

Code of Good Practice in Research



Vice-Rectorate for Research and Knowledge Transfer

UNIVERSITY OF GRANADA

CODE OF GOOD PRACTICE IN RESEARCH

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Research ethics are defined as a combination of values, rules and regulations that support the development and improvement of research activities. Research ethics are based on a set of guiding principles that lead to the establishment of specific good practices in research. The University of Granada has compiled these good practices through the creation of our Code of Good Practice in Research.

0. INTRODUCTION

The Science, Technology and Innovation Law (*Ley 14/2011*, *de 1 de junio*, *de la Ciencia*, *la Tecnología* y la Innovación) states that: "The main objective [of this law] is to promote research, experimental development and innovation as the basis for sustainable economic development and social wellbeing".

This translates into several specific objectives mentioned in the Law (Section 2), including the following principles:

- To contribute to sustainable development that fosters genuine and equitable social progress.
- To promote development cooperation in scientific research, technological development and innovation, with the overall aim of improving social progress and productivity in line with the guiding principles endorsed by research institutions.
- To foment research and innovation applied to the development of environments, products and services that guarantee the principles of inclusion, universal accessibility, design for all, and independent living for people with disabilities and in situations of dependence.

The University of Granada Statutes indicate the following:

- Section 1: "one of the competencies of the University in the provision of public services is scientific research".
- Section 3: "the University's activities are focused on the creation, development, critique and dissemination of knowledge through quality teaching and research".



• Sections 182 and 183 state that one of the main goals of the University is to conduct "research, which is the basis of teaching and a fundamental tool for social development through the transfer of results to society. Therefore, the University strives to promote the development of scientific, technical, humanistic and artistic research, as well as the training of researchers in basic, applied and experimental research and innovation". It also states that "the University of Granada will carry out quality research and will effectively manage knowledge and technology transfer, contributing to development and innovation, competitiveness, improved quality of life in society, socio-economic progress, and ethical, equitable and sustainable development.

It also indicates that the University will place special emphasis on the relationship between research and the production systems in its environment. Specifically, the second part of section 183 states that "research carried out at the University of Granada will respect the principles established in national and international legislation in the fields of biomedicine, biotechnology and bioethics, as well as privacy, data protection, and intellectual and industrial property rights".



1. GUIDING PRINCIPLES

This section summarises the principles that should guide the actions of university researchers in accordance with ethical criteria and current legislation. These principles apply to all professionals conducting research at the University and must be accepted both as personal and collective commitments in order to safeguard the quality of scientific practices.

The Code of Good Practice is based on general principles applied to research:

- 1) Science is at the service of human beings and entails respect for their dignity. Therefore, the University's scientific policies must be designed in accordance with this principle and must never violate, under any circumstances, the rights of human beings as established by different international agreements in relation to civil, political, economic, social and cultural rights. In this regard, the University of Granada firmly adheres to UNESCO's Declaration on Science and the Use of Scientific Knowledge, and the Singapore Statement on Research Integrity.
- 2) Research entails accepting certain responsibilities and must promote the conservation of biodiversity. It must also be conducted in line with the precautionary principle, especially concerning research activities with the potential to negatively impact the environment or human beings, even if the existence of potential threats has not been fully established.
- 3) Research must be rigorous at all stages, from the design stage until the dissemination of results and knowledge transfer.
- 4) Transparency in the management and development of research activities must be upheld as a core principal throughout all stages.
- 5) Fair and explicit acknowledgement of the merits and contributions of research staff in the development of research activities is essential.
- 6) The greatest levels of visibility, transfer and protection of research results must be guaranteed. Moreover, there is a fundamental duty to ensure that future generations are trained and that knowledge is effectively passed on to them.
- 7) Researchers and the University have a duty to maximise the benefits of research for society.



These principles must be instilled in researchers from the early stages of their careers and apply to all fields of knowledge, ranging from the exact sciences to the humanities. Special importance should be given to research involving experiments on human beings or that might affect their dignity and condition, including their rights, beliefs, gender, etc. Experiments involving animals, biological agents or genetically modified organisms should also receive special attention.

