

**October University for Modern Sciences and Arts**



# **GUIDELINE FOR RESEARCH ETHICS**

**Central Committee for ethical conduct**

**June 2023**

## TABLE OF CONTENTS

	page
1. Introduction & Background .....	1
2. What is ethics? .....	2
3. Scope of the guidelines .....	2
4. Role of ethical committee.....	3
5. Guiding principles.....	4
5.1 Integrity .....	4
5.2 Autonomy/respect for persons .....	4
5.3 Beneficence .....	4
5.4 Non-maleficence.....	4
5.5 Justice/Fairness .....	4
6. Matters of ethical concerns in research.....	5
6.1 Respect for the Law and System of Government.....	5
6.2 Relevance & integrity .....	5
6.3Plagiarism.....	6
6.4Investigator Competence .....	7
6.5Informed consent .....	8
6.6Misuse of Privileged Information.....	12
6.7 Ownership of and Access to Data.....	12
6.8Confidentiality.....	14
6.9Care and protection of research staff .....	14
6.10 Care and protection of animals .....	14
7. Responsibilities of Research Supervisors and Trainees.....	15
8. Collaborations.....	16
9. Research misconduct .....	17
10. Equality, diversity and inclusion policy.....	19
11. References .....	22

# THE GUIDELINES

## **1- Introduction & Background:**

On 19 October 2005, the 33<sup>rd</sup> Session of the General Conference of UNESCO adopted the *Universal Declaration on Bioethics and Human Rights* (hereafter referred to as the Declaration). The Declaration embodies a set of bioethical principles that have been agreed upon by 191 Member States of UNESCO after an intense elaboration and consultation process involving independent and governmental experts from all regions of the world. This set of bioethical principles provides a common global platform by which bioethics can be introduced and strengthened within each Member State, and UNESCO is mandated to promote, disseminate and elaborate these principles for practical purposes.

The rapid progress in scientific research has presented several new and unique ethical and social challenges within the context of human medical science. Research in many fields has led to increased knowledge of the disease, acceleration of the healing process, improved drug treatment for infectious diseases and hope for the struggle against incurable diseases such as HIV/AIDS, Parkinson's and Alzheimer's. biotechnology-based and biomedical researches promise major advances in human health and therefore, any limitations on the right to freedom of scientific research should be for significant reasons only, and as least restrictive as possible, so as not to impede scientific wisdom and prevent damage to the scientific undertaking. At the same time, a duty exists to ensure that research in any area is conducted in ethically acceptable ways. A balance needs to be struck between recognizing the potential benefits this research offers to individuals and the community as a whole, and the duty to ensure that research in this area is conducted ethically.

MSA University provides a unique research environment due to its sound infrastructure, well-equipped research laboratories, and skilled researchers, and the purpose of this set of guidelines is to provide a positively oriented set of practical suggestions for maintaining integrity in research. Not only does the ethical conduct of science satisfy a scientific moral code; but it also leads to better scientific results because

adherence to ethical research practices leads to more attention to the details of scientific research, including quantitative and statistical techniques, and more thoughtful collaboration among investigators. Also, the credibility of science with the general public depends on the maintenance of the highest ethical standards in research.

## **2- What is ethics?**

Morality is a unique feature of the life of human beings. It is deeply influenced by several cultural factors, such as history, traditions, education, religious beliefs, etc. The intellectual analysis of this human dimension in all of its complexity is the goal of the discipline called Ethics. Ethics does not create morality or moral behaviour. The goal of ethics is much more modest: to explore the nature of moral experience, its universality and its diversity. Ethics and morality are generally taken as synonyms because they originally had the same meaning: the study of the disposition, character, or attitude of a specific person, group of people or culture, and ways of promoting or perfecting it.

## **3- Scope of the guidelines**

The objective of these Guidelines is to contribute to the development of quality and consistency in the ethical review of scientific research. The Guidelines are intended to complement existing laws, regulations, and practices, and to serve as a basis upon which ethics committees (ECs) can develop their specific written procedures for their functions in biomedical research. In this regard, the Guidelines establish an international standard for ensuring quality in ethical review. The Guidelines should be used by national and local bodies in developing, evaluating, and progressively refining standard operating procedures for the ethical review of biomedical research.

