

School for Doctoral Studies Code of Good Practice

(Agreement of the Governing Council on 30 January 2013)

Index

Introduction.....	3
Objectives and scope of this document	4
Basic research values and principles at the UAB.....	4
<i>Freedom</i>	4
<i>Honesty</i>	4
<i>Rigour</i>	5
<i>Conflicts of interest</i>	5
<i>Responsability</i>	5
Research organisation	5
<i>Research groups</i>	5
<i>Leadership</i>	6
<i>Tutoring and supervision of trainee research staff</i>	6
<i>Obligations of course directors or tutors</i>	6
<i>Obligations of trainee staff</i>	7
Research planning	7
Research practice	8
<i>Working procedures</i>	8
<i>Research infrastructure</i>	8
<i>Research involving people</i>	8
<i>Research involving animal experimentation</i>	9
<i>Research involving natural spaces and cultural heritage</i>	9
<i>Potentially hazardous procedures and materials</i>	10
Collection and storage of materials and data.....	10
<i>Acquisition and recording</i>	
<i>Physical materials</i>	10
<i>Computerised materials</i>	11
<i>Storage</i>	11

<i>Data ownership</i>	11
Dissemination of results	12
<i>Dissemination policy</i>	12
<i>Institutional credits, acknowledgements and grants</i>	12
<i>Dissemination in the media</i>	12
Authorship	13
<i>Order of authors</i>	13
<i>Authorship of reports</i>	13
Research projects sponsored by private companies and intellectual and industrial property	14
<i>Transparency and supremacy of interests</i>	14
<i>Intellectual property</i>	14
<i>Industrial property</i>	14
<i>Error correction and retraction</i>	15
<i>Curriculum vitae</i>	15
Evaluation, assessment and review activities	15
<i>Peer review</i>	15
References	16
<i>Codes of Good Practice</i>	16
<i>Legal references</i>	16

Introduction

The Universitat Autònoma de Barcelona (UAB) is committed to the objective of achieving a high level of excellence in teaching, research and knowledge transfer and supports the development and establishment of learning methods adapted to each stage of its teaching.

As an integral part of the UAB, the School for Doctoral Studies subscribes to and adopts this commitment which it has formalised in a code of good practice. This is understood as the code of values and principles that inspire all its activities and are adopted by all those participating in them. This code of good practice has to guide the direction and monitoring of PhD candidates and their doctoral theses. The School for Doctoral Studies therefore has an internal agreement which sets out the rights and responsibilities of the thesis supervisors, tutors and PhD candidates.

In accordance with its statutes the UAB promotes the principles of freedom, democracy, justice, equality and solidarity. The *School for Doctoral Studies Code of Good Practice* therefore aims to orientate research and university activities towards a culture of Peace, respect for human rights, equality and social progress, respect for the environment and sustainable development, and implies the explicit rejection of research for military purposes.

Royal Decree 99/2011, 28 January, on the regulation of official doctoral studies, establishes the legal framework for studies at postgraduate level, giving them a fundamental role as an intersection between the European Area for Higher Education (EHEA) and the European Research Area (ERA). Article 9 of the royal decree (section 8) establishes that all people who form part of the school for doctoral studies must comply with the code of good practice adopted by the school.

The *School for Doctoral Studies Code of Good Practice* is a set of recommendation and commitments that acts as a guide to PhD candidates in their joint situation as postgraduate students and trainee researchers.

In terms of quality and the improvement of PhD programmes, the School for Doctoral Studies is firmly committed to developing new policies for quality and continual improvement of PhD programmes. In order to ensure academic quality PhD programmes are included within the internal system of quality guarantee (SIQ) of the UAB, previously applied to Bachelors and Masters Degrees and certified by the Catalan Agency for University Quality (AQU) within the AUDIT programme. The SIQ includes the minimum processes demanded by law with respect to PhD programmes. The PhD programme must have mechanisms available to analyse the development and results and ensure that review and improvement continues. The annual quality review for PhD programmes is carried out according to specific efficiency indicators such as success rates, number of theses produced, number of major scientific contributions and the number of theses awarded *cum laude*. The PhD programme committee is responsible for planning actions for improving the different process involved in the PhD programme annual review.

