CBP-DIR-01c

CODE OF GOOD RESEARCH PRACTICES

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INTRODUCTION

La Fundación de Investigación del Cáncer de la Universidad de Salamanca (Foundation for Cancer Research at the University of Salamanca, FICUS) is a non-profit public foundation responsible for promoting, managing, and providing administrative and scientific-technical support to the research groups of the Cancer Research Center - Institute of Molecular and Cellular Cancer Biology of Salamanca (hereinafter, CIC-IBMCC or Center), as stated in Article 6 of its Statutes.

The CIC-IBMCC is composed of scientific, healthcare, technical, or administrative personnel primarily affiliated with the Spanish National Research Council (CSIC), the University of Salamanca, or FICUS itself. Some of these individuals may have additional institutional affiliations with the Health Service of Castilla y León (SACyL), the Salamanca Health Research Institute (IBSAL), or the Biomedical Research Networking Center (CIBER).

This Code of Good Scientific Practices of FICUS establishes guidelines, ethical criteria, and quality standards for conducting research activities that take place wholly or partially within the CIC-IBMCC, regardless of the institutional affiliation of the personnel involved (FICUS, CSIC, University of Salamanca, other entities). This personnel also includes visitors, trainees at any professional level, and external personnel associated with projects carried out within the CIC-IBMCC. The aim of this Code is to ensure that the CIC-IBMCC and FICUS are committed to conducting research with integrity, transparency, and excellence. Its goal is to prevent conflicts, unfair practices, or data falsification, as well as to ensure respect for authorship of publications, ownership of discoveries, their protection, and the reproducibility and accessibility of data obtained by third parties. Following this philosophy, the specific objectives of this Code are:

a) To promote that research conducted within the CIC-IBMCC adheres to the highest standards of rigor, honesty, transparency, and responsibility.
b) To encourage the acquisition of good scientific practices in all aspects, dimensions, and stages of scientific activity, including the training stage of research personnel.
c) To foster reflection on ethical issues related to research, its benefits, and risks.

In this context, FICUS undertakes to adopt, for its own personnel and that of the CIC-IBMCC, the ethical principles and professional responsibilities regarding research activity contained in the National Declaration on Scientific Integrity signed by different institutions in 2015, as well as the proposal of the Spanish Confederation of Scientific Societies (COSCE) in 2016 regarding the Transparency Agreement on the Use of Animals in Scientific Experimentation in Spain.

The center's management will ensure that research projects meet high quality criteria and adhere to the recommendations outlined in this code of good research practices. FICUS and CIC-IBMCC personnel with research management responsibilities must ensure compliance with these principles and recommendations. All research personnel are obligated to be familiar with this code and to comply with the principles and recommendations contained therein. Their personal commitment to refrain from engaging in unfair practices, falsifying results, or misappropriating authorship of research is essential to ensuring ethically appropriate research.

This Code establishes basic rules of application for all FICUS and CIC-IBMCC personnel. However, it does not exclude that the institutions forming part of the CIC-IBMCC (CSIC, University of Salamanca) may require compliance with other specific measures for their personnel. Efforts will be made, in any case, to harmonize these policies, always assuming the most advanced measures in this field.

Protocols for managing issues associated with this Code will be directly managed by the bodies and committees specified in this document. In the case of FICUS personnel, the procedures for investigation, deliberation, and final decision-making will be carried out entirely by these bodies and committees. In the case of personnel directly affiliated with CSIC, the University of Salamanca, and other entities, cases will be referred to the analogous bodies and committees of the appropriate institution for the issuance of corresponding disciplinary measures (see Chapter 10).

GENERAL PRINCIPLE OF RESEARCH ACTIVITY

Good scientific practices are based on the fundamental principles of integrity in research, affecting all aspects related to the scientific research process and encompassing a set of actions and

responsibilities applicable to both institutions and all parties involved in the research process. Compliance with these principles is aimed at preserving integrity, soundness, and quality science. These principles are as follows:

- Professionalism and professional rigor to ensure the quality of research, reflected in its design, methods, analysis, and use of resources.
- The principle of scientific knowledge is the capacity for wonder or questioning about the why of facts, situations, or processes hitherto uninvestigated or unresolved. Science pursues an objective knowledge that can be assumed as true. To achieve this, it follows a reflective process that has two phases: methodical doubt, hypothesis elaboration, and final experimental validation.
- Observation and experimentation are intended to obtain data that facilitate appropriate responses to scientific questions posed. For this reason, research must be conducted following well-designed work protocols that, if necessary, can be examined, understood, and replicated by any scientific professional in the same field and with similar professional qualifications.
- In scientific research, experimental and observational data and materials used are the basis of results and publications. For this reason, it is necessary, in case of doubt, for experiments to be replicable and for the bases of their interpretation to be understood. Considering that data ownership always belongs to the institution where the work has been carried out, materials must be preserved, or at least, their origin must be clearly documented.
- The institution must provide all research personnel, regardless of their professional or training stage, with adequate means to store the data obtained, in order to allow any expert in the field access, understanding, and reproduction.
- Material and economic resources must be used effectively and efficiently, administered correctly and responsibly, so as to allow or facilitate the achievement of planned objectives and generate the highest possible degree of confidence in society. This is especially important considering that economic and material resources are limited and largely come from taxes or contributions from the public.
- Science, as a quest for knowledge, is inherently opposed to and incompatible with fraud. However, as in any other aspect of our lives, there is the possibility of inappropriate conduct by some scientific personnel seeking shortcuts to fame, undeserved merits, or personal or

institutional economic benefits. Such behaviors constitute the greatest threat to the proper development of scientific practice. These behaviors are ultimately the responsibility of the individual who practices them, although it is the institutional responsibility to create a working environment that does not encourage them and, if they occur, to investigate and penalize them appropriately.

- Scientific personnel are obliged to adjust their activity to certain ethical principles, including: (a) Intellectual honesty in the development, execution, review, and dissemination of research. (b) Transparency and altruistic sharing of reagents and data, with appropriate safeguards to ensure the protection of data obtained. (c) Respect for all members of the scientific community, research participants, and society in general. (d) Accountability for all actions and decisions in all aspects, dimensions, and stages of research.

1.- Leadership and Collaboration in the Research Group

The complexity of contemporary scientific research almost always necessitates teamwork and the utilization of methodologies, human resources, and infrastructures organized through research projects or programs.

Research teams, defined as the set of scientific and technical personnel developing a specific line of research or project, should have at least one responsible person (principal investigator) who exercises leadership and represents the team.

The responsibilities and composition of the research group are typically clearly defined in funding or resource allocation documents for the project or programs and must be strictly adhered to throughout their validity period, except in cases of force majeure.

All members of a research team, within their areas of responsibility, must refrain from initiatives that could jeopardize the proper development of the project and actively participate in proposed and organized team activities.

Those leading research groups, teams, or programs must assume the responsibilities associated with

such leadership, both in scientific terms (ensuring appropriate research direction) and in organizational and management aspects.

Each principal scientific leader at CIC-IBMCC is obligated to develop original research projects and will be expected to be professionally consistent with this code of good scientific practices.

Those responsible for research teams must foster a working environment where members can learn and where knowledge exchange and the achievement of common research objectives are promoted. Similarly, principal research personnel must foster an atmosphere of mutual cooperation within the team, encouraging the showcasing of skills and fostering an exchange of ideas and knowledge to improve outcomes. They will also promote collaboration with other research teams to facilitate idea exchange among researchers. Under no circumstances will the research activities of potential competing groups be obstructed, nor will the dissemination of scientific results be delayed or prevented. Scientific personnel must always be open to criticism, doubts, and comments expressed by other teams, colleagues, and society at large.

2.- Honesty, Integrity, and Transparency

FICUS will promote a research culture, honesty in research, and the exchange of ideas and knowledge among researchers.

Research personnel must not violate intellectual property rights, engage in plagiarism, or manipulate or selectively present results.

Honesty must govern the evaluation of scientific articles, research projects, or scientific activities of other individuals.

3.- Supervision and Mentoring of Research Trainees

The training of young scientific personnel should not be limited to the learning necessary to carry out their research work but should also include knowledge of good scientific practices, teamwork, and coexistence within the research group and research center, as well as the use of the center's different resources.

FICUS will ensure that research personnel receive rigorous training in research design, methods, and analysis, research ethics, scientific integrity, good scientific practices, and relevant legal regulations. FICUS will ensure that all research personnel receive ongoing training in these areas throughout their professional careers through activities conducted by participating institutions in CIC-IBMCC. FICUS will seek agreements so that these training courses can be accessible to any CIC-IBMCC personnel regardless of their institutional affiliation.

The supervisors will be ultimately responsible for the research carried out by the trainees and will follow the rules established by the Training Committee of CIC-IBMCC and, if applicable (master's, doctorate), the academic regulations of the University of Salamanca to which they are directly linked.