This guideline only addresses ethical issues concerning ‘scientific research’. The term ‘research’ covers a broad spectrum of activities and can be defined as the ‘systematic search or enquiry for knowledge’.

## **4- The role of the ethical committee (EC)**

The purpose of an EC in reviewing biotech or pharmaceutical-based research is to contribute to safeguarding the dignity, rights, safety, and well-being of all actual or

potential research participants. A cardinal principle of research involving human participants is 'respect for the dignity of persons. The goals of research, while important, should never be permitted to override the health, well-being, and care of research participants.

ECs should also take into consideration the principle of justice.

Justice requires that the benefits and burdens of research be distributed fairly among all groups and classes in society, taking into account age, gender, economic status, culture, and ethnic considerations. ECs should provide independent, competent, and timely reviews of the ethics of proposed studies. In their composition, procedures, and decision-making, ECs need to have independence from political, institutional, professional, and market influences. They need similarly to demonstrate competence and efficiency in their work. ECs are responsible for reviewing the proposed research before the commencement of the research. They also need to ensure that there is regular evaluation of the ethics of ongoing studies that received a positive decision.

Each researcher has to fill out an application form and present it to EC to begin his research. Researchers will not begin their research except after receiving written approval from EC.

In terms of approval, the EC will make one of three decisions:

1. **Approval** - researcher can go ahead with the research as proposed, perhaps with some minor changes.
2. **Conditional Approval** – researcher can go ahead, but only when the EC has proof that he has changed his protocol according to certain specified conditions.

**Not Approved** - The EC will not allow the researcher to proceed. Reasons will be given for this.

An ethics evaluation by the **Ethical Committee** is currently recommended for the following types of research:

- Clinical trials of medicines or other interventional forms of treatment,

- Epidemiological studies,

- Research on human behaviour and the behaviour of other primates,
- Research of vulnerable population groups such as children, prisoners or mentally ill patients,
- Research of groups with particular racial or cultural characteristics,
- Research on the human embryo (in vitro or in vivo),
- Research on human genetic, chemical, pharmaceutical and biological materials
- Research on vertebrate animals,
- Research in rare biological species (plants or animals),
- Research on potentially dangerous organisms for humanity and the environment, including genetically modified organisms.

## **5- Guiding principles**

This guideline addresses the ethics of research at MSA University to ensure compliance with the basic ethical values of beneficence, non-maleficence, justice and respect for persons. Furthermore, the guideline aims to identify good, desirable and acceptable conduct in research which promotes the welfare and rights of research participants.

Any research, including scientific research, must conform to the following ethical principles and values:

### **5.1 Integrity**

Researchers must always act with honesty and respect for the truth.

### **5.2 Autonomy/Respect for Persons**

Patients, participants and research subjects must be treated with respect for their autonomy, freedom of choice, dignity and human rights. Informed consent is a vital element in respecting the right to individual autonomy.

### **5.3 Beneficence**

Researchers must always act in the best interests of the patient/research participant and make efforts to secure their well-being.

#### **5.4 Non-maleficence**

The “Not harm” principle applies to scientific research and entails refraining from doing harm and attempting to maximize possible benefits and minimize possible harms.

#### **5.5 Justice/Fairness**

In research endeavours, researchers must attempt to address past inequities, recognizing wider community interests beyond merely the interests of the individual, organization or corporation, providing redress for the vulnerable and promoting equitable access to resources. This principle can also be described as necessitating an equal distribution of the risks and benefits of research between communities.

### **6. Matters of ethical concern in research**

#### **6.1 Respect for the Law and System of Government**

There must be compliance with the Constitution of the Arab Republic of Egypt and all relevant Egyptian laws, legislation and standards.

#### **6.2 Relevance & Integrity**

Researchers must acquaint themselves with the current relevant quantitative methods available for processing data, including graphical and tabular methods of presentation, error analysis, and tests for internal consistency.

Research integrity requires not only that reported conclusions are based on accurately recorded data or observations but that all relevant observations are reported. It is considered a breach of research integrity to fail to report data that contradict or merely fail to support the reported conclusions, including the purposeful withholding of information about confounding factors. If some data should be disregarded for a stated reason, confirmed by an approved statistical test for neglecting outliers, the reason should

be stated in the published accounts. A large background of negative results must be reported. Any reckless disregard for the truth in reporting observations may be considered to be an act of research misconduct.

