Code of good practices in research, research training, development and innovation of the Universitat Rovira i Virgili

30 October 2013

CODE OF GOOD PRACTICES OF THE URV

Introduction

In accordance with the Statute of the URV, research is essential to the University as it forms the basis of its teaching and is means for ensuring the progress of society. The Universitat Rovira i Virgili promotes the advance of knowledge by training researchers in basic and applied research and encourages the transfer of knowledge, technology and innovation to society.

The URV's *quality policy* defines the institution's priority objectives as follows:

a) To achieve recognised scientific quality.
b) To achieve excellent levels of quality and scientific productivity in research, development and innovation (R+D+I) in order to significantly contribute to the advancement of knowledge and regional development in all areas.
c) To compete on an international level, above all in the priority research ambits.

The URV must strive to ensure the quality and efficiency of its research and to guarantee this has put in place following processes: a research group map, research group quality assessment, a contracts programme with the departments, research centres and recognised research groups, a doctoral degree quality assurance system, and the creation of university chairs to promote the transfer of technology, innovation and knowledge and to encourage reflection on issues relating to social problems and challenges.

To achieve this quality policy, the URV has implemented a quality management system for its research groups and innovation centres which since 2007 has been certified as complying with ISO 9001.
Another element that assists in the implementation of the URV's research quality policy is the Postgraduate and Doctoral School, whose mission is to provide trainee researchers with a learning environment based on quality research activity and experiences that help individuals to acquire the competences necessary to progress onto a wide range of contexts requiring the intense use of knowledge.

The institution must also guarantee that all of its R+D+I activities are carried out in accordance with the current legislation and put in place a series of good scientific practices. The Code of Good Practices in Research, Research Training, Development and Innovation of the URV is designed to achieve these aforementioned objectives.

Definition of good practices

In general *codes of good scientific practice* (CGSP) are those that are defined in the document entitled *Recomendaciones para la implantación de buenas prácticas científicas del Comité de Bioética de España* (2011) (The Spanish Bioethics Committee's Recommendations for the Implementation of Good Scientific Practices (2011)), which comprises a series of rules, recommendations and commitments that must be observed by scientific staff, research centres, organisations awarding research grants and scientific societies with the aim of ensuring research quality and integrity. CGSP are complementary, rather than substitute, the current legal regulations. Specifically, CGSP bring together and ratify the unwritten rules that are traditionally followed by the scientific community.

The Code of good practice for research and training in research, development and innovation of the Universitat Rovira i Virgili (hereafter CGP-URV) complies with the internal legislation and regulations in force at the URV on the date of approval. Nevertheless, the CGP-URV must be reviewed periodically using the mechanisms described in Section 3 of the present document under the title Commitment to Dissemination, Application and Monitoring to ensure that the CGP-URV complies with new legislation as it comes into force.

This document is based on the *Recomendaciones del Comité de Bioética de España con relación al impulso e implantación de buenas prácticas científicas en España (Recommendations of the Spanish Bioethics Committee regarding the promotion and implementation of good scientific practices in Spain* (2011)) and the *European Charter of Researchers*: and the Código de conducta para la contratación de investigadores (Code of Conduct for the Recruitment of Researchers) by the European Commission's Directorate General for Research (2005). The present document also takes into account the recommendations of the *Codi de bones pràctiques científiques del Parc de Recerca Biomèdica de Barcelona* (Code of Good Scientific Practices of the Barcelona Biomedical Research Park) (2007), the *Código de buenas prácticas científicas del Comité de Bioética y Bienestar Animal del Instituto de Salud Carlos III* (Code of Good Practices of the Bioethics and Animal Welfare Committee of thee Carlos III Health Institute) (2009), the *Vancouver System*'s Uniform Requirements for Manuscripts Submitted to Biomedical Journals (2006), and the *10 Salzburg Principles* regarding university doctoral courses. The CGP-URV is one of the instruments that regulates the Postgraduate and Doctoral School, in accordance with Royal De 99/2011, of 28 January, which governs official doctoral courses, and it forms part of the URV's commitment to the European Charter of Researchers, which the URV is signed up to after the resolution passed by its Governing Council on 18 December 2008.

Scope of the Code of Good Practices

The CGP-URV applies to all teaching and research staff, trainee research staff, master's and doctoral students and technical and administrative staff who carry out or collaborate in research activities or R+D+Ì training in all ambits of knowledge at the URV, the URV Foundation (FURV), other entities linked to the URV and other institutions that collaborate with the URV. In certain instances the CGP-URV may also apply to bachelor's students if they are engaged in any of the previously described activities.

