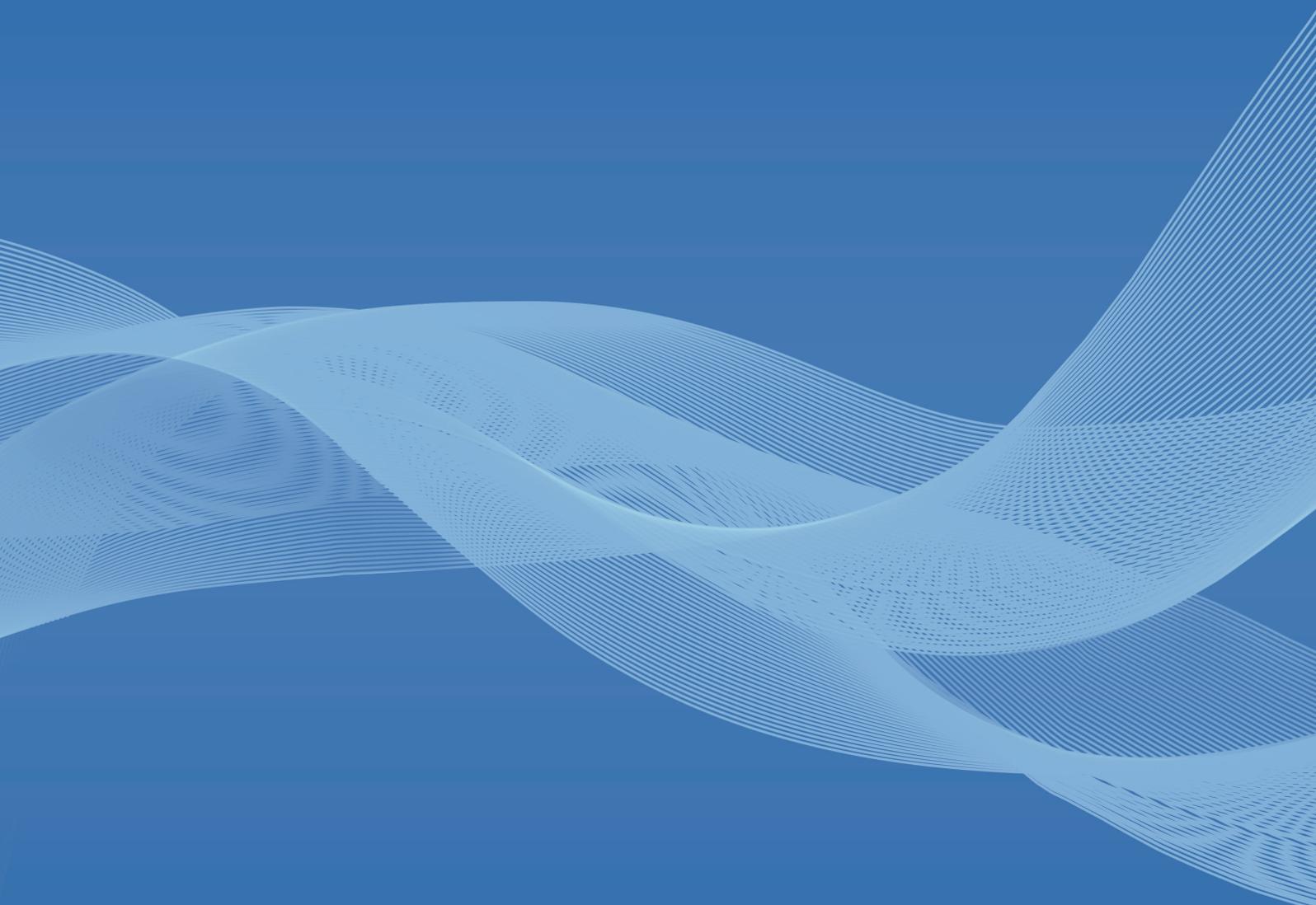


Research Integrity



December 2022

Kyoto University Research Integrity Committee

The primary aim of this pamphlet is to provide faculty, researchers, and graduate school students with a clear understanding of research integrity. Please note that the pamphlet may contain terms and expressions that differ from those in the guidelines and rules produced by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Kyoto University. For details, please refer to the URLs listed within the pamphlet.