The UAB also has a *Code of Good Research Practice* which was produced in accordance with the recommendations contained in the *Recommendation of the Bioethical Committee of Spain in relations to the impulse and implementation of good scientific practice*, by the Committee for Ethics in Animal and Human Experimentation at the UAB (CEEAH), in accordance with the provisions of the prevailing legislation. The *Code* is based in the *European Research Charter* and other documents of good scientific practice in public research institutions, and was approved by the Research Committee of the UAB at its Meeting on 12 November 2012.

The School for Doctoral Studies has adopted this code with reference to the research activities contained within doctoral studies, which are detailed below.

Objectives and scope of this document

Good practice in research involves an intellectual attitude that translates into a working ethos. They are related in the way in which research is planned and carried out, how the results are recorded and diffused and how the knowledge derived from the research is applied and exploited.

The CBPR is the collective self-regulating instrument that is made up of a set of actions, recommendations and commitments for research practice.

Its strength comes from the fact that it includes legal precepts, but also the voluntary acceptance of everyone involved in research and especially the researchers themselves. This acceptance means that what is contained in it is what researchers of recognised prestige consider is appropriate in terms of attitude, behaviour and ethical commitment required by high level research.

For that reason the objectives are:

- Better quality research in all fields.
- The establishment of mechanisms to guarantee honesty, rigour and responsibility in research.
- The acquisition of good scientific practice in the period of research training.

The content is complementary to the existing legal regulations.

This document is applicable to researchers and trainee researchers at the UAB, as well as the other bodies under majority or total control of the University.

In the case of conflicts it is suggested that the Research Committee of the UAB resolve the case on the request of the different parties, without prejudice to the possibility of making an individual claim for mediation by the ombudsman of the UAB and with recourse to the legal or specific requests established within Spain.

Basic research values and principles at the UAB

The basic principles that should inspire any kind of research at the UAB are freedom, honesty and responsibility.

Freedom

The principle of freedom refers equally to the choice and the carrying out of research. Despite that, this freedom is embraced by the ethical principles contained in the previously mentioned UAB Statutes and the international agreements and declarations that make reference to them, as well as the legal precepts applicable in each case, which are mentioned at the end of this code.

Honesty

Researchers must be honest in their research activities and also towards other researchers in their work and with the institution itself. This applies to all works of research, including the initial formulation of the hypothesis, design of the research methodology, analysis of data, publication of the results, recognition of the contribution of other researchers and reviewing and evaluation activities undertaken as personal commissions.

Researchers must recognise the direct and indirect collaborations and contributions of colleagues clearly, unequivocally and explicitly.

Researchers must respect industrial and intellectual property rights and must not plagiarise or self-plagiarise or manipulate the results.

Rigour

The honesty of researchers also implicitly involves rigour in carrying out the research. Researchers have to engage in a careful process of discovery and interpretation. That requires detailed revision of the results obtained before publication and, if errors significant are detected after publication, these should be publicly and explicitly rectified as soon as possible.

Conflicts of interest

Conflicts of interest are present in all facets of human activity and appear when the criteria applied to a primary interest (e.g. knowledge of an area) may be unduly influenced by a secondary interest (e.g. economic gain or improving the position of the researcher).

Finding oneself in a situation of conflict of interests is not intrinsically unethical but the situation must be recognised and handled correctly. Researchers should therefore pay great attention to possible conflicts of interest in order to realise when they are occurring. Where conflicts are identified they should be avoided or made public and appropriately handled according to the policies of the contracting parties, evaluating bodies or publishers.