The CGP-URV must be made available to all individuals engaged in these activities, either at the point of registration for students, or when they are contracted, in the case of teaching and research staff and administrative and services staff.

The entities and units responsible for informing new staff of the CGP-URV must demonstrate that they have done this in the manner specified by the URV.

The CGP-URV must also be clearly disseminated on the URV's website and on the websites of the different research and research training structures.

The CGP-URV is a living instrument designed for collective regulation which must be reviewed periodically to ensure its applicability and compliance with the law.

The committee appointed by the URV must therefore ensure that the CGP-URV is correctly monitored, reviewed and updated.

CODE OF GOOD PRACTICES OF THE URV

Objectives of the CGP-URV

- To improve the quality, productivity and competitiveness of the research that is carried out in all ambits.

- To establish mechanisms to guarantee compliance with the current legislation and the principles of social responsibility and efficient use of resources.

- To promote good practices in the undertaking, management and communication of research throughout the University by following the criteria established by external auditors and evaluations.

- To foster the acquisition of good scientific practices from the very beginning of the research training process.

The URV has a quality management system for research, development and innovation (QMS for R+D+I) which has been certified since 2008 as complying with ISO 9001 on quality management. This system is applied to more than twenty research groups and innovation centres at the URV.

Under this QMS, the groups and centres design processes to enable their own groups of interest to comply with the requirements of ISO 9001 whilst also ensuring that their quality policies are still in line with that of the URV. Groups of interest are researchers, staff, companies, government institutions, the European Union and society in general.

The main points of the R+D+I quality policy that are defined and approved during this process constitute the foundations for good practices in these activities.

Mission

To generate knowledge and transfer it to society by pursuing lines of research aimed at improving competitiveness in the different ambits of action.

Vision

To undertake quality research to achieve international recognition and visibility of excellence within the various research ambits and the socio-economic setting.

Values

- **Orientation towards groups of interest**: providing training for URV researchers and high quality services to businesses, institutions and other entities.
- **Participation**: encouraging all teaching and research staff at the URV to join a research group.
- **Continual improvement**: establishing a culture of total quality throughout the organization of groups and other research structures.
- **Efficiency**: providing an efficient service to the groups of interest.
- **Commitment**: working responsibly as a team whilst keeping the principal strategies of the URV's scientific policy to the fore.
- **Flexibility**: responding quickly to the opportunities and demands that present themselves.
- **Safety**: ensuring the safety of everyone who uses the URV's facilities.
- **Innovation**: facilitating continuous scientific visibility and constantly seeking out new projects relating to potentially necessary activities in the future.
- **Collaboration**: encouraging joint work between the various research groups and innovation centres and with other universities and institutions in Catalonia, Spain and internationally.

Basic principles governing R+D+I activities

All staff involved in R+D+I activities, including training in these ambits, must observe the principles of rigor, honesty, responsibility, transparency and confidentiality that are outlined in the present document.

This is specified in the European Charter of Researchers, to which the URV has adhered since the resolution passed by its Governing Council on 18 December 2008. Researchers, therefore, must observe the recognised ethical practices and the fundamental ethical principles corresponding to their disciplines and the ethical regulations stipulated in the deontological codes that apply to them.

The teaching and research staff (hereafter researchers) must ensure that their work is relevant to society and that it does not duplicate any work previously carried out by other people. They must avoid any form of plagiarism and must respect the intellectual property and joint ownership of data when their research is conducted in collaboration with others.

Researchers must comply with Organic Law 3/2007, of 22 March, regarding equality between women and men, in all areas where it is relevant to their research. They must also be familiar with and apply the equality directives established in the University's 2nd Equality Plan (approved by the Senate on 24 November 2011) and the measures aimed at ensuring a balance between work and personal life as specified in the URV's internal regulations.

Researchers must be familiar with the strategic objectives and funding mechanisms relevant to their area of activity and must request the necessary permission before beginning their work or access the resources provided.

All staff involved in R+D+I activities must be familiar with the legislation and regulations regarding the conditions of their work, including intellectual property rights and the requirements and conditions established by any sponsor or funding organisation, independently of the nature of their contract. Researchers must respect these conditions when submitting their results (e.g. thesis, publications, patents, reports, development of new products, etc.) in the manners specified in the contract or equivalent document.

Researchers must be conscious of their obligation to justify their actions to those who are funding them and to society as a whole. Furthermore, researchers funded with public money are also responsible for using taxpayers' money efficiently. They must respect principles of correct, transparent and efficient financial management and cooperate with the authorised auditors.

Researchers must avoid any conflicts of interest that could compromise the validity of their research results.