In the event of research misconduct, the following measures will be taken:

Measures taken against the individuals involved:

- Disciplinary measures imposed by the university (disciplinary dismissal, suspension from work, revocation of degree, etc.).
- Restriction of eligibility to apply for competitive research funds.
- Revocation of funding awarded, and requirement to return funding already received.

Measures taken against the university:

If the university's management is found to be inadequate by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), indirect expenses funding for the entire university will be reduced.
If there is no improvement, even after the above measures have been taken, competitive research funding for the entire university will be suspended.

Guidelines for Responding to Misconduct in Research (issued by MEXT)

https://www.mext.go.jp/a_menu/jinzai/fusei/_icsFiles/afieldfile/2015/07/13/1359618_01.pdf



What Constitutes Misconduct in Research Activities?

Kyoto University defines “research misconduct” as “fabrication,” “falsification,” or “plagiarism.”

- Regulations on Promoting Research Integrity, etc. at Kyoto University
<https://www.kyoto-u.ac.jp/sites/default/files/inline-files/20210329%20Regulations%20on%20Promoting%20Research%20Integrity-185a85e83b24621d41bab3734baa4d64.pdf>



Fabrication	Creating false data or research results, and presenting them in papers, etc.
Falsification	Creating false data or research results by altering research materials, equipment, or processes, and presenting them in papers, etc.
Plagiarism	Borrowing ideas, analytical methods, data, research results, papers, or terminology without permission or appropriate acknowledgment of the original researchers, and presenting them in papers, etc.

In addition to the above, duplicate publications, improper authorships, etc., are also considered breaches of researcher ethics, and are prohibited under the submission rules of many academic journals.





Cases of Misconduct

Case 1: Fabrication and Falsification

A faculty member **fabricated** and **falsified** data used in key graphs in an academic paper by such means as calculating numerical values to produce conclusions favorable to the faculty member's purposes. It was found that many of the fabricated or falsified portions were important points in the paper, and that they significantly affected the paper's conclusions.

Case 2: Falsification and Plagiarism

It was found that, in an academic paper written by a faculty member, said faculty member had **falsified** (manipulated) data and **plagiarized** several figures (did not provide appropriate reference sources). This was determined to be gross negligence of the duty of care required of researchers. As a result, the paper was retracted.

Case 3: Plagiarism

It was found that a former graduate student, while still enrolled at the university, committed **plagiarism** (used phrases, ideas, and research results without permission) in a total of 11 instances in an academic paper that was published in a journal. The investigation findings were reported to the institutions to which the journal was distributed, and the paper was retracted.

Case 4: Fabrication and Falsification

It was found that, in an academic paper written by a former faculty member, said faculty member had falsified data by copying and pasting clusters of data points to support their hypothesis and had committed a total of 37 instances of misconduct (**fabrication/falsification**) involving intentional or gross negligence of the duty of care required of researchers.

Case 5: Fabrication

It was found that four academic papers written by a former faculty member had been **fabricated** because it could not be confirmed that the experiments for the papers had actually been conducted. Furthermore, given that such misconduct could not possibly have occurred through negligence, all instances were determined to be intentional.

Case 6: Fabrication and Falsification

It was found that 11 figures in an academic paper co-written by a former researcher and a current faculty member of the university contained **fabricated / falsified** information. The former researcher (the primary author) was found to have been involved in the misconduct, and the faculty member (the corresponding author), while not involved in the misconduct, was found to be responsible for the content of the paper, including failure to perform final checks.





Disciplinary Action against Research Misconduct

To date, the following disciplinary action has been taken against cases of research misconduct at Kyoto University.