Responsibility

As members of the UAB, researchers must guarantee that the research is carried out in accordance with the principles expressed in the University Statutes, as well as in the terms and conditions defined by the funding body or agreed between the UAB and the funding bodies. This includes the need to ensure that:

- Research is carried out in compliance with the criteria for economic and environmental sustainability.
- Research is carried out in accordance with the original proposal presented to the funding body, except where changes have been agreed.
- Funding is used solely for the planned objectives, except where authorisation has been obtained for alternative uses.
- Reports reflect the work being carried out exactly and are presented within the set deadlines.
- The conditions relating to publication, authorship and intellectual property are complied with.

Researchers must report any act of malpractice with regard to these principles as soon as they come to light in an appropriate and responsible manner.

Organisation of the research

Research groups

In accordance with the UAB Statues (Article 182) research is structured around a research group. The research group is a research unit made up of members of the academic staff who share scientific objectives and are coordinated by a principal researcher.

Research groups must have an organisational structure in which the lines of authority and communication among its members are clearly indicated, as well as the responsibilities for the different research actions.

All members of a group, within their area of responsibility, must take on this commitment and reject initiatives that could jeopardise the way in which they carry out their project. Members of the research group must take an active part in the activities that are proposed and organised.

Leadership

Research groups must have a principal researcher who leads the group and publicly represents it. The responsibilities of that leadership include both academic and organisational aspects.

Research group leaders must promote an area of work in which members can gain experience and develop their skills and in which the exchange of ideas and knowledge is promoted as well as the achievement of common research objectives.

Leaders must also promote cooperation with other research teams to encourage the exchange of ideas and knowledge among researchers.

Tutoring and supervision of trainee research staff

The training process for young researchers is one of the responsibilities of the researcher. This process should not be limited to the learning necessary for undertaking the research task, but should include the CBPR, team working and working within the research group, the centre and the institution.

Obligations of supervisor or tutors

Supervisors and tutors are responsible for the training process taking into account the defined objectives and the timeframe for achieving them. They must therefore provide the trainee researchers with the best possible conditions for carrying out their scientific work in the future.

Specifically they must:

- Interact personally and regularly with the trainee researchers under their supervision to oversee the tasks they have been asked to carry out and guarantee that they are fulfilled.
- Facilitate access to adequate means and scientific environment, taking into account the training needs and avoiding unnecessary pressure.
- Introduce trainee staff to discussion forums and scientific meetings and offer advice for their future, as well as allowing them to participate in research projects, periods abroad, courses, etc.
- Avoid trainee researchers being involved in tasks that are outside their area of training.
- Ensure that work orientated to training researchers (Master's degrees, PhD theses) does not form part of projects with commercial restrictions over the diffusion of results.
- Ensure that the research is carried out in safe conditions, informing the trainee researchers about the safety rules and risk prevention measures and insisting that these are complied with.

- Stress to trainee researchers that they must follow the CBPR and should be self-critical when evaluating the safety of their own work.
- Offer the trainee researchers all the information they need in relation to the existing legal requirements that affect research activity (see legal references).
- Recognise the personal work of the researchers and be rigorous and fair in the authorship of publications and other forms of diffusion of the work carried out.
- Carry out work in a way that provides an example for the trainee researchers.

Obligations of trainee researchers

- Be fully involved in the project assigned to them for their training and take on the commitments that derive from it and achieve the objectives set out, dedicating the necessary time and resources within what is reasonable for the situation and dedication to the project.
- Undertake to make good use of the materials and installations available.
- Follow the advice and recommendations of the supervisors or tutors and inform them of any possible initiatives and the progress in the results.
- Inform themselves of the safety rules and procedures and follow them and respect the CBPR.
- Take part in scientific activities, discussion forums, seminars, etc. related to the carrying out of their own work.
- Recognise the contributions of supervisors and tutors in their oral and written results.

Research Planning

All research must be contained in a written document (research protocol or design). The document text must coincide with the report needed to apply for funding for a research project in a public call for applications.

A research protocol should include information relevant to the project. As an example the following sections could be considered: background, specific objectives, methodology to be used and research team. The document should also include a work plan with a calendar setting out each of the planned phases of the research, which should also contain the human resources planning, assignment of tasks and the material resources anticipated. If possible it should also include an economic assessment of the costs and a budget.

