



Code of Good Practice in Research

(Agreement of the Governing Council: 30 September 2020)

UAB

Universitat Autònoma
de Barcelona

Table of contents

Introduction	4
1. Objectives and scope of the document	5
2. Values and basic principles of research at the UAB	6
a) Freedom	6
b) Honesty	6
Rigour	7
Conflicts of interest	7
c) Responsibility	7
3. Organisation of the research	9
a) Research groups	9
Leadership	9
Tutoring and supervision of trainee research staff	10
Duties of supervisors or tutors	10
Duties of trainees	11
b) Planning the research	11
c) Conducting the research	13
Work procedures	13
Research infrastructures	13
Research with human beings	14
Research with experimental animals	15
Research with natural spaces and cultural heritage	16
Potentially dangerous procedures and materials	16
d) Collecting and conserving material and data	17
Record keeping	17
Physical media	18
Electronic media	18

Storage	18
Ownership of the data	18
4. Dissemination of results	20
a) Policy on dissemination	20
b) Institutional affiliation and acknowledgements	20
c) Dissemination in the Media	21
5. Authorship	22
a) Order of the authors	23
b) Authorship of reports	23
c) Amending errors and public retraction	24
6. Research projects sponsored by private companies and intellectual and industrial property	25
a) Transparency and prevailing interests	25
b) Intellectual property	26
c) Industrial property	26
7. Fabrication, falsification, plagiarism and other questionable practices	27
8. Curriculum Vitae	28
9. Assessment, advisory support and review	29
References	30
Codes of good practice and guides	30
Legal references	30

Introduction

In accordance with its Statutes, the Universitat Autònoma de Barcelona (UAB) seeks to participate in the creation of scientific, technical and professional knowledge through research and the transfer of results to society, and to stimulate and nurture intellectual and artistic activity in all areas of culture and knowledge, in a spirit of constant concern with quality and excellence.

In carrying out its activities, the UAB is inspired by the principles of freedom, democracy, justice, equality and solidarity. This commitment means the orienting of teaching, research and other university activities towards the culture of peace, respect for human rights, social progress, respect for the environment and sustainable development, and explicitly renouncing research for direct military purposes.

In order to implement these principles in accordance with current legislation and with the ethical norms accepted by the scientific community, the UAB adopted the Code of Good Practice in Research (CBPR), which was approved by its Governing Council on 30 January 2013. The CBPR has been a useful tool in the university's self-regulation of academic, research and transfer activities, but now needs to be updated in view of the rapid changes taking place in recent years: intensive digitalisation of society, entry into force of the European General Data Protection Regulation, scientific advances across all fields, especially in genetics and artificial intelligence, and changes in societal values themselves.

This CBPR observes the recommendations of the European Charter for Researchers (European Commission), the European Code of Conduct for Research Integrity (ALLEA), and other documents on good scientific practice from national and international public research institutions. It was prepared and revised by the Ethics Committee on Animal and Human Experimentation (CEEAH) of the UAB and was approved by the Research Commission on 12 February 2020 and by the Governing Council on 30 September 2020.

1. Objectives and scope of the document

Good practice in research implies a reasoned approach to work. It relates to how research is planned and conducted, how results are recorded and reported, and how knowledge generated by research is disseminated, applied and exploited.

The CBPR is a collective self-regulation instrument: a set of guidelines, recommendations and commitments regarding research activity. Its strength derives from the legal precepts included in it, but also from its voluntary adoption by researchers themselves and all other agents involved. This is because it seeks to promote the attitudes, behaviour and ethical commitment deemed appropriate for top-level research by prestigious researchers themselves.

The aims of the CBPR are therefore the following.

- To improve the quality of research in all fields.
- To establish mechanisms for ensuring honesty, rigour and responsibility in research.
- To promote the adoption of good scientific practice on the part of trainee research staff.

It is intended to complement existing legal provisions. This document is applicable to UAB researchers and research trainees (PDI), and to organisations principally or wholly controlled by the UAB.