Modifying an approved protocol amid a clinical or epidemiological study or changing the character of an approved study (e.g., from an exploratory to a confirmatory study) might in some cases be considered improper or even be viewed as research misconduct.

Expenditure of any grant funds from either government or others for fabricated or falsified research is not only a violation of research ethics but also a crime, and those responsible may be subject to prosecution for fraud with the possibility of a demand for restitution of funds to the government, a fine, and/or imprisonment.

Fabrication and falsification of research results are serious forms of misconduct. It is a primary responsibility of a researcher to avoid either a false statement or an omission that distorts the truth. A researcher must not report anticipated research results that had not yet been observed at the time of submission of the report.

Meticulous record-keeping is a sound scientific practice which provides an accurate contemporaneous account of observations that become a permanent reference for the researcher, who otherwise might not remember several weeks, months, or years later exactly what had been observed or what methods had been used. An accurate record also serves others who may want to replicate the observation or apply a method to other situations. In addition, it is an aid in allowing the eventual sharing of information with others and as documentation that might disprove any subsequent allegation of fabrication or falsification of data.

### **6.3 Plagiarism**

Authors who present the words, data, or ideas of others with the implication that they are their own, without attribution in a form appropriate for the medium of presentation, are committing theft of intellectual property and may be guilty of plagiarism

and thus of research misconduct. This statement applies to reviews and methodological and background/historical sections of research papers as well as to original research results or interpretations. If there is word-for-word copying beyond a short phrase or several words of someone else's text, that section should be enclosed in quotation marks or indented and referenced to the source. The same rules apply to grant applications and proposals, clinical research protocols, and student papers submitted for academic credit.

An author should cite the work of others even if he or she had been a co-author or editor of the work to be cited or had been an adviser or student of the author of such work. Not only does plagiarism violate the standard code of conduct governing all researchers, but in many cases it could constitute an infraction of the law by infringing on a copyright held by the original author or publisher.

The work of others should be cited or credited, whether published or unpublished and whether it had been written work or an oral presentation. Each journal or publisher may specify the particular form of appropriate citation. One need not provide citations, however, in the case of well-established concepts that may be found in common textbooks or in the case of phrases which describe a commonly-used methodology. Special rules have been developed for citing electronic information.

Members of a research group who contribute to the work of the group that is later incorporated into a proposal or protocol are entitled to be consulted and informed as to what their role will be if the proposal is funded or the protocol is approved. A charge of plagiarism in the proposal or protocol, however, can usually not be sustained because such members are not later included as part of the team that conducts the approved or funded research. Such researchers who are excluded from subsequent research are entitled, however, to be considered for co-authorship in publications if their contributions merit it.

#### **6.4 Investigator Competence**

Only investigators who are competent and appropriately and suitably qualified in the necessary fields of science should conduct the research. Where delegation of research is necessary, the principal investigator should only delegate to individuals who possess the necessary skills and experience. Researchers must at all times endeavour to achieve the highest level of scientific quality in their research.

When assessing the competence and suitability of the researcher to conduct the specific research the following attributes must be taken into account:

- Technical and research competence;
- Educational background and qualifications;
- Certification;
- Knowledge and experience in the required field;
- Honesty and Integrity;
- Fairness;
- The researcher's sensitivity to identifying an ethical issue; and
- The ability to act responsibly and appropriately when faced with an ethically challenging situation.

A technically competent researcher must be empathetic and compassionate and these characteristics will best be maintained in a good clinical and research environment that provides appropriate research mentoring.

Researchers must never misuse their positions or knowledge for personal power or gain.

## **6.5 Informed Consent**

It is necessary to obtain informed consent from the research participant before commencing research. This requirement is based on the fundamental moral duty that we not acts against the wishes of a person and that human dignity and integrity should be respected. Previously, Research Ethics Committees had to rely on ethical guidelines and to some extent, Constitutional and common law for ethical guidance regarding research on human subjects. The preferred manner of recording consent is in both written and verbal form. Where the participant is not literate, the consent must be obtained in the presence of a literate witness who must confirm in writing that the consent obtained was informed in nature. This means that the research participant was informed of all

information relevant to his/her participation, including the risks and benefits of the proposed research and understood all the risks and benefits of such research.