As well as these aforementioned principles, research activities should be guided by a set of specific values:

1.1 HONESTY

Researchers must be honest in their research and also with their research colleagues. Research staff must not infringe intellectual property rights and they must refrain from plagiarism, manipulating results or selectively presenting results.

Researchers must also be honest when reviewing and evaluating other researchers' papers, projects and scientific activities.

This entails the following:

- a) The University and its researchers will not tolerate plagiarism.
- b) The University and its researchers must share data and findings openly and within the established timeframes so that other researchers can access and review them.
- c) Researchers must fairly and honestly acknowledge and cite the work of others.
- d) The University must provide the research community with a system that allows them to effectively store research data so that all research findings can be retrieved, even after the researcher has ceased ties with the University.

1.2. ACCOUNTABILITY

Research staff must guarantee that research is conducted in line with the terms and conditions established by the body funding it, those agreed by the University of Granada, and any other relevant funding bodies, which entails the following:

- a) Research must be conducted in line with the original proposal presented to the funding body.
- b) The funds must only be used to cover the proposed objectives and activities.

- c) Reports must accurately reflect the work carried out and be submitted in the specified timeframes.
- d) Researchers must meet the conditions established concerning publication, authorship, and intellectual and industrial property in relation to research results. Confidentiality conditions must be met if established in the contract.
- e) Material resources and funds must be used correctly, effectively, efficiently and responsibly.
- f) Researchers must collaborate with the University's management services in order to ensure that funds are properly managed and accounted for.
- g) Researchers must use information resources properly, complying with current intellectual property law and the respective copyright licenses of the digital resources acquired by the University. (Please consult the <u>University Library Code of Ethics</u> for further information on this point).
- h) Researchers must avoid unfair competition with private businesses that are equipped to provide similar services.
- i) The University and its researchers must ensure the existence of open channels and procedures with regard to the conduct and supervision of research activities.

1.3. RIGOUR

Research must be conducted in line with well-established working protocols that can be examined and understood by any researcher in that field.

Data must be collected and interpreted in a systematic manner, which requires thoroughly reviewing the results obtained before publishing them.

Research must be designed and conducted in a way that reflects commitment to accountability and quality.

If a project involves human research or the use of personal information, researchers must take special precautions that are proportionate to the level of risk involved. Moreover, researchers must comply with the rules stipulated in the current legislation and with the best practices in their respective fields.



1.4. CONFLICTS OF INTEREST

Researchers must avoid conflicts of interest that could potentially compromise the validity of results.

A conflict of interest occurs when the commitments and duties of researchers, students, or funding bodies/companies are put at risk. Conflicts of interest may arise from the following scenarios:

- a) The possibility of a researcher (or a close family member or any person with whom the person involved has a relationship) personally benefitting either financially or otherwise from the research activities.
- b) The agreements and responsibilities that the person maintains with others or other bodies/companies lead to a conflict.

Researchers must disclose any conflict of interest, regardless of the cause. Financial interests are not the only causes of conflicts of interest and reasons that might seem "irrelevant" to one person can be highly relevant to others.

Each individual member of the university community is responsible for officially disclosing activities or situations that could potentially cause conflicts of interest or that might be seen as such by others.

In case of doubt or suspicion, you must inform the Vice-Rectorate for Research and Knowledge Transfer so that they can inform, if necessary, the University Legal Services, of a conflict of interest. The Vice-Rectorate for Research and Knowledge Transfer provides a specific document for managing potential or actual conflicts.

In all instances:

- a) Research staff must make all information concerning financial aspects that might affect the research activities available.
- b) If a potential conflict arises between the researcher's professional activity and personal beliefs, the researcher must clarify the point to which they are speaking solely as a researcher.



1.5. RESEARCH MISCONDUCT AND UNACCEPTABLE PRACTICES

Science, as the activity engaged in the quest for knowledge, is by its very nature opposed to fraud. However, there is always the possibility of misconduct by research staff. Acts of misconduct go against scientific practice and are the responsibility of the researcher who commits them.