In the event of a dispute, it is recommended that the case be resolved by the UAB Research Commission at the request of any of the opposing parties, though individuals may always request mediation on the part of the UAB ombuds officer or go to the courts or other authorities.

2. Values and basic principles of research at the UAB

The basic principles that must underlie any research conducted at the UAB are freedom, honesty and responsibility.

a) Freedom

The principle of freedom refers to both the choice and the conduct of research. However, this freedom is limited by the ethical principles contained in the aforementioned UAB Statutes, in the corresponding agreements and international declarations, and in the legal precepts applicable to each case, which are referred to at the end of this Code.

b) Honesty

Researchers must be honest in their research activities and also towards those of other researchers and the institution itself. This applies to all research work, including initial formulation of hypotheses, methodological design, data analysis, publication of results, acknowledgement of contributions from other researchers and arrangements for review and assessment.

Researchers must clearly, unequivocally and explicitly acknowledge collaboration and contributions, both direct and indirect, from colleagues.

Researchers must respect industrial or intellectual property rights and must not engage in plagiarism or self-plagiarism or manipulate results.

➤ **Rigour**

Researchers' honesty itself implies rigour when conducting their own research. Researchers must therefore carry out an accurate process of discovery and interpretation. This requires a detailed revision of results obtained before these are published and, should major errors be detected after publication, these must be rectified publicly and explicitly as soon as possible.

➤ **Conflicts of interest**

Conflicts of interest are present in all facets of human activity: appearing whenever a criterion applied to a primary interest (for example, knowledge of a subject area, selection of persons, or appraisal of research work) could be unduly influenced by a secondary interest (for example, financial gain or heightened status for the researcher or direct associates).

It is not intrinsically unethical to be in a situation of conflict of interest: what is needed is to recognise the situation and manage it appropriately. Therefore, researchers must pay considerable attention to possible conflicts of interest that they might incur. If any are detected, they should be avoided or else made public and addressed appropriately in accordance with the policies of contracting bodies, evaluation bodies or publishers.

c) Responsibility

As members of the UAB, researchers must ensure that their research is carried out in conformity with the principles expressed in the UAB Statutes, and with the terms and conditions set by the funding entity or agreed between the UAB and funding bodies. This includes ensuring the following.

- The research follows both economic and environmental sustainability criteria.

- The research is conducted as set out in the original proposal submitted to the funding entity, unless amendments have been agreed on.
- The funding is used only for the objectives established, unless authorisation is obtained for other uses.
- Reports reflect the work done exactly and are submitted on time.
- Conditions on publication, authorship and intellectual property are met.

Researchers must appropriately and responsibly report to the Research Commission any known case of malpractice that violates these principles.



3. Organisation of the research

a) Research groups

Pursuant to the UAB Statutes (Article 182), research is organised around the research group (RG). An RG is a research unit formed by academic staff members who share scientific objectives and are coordinated by a head researcher, termed the *coordinator* (Art. 7 30/1 2020 UAB Regulations on research).

RG must have an organisational structure in which lines of communication and authority between their members are clearly indicated, together with the latter's responsibilities towards the research activities.

All group members, within their own designated roles, must uphold this commitment and abstain from any initiatives that might endanger the proper implementation of the project. RG staff must actively participate in the activities proposed and organised.

► Leadership

RG must be headed by a PhD holder, who leads the group and represents it publicly. This leader's responsibilities include both academic matters and matters of organisation and management.

RG leaders must foster a work climate in which members can learn and develop their skills and are encouraged to exchange ideas and pass on their knowledge, towards the achievement of common research goals.

Leaders must also promote cooperation with other research teams, to favour the exchange of ideas and knowledge between researchers.

➤ **Tutoring and supervision of trainee research staff**

The process of training young researchers is one of a researcher's responsibilities. This process is not limited to the learning needed to carry out the research work, but must include training on the CBPR, teamwork and cohesion within the RG, the centre and the institution.