Unforeseeable risks obviously cannot be foreseen, but participants must be told the nature and extent of all foreseeable risks or discomfort associated with the research. This includes financial risks attendant on participation. The person must also have been able to give consent voluntarily without any form of coercion or undue influence.

Research Ethics Committees must ensure that informed consent procedures are followed.

The four main requirements for informed consent are:

- (a) Disclosure;
- (b) Understanding or appreciation;
- (c) Voluntariness; and
- (d) Capacity to consent.

#### **A. Disclosure**

The disclosure relates to information which must be supplied to a research participant before obtaining consent to participation for such consent to be informed. Participants must be made aware of their right to be informed of relevant new findings, and the consequences of their withdrawal from research. They should know, too, whether the investigator may terminate participation and be informed of the availability of peer counselling to assist them in making an informed choice.

Disclosures made to prospective participants must be detailed and comprehensive, made in the appropriate language and in a manner that facilitates understanding. The researcher should adopt a non-threatening approach that invites interaction and questions from the participant. Where possible, researchers should make use of an environment where the potential participant feels comfortable and not intimidated.

In the event of significant changes in the conditions or procedures of the research, or if new information comes to light which may impact participants continuing with the research, new informed consent must be obtained from such participants.

The following list is a concise summary of essential information that must be disclosed to research participants to facilitate informed consent. Participants must be informed of all

relevant information which may impact their decision to participate in the research, including the following:

- (a) That they are participating in research and that participation is voluntary;
- (b) What the aim of the research is and the anticipated period of his/her involvement in the research;
- (c) The research and experimental procedures to which s/he will be subjected;
- (d) any responsibilities which s/he will have if they consent to participate in the research;
- (e) any risks, dangers and/or complications that may result from, or be inherent in, the research. This includes the possibility of unforeseen risks, dangers and complications that may result from such research;
- (f) The benefits to him/herself or others, both during and after the research;
- (g) What will happen in the event of him/her being injured in any way during participation in the research, including whether compensation will be given in research related injuries (participants must also be told whom to contact in the event of such injury);
- (h) That they have a right to be informed of relevant new findings related to the research;
- (i) That s/he may at any stage of the project withdraw his or her consent to participate without any disadvantage to him or herself;
- (j) The consequences of their withdrawal from research;
- (k) Whether the researcher is allowed to terminate participation and the circumstances which may lead to such termination;
- (l) That peer counselling is available to assist him/her in making an informed choice;
- (m) The extent to which confidentiality will be maintained and that the sponsors of the study and regulatory bodies will be permitted to inspect research records;
- (n) Where during the course of the research, information comes to light that the participant may have a legal duty to disclose to a third party, the researcher may have a duty to disclose such information to the third party, should the participant refuse/fail to do so;
- (o) Whether the research has been approved by an accredited research ethics committee and that the contact details of such research ethics committee representatives must be made available to the participant;

- (p) The investigator's qualifications which make him/her suitable and competent to conduct the research;
- (q) The investigator's contact details should the participant require additional information or suffer an adverse event;
- (r) The possible research uses, direct or secondary, of the participant's medical records and biological specimens taken during the course of the research;
- (s) Whether biological specimens collected during the research will be destroyed, stored, or possible future use. Participants must be made aware that they have the right to decide about the future use of such specimens and that the specimens may not be used in any other or subsequent research unless the participant's informed consent has been obtained in writing for that specific research project;
- (t) That the researcher may have a legal duty to breach confidentiality if, during the course of the research, it is discovered that the participant has a notifiable disease.

## **B. Understanding or appreciation**

Obtaining informed consent must be done in a manner which recognizes the individuality of the specific participant by considering factors such as his/her age, maturity, intelligence, education and belief system. Merely reading out the contents of the consent form in a mechanical way will not suffice as satisfactory disclosure. The researcher must be confident that all information disclosed to the participant was understood and that s/he appreciates all risks and benefits associated with the proposed research. The researcher must allow the participant to ask questions freely and must ensure that all questions are answered honestly and appropriately. In addition, the researcher must ensure that the participant is provided with sufficient opportunity to consider all the information before consenting.

