



Scientific Research Ethics Charter of Capital University

Introduction

Scientific advancement in all fields of science requires values and ethics in the form of a charter and guide that serves as a reference and foundation for faculty members and their supporting staff to engage in honest self-reflection with genuine conviction, for ethics and honesty are the foundation of success, and scientific success is the foundation of the advancement of nations and peoples. This is what the nation needs: all scholars working together through diligent work with complete transparency, credibility, and good morals. Ethics are a necessity of civilized life and a fundamental requirement for organizing and stabilizing society, and their absence means the dominance of the law of the jungle, where "might is right" rather than "right is might ."

Therefore, this document has been developed to serve as a guide for directing all beneficiaries of scientific research at Capital University, including researchers, supervisors, professors, and indeed the academic community, toward appropriate conduct regarding scientific research. The document defines standards of good conduct, scientific integrity, ideals, and general principles that establish guidelines for discussing ethical issues that should prevail within the Capital University community.

Definition of Scientific Research

It is an organized intellectual process carried out by the researcher in order to investigate the facts concerning a particular issue or problem, called the research topic, by following an organized scientific method called the research methodology, with the aim of reaching appropriate solutions for addressing it or results that are valid for generalization to similar problems, called the research findings.

Scientific Research Ethics

The first thing a researcher must possess is the necessary tools for scientific research, meaning that they should not be a novice in this field. This is achieved through the following:

- Academic integrity in conducting research and writing publications.
- Commitment to scientific thinking .
- Accuracy in collecting and analyzing data
- Respect for intellectual property.
- Patience in enduring the hardships of research.
- Directing their research toward benefiting society and refraining from conducting research that harms the environment.

- The ability to be creative and innovative in finding solutions to environmental and societal research problems.

Definition of the Ethical Charter of Capital University

A set of agreed-upon ethical principles, standards, and duties among faculty members that govern work practices at the university, with the aim of enhancing the ethical framework within the university and fostering a spirit of belonging and loyalty to the university and the nation.

Objectives of launching the Ethical Charter of Capital University

- Promoting the values of integrity and transparency and ensuring the application of quality standards and academic accreditation.
- Encouraging university faculty members to adhere to the Professional Ethics Charter in letter and spirit, in orientation and conduct.
- Working to make this charter a standard for the conduct of faculty members regarding their academic relationships with their students and colleagues, as well as with the external community.
- Emphasizing the role of the university professor in the educational process.
- Enhancing cooperation among faculty members, as well as communication and cooperation with the surrounding environment, students, and staff.

- Clarifying professional obligations toward colleagues in the same profession considering the governing laws.
- Encouraging university members to participate actively in all university academic or administrative activities.
- Protecting intellectual property rights and applying its standards

The Basic Principles of Research Ethics

There are a number of general principles that must be followed and adhered to in all branches of science, which relate to the values of "positive action" and "avoiding harm", such as respecting the rights, opinions, and dignity of others, whether they are fellow researchers, research participants, or those targeted by the research.

There are some considerations regarding ethical conduct that include the following:

- Credibility
- Expertise
- Safety
- Trust

- Respect for people and privacy
- Confidentiality of information and data
- Animal rights

To clarify these considerations, we detail them as follows:

Credibility:

Your research findings must be reported honestly, and you must be truthful in what you convey, and not fill in any missing or incomplete information based on what you think may have happened, nor attempt to introduce data based on the results of theories, or other people.

Expertise:

The work you undertake in research should be appropriate to your level of expertise and training, first carry out the preliminary work and then try to understand the theory accurately before applying the concepts or procedures, and an expert in your field of research will be the best person to assist you in choosing the things you should look into.

Safety:

Do not expose yourself or others to physical or moral danger, and take your preparatory precautions during all experiments, and do not attempt to conduct your research in environments that may be dangerous from geological, atmospheric, social, biological or chemical aspects, and the safety of those targeted by the research is also important, so do not embarrass them, make them feel ashamed, or expose them to danger in your research topic.

Trust:

Scientific research depends on mutual trust among researchers, as well as between researchers and the target groups, such that each researcher conducts their research accurately and carefully, so the researcher should try to build a relationship of trust with those they work with, so that they obtain greater cooperation from them and more accurate results, and they should never exploit the trust of the people they are studying.

Adherence To Research Ethics in Experiments Conducted on Humans

Prior consent must be obtained from human research participants (or their guardians if they are under the legal age) before beginning the research, and this consent must have clear terms (the risks, benefits, and what is required of the person) For example, if you need to access other people's privacy, you must obtain their consent to do so, as inadequate or improper initial planning of your research may force you

to look for another site and start over. You must also protect the identity of the research participants at all times, so do not provide names or hints that could reveal their true identities, and this can be achieved by converting names into numbers or symbols while ensuring that everything related to the identities of the subjects is destroyed after the study is completed.

Adherence To Research Ethics in Experiments Involving Animals

Treating animals humanely is a sign of a civilized society and is particularly important at present, as it is a requirement for international scientific publication when experimental animals are used in scientific research. Dealing with animals is not limited to scientific research alone but also extends to practical training in some practical colleges. The uses of animals of various types differ in the fields of agriculture and food, in addition to their use in education and scientific research, where different experiments are conducted as a first stage before being applied to humans when they subsequently prove successful. The Universal Declaration of Animal Rights states that all living creatures have natural rights, that animals with nervous systems have specific rights, and that every animal has the right to be treated well and protected by humans.

Experimental animals must be kept in a suitable environment to ensure the validity of the results, while also observing what the heavenly laws have advocated, even before human ethics and civil laws, regarding kindness to animals, as the animal has the right to appropriate shelter and care that meets its basic needs, followed by adherence to humane euthanasia

without excruciating pain, as well as disposing of its carcass in a manner that does not cause harm to humans or pollute the environment.