➤ **Duties of supervisors or tutors**

Supervisors or tutors take charge of the training process, with the set objectives and timeframes for achieving them in mind. To the maximum extent, they also pave the way for trainee research staff to have a successful career in science.

Specifically, they must do the following.

- Regularly meet the trainee researchers in their charge to supervise the tasks assigned to them and ensure completion of these.
- Provide trainees with the appropriate means and scientific environment, taking their training needs into account and shielding them from undue pressures.
- Help trainees to join discussion forums and scientific meetings and to take part in research projects, stays abroad, courses, etc., and advise them on their future.
- Prevent trainees from being involved in tasks outside the scope of their training.
- Ensure that trainees' workload (master's degree research projects, doctoral theses, etc.) does not form part of projects with commercial restrictions on the dissemination of results.
- Ensure that the research is conducted under safe conditions, informing trainees about rules on safety and occupational risks and urging them to comply with these rules.
- Persuade trainees to follow the CBPR and to be critical when evaluating their own work.

- Provide trainees with all necessary information on legal provisions affecting research activity (see the legal references).
- Acknowledge the work done by trainees and be rigorous and fair in the authorship of publications and other means for disseminating the research work done.
- Set an example for trainees to follow.

➤ **Duties of trainees**

- Integrate fully into the project assigned to them for their training, take on the corresponding commitments, and achieve the goals they have been set by allocating as much time and as many resources as possible, given their circumstances and their role in the project.
- Make appropriate use of the materials and facilities placed at their disposal.
- Follow the advice given by supervisors or tutors and notify these of any of the trainee's own initiatives and how these are progressing.
- Learn and follow safety rules and procedures and the CBPR.
- Take part in scientific activities: discussion forums, seminars, etc., related to the trainee's own work.
- Acknowledge the contribution made by supervisors or tutors when disseminating results – whether orally or writing.

b) Planning the research

All research must be formulated in a written document (research design or protocol). The text of the document may coincide with the report needed when seeking funding for a research project through a public competition.

A research protocol must include all relevant information on the implementation of the project. As an example, the following sections could be considered: background, specific objectives, methodology to be adopted

and information on the team. The document must also include a work plan with the time schedule, the human and material resources, and the task allocation for each phase of the research and, if possible, an estimate of the financial costs and the budget available for carrying out the research.

Planning the research also involves determining how to disseminate the findings, especially with regard to authorship and authorship order.

Any research protocol that involves research equipment or facilities that are not exclusively for private use must receive prior authorisation from the head of the institution, centre, facility or equipment to be used.

When different groups from one or more centres intend to participate in the same project, the scope, terms and conditions of this collaboration must be set out in writing.

Where relevant, the statistical power of the proposed studies must be considered. This is particularly important in studies involving human beings or experimental animals, to avoid unnecessary or unproductive experiments.

Other ethical and legal matters and risk assessments may need to be taken into account for certain types of studies. If the research directly involves persons, material of human origin or experimental animals, the document must be submitted for prior assessment by the CEEAH of the UAB. If it involves biological hazards, for staff members or for the environment, it must be submitted for prior assessment by the Institutional Biosafety Committee of the UAB (IBC).

When the study or research project involves personal data processing, it is necessary to observe the processing principles in Article 5 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR), especially those of lawfulness and minimisation, and the corresponding risk assessment must be performed, together with an assessment of impact on data protection where required. All this must be done in accordance with instructions and recommendations from the UAB Data Protection Officer.

Ongoing research projects or protocols must be monitored to verify that their activities are being conducted as planned, and to make any necessary adjustments.

c) Conducting the research

➤ Work procedures

The methodologies used in research projects or protocols must derive from sources that ensure reliability: referencing methods, science publications, norms, etc.). If the research involves the development of a new methodology, the process of fine-tuning and validating the new methodology forms part of the research protocol and the researchers must have evidence of its reliability.

All procedures and methods used in the research protocol must be suitably referenced and documented to allow the operations to be subsequently reviewed in as much detail as possible. This documentation must appear, at least, in the original results obtained by the researchers. Depending on the nature of the research, it may be more appropriate to document the methods in the research protocol or in specific procedures.