Organisational aspects of research

Organisation / leadership of groups and other research structures

The URV's research groups and other research structures must have at least one person in charge who also represents them publicly. The leaders of these groups and structures must promote a working environment that fosters the exchange of knowledge, enables common research objectives to be achieved and allows members to develop their skills.

The leaders must promote gender equality in recruitment practices, working conditions, training opportunities and in all other aspects of the organisation and functioning of the research group or structure.

The members of the research groups or structures must actively participate in the activities which are proposed and organised.

The research groups and structures must have a well documented organisational structure that clearly indicates the lines of authority and communication between the members and the responsibilities of each person with regard to research activities.

The leaders must promote cooperation with other research groups to encourage the exchange of ideas between researchers.

The research groups and structures must have quality objectives that are aligned to those of the URV. If deemed necessary, they may also draw up their own quality policy in line with the R+D+I quality policy of the URV.

Planning and monitoring of continual training for the research groups

The leaders must establish a system for determining the needs abilities of the research staff, in particular regarding specific training for their work. The training activities (courses, seminars, conferences, etc.) must be planned, carried out and evaluated.

Recruitment of new staff and conditions of staff leave from research groups, structures and projects

The leaders must ensure that new members of research groups, structures or projects receive adequate information and training in the rules governing the research teams, the use of facilities and the applicable security measures.

When a member of a research group, structure or project team completes their work, they must submit a written report describing the functions and tasks that they have executed, the results of these functions and tasks, the location of the documentation relating to their work and any other information relevant to the continuation of the research.

Supervision of trainee research staff

All individuals who receive research training through the Universitat Rovira i Virgili must be assigned a personal supervisor.

Trainee researchers who are following doctoral programmes must have their training supervised in accordance with the URV's internal quality assurance system (IQAS) for doctoral studies, the Postgraduate and Doctoral School's Regulations and the current legislation governing doctoral studies.

Each doctoral programme has an academic committee responsible for defining, updating, coordinating and monitoring the quality of the programme and the training and research of each doctoral student.

In addition to the academic committee, supervision is also undertaken by:

⌄ The thesis tutor

The tutor is responsible for ensuring that the doctoral student receives appropriate training and for monitoring the student's research. The tutor must hold a doctoral degree, be an active researcher or similar at the URV with accredited research experience and be affiliated to the Postgraduate and Doctoral School. The tutor is designated by the academic committee of the doctoral programme. This activity will count as part of the tutor's teaching and research commitments.

The number of students under the guidance of any one tutor must be appropriate and compatible with the tutor's other obligations and commitments.

⌄ The thesis supervisor

The thesis supervisor has overall responsibility for guiding the doctoral student's research. The supervisor is appointed by the academic committee of the doctoral programme and must have accredited research experience and be an active researcher at the URV or another university, centre or institution, provided that he/she is a member of the doctoral programme. The thesis supervisor may also act as the thesis tutor. This activity will count as part of the supervisor's teaching and research commitments.

⌄ The trainee research staff

Trainee research staff have the rights specified in the Student Statute (Royal Decree 1791/2010, of 30 December) and the other currently applicable legislation. Furthermore, in the case of doctoral students, the Postgraduate and Doctoral School's Regulations state that they have the right to:

a) Receive high quality research training that fosters scientific excellence, equality and social responsibility.
b) Have a tutor that guides their training and a thesis supervisor or supervisors with accredited research experience who will supervise their thesis.
c) Become a member of a research group.

d) Be informed about the opportunities for a research career offered by the URV and to apply for them.
e) Participate in funding programmes and competitions for research training and mobility.
f) Have their intellectual property rights recognised and protected with regard to the results of thesis doctoral theses and research work, in accordance with the current legislation.
g) Apply to the academic committee for a change of thesis supervisor, a change in status (full/part time) or a temporary leave of absence from the doctoral programme.
h) Be represented in accordance with the Statute of the URV.
i) Participate in the monitoring of doctoral programmes and in the institutional evaluation procedures.

Trainee research staff have the obligations specified in the Student Statute (Royal Decree 1791/2010, of 30 December) and the other currently applicable legislation. Furthermore, in the case of doctoral students, the Postgraduate and Doctoral School's Regulations state that they have the obligation to:

a) Register each academic year for academic tuition and make the corresponding payments within the periods specified by the relevant calendar.
b) Write a research plan before the end of the first year that specifies the methodology, objectives and resources required and a schedule for completion.
c) Follow and actively participate in the programme's training activities.
d) Conduct research activities correctly and successfully.
e) Provide data at least once a month on their research activities using the system provided by the URV for trainee researchers.
f) Inform the academic committee if they decide to voluntarily withdraw from the doctoral programme.