Research planning should also anticipate the diffusion of results, especially in aspects such as authorship and the order in which the authors appear.

All research protocols that include the use of installations or equipment for the research that are not for exclusive use should receive prior approval from the person responsible for the institution, centre or equipment to be used.

When it is anticipated that different groups from the same or different centres will be involved in a research project there should be a written document of the scope, conditions and terms of the joint collaboration.

Where necessary the statistical weight of the proposed study should be taken into account. This aspect is especially important for studies that involve the use of humans or animals in experiments in order to avoid unnecessary or unproductive testing.

Depending on the type of study, ethical and legal aspects should also be taken into account as well as risk evaluation. If the research directly involves people, human material or experimental animals, the document should first be submitted to the CEEAH of the UAB. Where there is biological risk to staff or the environment it should be previously submitted to the Biosafety Committee (CBS) of the UAB.

During the projects or research protocols monitoring should be carried out to show that the activities being carried out are in line with the planning and to make any necessary changes.

Carrying out the research

Working methods

The methods used in the protocols or in the research project must come from reliable sources (reference methods, scientific publications rules, etc.) Where the research involves a new methodology the process of starting up and validation of the new methodology must form part of the research protocol and researchers must demonstrate its reliability with evidence.

All procedures and methods used in the research protocol must be adequately referenced and documented to allow subsequent revision in the most exact way possible of how it is going to operate. This documentation must consist of at least the original results obtained by the researchers. According to the nature of the research it may be more appropriate to document the methods in the research protocol or in specific procedures. In this last case the copies of the procedures must be controlled to ensure that all the researchers have the same version of the documents.

Research infrastructures

All installations must be adapted so that the planned research activities can be carried out, both in terms of the safety of people working in them and the quality of the results obtained.

Where equipment is used to carry out the research activities, researchers must ensure that it is adequate for the activities to be carried out and that the people who have to use it are suitably trained with adequate instructions for its use. In the case of complex equipment those instructions must be in the form of documented procedures.

Any piece of equipment used for research activities must undergo preventative maintenance to avoid malfunctioning that could later the results obtained. Researchers must also guarantee the reliability of the measures offered by the equipment at all times.

Research with humans

In research with humans there is a special need for diligence in terms of the information about the proposal, inconveniences and possible risks and the benefits of the research (for the subject or other people), obtaining explicit, written consent from the people participating or their parents or legal guardians in the case of individuals that are legally considered incapable of giving consent as well as the confidentiality of data, samples and the results obtained. In particular researchers must acquire

the explicit commitment to confidentiality in anything that the people in the project may find out in accordance with the regulations on personal data protection. They must also make an explicit commitment to not pass data or biological samples to other projects or researchers without the authorisation of the providers or the research ethics committee or without clearly knowing the objectives.

In general, all research protocols involving the use of human samples or data about people must comply with the prevailing legislation and in particular Law 14/2007 on research in biomedicine and Organic Law 15/1999 on the protection of personal data. All research protocols involving the direct participation of people or which are based on any information or biological samples obtained from people must receive the approval of the CEEAH of the UAB or, where the purpose of the research is of a clinical nature, the corresponding clinical research ethics committee (CEIC) of the health centre where the research is being carried out. In the case of research with patients, the members of the research team who are not responsible for the clinical treatment of participants must collaborate and not interfere in any question raised by the medical staff responsible.

Researchers must specify any economic compensation that the subjects participating in the project will receive, and this must be proportional to inconvenience or risk incurred and may not be used as an incentive for participation in the research.

Where it is anticipated that students from the UAB will participate in a project there must be a guarantee that their inclusion is free and voluntary, and measures must be taken to avoid adverse consequences for those who decide not to take part or who withdraw from the projects.

Research with animal experimentation

All research activities carried out with experimental animals must be carried out in accordance with the principles of replacement, reduction and refinement contained in the prevailing legislation and in particular in Royal Decree 1201/2005 of 10 October on the protection of animals used for experimentation and other scientific purposes and Decree 214/1997 of 30 July which regulates the use of animals for experimentation and other scientific purposes.