Tutors of research trainees are subject to the following obligations:

- Associated with the training programs developed within CIC-IBMCC.
- Have extensive experience in their discipline to be able to instruct and direct research trainees properly.
- Perform their work in a way that sets an example for the trainees.
- Provide research trainees with appropriate means and scientific environment, considering their training needs and avoiding unjust or arbitrary pressures.
- Provide research trainees with knowledge of safety rules and occupational risk prevention and inform them of the obligation to comply with them.
- Promote knowledge and compliance with this code of good scientific practices and encourage a critical spirit in the evaluation of their scientific work.
- Recognize the work of research trainees and be rigorous and fair in acknowledging their responsible contributions to authorship in publications.
- Introduce and support research trainees in discussion forums and scientific meetings and advise them for their future.

Research trainees are subject to the following obligations:

- Fully integrate into the research team and participate loyally and actively in the assigned work or project for their training.
- Follow the advice and recommendations of their supervising tutor and report on their initiatives and progress in their results. Communicate any difficulties or problems encountered in the course of their work.
- Inform and comply with safety rules and procedures, as well as respect the Code of Good Scientific Practices.
- Participate in scientific activities, discussion forums, seminars, etc., related to the development of their work.
- Obtain authorization from the person responsible for their supervision and acknowledge their contribution to the oral or written dissemination of their results.
- Respect and value management, administrative tasks, and tasks related to research activity, as well as the proper use of material resources and facilities.
- Fulfill the duty of confidentiality as necessary.

4.- Proper Use of Resources

Economic and material resources allocated to research must be used and managed correctly and responsibly, being especially important not only from an ethical standpoint but also because these resources derive from societal involvement through taxes, altruistic contributions, or other forms of public participation.

Therefore, all personnel at CIC-IBMCC are obliged to use resources with criteria of responsibility and efficiency, following safety, health, and environmental protection regulations established at all times.

5.- Currículim vitae

The *curriculum vitae* (CV) is a reflection of research activity and should never be the end goal of it.

It is compiled in a document detailing personal data, education, and professional experience of an individual. The CV must comply with standardized formats and present information in an orderly

manner.

Veracity and clarity are indispensable requirements for the preparation of the CV. Its content and authenticity are the sole responsibility of the owner.

RESEARCH PROTOCOLS

Research should be conducted following well-designed work protocols. The protocol will contain relevant information regarding the project's development, such as background, hypothesis, objectives, methods, research team composition, work plan, and expected timeline for each phase of the research, task distribution, expected material resources, an economic assessment of costs and project budget, and the forecast for result dissemination.

Protocols must be carefully designed with the purpose of the optimal use of resources, always considering workplace safety regulations and the general rules of CIC-IBMCC FICUS and the laboratory, and considering the following aspects:

1. Research involving experimental animals

Personnel involved in procedures requiring the use of experimental animals must have accredited training enabling them to perform the functions established in national and European legislation. Procedures and projects involving experimental animals should adhere to the principles of the three Rs: (a) replacement of animals with other testing methods or strategies, (b) reduction of the number of animals used in experimentation to the minimum necessary, and (c) refinement or use of procedures that eliminate or minimize adverse effects on animal welfare. Projects involving animal experimentation must be approved by the Animal Experimentation Committee and the corresponding regional community body.

According to current regulations and the use of the Animal Experimentation Service of the University of Salamanca by CIC-IBMCC scientific personnel, animal experimentation permits are evaluated and

approved by the Bioethics Committee of the University of Salamanca and finally authorized by the Directorate General of Agricultural and Livestock Production of the Ministry of Agriculture, Livestock, and Rural Development of the Junta of Castilla y León.

2. Research involving humans

Researchers conducting research activities involving humans or using biological samples of human origin or personal data must adhere rigorously to the applicable regulations and must always have the favorable reports from the corresponding committees.

When conducting a clinical trial with drugs or medical products, or when these are part of a research project, approval must also be obtained from the corresponding ethics committee and authorization from the Spanish Agency of Medicines and Medical Devices. Likewise, researchers must request and obtain express consent from individuals agreeing to participate in a research project or from the responsible person if they are minors or incapable of giving consent. When applicable, the economic compensation to be received by project participants should be specified. Researchers must commit to maintaining confidentiality regarding the personal data of participants throughout the data acquisition, processing, and storage processes, as well as in the subsequent publication of results. As a general rule, efforts should be made to ensure the confidentiality and anonymity of data that could lead to the identification of participants, except when the study's characteristics require a different procedure, duly justified. When data cannot be anonymized, stratified coding procedures should be used so that researchers do not have direct access to the personally identifiable data of human subjects participating in the research. Compliance with the current law on the protection of personal data must be ensured. Researchers must undertake not to transfer data or biological samples to other projects or researchers or to use them for purposes other than those for which consent was obtained without the authorization of the donors or the corresponding research ethics committee.