When trainee researchers complete their training or withdraw from it for any reason they must submit a written final report in the manner described in section 5.2 of the present document.

Protocols and methods

✓ Protocol in writing and submitted for third-party review

Any proposed research must first be described in a written document (research protocol or project). The document may be a report or proposal submitted for funding through a public grants competition. The document must define the project planning (with objectives and stages), the names of those involved and the deadlines. If the planning is not fully described in the project report or application, then any missing information must be provided in other supporting documentation.

All methodologies and protocols used must be taken from established methods, scientific publications, regulations or standards to ensure their reliability.

If the project leads to the development of a new methodology or variation of an existing one, the process of developing and validating the new methodology must form part of the research protocol or project and the researchers must provide evidence of its reliability. All procedures and methodologies used in the research protocol must be adequately documented to ensure traceability and repeatability of the results. This documentation must contain in writing the original results obtained by the researchers, either in laboratory reports that have been properly recorded and monitored, in specific procedures or in the research project itself.

If the protocol or project involves human subjects, human embryonic materials or animal experimentation, it must be approved/authorised by the Clinical Research Ethics Committee or the Animal Experimentation Ethics Committee.

The research protocols or projects must comply with the conditions of the competition or contract in terms of equal opportunities between women and men and follow the recommendations therein. If relevant to the research that is to be undertaken, the protocols must ensure gender equality in all its aspects during all phases of the project.

Development and monitoring of research projects

Projects must be carried out in accordance with the planning. The results obtained and the methodologies used must both be recorded in the laboratory reports, the working procedures or other another form of document.

The execution of the research projects or protocols must be monitored to ensure that the planned activities are proceeding in the appropriate manner. This monitoring must be recorded in writing, must state when the project has taken place and include a summary of the principal results and of any incidents or deviations that may have been detected.

Expanding or modifying the project

Any modification of the original project design must be recorded in writing in a complementary protocol and is subject to the requirements specified in the corresponding conditions of the funding competition. It must also be communicated to the funding organisation in accordance with the manner specified in the funding conditions.

Secret research

Secret research is not permitted[1] with public funding unless authorised by the funding organisation. A research project or part thereof may not be secret except in cases where for reasons of confidentiality or competitiveness it is necessary to temporarily restrict the dissemination of certain procedures or documents relating to the project.

[1] For the purposes of the present document, secret research is considered to be that which maintains secrecy regarding the subject of investigation, the procedures used or the results obtained (for example, privately funded research may be subject to a confidentiality contract at the insistence of the funding entity). The term *secret research is distinct from the term confidentiality of research results*. For reasons of competitiveness (as is the case with privately funded research) confidentiality may be maintained indefinitely. Patentability (of publicly or privately funded research) may also lead to confidentiality for a certain period, for example, until the patent is requested.

Urgent research

If circumstances relating to public health or security require research to begin immediately, particularly if such research involves humans or animal experimentation, the undertaking of these activities must still be recorded in the protocol, even if it simplified. When possible, these projects must be reviewed externally and follow the procedures governing non-urgent research.

Research facilities, equipment and materials

Facilities and scientific equipment

The individuals in charge of research must ensure that the facilities, equipment and materials used for the planned research activities will provide the appropriate levels of personal safety, environmental protection and quality and reliability regarding the research results.

The scientific equipment must be identified in such way as to ensure the traceability of the research results. Researchers must ensure that all the equipment used in research projects receives sufficient maintenance to prevent any malfunction that could compromise the research results. The equipment must also be subject to a verification procedure to ensure that it is correctly functioning or calibrated in accordance with the manufacturer's specifications and the amount of use that it receives (level of work, frequency of use, etc.) to guarantee the reliability of the measurements that it provides. The maintenance, verification and/or calibration procedures must be respect the basic principles of efficiency, appropriate use of the equipment and responsible use of resources.

Any individual who wishes to use the scientific equipment must have the necessary training and instructions to use it in the correct manner. If necessary, these instructions must be written down as a working procedure, or the user must refer to the instruction manual.

Use of external equipment and facilities

All research projects and protocols that involve the use of external equipment and/or facilities require the prior approval of the individual in charge of the centre, institution, facility or equipment that is to be used.

Computer equipment and ICT

The individuals in charge of the computer equipment must ensure that it is properly functioning and maintained for use by the research groups and other research structures. They must also preserve the safety of information by respecting and following the user regulations specified in the URV's corporate security policy.

They must ensure that information relating to research projects and results is protected and recoverable. For this reason they must make regular back-up copies of important information. If the project generates confidential or restricted information, the individual in charge must ensure that it is correctly handled and protected, in accordance with the current legislation and regulations.