The staff taking part in research with experimental animals and animals used for other scientific purposes must have the corresponding accreditation as researcher or experimenter, depending on the case. Researcher must therefore apply for and obtain authorisation from the Ethics Committee for Animal and Human Experimentation of the UAB (CEEAH) for each of the experimental procedures in which animals are used for experimentation and other scientific or teaching purposes.

Research involving natural spaces and cultural heritage

Research activities carried out using or within natural spaces, in environmental settings or heritage sites (natural, historical, archaeological, etc) oblige researchers to take special care and always look for compatibility between their own research tasks and the maintenance, conservation and sustainable development of those spaces for future generations.

Any type of research in these areas must be carried out in accordance with the rules and prevailing legislation for each geographical area, region or country, and the local communities must always be respected. The spirit of the actions must be that marked by the directives of international organisation such as UNESCO (Convention for the protection of world cultural and natural heritage, Paris, 16 November 1972).

Potentially hazardous procedures and materials

The use of procedures and materials that are potentially hazardous must be undertaken in accordance with the regulations and good practice guides to guarantee the safety of researchers and the university community as well as the environment.

Where necessary a prior risk assessment must be carried out in accordance with the prevailing legislation and the approval of the Biosafety Committee (CBS) and the Technical Unit for Radiological Protection of the UAB must be obtained.

The head researchers must be committed to informing all researchers and staff involved in the use of these procedures and materials, and complying with the health and safety regulations, safety at work and environmental protection measures in place.

Researchers must also be committed to carrying out the research strictly following the approved safety protocols and must inform of any accidents that may place the staff or the environment at risk, and they must also follow the protocols for containment and decontamination to minimise the risks of exposure.

Collection and storage of materials and data

Obtaining and recording materials

The recording, storage and custody of material deriving from research is the responsibility of the project leader and must be undertaken according to their criteria.

Researchers must record all data and observations obtained from the research activity (including the preliminary, negative, unexpected or discordant results) permanently and with sufficient clarity to allow third parties to reproduce the work carried out. The records must identify the person who obtained the data and the date. Any changes made must show the corrected data and identify the data of the correction and the person who made it. The record and the identification of data must demonstrate the work carried out and ensure traceability, which could be especially important for the protection of intellectual and industrial property.

All data must be conserved for a minimum period 5 years from the date of publication (except in the cases where there is an agreement for a longer period) in order to guarantee integrity and safety and avoid non-authorized changes.

The original data from the research (and where necessary the relevant specimens, samples, original questionnaires, recordings and images, etc.) must be stored in their original form, especially if they have been subsequently modified or improved. Excessive improvement or interpretation of the original data should therefore be avoided.

All materials involved in research activities or those which derive from it must be identified in a clear and lasting manner along with the project or protocol from which they come.

In all research involving the use of personal data there must be a guarantee that the data has been obtained and is stored in compliance with the prevailing legislation.

Physical materials

All original data must be clearly and precisely recorded, including all the relevant details of the research carried out. Where notebooks are used they should preferably be indexed with bound pages (not interchangeable or disposable) which are numbered. Material that cannot be included in them must be kept in a dossier with cross reference systems between the two documents.

Computerised materials

In the case of data stored electronically, security copies should be systematically generated periodically and, taking into account the established conservation period, recovery must be guaranteed, especially cases where the format or standards are changed.

It must be guaranteed that all means are available to avoid accidental dissemination of the data as a result of error or lack of knowledge or a lack of protection against external attacks.

Copies of the main programs used to process the data obtained must also be kept.

Storage

Storage of materials should be carried out in such a way as to guarantee their integrity, traceability and conservation at all times. Where the storage conditions are critical (temperature, humidity, etc.) the corresponding records must be obtained. Any exchange of materials with other institutions must be undertaken with the corresponding signed transfer protocol.