According to current regulations and patient data primarily coming from the University Hospital of Salamanca, experimentation permits involving human samples will be evaluated and approved by the Bioethics Committee of the University of Salamanca.

3. Genetically modified organisms

If genetically modified organisms are intended for use in research, the relevant legislation will be applied, and what is indicated in point 3.1 will be applied.

4. Acquisition, recording, storage, custody, and conservation of materials and results

The registration, storage, and custody of material (samples, data) from a research project are the responsibility of the principal investigator. Any exchange of materials with other institutions will require the signing of the corresponding transfer agreement outlining all conditions of transfer. To make the transfer, it is necessary to know in advance the intended use of the requester, inform the research team of the request, obtain approval from the person responsible for the research, and also ensure that the requester is willing to cover possible production and shipping costs. Transfer may be limited for reasons of availability, competitiveness, or confidentiality. Material or data from individuals should only be shared in a way that makes it impossible to identify the source subjects; if identification is possible, they can only be transferred if express informed consent has been obtained from the donor individuals.

The project leader must ensure that all participating staff are informed of these obligations and comply with them accordingly.

FICUS, through itself or the partner institutions, will provide technical support for public access to raw data (after protection, if necessary) and final results published through shared databases. However, if available, storage of data obtained in public databases for general access will be promoted. There are already such databases for genomic, proteomic, microscopy data, and other techniques. Scientific personnel would be advised and informed about these storage mechanisms to facilitate data access by other researchers, transparency of our research, and replicability of the obtained results.

5. Safeguards

Research personnel must comply with the codes and regulations in force in Spain or in the country where their research is conducted, applicable to their discipline.

Research personnel will treat participants in the research, whether human or experimental animals, with respect and care, in accordance with ethical and legal provisions.

Research personnel have an obligation to ensure the health, safety, and well-being of the community from which participants, collaborators, and third parties related to the research come.

Research personnel will consider relevant differences in age, sex, culture, religion, ethnic origin, and social class to avoid any form of discrimination. They will also recognize and adequately manage the risks and potential harms arising from their research.

SCIENTIFIC PUBLICATIONS

1. Publication of results

The management of research results conducted within CIC-IBMCC will adhere to the principles outlined by the European Commission's Open Science policies, as well as the guidelines of the Spanish Strategy for Science, Technology, and Innovation (EECTI) 2021-2027.

Dissemination of results is an ethical duty of research personnel, contributing to the advancement of knowledge and serving as an essential part of the accountability process for the use of public resources in research. Publishing results, whether orally or in writing, is a fundamental activity in any research endeavor, as it allows for sharing and critiquing results within the international scientific community. However, the publication of results will be subject to possible needs for protection of industrial and intellectual property.

Researchers should strive to publish their research results and interpretations in an open, honest,

transparent, and accurate manner, including results that are not consistent with the hypotheses. Negative and inconclusive results are as valid as positive ones for dissemination and therefore should also be published. Fragmented publication, where parts of the same work are published separately (when two or more articles from the same team cover the same population, methods, and research question), is only acceptable for reasons of length or at the request of editors.

Researchers should not delay the publication of research results obtained with public funding unless legal protection requires it. Results obtained within a contract/agreement with public or private entities will be disseminated according to the clauses stipulated therein, always in line with the aforementioned principles. Oral communications about research content should follow the same criteria as publications, avoiding exaggeration of the relevance and practical applicability of the results.

In case errors are detected in the content of any publication, they should be acknowledged in publications of the same level. Retraction of the entire publication is necessary in the case of serious errors.

2. Authorship of publications

To be considered a full author of a published work, the recommendations elaborated by the International Committee of Medical Journal Editors will be followed. Specifically, scientific, or technical personnel must meet all the following conditions:

- Substantial contribution to the conception or design of the work or to the acquisition, analysis, or interpretation of data.
- Participation in drafting the work or critically revising its intellectual content.
- Involvement in approving the final version to be published.
- Ability to be accountable for all aspects of the article to ensure that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Individuals associated with the research group who, due to their hierarchical position or employment relationship, request authorship without meeting all the above requirements cannot be authors.