In addition, all research staff must make responsible use of the ICT provided by the URV for their research. Consequently, any use of the ICT must be based on mutual trust and respect for the current legislation and must follow the guidelines and recommendations set forth in the Regulations governing the use of information and communications technologies (ICT) of the URV (approved by the Governing Council during its session on 22 December 2011 and modified by the Governing Council in its session on 30 October 2012).

Materials and products

All materials and products used in research projects, including commercial reagents, laboratory preparations, samples and waste, must be correctly labelled to guarantee the traceability of the research results. They must also be stored in the appropriate conditions and used and discarded, if appropriate, in a manner that respects the instructions on environmental safety and protection in the product specifications, the safety manuals, the laboratory protocols, the risk prevention manual, the working procedures or other relevant documentation.

Record keeping, documentation, storage, conservation and cession or shared use of data, documents, and biological or chemical material resulting from research

Plan for collecting and conserving data.

All research projects must have a system for collating data, records and biological or chemical that is produced during research, in addition to a plan for storing and conserving them.

Record of data and rectifications.

All data resulting from research experiments and observations must be collected without exception. This information must be permanently recorded in the databases, record books or other relevant format and in manner that can be reviewed by third parties. The records must also include any changes, errors, negative, unexpected or inconsistent results and the name of the person who makes or observes them.

Conservation of the collated data.

The infrastructure and means needed to ensure that the documentation and biological or chemical material is correctly stored and conserved. For electronically recorded data, there must be a specific plan regarding back-up copies and physical location.

Storage and access to the data.

All members of the research team must be able to access the collated data and to any interpretations thereof. The individual in charge of the research must have a single record of the different methods used for collating data (notebooks, databases, etc.) and for storing samples. This record must be accessible to third parties.

Properties of the data and samples.

All primary data (notebooks, databases, etc.) and biological or chemical material obtained during a piece of research belongs to the research group or structure to which the individual in charge of the project is affiliated. The record and the storage of the data is the responsibility of the individual in charge of the project. If a member of the research group or structure changes institution, provided it is necessary, the individual in charge of the project can provide the person who is changing institution with a photocopy of all the record books, a copy of the existing electronic information, a photocopy of the notebooks and aliquots of biological or chemical materials. If the researcher in charge is changing institution, this process make take place under the supervision of the new researcher in charge of the research group or structure.

Sharing of data and samples with third persons.

Data and materials from a piece of research must be made public and available for consultation by third parties, except for when the data are restricted with a view to future commercialisation. For data to be shared, the applicant must make it clear how they want to use the data, the person in charge of the research team must be aware of the application for data, the person in charge of the research must approve a transparency protocol, and the applicant must agree to pay any production or administrative costs. Data sharing may be restricted for reasons of availability, competitiveness or confidentiality. It must not be possible to identify individuals who have shared materials or data unless they have given express permission for this information to be shared.

Storage times for data and samples.

All primary and original information and all biological and chemical material that is stored as a result of a research project must be kept for at least ten years after the first publication of the results, except in cases where the law permits shorter periods or requires longer periods. If the centre allows it, primary material and information can be stored for longer periods and place of storage must always have the approval of the person in charge.

Publication, dissemination and exploitation of research results

The conclusions of research projects must be as objective as possible. All evaluations must always be based on data and evidence. Scientific research results must always be peer reviewed.

Results must be disseminated in accordance with the URV's communications policy. The funding entity must give its authorisation to the dissemination of results if the research has been funded by private or public institutions or companies outside official funding programmes. In these cases, the conditions for disseminating and publishing the research must be specified in the corresponding contract or agreement.

The URV's regulations governing confidentiality and intellectual and industrial property must also be observed. If the results of a piece of research could be protected for the commercial interest, the person in charge of the research project must inform the University of this and take this into account when managing the publication of the results in scientific journals.

In accordance with the conditions of the contracts, agreements or funding programmes, researchers must ensure that the results of their research are disseminated and exploited (that is, published, transferred to other research projects and, if appropriate, commercialised). In particular, senior researchers must lead the way in ensuring that their research is fruitful, that the results can be commercially exploited and/or that they readily accessible to the public.

Researchers must ensure that their research activity is disseminated to society in a manner that non-specialists can understand it and the public at large increases its understanding of science.

Researchers must ensure that the dissemination and publication of their research activities includes the variable of gender, for example, with the presentation of specific and separate data per sex when relevant. They must also avoid the use of sexist language.

Negative research results must also be published. Researchers who try to do this must have the support of editorial committees because journals do not always accept publications.

