

The dignity of knowledge < Researcher's ethics >

Creative ideas are the source of knowledge;
the dignity of knowledge is the responsibility to society —

We are entrusted by society "to deeply seek the truth, to create new insights and to distribute widely the fruits to society." That is the mission of a university with a grave social responsibility. When carrying out research, we should endeavor to follow researcher's ethics, paying particular attention to the points below, and to maintain and improve the quality of research at the University of Tsukuba.

Prevention of improper conduct related to research

 Improper conduct related to research includes fabrication, falsification or plagiarism of data or research results in published research outlets.

Fabrication: creating data or research results that do not actually exist.

Falsification: converting research results obtained from research activities to false results

by manipulating the modification of the research materials, the research

equipment or the research process.

Plagiarism : use of another researcher's ideas, analysis, methods, data, research results,

research papers or terminology without obtaining the researcher's consent

or without appropriate references to the original author.

• Improper conduct related to research should not be carried out by a researcher who is seeking the truth. Improper conduct will shake public confidence in science and will hamper the development of science. Given that most research is funded by taxes, improper conduct related to research, as well as the improper use of research funds, is socially-prohibited behavior.

Prevention of impropriety and guaranteeing the credibility and reproducibility of research results

- Data analysis should not be carried out with preconception or a biased view, but with credibility and objectivity. A researcher should not consider only favorable data, but should create an environment to check the data or analyzed results with research collaborators or co-authors through open discussions.
- Citations of published data or research papers should clearly follow the rules. Improper research includes the plagiarism of the writings of others, including information, master theses or doctoral theses, and the citation of texts or graphic charts in research papers without indicating the proper credit. In order to clarify the originality of the research paper, the researcher should respect preceding studies, evaluate other researchers' achievements properly, and cite them appropriately.
- A researcher should manage research records properly and store research data or specimens for a certain period after the submission of a research paper. It is the researcher's responsibility to guarantee the credibility and reproducibility of his/her research in order to prove the research is scientific.



Compliance Counter for Allegations Related to Improper Conduct

— Awareness of researcher's ethics —

Social responsibility of a researcher to publish the research results

- A researcher should be aware that publishing research results is the duty of a researcher toward society, in order to contribute to the accumulation of the common intellectual assets of mankind.
- When a researcher becomes aware of an error in a research paper, the researcher should announce the correction immediately. While a research paper is preserved permanently as evidence of knowledge, neglecting an error will waste other researchers' time and efforts, and hinder the development of science.
- Someone who did not actually contribute to the research should not be listed as an author of a research paper. An author should be responsible for the contents of a research paper.

High Ethical Standards

- One should acknowledge the importance of researcher's ethics and develop a high ethical standard in research laboratories, in academic programs, in graduate courses, and, by the same token, in the wider researchers community. 'Pursuit of truth' and the 'freedom of research' are founded on the reliance and trust of society.
- Both teachers and students should have consciousness and pride as independent researchers and stand firmly against improper conduct related to research. Turning a blind eye to improper conduct by a research collaborator is deemed as involvement in improper research.
- Regarding the possession of research results, research data or research material, and the duty of confidentiality related to research, a researcher should obey the content and items of any contract made. In case of joint research, publishing one's own data without the research collaborator's permission is deemed plagiarism. Offering unpublished data to a third party, in some cases, may be a leakage of information.
- Research should comply with laws and guidelines related to environmental safety, bioethics, medical ethics, conflict of interests, etc. Research should comply with necessary formalities in advance of undertaking the research.
- In the case of using research funding, a researcher should obey the rules of each research funding system and use the funding properly.

Research by students and the instruction of research

- A student, as an independent researcher, also should follow the researcher's ethics. A student's degree may be revoked due to improper conduct related to research.
- In the case where a student publishes improper research results, the student's supervisor may not only be investigated over the issue of responsibility as a joint author, but also as a supervisor or as a member of the board of the examining committee for an academic degree.
- Between a supervisor and a student, not connivance, but a continued tension in research is necessary. It is vital to create an environment to exchange opinions or criticism freely about the research.