scientific community. TENK was founded in 1991 by decree to handle ethical issues on scientific research and to promote research integrity. Universities, universities of applied sciences and other research organisations in Finland have voluntarily committed to comply with TENK’s guidelines on responsible conduct of research.
www.tenk.fi