Authorship and intellectual property

LWorking or technical reports or any other text addressed to third parties must always include a list of every author involved in the research and, as far as possible, a list of the tasks carried out by each person, the centre or centres to which they belong and the funding received. This information must be provided in the same manner as a scientific publication or patent application and in accordance with the Regulations on industrial and intellectual property of the Universitat Rovira i Virgili (approved by the Governing Council on 30 April 2009).

✓ **Order of authorship.**

Journals and other media specify their own conditions and criteria regarding the order of authorship. Nevertheless, as a general rule, the order of authorship on scientific publications must respect the following criteria:

a) The first author on the list must be the one who has made the most important contribution to the research and has prepared the first draft of the article.
b) The senior researcher who leads and/or has ultimate responsibility for the research protocol is the last author.
c) The remaining authors may appear in order of importance and, in certain instances, in alphabetical order. The corresponding author has primary responsibility for the publication process and any subsequent communications that arise from the publication of the research. This responsibility may be shared.

Shared principal authorship.

If two or more authors have made the same contribution to the research and have shared the task of preparing the manuscript, they must both feature as first authors. This must be made explicitly clear in the original publication. The same criterion may be applied to intermediate and senior authors.

Instructions regarding affiliation.

To guarantee the national and international visibility of authors, departments, faculties, research institutes, collaborating chairs and the University itself and to facilitate the retrieval of publications and citations in their name, the research staff must be familiar with and comply with the Regulations regarding the unique researcher identifier (URI)– URV affiliation (agreed by the Research and Transfer Committee on 29 October 2009, with a favourable report from the Governing Council on 5 November 2009) when choosing an officially recognised form of their name and institutional affiliation.

All researchers must clearly state their affiliation to the University in the work that they publish. Researchers affiliated to other research structures (institutes, research centres, technological centres, observatories, collaborating chairs, etc.) must also clearly state their affiliation to the University, in accordance with the Framework for relations between the URV and research institutes and technological centres.

With regard to editing, researchers must be familiar with and respect the Normativa d'edició de la URV (The Board of Governors, 20 December 2000). Any publications in which the University appears as an editor or co-editor must comply with the *Basic manual on graphic norms* to ensure that the University's logo and graphics are represented correctly.

Researchers must be familiar with the University's policy with respect to protecting intellectual property and promoting the valorisation and commercialisation of research results.

All published research must explicitly state which independent ethical committees have supervised the research protocol and provide details of all public and private subsidies, grants or sponsorship. All publications must also state any of the University's research support services that may have been used during the research.

Instructions for curriculum vitaes.

Researchers must respect the URV's regulations and directives regarding the writing and updating of curriculum vitaes and the procedures and conditions stipulated in the Regulations on the use of curriculum vitaes *regarding the use of electronic curriculum vitaes*.

Collaborative projects

Prior to any research, development and innovation project undertaken with other universities or public or private entities, regardless of the area of knowledge, an R+D+I collaboration contract must be drawn up and signed, in accordance with Article 83 of Organic Law 6/2001 on Universities. The URV Foundation will be responsible for completing the aforementioned contract.

The contract must clearly state who owns and has the right to exploit any results obtained during the execution of the contract.

In all instances, any rights corresponding to the URV must be respected, by virtue of the Regulations on industrial and intellectual property (approved by the Governing Council in its session on 30 April 2009) and the Framework for relations between the URV and research institutes and technological centres, approved by the Governing Council in its session on 26 February 2009. Collaborative projects must also respect the procedure approved by the Research and Transfer Committee on 23 April 2012 and ratified by the Governing Council on 10 July 2012. In all instances, the current, revised and updated documents must be applied.

Personal data protection

All individuals who work with personal data must comply with the principles established in the Regulations on personal data protection and confidentiality:

- Any data that are collected must be appropriate, relevant and not excessive, and may not be used for any purposes other those for which they are collected.
- The use of personal data requires the explicit consent of the person concerned, except for in the specific circumstances stipulated in the law.
- If personal data are collected and held on file, the individuals concerned must be informed of the existence of the file, the purpose for which the data were collected, and that they have the right to access, rectify, remove and oppose the handling of their data.
- Data relating to political and religious beliefs and ideology, union membership and health are subject to particular protection.
- The appropriate technical and organisation measures must be adopted to guarantee the security of the data and to prevent any unauthorised alteration, loss, handling or access.
- Any individuals using the data are obliged to maintain professional secrecy and to take full care of them.
- The individuals concerned must give their consent before their data can be passed onto a third party, except for in the cases stipulated in the law.