Additionally, any person who has made relevant contributions according to the criteria described must be listed as an author.

All research personnel mentioned in a specific publication must be aware of its content and are responsible for its accuracy unless stated otherwise, ensuring compliance with authorship requirements.

Each author must declare potential conflicts of interest.

Research personnel must reference all works directly related to the research that serve as background for the publication, avoiding references that are not actual background.

3. Order of authorship

The order of scientific personnel should be established according to accepted guidelines in the discipline of the work, which should be known to all scientific-technical personnel involved before the start of the research. When each author's contribution is differentiated, it is common practice for the order of authorship in publications to be as follows:

- The first co-author, the person who has made the most significant contribution to the research and has prepared the initial draft of the article.
- The last author, the person leading the research or having the ultimate responsibility in the research protocol.
- The rest of the co-authors may be listed in order of contribution and, in some cases– if all contributions are similar–alphabetically, with explicit mention of this.
- When two or more co-authors have dedicated the same effort and have shared the main manuscript preparation, they have the same consideration as first authors. This circumstance must be explicit in the article publication. The same criterion can also be applied to lead, intermediate, and senior authors.
- The corresponding author is responsible for all editorial processes and future interactions resulting from the publication of the work.

- When possible, specific contributions of each author should be detailed.

4. Mentions and acknowledgments

Alongside responsible authors, the institutions, or affiliations where the research was conducted should be cited.

For CIC, it should be cited in either of the following ways:

Long version (depending on the program):

Molecular Mechanisms of Cancer Program, Centro de Investigación del Cáncer and Instituto de Biología Molecular y Celular del Cáncer, Consejo Superior de Investigaciones Científicas (CSIC) and University of Salamanca, 37007 Salamanca, Spain.

o

Translational and Clinical Research in Cancer Program, Centro de Investigación del Cáncer and Instituto de Biología Molecular y Celular del Cáncer, Consejo Superior de Investigaciones Científicas (CSIC) and University of Salamanca, 37007 Salamanca, Spain.

Short version:

Centro de Investigación del Cáncer and Instituto de Biología Molecular y Celular del Cáncer, Consejo Superior de Investigaciones Científicas (CSIC) and University of Salamanca, 37007 Salamanca, Spain.

Grants, financial aid, or economic sponsorships received for research must be declared and acknowledged, provided their mention has not been declined. All published works must explicitly include the research ethics committees that have approved the research protocol.

Contributions from collaborators and support personnel must be appropriately acknowledged.

Any person who does not meet the described authorship criteria but has contributed to the work in some other way should be recognized in the acknowledgments section.

5. Outreach

A free society requires a high level of knowledge and access to critical elements for decision-making.

In line with the European Commission's Open Science and the Spanish Strategy for Science, Technology, and Innovation (EECTI) 2021-2027, FICUS promotes researchers' dissemination and communication of their research results to contribute to the cultural advancement of the general public and the dissemination of knowledge, justifying to society the resources dedicated to research.

Results dissemination through the media should always include an explanatory or public-friendly part of the presentation. In such public presentations, authors' names must always be associated with their institutions, and whenever possible, grants and aids received should be mentioned. When presenting opinion articles, it should be noted that these judgments are personal and not institutional. It is not acceptable to communicate and disseminate research results to the media before publication in scientific journals. In disseminating results to the media, as in the publications themselves, excessive optimism or false expectations regarding the research should be avoided. The same criteria applied to other dissemination activities, such as truthfulness and sufficient scientific evidence, should be applied in outreach activities.

Therefore, research personnel working at CIC-IBMCC must:

- Disseminate and communicate research results to society to contribute to the cultural advancement of the general public and the dissemination of knowledge, and to justify to society the resources dedicated to research.
- Make an effort to provide the non-specialized audience with an appropriate level of knowledge and avoid presenting premature and insufficiently validated results to the media.

EVALUTATION, ADVISING AND CONFLICT OF INTERESTS

Research personnel are often called upon to participate in project, publication, group, or individual evaluations. Additionally, the most frequently used procedure in the scientific community for validating written works, to measure their quality and scientific rigor, is peer review.