Data ownership

All the primary data (collection notebook, data bases, etc.) as well as material obtained during the research is the property of the centre to which the project leader belongs. Where there is a change of institution, and where necessary, the project leader may make a photocopy of all or part of the record books, a copy of the existing electronic information and a photocopy of the data collection notebooks or part of the material available to the person who is changing centre. Where the change affects 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 be able to access the information from the data obtained and their interpretation. The head researcher must hold a single record of the different elements of data collections (notebooks, data bases, etc.) and custody of samples, access to which must be in conditions which make them available to third parties.

The data and materials resulting from the research must be public and in conditions which make them available to third parties, with the exception of cases where restrictions have been established for reasons of confidentiality or possible future commercialisation. Before granting access to data and materials it is necessary to find out the use that the person requesting will make of them, inform the knowledge of the request by the research team and follow a transfer protocol with the approval of the research leader; it is also necessary that the person requesting the data and materials takes responsibility for any production or procedural costs. The granting of access may be limited for reasons of availability, competition or confidentiality. The material or data that comes from people must be shared in such a way as to not be able to identify the source subjects; where this is not the case specific permission must be obtained from the people from which they come.

Dissemination of the results

Dissemination policy

The dissemination of the results is an ethical responsibility of researchers understood as being a contribution to increasing and improving human knowledge and as part of the process of balancing accounts for the use of public resources for research.

Therefore it is unethical to wait too long before disseminating the results, not disseminating them at all or exaggerating the importance of results derived from the research, or even the non-publication of negative results (in certain health-related cases).

The UAB considers open-access initiatives for knowledge to be positive (*Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*), which favour and promote models of publication that advocate free access to scientific and academic production generated by researchers. For that reason the UAB recommended the Berlin Declaration (<http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/>) to the Governing Council on 14 March 2012. In any case open access has to meet the same criteria of honesty and rigour that rule other means of communication.

Institutional credits, acknowledgement and grants

All researchers must clearly state that they belong to the UAB in their published works. In the case of researchers attached to the UAB through other research structures (institutes, observatories, etc.) these attachments must also be clearly identified.

Attachment to the UAB must comply with the instructions of the Vice Rector's Office for Research in terms of the "Standardisation of signatories and attachment of researchers to the UAB".

All published research must explicitly include the independent committees that have supervised and approved the research protocol.

The acknowledgements section must include people and institutions that have collaborated in the research. In particular the work and contributions of support staff must appear as well as the support services for research at the UAB.

Subsidies, funding grants and economic sponsorship received to carry out the research must be declared and acknowledged, as long as acknowledgement has not been declined by the awarding organisation.

Dissemination in the media

Presentation of results through the media must always include an informative explanation or part of the presentation adapted to non-specialist audiences.

In this type of public presentation the authors' names must always be associated with their institutions and wherever possible subsidies and grants received should be mentioned.

It is not considered acceptable to communicate and disseminate results of research to the media before peer review has taken place, nor should excessive optimism or false expectations be raised in relation to the research.

Authorship

For the purposes established in the legislation on intellectual and industrial property to determine authorship or co-authorship of a publication and inventor of a patent or model of use the following are required:

- Have made a substantial contribution to the project and the creative process, i.e. to the conception and design of the project or the analysis and interpretation of the results.
- Have contributed to the preparation of presentation, report or the results.
- Be able to present a personal contribution to the research and discuss the main aspects of the research as a whole.

All co-authors referred to in a specific publication do not have to know the text but have to sign to accept the final written version and therefore declare that they are co-responsible for the content.

Simple participating in the collection of resources, data or samples or in the provision of subjects for experimentation does not necessarily justify co-authorship, even though that participation is recognised in the acknowledgements section.

People involved in the research group who, as a result of hierarchical position or job status, demand the position of *ex officio* author are violating academic freedom and committing an act of injustice or even abuse of their authority. Conversely the deliberate omission of the name of any person who has made a proven contribution according to the criteria set out previously is an act of inappropriate appropriation of intellectual property for the rest of the authors.