In general, priority must be given to research conducted with dissociated data. The disassociation of data is the mechanism that separates identifying data from other personal data.

Before conducting any research with personal data, the research group must contact the General Manager's Office of the URV (or suport.lopd@urv.cat) to determine which legal, technical and organisational measures need to be adopted.

Health and safety and environmental protection

Researchers must integrate the prevention of risks in the workplace into all areas of their activities, must follow safe practices at all times and must comply with and use the risk prevention manuals approved by the Governing Council, the occupational risk prevention legislation, the Risk prevention management manual of the URV approved by the Governing Council in its session on 7 March 2013 and any other related URV regulations.

The individuals in charge of research groups or other structures must guarantee that the facilities comply with the requirements and that they have the relevant authorisation to undertake any scientific practice that is subject to specific regulations. Furthermore, in accordance with the procedures established in the *Risk prevention manual* of the URV, they must:

- Ensure that the staff under their charge have the capacity and are provided with the necessary protection to carry out the tasks that they are asked to do.
- Understand the risks inherent in the activity and in the place where it is undertaken and communicate these risks through the channels established by the URV.
- Eliminate risks or control them at source, primarily through collective protection systems and secondly by requiring individuals to undergo risk prevention training if deemed necessary.
- Cease activities in event of any uncontrolled risks or unsafe situations/actions.
- Coordinate their activities with the relevant URV staff (defined in the *Risk prevention management manual of the URV*) and supervisors defined in the URV regulations in order to implement risk prevention measures, particularly for concurrent activities.

The individuals in charge of research groups or other structures must comply with the processes that regulate research on human subjects and observe the requirements regarding the use, exposure to and storage of radioactive materials, genetically modified materials or any other potentially dangerous biological agent.

All staff involved in research tasks must have access to information and effective health and safety protection in the workplace. In accordance with the procedures established in the Risk prevention manual of the URV, all staff must understand the safety regulations in their workplace and make appropriate use of the resources, means, installations and services that the University makes available to them.

All staff involved in research tasks and research training must know and apply the URV's environmental protection measures and ensure that the individuals in their charge comply with these practices. In general, staff should avoid the wasteful consumption of water, energy and any other materials to reduce the generation of waste and emissions as a result of the URV's activities. Staff must ensure that they incorporate environmental criteria into the supply of resources and services in those cases where it is legally and technically possible.

Conditions regarding research with human subjects

All research projects conducted on human subjects or that use biological samples of human origin and clinical trials must request and obtain a favourable report from the corresponding clinical research ethics committee.

In the case of research projects with ill individuals, those members of the research team who are not responsible for the clinical treatment of the participants must collaborate and not interfere in any way with medical staff responsible.

Researchers must be familiar with and comply with the recommendations of the European Charter for Researchers (EU, 2005).

If researchers want to use human subjects in a research project or to take human biological samples for use in a research project, the researchers must inform the intended subjects (or their guardians/representatives) about the nature of the research and must seek and obtain their informed consent, preferably in writing. The researchers must inform the subjects about the purpose and duration of the project, the expected benefits (either for the subjects or for other people), any possible risks or problems, the criteria for inclusion in/exclusion from the project, the research methodology and the criteria that will be used to decide when the research project has concluded. If the informed consent is only obtained orally, an explanation must be given as to why written consent was not obtained.

Researchers must maintain absolute confidentiality regarding all information that they may obtain about the subjects participating in a research project, in accordance with the regulations on personal data protection (Organic Law 15/1999, of 13 December, on personal data protection).

Researchers must protect the anonymity of participants both during the project and when recording and storing the data obtained. Given that the process of obtaining data during clinical research is complex and cannot always be repeated, the research team must pay particular attention to the procedures for collecting and storing data.

Researchers must not under any circumstances transfer data or biological samples to other projects or other researchers without the authorisation of the subjects or the corresponding research ethics committee, and they must respect at all times the provisions on personal data protection and confidentiality guarantees that are stipulated in Law 14/2007, 0f 3 July, on biomedical research.

If a project is to involve the participation of students, they must participate of their own accord and measures must be put in place to prevent negative consequences for any students who do not wish to participate or who decide to withdraw from the project.

Research projects involving the use of specific facilities such as the dissection room must provide specific written instructions regarding the collection, preparation and handling of data and samples if these instructions are different from those stipulated in the user manual for the specific facility or the unit in charge of the facility. The research group must also complete the documentation required by these units.

All research projects involving the acquisition, handling and/or storage of biological samples for genetic analyses must comply with the restrictions on genetic analyses and specific consent stipulated in Law 14/2007, of 3 July, on biomedical research.