The University of Granada expects researchers to strictly and actively comply with the highest possible standards of integrity and with the ethical principles and professional codes stated in this document. Failure to do so, intentionally or otherwise, damages the scientific process and can have a negative effect on other researchers, the University, and society in general.

Research misconduct and other unacceptable practices may include:

- a) Overinterpretation and manipulation of data.
- b) Falsification of data or experiments to make them fit the initial hypothesis.
- c) Fabrication of data and findings.
- d) Plagiarism.
- e) Failure to comply with established research protocols, especially if they have the potential to affect humans, animals, or the environment.

Among the mechanisms in place to counter misconduct are the following:

- a) Research must be peer reviewed and the results need to be made available for third parties to independently assess them.
- b) National and international research communities are committed to reporting and combatting fraud.
- c) Both national and international representatives participating in scientific research actively collaborate to monitor for, and pursue, cases of fraud.
- d) Researchers are under the obligation to correctly cite original sources when using other people's work, theories and ideas, and when paraphrasing specific contents from the source text.

If a researcher notices any misconduct taking place in research activities, they have a duty to report said misconduct.



In such cases, the researcher must consider:

- a) The possibility of resolving misconduct allegations internally at the University.
- b) The potential consequences for themselves, the University, and society, if the corresponding report is correct.
- c) The possible consequences of failing to act as a whistle-blower.
- d) If there are other motives for making the report that could affect its objectivity.

Communication channels for reporting should be appropriate, minimising conflict and optimising the actions taken to repair any damages incurred.

If any of these actions imply a violation of current legislation or cause harm to public interests, to the University of Granada's property, to citizens, or discredit the University's corporate image, the precautions stipulated in the Spanish Law 7/2007, April 12 (Basic Statute of Public Employment) and any other relevant regulations will be applied.

The principles and rules stipulated in this Code of Good Practice in Research do not include honest mistakes or differences in the interpretation of research data or methods, or the criteria used to evaluate them.



2. COMPLIANCE WITH THE CODE OF GOOD PRACTICE IN RESEARCH AND THE RESEARCH ETHICS COMMITTEE

The Research Ethics Committee ensures the implementation and enforcement of this Code of Good Practice. In order to appoint the Ethics Committee, a Research Committee will propose a series of members, the Vice-Rectorate for Research and Knowledge Transfer will then narrow down the proposals and the Rector of the University of Granada will officially appoint the members of the Ethics Committee.

This Committee works in an independent manner for the scientific community and research staff of the University, its sole objective being to guarantee quality in research and to maintain its integrity.

Allegations of misconduct will be reported to the Vice-Rectorate for Research and Knowledge Transfer, which will handle them with due process using the different administrative and academic services that the University offers (University Inspection Office, Legal Services, University Secretary's Office, etc.).

The Research Ethics Committee must guarantee, at all times, due diligence and confidentiality in the management, independence, impartiality, and fairness of its decisions.

Complaints, allegations, and reports of misconduct can be presented at any of the University Register Offices, and should be addressed to the Vice-Rector for Research and Knowledge Transfer or to the University of Granada Ombudsman, who will process them accordingly.

2.1. COMPOSITION AND RESPONSIBILITIES OF THE RESEARCH ETHICS COMMITTEE

The Research Ethics Committee must actively raise awareness, inform, and educate the university research community about different ethical issues concerning research. The Committee is made up of the following members:

- a) Chairperson: Vice-Rector for Research and Knowledge Transfer.
- b) Secretary.
- c) A Director for Research Policy.
- d) The person chairing one of the three Ethics Committees on: a) Human Research (CEIH), b) Animal Research (CEEA), c) Research with Genetically Modified Organisms and Biological Agents (CIOMAB).
- e) Five academic and research staff members representing the main branches of knowledge.