➤ Research infrastructures

All installations must be suitable for carrying out the planned research activities, both in terms of safety of the persons working there and of the quality of the results obtained.

When equipment is used for research activities, the researchers must ensure it is suitable for these and that the staff using it has been given the appropriate training and instructions. Instructions for using complex equipment must take the form of documented procedures.

Any equipment used in research activities must receive preventive maintenance to ensure that results obtained are not altered by a mal-

function. In addition, the researchers must at all times ensure that the measurements taken by the equipment are reliable.

➤ **Research with human beings**

In research with human beings, special care must be taken when informing on the purpose, inconveniences, and possible risks and benefits of the research (for the subjects themselves or for other people), when obtaining participants' explicit, specific consent, or that of their legal guardians in the case of those considered legally unable to give consent, and with regard to the confidentiality of data, samples, and results obtained. In particular, researchers must explicitly pledge to maintain due confidentiality concerning all knowledge obtained about those participating in a project, in line with the regulations on personal data protection. Additionally, researchers must explicitly pledge not to pass on data or biological samples to other projects or researchers without authorisation from the assignors or the corresponding research ethics committee, or if the purposes of this transfer are not clear. Nevertheless, it is considered good practice to openly publish duly documented basic research data once the research is over and after a reasonable period of study by the research team, taking the necessary measures to ensure anonymity and/or protection for participants and their communities, where appropriate (UN declaration on rights of indigenous peoples, 2007).

In general, any research protocol involving the use of samples of human origin or personal data must be subject to current legislation, particularly Law 14/2007, on research in biomedicine, the GDPR and Organic Law 3/2018, of 5 December, on personal data protection and digital rights (LOPDGDD).

Any research protocol that involves the direct participation of persons, or is based on information or biological samples obtained from persons, must be approved by the CEEAH of the UAB or, if the object of the research is of the clinical type, by the corresponding clinical research ethics committee at the health care centre where the re-

search is conducted. In the case of research with sick patients, the research team members who are not responsible for the participants' clinical treatment must collaborate in it and may not interfere in any matter determined by the medical personnel responsible.

Where appropriate, researchers must specify the financial compensation given to the subjects involved in the project, which must be proportional to the inconveniences or risks generated and may not incentivise participation in the research.

If UAB students are expected to take part in the project, this must be voluntary on their part, and measures must be taken to avoid adverse consequences for those who choose not to take part or decide to withdraw.

➤ **Research with experimental animals**

All research activities with experimental animals must fulfil the principles of replacement, reduction and refinement (3R) defined in current legislation, especially Royal Decree 53/2013, of 1 February, setting out basic rules for protecting animals used in experiments and for other scientific purposes, including teaching, and Decree 214/1997, of 30 July, regulating the use of animals in experiments and for other scientific purposes, amended by Decree 164/2018, of 8 July. The 3R principles should be applied to all stages in the research process, from the design and performance of experiments to the presentation and dissemination of results. However, research staff are recommended to use the ARRIVE guides (*Animal Research: Reporting of In Vivo Experiments*) where appropriate (see the references).

Staff who participate in research activities that involve using animals for experiments or other scientific or teaching purposes must be accredited as researchers or experimenters, as required, in compliance with Order ECC/566/2015, of 20 March.

Likewise, researchers must seek and obtain authorisation from the CEEAH of the UAB for any procedures in which animals are used

for experimental purposes or for other scientific or teaching purposes in the UAB centers, and they must request approval from competent body, where appropriate.

➤ **Research with natural spaces and cultural heritage**

Performing research activities with and/or inside natural spaces and environments and heritage sites (natural, historical, archaeological, etc.) obliges researchers to be specially careful to ensure that the research tasks are compatible with the maintenance, conservation and sustainable development of these spaces for future generations.