All research projects involving the acquisition, handling and/or storage of biological samples from human embryos must comply with the restrictions and requirements regarding research on live human embryos and foetuses in utero stipulated in Law 14/2007, of 3 July, on biomedical research. They must also comply with the provisions regarding research with biological samples from embryos, in particular those relating to research guarantees and requirements.

Specific conditions relating to research involving animal experimentation

All research projects and activities involving animal experimentation must be conducted in accordance with the current relevant legislation and must have the approval of the URV's Animal Experimentation Ethics Committee.

As a general principle, research activities that use animals for experiments and other scientific purposes must follow the "three R's", that is, replacement, reduction and refinement. Thus, as far as possible, researchers must try to replace animal experiments with other experiments that do not use animals, reduce the number of animals to the minimum number required to obtain valid results, and refine experimental procedures to minimise the suffering of the animals.

Research projects involving the use of specific facilities such as the Animal House must provide specific written instructions if these instructions are different from the normal instructions for use and must also complete the documentation required by these facilities. Individuals who participate in research activities that use animals for experiments and other scientific purposes must possess the corresponding official accreditation issued by the Catalan Government.

List of abbreviations

CEIC: Clinical Research Ethics Committee
CEEA: Animal Experimentation Ethics Committee
CGSP: Code of Good Scientific Practice
CGP-URV: Code of good practices in research, research training, development and innovation of the Universitat Rovira i Virgili
URI: Unique Researcher Identifier
R+D+I: Research, Development and Innovation
QMS for R+D+I: Quality Management System for Research, Development and Innovation
IQAS: Internal Quality Assurance System
ICT: Information and Communication Technologies
EU: European Union
URV: Universitat Rovira i Virgili

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- *Uniform Requirements for Manuscripts Submitted to Biomedical Journals Vancouver System*. Normas de Vancouver (actualitzat 2006)

- *The 10 Salzburg Principles regarding university doctoral courses* (2005)

- Statute of the URV (Modified by the Senate on 12 May 2011)
- Quality policy of the URV (2006)
- Research, development and innovation quality policy (revised 2013)
- Strategic Research Plan of the URV (Approved by the Senate on 12 December 2001)
- Regulations of the Postgraduate and Doctoral School (Approved by the Governing Council on 11 July 2013)
- Regulations on industrial and intellectual property of the Universitat Rovira i Virgili (approved by the Governing Council on 30 April 2009)
- URV Regulations on good practice in transfer and service provision (approved by the Governing Council on 10 July 2003)
- URV Publication Regulations (approved by the Governing Council on 30 October 2007)
- URV Editing Regulations (approved by the Board of Governors on 20 December 2000)
- Essential lines in the URV's scientific policy (approved by the Board of Governors on 18 February 1999)
- Internal quality assurance system (IQAS) of the URV, described in the Document on quality assurance in teaching at the URV (adapted to doctoral studies, 2008)
- Regulations on personal data protection and confidentiality (2013)
- Risk prevention management manual of the URV (approved by the Governing Council on 7 March 2013)
- Regulations on the unique researcher identifier - URV affiliation (agreed by the Research and Transfer Committee on 29 October 2009, with a favourable report from the Governing Council on 5 November 2009)
- Regulations governing the use of curriculum vitaes (updated 2013)
- Framework for relations between the URV and research institutes and technology centres (approved by the Governing Council on 26 February 2009)
- Regulations on the use of information and communication technologies (ICT) at the URV (approved by the Governing Council on 22 December 2011 and modified by the Governing Council on 30 October 2012)
- 2nd Equality Plan of the Universitat Rovira i Virgili (approved by the Senate on 24 November 2011)

Related legislation

- Law 36/1991, of 30 December, on the creation of the Universitat Rovira i Virgili

- Royal Legislative Decree 1/1996, of 12 April, which approved the revised text of the Law on intellectual property and which regulates, clarifies and harmonises the current legal provisions on works that can be protected by intellectual property rights

- Law 11/1986, of 20 March, on patents for innovations that can be protected by industrial property rights

- Organic Law 15/1999, on 13 December, on the protection of personal data

- Law 31/1995, of 8 November, on occupational risk prevention. Modified by Law 50/1998, Law 39/1999, Royal Legislative Decree 5/2000 and Law 54/2003

- Law 14/2011, of 1 June, on science, technology and innovation

- Law 14/2007, of 3 July, on biomedical research

- Royal Decree 99/2011, of 28 January, which regulates official doctoral courses

- Royal decree 1791/2010, of 30 December, which approves the Student Statute

- Organic Law 3/2007, of 22 March, on equality between women and men