Order of authors

The order in which authors appear in the publications may follow certain customs or uses that are established in each area of research and it is recommended that these are respected.

In general terms, where the contribution between different authors is equal, the most usual order in which names appear is alphabetical.

Where the contribution of each author is different it is usual practice to list the authors as follows:

- The first co-author is the person who has made the greatest efforts in the research and prepared the first draft of the article.
- The next co-author is the senior researcher who directed the research or who has ultimate responsibility for the research protocol.
- The other co-authors may appear in order of their contribution or, in some cases, alphabetical order.

Where two or more researchers have made an equal effort and have shared the main work in writing the manuscript they have the same consideration as first authors. This circumstance is explicit in the publication of the original. The same criteria can also be applied to intermediate and senior authors.

The author with responsibility for the correspondence is the one with the main responsibility for the publishing process as well as future interactions that may derive from the publication of the work.

Authorship of the reports

The publication of working or technical reports or any other written document aimed at third parties must always include the relationship of the authors to the research or investigation, the centres they are from and the subsidies and grants receive that may be relevant to the report, in the same terms as a scientific publication or patent.

Research projects sponsored by private companies and intellectual and industrial property

According to Article 4.b of the Statutes of the UAB, one of the aims of this university is “to participate in the creation of scientific, technical and professional knowledge through dedication to research and the subsequent transfer of the results obtained to society”. For that reason, the UAB encourages and promotes good management of the ownership of the results and has established and disseminated an intellectual and industrial property policy that allows it to be evaluated, protected, valorised and commercialised effectively. Measures must also be adopted for increasing awareness and the training of new researchers in relation to intellectual and industrial property and its exploitation.

Transparency ad supremacy of results

In the exchange or transfer of knowledge and technology with private entities it is always necessary to foreground the public interest in such a way as the agreements must be made with total transparency. The UAB must establish the necessary limitations for protecting the intellectual freedom of its researchers avoid compromises of confidentiality that are disproportionate or unjustified restrictions in the publication of the results obtained.

Intellectual property

The appropriate contractual documents must be written up in which the different interests, tasks and contributions of the parties are set out. The obligation to secrecy and confidentiality by the parties must also be stipulated and the assignment of ownership of the results generated within the project, and the possibility of drawing up appropriate and efficient legal protection o the result and establishing the conditions for their exploitation must be contemplated.

If the results obtained in the research are susceptible to protection because they have potential commercial interest, they should not be disseminated while the parties are carrying out the evaluation of them. Possible delays in the dissemination in order to protect intellectual property should be kept to a minimum.

All intellectual property, technical knowledge, reagents or materials generated by researchers in the UAB installations, or in relation to the research activities at the UAB, are the property of the UAB. This principle is generally also applied to visiting researchers who use the research installations of the UAB.

Industrial property

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

Where the UAB contributes means and facilities for the promotion and creation of technology companies as the result of the work of a specific research group it must be careful that abuses do not occur in favour of the private interests of the company participants.

Correction of errors and public withdrawal

If an error is found that devalues the published results, the principal author must discuss the matter immediately with the leader of the research so that the co-authors can be notified, publish a correction as soon as possible and establish the basis of the reservations. Where the doubts are considered to be serious a withdrawal must be published as soon as possible.

Curriculum vitae

The *curriculum vitae* is the result of the research activity and under no circumstances should it be the purpose of the research.

The CV is set out in a document detailing personal information, training and professional experience, in which truthfulness and clarity are essential requirements. The content is the responsibility of the person presenting the CV and there it is recommended that all pages be signed or stamped.

It is the obligation of researchers to keep the UAB informed of their professional activity by updating the CV using the appropriate instruments.

Evaluation, assessment and review activities

Researchers often take part in the evaluation of projects, publication, groups and individuals. In general the peer reviews are carried out by experts in the subject at the same level as those being reviewed.

Peer review

Peer review refers to a personal responsibility in the form of an expert or similar to carry out an evaluation, examination or criticism of a manuscript that they have been sent in the hope of publishing, an application for individual or group funding or an experimental procedure assessed by an ethics committee.