Any research done in these contexts must comply with current rules and regulations in each geographical area, region or country, and autochthonous communities must always be respected. The framework for carrying out these operations is set out in the guidelines issued by international bodies like UNESCO (Convention for the Protection of the World's Cultural and Natural Heritage, Paris, 16 November 1972).

➤ **Potentially dangerous procedures and materials**

The use of potentially dangerous procedures and materials must comply with regulations and manuals on good practice, to safeguard both researchers, university community and the environment.

Where appropriate, a prior risk assessment must be made in line with regulations, and due approval obtained from the IBC and the Technical Unit for Radiological Protection (UTPR) of the UAB.

All staff and researchers who have to use these procedures must be informed of them by the head researchers, who must also enforce the relevant measures on safety, workplace health and protection of the environment.

In addition, researchers must strictly follow the approved safety protocols, give warning of the types of accidents that could endanger people and the environment, and apply the relevant containment

and decontamination protocols for minimising the risk of exposure if such accidents occur.

d) Collecting and conserving material and data

➤ Record keeping

Project coordinators are in charge of the recording, storing and safeguarding of the material deriving from research work, which must be done as they specify.

Researchers must systematically record all data and observations from research activities (including preliminary, negative, unexpected or discrepant ones) in a way that is clear enough for third parties to reproduce the work done. These records must state who obtained the data and on what date. Any amendments must show the amended data and specify the date of amendment and the person who made it. Correct record-keeping and identification of data provide necessary proof of the work done and they ensure its traceability, which can be especially important in the protection of intellectual and industrial property.

All data must be kept for at least five years from the date of publication (unless a longer period has been agreed), thus ensuring their integrity and security and preventing unauthorised modifications.

Original research data (and, where appropriate, relevant specimens, samples, original questionnaires, recordings, images, etc.) must be stored in their original form, especially if they have subsequently been modified or enhanced.

All materials on which research has been conducted, or deriving from it, must be unequivocally and permanently identified, clearly indicating the project or protocol they pertain to.

Whenever personal data is processed manually or automatically for research purposes, the relevant regulations must be complied with.

➤ **Physical media**

All original data must be recorded clearly and precisely, including all important details of the research conducted. If a notebook is used, it should be indexed and bound (so that pages cannot be removed or displaced), and with numbered pages. Material that cannot be attached must be kept in a dossier with a system in place for cross-referencing both documents.

➤ **Electronic media**

If data are stored in electronic media, they must be backed up regularly and, in accordance with the stipulated conservation time, must be readily recoverable, especially in the case of changes in the media or standards.

All efforts must be made to prevent the data being disseminated through error, lack of knowledge or insufficient protection against malicious external attacks.

Likewise, backup copies must be kept of the main software used to process the data obtained.

➤ **Storage**

Materials must be stored in a way that consistently ensures their integrity, traceability and proper conservation over the established time period. If the storage conditions are critical (temperature, humidity, etc.), the corresponding records must be kept. Any exchange of materials with other institutions must involve signing the corresponding transfer protocol.

➤ **Ownership of the data**

All primary documentation (notebooks for data collection, databases, etc.), together with material obtained during the research, are the property of the centre to which the project leader is attached. If a researcher moves to a new centre, the project leader may provide him

or her with a copy of all or some of the record books, a copy of the existing digital information, a photocopy of the datacollection notebooks, or parts of the material available. When the change involves the head researcher, this process must be carried out under the responsibility and supervision of the directors of the centre or department.

All members of the research team must have access to the information and interpretation of the data obtained. The head researcher must keep a single record of the different elements of data collection (notebooks, databases, etc.) and of sample storage, which must be capable of being placed at the disposal of third parties.

The data and materials deriving from a research project must be public and available for sharing with third parties, except when restrictions are in place due to confidentiality or the possibility of commercialisation in the future. For data or materials to be shared, the use to be made of them must be known in advance, the research team must acknowledge the request for sharing, and a transfer protocol must be followed with the approval of the head researcher. In addition, the person requesting sharing must be willing to meet any production and delivery costs. There may be restrictions on sharing for reasons of availability, competitiveness or confidentiality. Material containing personal data must be shared in such a way that the source subjects cannot be identified. If this is not possible, prior explicit consent is needed from these persons.