Ethical Obligations and Standards That Researchers Must Adhere to:

- Following the recognized scientific and methodological principles at all stages of scientific research.
- Respecting the areas of specialization and expertise required to conduct the research.
- Respecting the rights of research participants.
- Not exploiting research participants.
- Conducting a thorough study of the feasibility of carrying out the research.
- Being aware of the risks and burdens resulting from the research regarding the individual and society.
- Providing complete and appropriate information for the research.
- Adhering to the religious values and ethical standards of the community.
- Preserving the rights of individuals participating in the research.

- Ensuring the safety of research participants above all other considerations.
- Adhering to the values of teamwork within the research team, recognizing each team member's contribution to the work, as well as safeguarding the intellectual and moral rights of each member of the research team.
- Avoiding conflicts of interest with participating or funding individuals and entities
- Adhering to the rules for preserving data in paper and electronic form, as well as storing research samples.

Ethical Obligations and Guidelines That a Faculty Member Must Adhere to When Providing Academic Supervision for Theses :

- The professor must have an absolute commitment to ethical conduct because they are the constant role model for their students .
- The professor should teach students how to access information and help them learn the skills necessary to do so .
- They must not exploit their students to accomplish personal matters, such as publishing a paper or obtaining an academic promotion, without acknowledging their efforts, which constitutes a violation of academic integrity .

- Monitor students' adherence to ethical rules and values and their knowledge of the laws and policies of the research institution to which they belong and continuously emphasize this .
- Ensure that academic supervision time is organized in a manner that serves the students' interests through a schedule agreed upon with the supervised researchers .
- Guide students to sources of knowledge and study references and provide them with what they need upon request .
- Follow up with students and provide them with the opportunity to communicate with them on an ongoing basis .
- Respect the researcher's ability to think independently, respect their opinion based on specific evidence and the freedom of their methodology, and encourage them to demonstrate their academic identity in the research .
- Be open-minded and patient and allow students to discuss and object in accordance with the principles of constructive dialogue and accepted standards of etiquette .
- Devote one or two lectures to teaching students the principles and ethics of scientific research, its stages, and methods of collecting, documenting, and analyzing material .

- Allow students some freedom in choosing their research topics from among a group of research topics presented to them .
- Encourage researchers to conduct joint research, with each student undertaking part of the research, thereby fostering a spirit of teamwork in scientific research among students.

Violation Of Research Integrity:

Ways in which research integrity can be violated: research integrity can be violated before conducting the research) when obtaining grants or when assigning research tasks or when drawing up plans for completing the research (while it is being conducted, or when presenting or publishing the results.

Three categories of research integrity violations can be distinguished:

- Fraud: including fabrication or falsification of research steps, or claiming to have conducted research that did not actually take place .

- Deception and misleading practices: these also include altering or concealing some or all of the research results and giving different impressions of the results
- Violation of the intellectual property rights of any member of the participating research team.

Examples of violations of scientific integrity:

- Distorting the results of source studies.
- Presenting results selectively.
- Presenting fabricated data following an observation or experiment.
- Intentionally applying statistical methods incorrectly.
- Inaccurate interpretation or deliberate distortion of research findings.
- Plagiarizing results or publications issued by others.
- Omitting the names of co-authors who made a substantial contribution to the research, or adding the names of people who did not participate in it or did not contribute in any meaningful way.
- Negligence in conducting the research, or in providing instructions for conducting it.
- Neglecting the rules governing the handling of confidential data.

Preventing Scientific Violations

Everything possible must be done to ensure that researchers respect the fundamental principles of professional scientific violations. Possible approaches in this area include:

- Training and practices that develop the proper skills.
- Raising and increasing awareness and understanding of research ethics standards.
- The existence of clear and transparent binding rules that apply to everyone.

Formation of Research Ethics Committees:

Specific procedures must be followed whenever there is any suspicion that a violation of the principles of sound scientific conduct has occurred. ‘Therefore, the university’s approach is to encourage the establishment of research ethics committees in the various faculties, in order to fulfil their primary role in monitoring the extent to which scientific research complies with the rules of academic integrity, and to ensure that all parties benefiting from scientific research assume responsibility and uphold integrity in conducting the research, provided that a central committee is formed under the

university's Postgraduate Studies Sector to serve as the reference body responsible for monitoring the performance of research ethics committees in the various faculties and entities, and this committee shall also be responsible for receiving any reports concerning any alleged cases related to scientific misconduct within the university.

References

University Organization Law No. 49 of 1972 and its amendments

Code of Ethics for the University Profession for Faculty Members and Their Assistants. Cairo University in cooperation with the Administrative Control Authority. 2020

Egyptian Intellectual Property Protection Law No. 82/2002 and its Executive Regulations

Principles of the Declaration of Helsinki on Human Rights concerning the conduct of experiments involving human subjects and its updates through 2000

National Institutes of Health (NIH) policies concerning information and safety monitoring 1998



Law No. (214) of 2020, Regulation of Clinical Medical Research, Arab Republic of Egypt, Ministry of Higher Education, Supreme Council of Universities.

International Ethical Guidelines for Health-related Research Involving Humans / World Health Organization. Regional Office for the Eastern Mediterranean and Council for International Organizations of Medical Sciences, Fourth Edition: Arabic Version 2020

Roadmap for Science and Technology for Development: The Ethical Dimension of National Projects / Ministry of Scientific Research in Egypt, Academy of Scientific Research and Technology, Cairo 2017.