In the Egyptian context, researchers must pay particular attention to the vulnerability of potential research participants. Many vulnerable Egyptian populations do not have access to primary, secondary or tertiary education, nor to adequate health care services which makes them particularly vulnerable to exploitation by researchers and research establishments. For this reason, details of the proposed research must be supplied to the

participant in a manner which is easily understandable and which takes cognizance of the cultural background, language, customs and beliefs of the participant.

### **C. Voluntariness**

Informed consent is only valid when it is obtained without dishonesty or misrepresentation. Any compulsion or undue influence on the part of the researcher will negate the consent given by the participant.

### **D. Capacity to consent**

Consent must be given by someone who is legally and factually capable of consenting. Regarding competence to consent and proxy consent, two broad categories of research participants must be recognized: Adults and Minors.

## **6.6 Misuse of Privileged Information**

One particularly serious form of plagiarism is the misuse of privileged information taken from a grant application or manuscript received for peer review. In such a case, plagiarism is a serious matter of theft of intellectual property because it not only deprives the original author of appropriate credit by citation but could also preempt the priority of first publication or use of the original idea to which the source author is entitled. Also, one who breaches confidentiality by showing a privileged unpublished document to an unauthorized person can be held to shared responsibility for any subsequent plagiarism of the document committed by that unauthorized person.

## **6.7 Ownership of and Access to Data**

Research data obtained in studies performed at the University of MSA and/or by employees of the University are not the property of the researcher who generated or observed them or even of the principal investigator of the research group. They belong to the University of MSA which can be held accountable for the integrity of the data even if

the researchers have left the University. Another reason for the University's claim to ownership of research data is that the University, not the individual researcher, is the grantee of sponsored research awards. Reasonable access to data, however, should normally not be denied to any member of the research group in which the data were collected. If there is any possibility that a copyright or patent application might emerge from the group project, a written agreement within the group should specify the rights, if any, of each member of the group to the intellectual property. A researcher who has made a finding which may be patentable should file an Invention Disclosure with the Office of Technology Management. The University patent policy allows the sharing of revenues from licensing, sale, or royalties between the inventor(s) and the University.

A principal investigator who leaves the University is entitled to make a copy of data to take to another institution to be able to continue the research or, in some cases, to take the original data, with a written agreement to make them available to the University on request within a stated period. A formal Agreement on the Disposition of Research Data should be negotiated in such cases through the Office of Research. Each student, postdoctoral fellow, or another investigator in a group project should come to an understanding with the research director or principal investigator, preferably in writing, about which parts of the project he or she might continue to explore after leaving the research group. Such an understanding should specify the extent to which a copy of research data may be taken. Co-investigators at another institution are entitled to access the data which they helped to obtain.

For unique materials prepared in the course of the research, such as intermediates in a chemical synthesis, autoradiograms, cell lines, and reagents, items that can be proportioned should be divided among members of a research group at different locations under negotiated terms of material transfer agreements. For non-divisible items, the nature of the assignment should be stipulated in the agreement. The Office of Research facilitates the execution of such agreements.

Since the scientific enterprise may be a cooperative endeavour encompassing many persons who now or in the future might pursue common research interests, and since it is in the interest of all to rely on the contributions and findings of others, every investigator has an obligation to the general scientific community to cooperate by sharing of data. Other virtues of sharing data include the facilitation of independent confirmation or refutation of reported outcomes. It is generally accepted that the data underlying a research publication should be made available to other responsible investigators upon request after the research results have been published. A researcher who has access to a unique set of experimental or observational data, e.g., from a satellite or an archaeological or paleontological site, has an obligation either to publish research results within a reasonable time or to make the data available to others who will be able to do so.

### **6.8 Confidentiality**

The investigator must preserve the confidentiality of the participants' research data. If the information collected and stored could cause harm or distress when disclosed to a third party, the investigator should arrange to protect the confidentiality of such information; for example, by omitting information that might lead to the identification of individual participants, limiting access to the information, anonymizing data or by other means.