4. Dissemination of results

a) Policy on dissemination

The dissemination of results is an ethical duty of researchers, being seen as a contribution to human knowledge and as part of the process of accountability for the use of public resources in research.

Therefore, it is unethical to avoid dissemination, delay it excessively, exaggerate the importance of the results obtained, or even avoid publishing negative results (in particular cases relating to health).

The UAB supports initiatives on open access to knowledge (Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities: <http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/>), that promote publication models favouring open access to researchers' scientific and academic production. Accordingly, the UAB subscribed to the Berlin Declaration on 14 March 2012, by decision of its Governing Council. In all cases, the open access approach must meet the same criteria of honesty and rigour that apply to the other means of communication.

b) Institutional affiliation and acknowledgements

All researchers must clearly state their affiliation to the UAB in their papers. This is also the case when a researcher is assigned to other research structures (institutes, observatories, etc.). Researchers' affiliation to the UAB and standardised signature must comply with instructions from the vice-rector responsible for research matters.

All published works must contain the names of the independent committees that supervised and approved the research protocol.

Persons and institutions that collaborated in the research must appear in the acknowledgements section. In particular, this section must mention the work and contributions of support staff and staff of the UAB research support services. Any financial support or sponsorships received for doing the research must be declared and acknowledged, unless otherwise indicated by the provider.

c) Dissemination in the Media

Whenever results are presented through the Media this must include an explanation for the layperson or a part of the presentation must be adapted to suit a non-specialist audience. In these types of public presentations, the authors' names must always be associated with those of their institutions and, wherever possible, any financial support received must be mentioned.

It is not considered acceptable for research results to be presented in the Media before peer review has been carried out, nor to show excessive optimism or raise false expectations regarding the research.

5. Authorship

Pursuant to the law on intellectual and industrial property, a claim to authorship or co-authorship of a publication or to ownership of a patent or usable model must rest on the following.

- A substantial contribution to the development of the project and the creative process or, in other words, to the conception and design of the project or to the analysis and interpretation of the data.
- A role in preparing presentations, reports or resulting publications.
- Ability to provide a detailed presentation of the personal contribution made to the research and to discuss the main aspects of the project as a whole.

All co-authors referenced in a particular publication must know its text and must accept the final version in writing, thus sharing responsibility for its content.

Mere participation in obtaining resources, collecting data or samples, or providing experimental subjects does not necessarily afford the status of co-author, though this participation must be recognised in the acknowledgements section.

Persons attached to a research group who ask to go on record as ex officio authors based on their position in the hierarchy or employment status are violating academic freedom and committing an injustice, if not abuse of authority. Conversely, deliberate omission of the name of any person who has made a proven contribution in line with the criteria set out above is an act of unlawful appropriation of intellectual property on the part of the other authors.

In general, authors should avoid the fragmentation of publications and set out all the information available in detail, including that which is needed to reproduce the results obtained.

a) Order of the authors

Regarding the order in which the authors appear in publications, it should be noted that customs and practices can vary between different research areas.

In general, when the different authors have made equal contributions, they appear in alphabetical order.

When their contributions differ, the order of signature in publications is usually the following.

- The first co-author is the person who has put the most work into the research and has prepared the first draft of the paper.
- The last author is the senior researcher who has led the research or who is given ultimate responsibility in the research protocol.
- The other co-authors can appear in order of their contribution or, in some cases, in alphabetical order.

When two or more co-authors have made equal contributions to a paper and have shared the main task of preparing the manuscript, they are both considered to be lead authors. This is made explicit in the publication of the original. The same criterion can be applied to intermediate and senior authors.