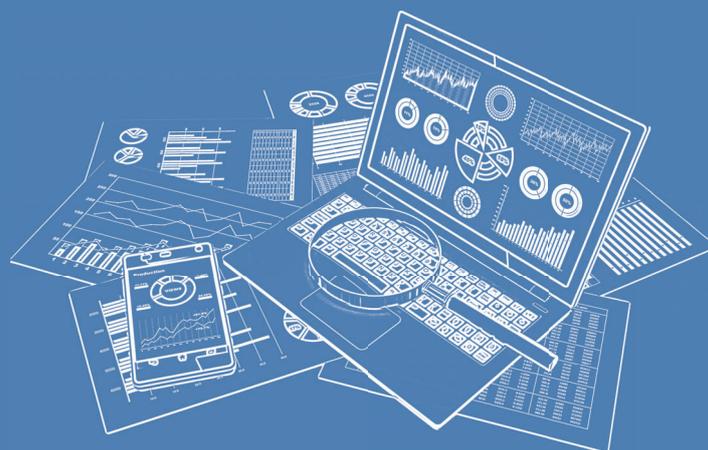
- Disciplinary dismissal *
- One-year suspension from work
- Revocation of degree
- Non-payment of retirement allowance *

*Similar disciplinary actions have been taken even after the retirement of the individual in question.

In addition to the above, the perpetrator's name, affiliation, and other details will be disclosed at a press conference, research funding must be returned, and restrictions will be imposed on eligibility to apply for research funding.

The details of misconduct cases, including the names of perpetrators and other details, are made public on the Japan Society for the Promotion of Science (JSPS) website:

<https://www.jsps.go.jp/j-kousei/sochi.html> (in Japanese)





Restrictions on Eligibility to Apply for Competitive Research Funds



"Notice: Prevention of Misconduct in Research Activities" (MEXT)
https://www.mext.go.jp/content/20210820-mxt_kiban02-100000300_2.pdf (in Japanese)

● Persons who are involved in misconduct

Persons liable to the imposition of restrictions on their eligibility to apply for competitive research funds		Degree of misconduct	Period of restriction
1. <u>Malicious cases</u> , such as those in which the perpetrator intended to commit misconduct from the outset of the research.		–	10 years
2. Author(s) of academic papers, etc.	Authors responsible for the academic papers, etc.	Has a <u>significant impact</u> on the progress of research and on society, and is <u>highly malicious</u>	5- 7 years
	Authors other than the above	Has a <u>minor impact</u> on the progress of research and on society, and is <u>less malicious</u>	3- 5 years
3. Persons involved in misconduct other than that described in items 1 and 2, above		–	2- 3 years

For more information about the degree of impact or the level of maliciousness, please refer to the notice above.

● Those who are not involved in the misconduct, but who are responsible for academic papers in which a case of misconduct was found.

Criteria for Determination of Penalty		Restricted period
Authors who are in the position of supervising or guiding those involved in the misconduct	Authors other than those described on the left	
<u>Cases in which specific measures were not taken to prevent misconduct</u> during the process of writing a paper, etc. (<u>checking experiment notes, raw data, historical records, etc.</u>)	Same as described on the left	3 years
Period of restriction imposed on the perpetrators: <u>6 years or longer</u> Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct in <u>multiple papers, etc.</u>	–	
Period of restriction imposed on the perpetrators: <u>6 years or longer</u> Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct in <u>a single academic paper, etc.</u>	Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct <u>in multiple papers, etc.</u>	2 years
Period of restriction imposed on the perpetrators: <u>up to 5 years</u> Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct in <u>multiple papers, etc.</u>		
Period of restriction imposed on the perpetrators: <u>up to 5 years</u> Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct in <u>a single academic paper, etc.</u>	Cases in which the responsible authors have neglected to conduct the necessary checks, and failed to prevent misconduct in <u>a single academic paper, etc.</u>	1 year
Cases in which the authors conducted the necessary checks, but in which it is considered to have been difficult to discover any actual misconduct (excluding cases in which such misconduct occurs frequently)		None



Action Plan for the Promotion of Research Integrity

Kyoto University has formulated an action plan to promote research integrity at the university.