### **6.9 Care and Protection of research staff**

Adequate safety measures must be employed within the university facilities to ensure the health and safety of staff engaged in practical scientific activities and research. All staff must be properly trained in safety procedures.

Furthermore, the Egyptian Work Act No. 12 for the year 2003 [chapter 3 (Occupational Health and Safety), Articles (209 – 214)] places a duty on employers to ensure the health and safety of their employees and to take measures to protect them against the hazards to health and safety arising out of, or in connection with, the activities such employees are involved in. The appropriate Research Ethics Committee should stress the importance of protecting the safety and welfare of research staff.

The primary investigator in the research should devise guidelines and apply safety rules for the proper handling of all hazardous materials. In this regard, the Hazardous Substances must be dealt with most safely.

#### **6.10 Care and protection of animals**

Animal testing raises many contentious issues. Researchers must at all times ask the question: ‘How valuable is the knowledge sought and how necessary is the use of animals to obtain the knowledge?’

Sentient animals must not be used in research, nor research conducted on such animals, unless the potential benefit of the technology being researched outweighs the moral and ethical concerns raised by utilizing such animals as a means to an end.

Laboratory animals should be able to live, grow, reproduce and interact under conditions and circumstances in which their species’ specific needs are met, as far as possible. Special consideration should be given to the needs of social animals in this regard and to animals which have adapted to special circumstances or environments e.g. nocturnal animals and marine animals.

### **7 Responsibilities of Research Supervisors and Trainees**

Research training is a complex process, the central aspect of which is an extended period of research carried out under the supervision of an experienced scientist. This supervised research experience is not merely the performance of tasks assigned by the supervisor but rather is a process wherein the trainee takes on an increasingly independent role in the selection, conceptualization and execution of research projects. The trainee should be trained in the skills and knowledge necessary for a successful career as a research investigator. It should be recognized that the trainee has unique, time-sensitive needs relevant to career advancement. In this regard, the supervisor's guidance and advocacy are essential components of training.

In general, a trainee will have a single primary supervisor, but may also have other individuals who function as mentors for specific aspects of training and career development. It is the responsibility of the primary supervisor to serve as a role model

and provide a rich research environment in which the trainee has the opportunity to acquire both the conceptual and technical skills of the field. In this setting, the trainee should be provided with clear expectations and undertake a significant piece of research, usually chosen as the result of discussions between the mentor and the trainee, which has the potential to yield new knowledge of importance in that field. To provide a meaningful, high-quality training experience, the mentor should monitor and guide the trainee's progress closely, and interact personally regularly to give timely feedback regarding research findings and progress. Supervisors and mentors should limit the number of trainees in their laboratory or branch to the number for whom they can provide an appropriate and productive training experience. Mentoring should be adapted to the needs and career stage of each trainee.

Specific aspects of the mentor-trainee relationship deserve emphasis. Training should impart to the young investigator appropriate standards of scientific conduct both by instruction and by example.

Mentors should be particularly diligent in involving trainees in research and related activities that contribute to their careers, including participation in intramural or extramural collaborations, encouraging presentations at scientific meetings, and networking. Mentors should provide trainees with timely and realistic performance appraisals and advice regarding career opportunities and advancement.

Trainees have responsibilities to their supervisors and their institutions as well. These responsibilities include adherence to these Guidelines and other applicable rules and programmatic constraints related to the needs of the research team and university.

## **8. Collaborations**

Collaborative research brings together investigators with distinct strengths to work together on a defined problem or address a specific research goal. Research collaborations, within MSA University as well as with extramural institutions, are strongly encouraged and supported; the complex scientific questions that face us today often require interdisciplinary or multidisciplinary approaches.

Successful collaborations are characterized by a strong sense of direction, a willingness to commit time and effort, an efficient communication strategy for discussion among the group members, a system in place for reevaluation as the project progresses, and a clear

definition of roles and responsibilities. It is advisable that the ground rules for collaborations, including eventual authorship issues, be discussed openly among all participants from the beginning. Whenever collaborations involve the exchange of biological materials they are routinely formalized by written agreements. Material Transfer Agreements (MTAs) are used to simply transfer proprietary research material without collaboration, for example, if you request a reagent from, or give one to, a colleague outside the university. Cooperative Research and Development Agreements (CRADAs) are agreements between one or more laboratories and at least one outsider group (private sector, another university, not-for-profit, government). CRADAs provide a protected environment for long-term collaborations; they confer intellectual property rights to MSA inventions. CRADAs are handled by the Technology Transfer Office of the university. Consulting can be viewed as a one-way collaboration, in which an MSA student/scientist is asked to contribute to an outside project by providing expert advice.