The author in charge of correspondence has the main responsibility for the whole publishing process, and for future interactions deriving from publication of the paper.

b) Authorship of reports

Technical reports or any other text written for third parties must always contain a list of the authors of the research paper, the centres they belong to and any financial support received that could be relevant to the report being issued, in the same terms as a scientific publication or a patent.

c) Amending errors and public retraction

If an error is found that devalues the published results, the lead author must immediately discuss the issue with the head researcher, notify the co-authors, publish an amendment as soon as possible and establish the basis for the reservations. If there are serious concerns, a retraction must be published as soon as possible.



6. Research projects sponsored by private companies and intellectual and industrial property

According to Article 4.b of the UAB Statutes, one of the purposes of this university is “to participate in the creation of scientific, technical and professional knowledge through research and the transfer of the results obtained to society”. For this reason, the UAB seeks to manage the ownership of its results appropriately, through a policy on intellectual and industrial property that allows this property to be evaluated, protected, valorised and commercialised effectively. It also endeavours to raise awareness among research staff and provide training on intellectual and industrial property and its exploitation.

a) Transparency and prevailing interests

In the exchange or transfer of knowledge and technology with private entities, the public interest must always prevail, which means a need for complete transparency in agreements made. The UAB must establish the limitations needed to protect the intellectual freedom of its researchers, and avoid disproportionate commitments on confidentiality or unjustified restrictions on publishing results obtained.

However, in accordance with the legislation on personal data protection, when data are processed on behalf of the data controller the legal relationship with private entities requires a contract or agreement to be executed, with Article 28 of the GDPR applying to the data processors.

b) Intellectual property

The relevant contract documents must be drawn up, and these must cover the parties' different interests, tasks or contributions appropriately. They must also stipulate the obligations of secrecy and confidentiality assumed by the parties and ownership of the results generated within the project framework, put in place effective legal protections for these results, and set out the conditions for exploiting them.

If results obtained from research activities may warrant protection due to their potential commercial value, they must not be disclosed while the parties are evaluating this. Any possible delays to disclosure aimed at protecting industrial property must be kept to a minimum.

All intellectual property, technical know-how, reagents, or materials generated by the researchers within the UAB facilities or in relation to UAB research activities are the property of the UAB. This also applies to visiting researchers who use the UAB research facilities.

c) Industrial property

When research staff participating in a project promoted by industry make a significant contribution to the design and execution of the project, the necessary agreements must be drawn up with the promoter to share the corresponding industrial property and, where appropriate, intellectual property.

Furthermore, when the UAB provides resources and facilities to promote and set up technologybased companies deriving from the research conducted by a particular group, it must safeguard against possible abuses in favour of the private interests of those participating in the company.

7. Fabrication, falsification, plagiarism and other questionable practices

Fabrication, falsification and plagiarism are illegitimate practices that have no place in university research and which should be reported immediately to the vice-rector responsible for research and/or the Research Commission.

Objectivity should always be maintained in research, which means avoiding questionable practices aimed at increasing its acceptance or impact, such as excessive enhancement of data or skewed interpretations.

Regarding the publication of research findings, it is recommended to follow the COPE guidelines (<https://publicationethics.org/>), to avoid self-plagiarism, the unjustified fragmentation of scientific papers and other questionable publishing practices.

8. *Curriculum Vitae*

While reflecting research activity, the Curriculum Vitae should never be the purpose of the research.

This document should contain the researcher's personal details and those of his or her educational and professional background – accurately and clearly stated in all cases. Its content is the responsibility of the person submitting it and, therefore, each of its pages should be signed or initialled.

Researchers should keep the UAB informed of their own professional activity by updating their personal CV using the means designated by the university.



9. Assessment, advisory support and review

Researchers often take part in assessing projects, publications, groups or individuals. In general, this assessment is performed by subject experts of equivalent rank to those being assessed: their peers, in other words.

Peer reviews are entrusted to experts who are asked to assess or critique a manuscript sent for publication, a report backing up an individual or group request for funding, or an experimental procedure needing approval from an ethics committee.