<https://www.kyoto-u.ac.jp/ja/research/rule/suishin> (in Japanese)



◆ Research Integrity e-learning course

Kyoto University provides research integrity training for faculty members, researchers, and graduate school students.

For more details, please refer to the following:

<https://www.kyoto-u.ac.jp/en/research/research-compliance-ethics/research-integrity-rules-reporting/research-integrity-training>



◆ Preservation of Research Data

The storage of raw data, experiment notes, other research records, and materials used in experiments, as well as the appropriate management and disclosure of such records are all vital, not only for preventing misconduct, but also in the event that researchers receive any accusations of being engaged in suspicious activities. At Kyoto University, **research records are maintained for at least 10 years after the presentation of the research results.**

For more details, please refer to the following:

https://www.kyoto-u.ac.jp/sites/default/files/embed/enresearchresearch-compliance-ethicsresearch-integrity-rules-reportingdocumentsresearch_data_en150730.pdf



◆ Education on Research Integrity and Writing Research Papers for Graduate School Students

In addition to providing education on research integrity through guidance sessions and classes, we hold face-to-face tutorials with graduate school students before they commence writing their masters and doctoral theses, and offer a common graduate course titled “Research Ethics and Integrity.”

◆ Online Tool to Detect Plagiarism

Kyoto University provides an online plagiarism detection tool called “iThenticate” for use by faculty members and researchers. Using iThenticate, they can compare their research results and publications with existing published information. **iThenticate can also be used to check for plagiarism in masters and doctoral theses and report assignments.**

For more details, please refer to the following:

<https://www.kyoto-u.ac.jp/en/research/research-compliance-ethics/research-integrity-rules-reporting/ithenticate>





Research Integrity Hotlines

If you discover a case of research misconduct, please report it to the relevant departmental section or the university's central administration.

Relevant departmental sections for inquiries, reports, etc.

<https://www.kyoto-u.ac.jp/en/research/research-compliance-ethics/research-integrity-rules-reporting/research-integrity-hotlines>



For reports/inquiries to the central administration, please use the dedicated form at the following

<https://u.kyoto-u.jp/wy-lt> (in Japanese)



Audit Office, Kyoto University
Yoshida-honmachi, Sakyo-ku, Kyoto 606-8501
Tel: 075-753-5139 Fax: 075-753-5138
Email: kc-madoguchi@mail2.adm.kyoto-u.ac.jp

*In principle, persons reporting cases of misconduct must provide their name and report the relevant details in writing. Consultations can be provided by phone.



Code of Conduct for Academic Research

The Science Council of Japan has published a statement that outlines a code of conduct for scientists in all academic fields ("Code of Conduct for Scientists—Revised Version," 2013). The code of conduct describes the responsibilities and duties of science and scientists as follows.
https://www.scj.go.jp/en/report/Code_of_Conduct_for_Scientists-Revised_version.pdf



What is science?

Science is a system of knowledge based on the principles of reason and empirical proof that is assiduously built up over time, and constitutes an irreplaceable common asset of all humanity. Scientific research is an act that creates new knowledge by boldly pursuing the challenges of unknown fields.

Science and scientific research exist both with and for society. Therefore, research activities based on scientific freedom and the subjective judgments of scientists only gain social recognition once they are premised upon public trust and the mandate of the people.

The responsibilities of scientists

Basic responsibilities of scientists

Scientists shall recognize that they are responsible for assuring the quality of the specialized knowledge and skills that they themselves create, and for using their expert knowledge, skills and experience to contribute to the health and welfare of humankind, the safety and security of society and the sustainability of the global environment.

Attitude of scientists

Scientists shall always make judgments and act with honesty and integrity, endeavoring to maintain and improve their own expertise, abilities and skills, and shall make the utmost effort to scientifically and objectively demonstrate the accuracy and validity of the knowledge they create through scientific research.





Inquiries regarding this pamphlet:

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