## **9. Research Misconduct**

The scientific community and general public rightly expect adherence to exemplary standards of intellectual honesty in formulating, conducting, reporting and reviewing scientific research.

Investigators must act with honesty and integrity when editing, analyzing, and presenting data. Deceptive manipulation of data as misrecording data, inappropriate exclusion of outlying data points, or enhancement of images is research misconduct.

Allegations of scientific misconduct are taken seriously by the administration of MSA University. The process of investigating allegations must be balanced by equal concern for protecting the integrity of research as well as the careers and reputations of researchers. The procedures followed at MSA University are intended to permit allegations of scientific misconduct to be processed promptly, confidentially, and fairly. Prompt action on an allegation helps minimize any harm to the public that could result if misconduct is found that has a potential impact on health and allows those who are

incorrectly implicated to have their names cleared without going through a lengthy process.

Allegations of misconduct that are shown to be untrue, even if they were made in good faith, can damage careers and have a chilling effect on research.

Confidentiality helps protect both the innocent scientists who are incorrectly or unjustly accused and those who raise the allegations. Fairness allows all who become involved in scientific misconduct cases to have the opportunity to participate appropriately in this important oversight process and address the specific issues at hand, while at the same time protecting innocent participants from adverse consequences.

- **Scientific misconduct or misconduct in research:** Research misconduct is defined as *fabrication*, *falsification*, or *plagiarism* in proposing, performing, or reviewing research, or in reporting research results.

**Fabrication** is making up data or results and recording or reporting them.

**Falsification** is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

**Plagiarism** is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Research misconduct does not include honest error or honest difference of opinion.

## **10. Equality, diversity and inclusion policy**

**MSA** is committed to encouraging equality, diversity and inclusion among our workforce, and eliminating unlawful discrimination.

The aim is for our workforce to be truly representative of all sections of society and our customers, and for each employee to feel respected and able to give their best.

The organization - in providing goods and/or services and/or facilities - is also committed against unlawful discrimination of customers or the public.

### **Our policy's purpose**

This policy's purpose is to:

1. Provide equality, fairness and respect for all in our employment, whether temporary, part-time or full-time
2. Not unlawfully discriminate because of the Equality Act 2010 protected characteristics of:
  - age

- disability
- gender reassignment
- marriage and civil partnership
- pregnancy and maternity
- race (including colour, nationality, and ethnic or national origin)
- religion or belief
- sex
- sexual orientation

3. Oppose and avoid all forms of unlawful discrimination. This includes in:

- pay and benefits
- terms and conditions of employment
- dealing with grievances and discipline
- dismissal
- redundancy
- leave for parents
- requests for flexible working
- selection for employment, promotion, training or other developmental opportunities

### **Our commitments**

#### **The organization commits to:**

1. Encourage equality, diversity and inclusion in the workplace as they are good practices and make business sense
2. Create a working environment free of bullying, harassment, victimization and unlawful discrimination, promoting dignity and respect for all, and where individual differences and the contributions of all staff are recognized and valued.

This commitment includes training managers and all other employees about their rights and responsibilities under the equality, diversity and inclusion policy. Responsibilities include staff conducting themselves to help the organization provide equal opportunities in employment and prevent bullying, harassment, victimization and unlawful discrimination.

All staff should understand they, as well as their employer, can be held liable for acts of bullying, harassment, victimization and unlawful discrimination, in the course of their employment, against fellow employees, customers, suppliers and the public

3. Take seriously complaints of bullying, harassment, victimization and unlawful discrimination by fellow employees, customers, suppliers, visitors, the public and others during the organization's work activities.

Such acts will be dealt with as misconduct under the organization's grievance and/or disciplinary procedures, and appropriate action will be taken. Particularly serious complaints could amount to gross misconduct and lead to dismissal without notice.