Reviews must be objective: based on scientific criteria rather than on opinions and personal ideas. Review requests should be refused if the potential reviewer has any conflicts of interest (for example, when there are direct ties to the authors or when these are close competitors) or does not feel sufficiently qualified to perform the review.

Reviewers' reports and the texts reviewed are always to be treated as confidential, privileged information. In consequence, these documents

- may not be used to benefit the reviewer until the information has been published;
- may not be shared with any colleague, other than for exceptional reasons, or with explicit permission from the publisher or research agency;
- may not be retained or copied, unless permitted by the publisher or research agency. The usual practice is to destroy or return the material once the process is over.

References

Codes of good practice and guides

Other codes of good practice that have been used to prepare this document.

- University of Cambridge
http://www.admin.cam.ac.uk/offices/research/research/Good_Practice.aspx
- Spanish Committee on Bioethics
<http://www.comitedebioetica.es/documentacion/index.php>
- Spanish National Research Council
https://www.csic.es/sites/default/files/codigo_de_buenas_practicas_completo_castellano_-_ingles.pdf
- International Committee of Medical Journal Editors
http://www.icmje.org/urm_main.html
- Medical Research Council
<https://mrc.ukri.org/publications/browse/good-research-practice-principles-and-guidelines/>
- Barcelona Biomedical Research Park
<https://prbbgoodpractice.wordpress.com/the-code/>
- ARRIVE Guidelines
<https://www.nc3rs.org.uk/arrive-guidelines>

Legal references

Decree 164/2019, of 8 July, on the use of animals for experimentation and for other scientific purposes.

Decree 29/1995, of 10 January, on automated filing systems containing personal data in the Department of Health and Social Security (DOGC no. 2013, 17 February 1995).

Decree 406/2006, of 24 October, on the requirements and procedure for accreditation by clinical research ethics committees (DOGC no. 4748, 26 October 2006).

Instructions of the vice-rector for Research on signature standardisation and affiliation of researchers at Universitat Autònoma de Barcelona.

Law 14/2007, of 3 July, on biomedical research (BOE no. 159, 4 July 2007).

Law 23/1998, of 30 December, on statistics of Catalonia (DOGC no. 2801, 8 January 1999), and Law 12/1989, of 9 May, on the function of public statistics (BOE no. 112, 11 May 1989).

Law 24/2015, of 24 July, on patents.

Law 31/1995, of 8 November, on the prevention of occupational risks (BOE no. 269, 10 November 1995).

Organic Law 3/2018, of 5 December, on personal data protection and digital rights guarantee).

Order of 25 March 1998 adapting, on the basis of technical progress, Royal Decree 664/1997, of 12 May, on protection of workers against risks of exposure to biological agents in the workplace (BOE no. 76, 30 March 1998).

Order ECC/566/2015, of 20 March, establishing training requirements for handling animals used, bred or supplied for experimental and other scientific purposes, including teaching.

Regulation (EU) 2016/679, of the European Parliament and the Council, of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR).

Royal Decree 1090/2015, of 4 December, on clinical trials with medicines, ethics committees on research into medicines and the Spanish Register of Clinical Studies.

Royal Decree 1369/2000, of 19 July, amending Royal Decree 822/1993, of 28 May, establishing the principles of good laboratory practice and their use in non-clinical studies on chemical substances and products.

Royal Decree 1386/2018, of 19 November, amending Royal Decree 53/2013, of 1 February, establishing basic rules to protect animals used in experiments and for other scientific purposes, including teaching.

Royal Decree 178/2004, of 30 January (BOE no. 27, 31 January), approving the General Regulations for enacting and applying Law 9/2003, of 25 April, which establishes the legal framework for the confined use, voluntary release and commercialisation of genetically modified organisms.

Royal Decree 665/1997, of 12 May (BOE no. 124 of 24 May), on protection of workers against risks of exposure to cancerous agents in the workplace (BOE no. 124, 24 May 1997).

Legislative Royal Decree 1/1996, of 12 April, approving the recast text of the Law on intellectual property.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), 2007.