The Research Ethics Committee will be responsible for:

- a) Ensuring the implementation and enforcement of this Code of Good Practice.
- b) Acting as a mediator in possible conflicts that might arise regarding good practices in research. Decisions taken by the Committee when it acts as a mediator are binding.
- c) Advising university bodies, authorities, students and staff.
- d) Supervising the University's policies regarding conflicts of interest, making recommendations for improvements, and sharing guides on good practices developed by external bodies.
- e) Ensuring proper systems are in place to promote and monitor compliance with the Code
- f) Reviewing, on an annual basis, allegations of conflicts of interest and informing the relevant university bodies of any potential situations and any measures that need to be taken with regard to them.
- g) Acting on behalf of the Governing Council regarding its policies on conflicts of interest.
- h) Preparing a report on the actions taken and updating the measures in place, in line with current legislation and codes of good practice established by external bodies.



3. CONCLUSIONS

These are the main guidelines and values that ensure public trust in scientific research and results. In essence, good practices in research rely on attitudes regarding the manner in which the research process must be carried out, from the design stage until the dissemination and storing of results.

The University of Granada is committed to promoting and safeguarding ethical behaviour in research. In this regard, the University informs its researchers about the possible consequences of misconduct and about their obligations under current legislation. To achieve this, the University must:

- a) Inform researchers about the rules and regulations regarding good practices in research.
- b) Properly train those carrying out research involving humans or personal information, as well as those responsible for supervising compliance with ethical values in this type of research, so that their knowledge and skills are continuously updated.

Lastly, although good practices are the best means of safeguarding ethical and legal principles in research and minimising conflict, they must also contain specific criteria for dealing with possible conflicts and instances of misconduct in line with the aforementioned principles.



4. KEY RESOURCES

For the creation of this Code we have used diverse types of resources:

Declarations and codes from international organisations, especially from the following sources:

- The European Science Foundation and UNESCO:

http://www.esf.org/fileadmin/user_upload/esf/2-Code_of_conduct_ESF-EN.pdf

http://www.unesco.org/science/wcs/eng/declaration e.htm

https://www.gov.uk/government/publications/universal-ethical-code-for-scientists

https://euraxess.ec.europa.eu/jobs/charter/european-charter

- Together with the Singapore Statement and the Montreal Statement developed as a result of the World Conference on Research integrity:

https://wcrif.org/guidance/montreal-statement

https://wcrif.org/guidance/singapore-statement

National declarations and codes of good practice, especially from the Concordat of UK Universities, the Norwegian National Committee for Research Ethics in Science and Technology, and the Austrian Agency for Research Integrity:

http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/research-concordat.aspx

https://www.etikkom.no/en/ethical-guidelines-for-research/guidelines-for-research-ethics-in-science-and-technology/

https://oeawi.at/?lang=en



Codes of good practice from some of the best universities in the world:

http://www.irb.cornell.edu/regulations/ethics.htm

https://your.yale.edu/research-support/conflict-interest/responsible-conduct-research-rcr

http://www.admin.ox.ac.uk/researchsupport/integrity/

Codes from Spanish institutions:

http://www.uva.es/export/sites/uva/3.investigacion/3.01.gestionproyectos/ documentos/c odigo buenas practicas investigacion UVa.pdf

https://www.uam.es/UAM/comite_de_etica/1446745192735.htm?language=es&nodepath= Comit?%20de%20?tica%20de%20la%20Investigaci?n

http://cms.ual.es/idc/groups/public/@vic/@vinvestigacion/documents/documento/vinvest-cbpi 2011.pdf

https://www.isglobal.org/documents/10179/2484371/Code+of+Good+Scientific+Practice/03ee46c2-b5e9-4658-9d16-0450f736f7ee

Documents from national organisations that specifically deal with good practices in research:

http://assets.comitedebioetica.es/files/documentacion/buenas practicas cientificas cbe 201 1.pdf

Regulations on research ethics:

http://www.ub.edu/rceue/index2.htm

Lastly, we have also used specific internal codes of good practice from the University of Granada:

http://biblioteca.ugr.es/pages/biblioteca_ugr/normativa

http://escuelaposgrado.ugr.es/doctorado/escuelas/caed/ doc/codigodebuenaspracticasparal adirecciondetesis