The reviews must be objective, i.e. based on scientific criteria rather than personal opinions and ideas. The review must be rejected where there are conflicts of interest (for example where there is a direct link with the authors or where there is close competition) or when the reviewer is not considered to be sufficiently prepared to carry out the review.

The reports and manuscripts reviewed are always considered confidential, privileged information. As a consequence, the documentation:

- Must not be used for the benefit of the reviewer until the information has been published.
- Must not be shared with colleagues except for specific reasons if there is no explicit permission from the publishers or the research agency.
- Must not be copied except where those responsible for the publishing process or the research agency give their permission to do so. The most normal situation is that once the process is complete the material is destroyed or returned.

References

Codes of good practice

Other codes of good practice that have been used in drawing up this document are:

- University of Cambridge
http://www.admin.cam.ac.uk/offices/research/research/Good_Practice.aspx
- Bioethics Committee of Spain
<http://www.comitedebioetica.es/documentacion/index.php>
- Spanish Research Council
<http://www.csic.es/web/guest/etica-en-la-investigacion>
- International Committee of Medical Journal Editors
http://www.icmje.org/urm_main.html
- Medical Research Council
<http://www.mrc.ac.uk/Ourresearch/Ethicsresearchguidance/Researchpractice/index.htm>
- Biomedical Research Park of Barcelona
<http://www.prbb.org/cat/part01/p06.htm>
- University of Barcelona (draft)

Legal references

- Royal Decree 178/2004, of 30 January, (BOE no. 27 of 31 January) which approves the general rules for the drawing up and execution of Law 9/2003, of 25 April, establishing the legal framework for the confined use, voluntary liberation and commercialisation of genetically modified organisms.
- Order of 25 de March 1998 in which, according to technical progress, Royal Decree 664/1997, of 12 May, on the protection of workers against risks related to exposure to biological agents at work (BOE no.76 of 30 March 1998) is adapted.
- Royal Decree 665/1997, of 12 May, (BOE no. 124 of 24 May) on the protection of workers related to exposure to carcinogenic agents at work (BOE no. 124 of 24 May 1997).
- Law 31/1995, of 8 November, for the prevention of labour risks (BOE no. 269 of 10 November 1995).
- Royal Decree 223/2004, of 6 February, regulating clinical drug trials (BOE no. 33 of 7 February 2004).
- Decree 406/2006, of 24 October, regulating the accreditation requirements and procedures for the clinical research ethics committees (DOGC of 26 October 2006).
- Law 14/2007, of 3 July, on biomedical research (BOE no.159 of 4 July 2007).
- Organic law 15/1999, of 13 December, on the protection of personal data (BOE no. 298 of 14 Decembere2007).
- Decree 29/1995, of 10 January, regulating automatic files containing personal data in the area of the Department of Health and Social Security (DOGC no. 2013 of 17 February 1995).
- Law 23/1998, of 30 December, on statistics of Catalonia (DOGC no. 2801 of 8 January 1999), and Law 12/1989, of 9 May, on public statistical function (BOE no. 112 of 11 May 1989).
- Royal Decree 1201/2005, of 10 October, (BOE no. 252 of 21 October) on the protection of animals used for experimentation and other scientific purposes (BOE no. 252 of 21 October 2005).
- Decree 214/1997, of 30 July, regulating the use of animals for experimentation and other scientific purposes (DOGC no. 2450 of 7 August 1997).

Royal Decree 1369/2000, of 19 July, which modifies Royal Decree 822/1993, of 28 de May, establishing principles of good laboratory practice and its application in non-clinical studies of substances and chemical products.

Law 11/1986, of 20 March, on patents for inventions and models of use.

Legislative Royal Decree 1/1996, of 12 April, which approves the rewritten text of the Law of Intellectual Property.

Instructions from the Office of the Vice Rector for Research for the standardisation of signatories and attachments of researchers at the Universitat Autònoma de Barcelona.