Further, sexual harassment may amount to both employment rights and criminal matters, such as sexual assault allegations. In addition, harassment under the Protection from Harassment Act 1997 – which is not limited to circumstances where harassment relates to a protected characteristic – is a criminal offence.

4. Make opportunities for training, development and progress available to all staff, who will be helped and encouraged to develop their full potential, so their talents and resources can be fully utilized to maximize the efficiency of the organization.

5. Make decisions concerning staff being based on merit (apart from any necessary and limited exemptions and exceptions allowed under the Equality Act).

6. Review employment practices and procedures when necessary to ensure fairness, and also update them and the policy to take account of changes in the law.

7. Monitor the makeup of the workforce regarding information such as age, sex, ethnic background, sexual orientation, religion or belief, and disability in encouraging equality, diversity and inclusion, and in meeting the aims and commitments set out in the equality, diversity and inclusion policy.

Monitoring will also include assessing how the equality, diversity and inclusion policy, and any supporting action plan, are working in practice, reviewing them annually, and considering and taking action to address any issues.

**Agreement to follow this policy**

The equality, diversity and inclusion policy is fully supported by senior management and has been agreed upon with trade unions and/or employee representatives.

## **Appendix 1 - References**

The following documents have been taken into consideration and/or referred to for the policy review.

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3. The MRC's series of publications on ethics and best practices and clinical trials.
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5. MRC Position Statement on Bioterrorism and Biomedical Research, 2005 Organisation for Economic Co-operation and Development Global Science Forum, Best Practices for Ensuring Scientific Integrity and Preventing Misconduct Research Councils UK Code of Conduct and Policy on the Governance of Good Research Conduct. 2008.
6. UK Research Integrity Office (UKRIO) Draft Code of Practice for Research, 2007 Universal Ethical Code for Scientists, 2006.
7. BBSRC Statement on safeguarding good scientific practice, revised, 2007 European Science Foundation: Stewards of Integrity: Institutional Approaches to promote and Safeguard Scientific Practice in Europe, 2008 Mental Capacity Act, October 2007.
8. National Research Council: Guide for the Care and Use of Laboratory Animals, National Academy Press, Washington D.C., 1996, 128 pp. ISBN 0-309-05377-
9. **Sieber, Joan E.:** Planning Ethically Responsible Research: A Guide for Students and Internal Review Boards, Applied Social Research Methods Series, Vol. 31, Sage Publications, 1992, Newbury Park, CA
10. UNESCO: Establishing Bioethics Committees, Guide No1, 2005, Division of Ethics of Science and Technology, SHS/B 10-2005/01
11. National Bioethics Commission: Ethics Committees in Research, chapter 10, Positions on Contemporary Problems – articles 2000 – 2007, 2007, National

- Printing House (the full text of the book is available on the Commission's website at: <http://www.bioethics.gr/media/pdf/bioethics2.pdf> ).
12. **T. Vidalis and K. Manolakou** (editor): Documents on Bioethics, National Commission of Bioethics, Eds. Sakkoulas, 2002, p. 493, ISBN 960-15-0716-7.
  13. (International documents and Greek Legislation on bioethics, grouped in thematic sections, can be consulted on the website of the Commission at [http://www.bioethics.gr/category.php?category\\_id=63](http://www.bioethics.gr/category.php?category_id=63) )
  14. Eckstein, Sue (ed.): Manual for Research Ethics Committees (Centre of Medical Law and Ethics, King's College London), 6th edition. Cambridge: Cambridge University Press, 2003, 558 pp. ISBN 0-521-81004-3
  15. Patent Rights and Technology Transfer, 11-02-01, July 1, 2005. This describes the procedures for applying for patents and outlines the relative rights and responsibilities of the inventor(s) and the University.
  16. Research Integrity Policy, 11-01-01, January 1, 2002. This defines research misconduct and describes the procedures for conducting inquiries and investigations into allegations of misconduct and for making and appealing decisions related to misconduct.
  17. Rights, Roles, and Responsibilities of Sponsored Research Investigators, 11-01-02, April 3, 1992. This document outlines the rights and responsibilities of investigators and provides a mechanism for resolution of disputes.