In these activities, the following points must be taken into account:

- There is a possibility of conflicts of interest due to the evaluator's proximity to the subject of evaluation or due to competitiveness, in which cases the evaluation must be dismissed.
- Evaluators must maintain strict independence from those being evaluated to avoid conflicts of interest that could arise from close professional relationships, kinship, friendship, enmity, or any other factor that could limit the issuance of an objective judgment.
- Reviewers should decline to review if there is any suspicion of bias, lack of objectivity, or transparency regarding the person or object of evaluation. They should also abstain from participating when any legal cause for abstention or recusal exists. Lastly, reviewers should abstain when they are not sufficiently prepared for the review.
- Research personnel must engage in the review and evaluation of research conducted by other personnel.
- Reviews, in all their facets (submissions for publication, job promotions, project funding, appointment to positions), must be well reasoned, clear, precise, and impartial. Those responsible for evaluating a scientific work must communicate any conflicts of interest (personal, academic, commercial, etc.) to the editorial staff.
- The review and evaluation process will always be subject to strict confidentiality. Reviewers will not use the information they have accessed during the evaluation process without prior, express, written, and specific authorization from the author. In the case of collective evaluations, confidentiality must include internal committee deliberations, except for what is recorded in meeting minutes.
- Reviewers must respect the rights of authors and applicants, refraining from using the information they have accessed during the evaluation process without prior, express, written, and specific authorization from the author.

- Evaluation and promotion criteria must be objective, clear, and stable, based on scientific criteria rather than opinions or main ideas, ensuring they are not subject to discrimination and solely reflect the quality or excellence of the work performed.
- All evaluations must be fair and expert, requiring objectivity. Evaluators must strive to understand candidates individually and interpret the documents presented to form a comprehensive understanding of the work actually performed and the capabilities of each applicant. Likewise, they should assess candidates in the context of their scientific environment.
- The person responsible for the research may provide advisory services regarding a subject in which they have specific expertise. Acceptance of advice, which must be known to the Institution or regulated by agreement/contract, implies that the person responsible for the research has the required knowledge and experience, as well as the absence of a conflict of interest. In formulating advice, the necessary recognition of sources used and the most updated information must be considered.
- This method allows for criticism, annotation, or editing of the work by other research personnel in the scientific field. Typically, a novel scientific publication is only accepted in the scientific community after undergoing peer review prior to acceptance for publication in a journal.
- Conflicts of interest arise when professional judgment applied to a primary interest (e.g., the validity of research, performance and fulfillment of professional responsibilities, or the mission of CIC-IBMCC and FICUS) may be influenced by a secondary interest (e.g., financial gain, personal relationships of friendship or enmity, or hierarchical or familial relationships).
- Finding oneself in a conflict of interest situation is not inherently unethical. Research personnel must pay close attention to potential conflicts of interest to identify them. If they exist, it is necessary to abstain from acting or intervening and avoid them, or alternatively, to make them public and address them appropriately according to the policies of contracting entities, evaluating bodies, or publication editors.
- Scientific personnel must not prioritize their personal interests when compromising their professional judgment or the mission of CIC-IBMCC and/or FICUS.
- Additionally, to ensure the independence of scientific personnel, they cannot accept any gift of value, favor, or service offered by reason of their employment that compromises the functions assigned to them.

- Those responsible for evaluating a scientific work must communicate to the relevant body or manager any conflicts of interest (personal, academic, commercial, etc.). Evaluations must be well reasoned, clear, precise, and impartial.
- FICUS will develop institutional criteria for handling conflicts of interest that may arise.

MANGEMENT OF RESULTS PROTECTION

FICUS will foster and promote proper management of the ownership of its results, in accordance with the provisions of the various agreements, statutes, and regulations governing the establishment and operation of each institution. In this context, it will establish and disseminate its policies for the management of intellectual and industrial property, allowing for the effective evaluation, protection, valorization, and commercialization of the data obtained at CIC-IBMCC. Additionally, measures will be adopted to increase awareness and training of research personnel regarding intellectual and industrial property and its exploitation.

According to existing agreements, data protection must be carried out through the following institutions depending on the scientific personnel that generates them:

- FICUS, in the case of scientific personnel contracted by itself.
- The University of Salamanca, in the case of scientific personnel contracted by said institution.
- CSIC, in the case of scientific personnel from this institution.
- CIBER, in the case of scientific personnel contracted by this organization.

Depending on the type of research and the personnel involved, data protection can be carried out jointly by two or more of the institutions mentioned above.

If the results obtained in a research are susceptible to protection due to their potential commercial interest, they should not be disclosed until FICUS or the associated institutions proceed with their evaluation. The person in charge of the project is obliged to communicate it for evaluation to the center's management. Possible delays in disclosure when seeking to protect industrial property should be minimized.

FICUS will establish the necessary limitations to protect research results with industrial property titles or as intellectual property, avoiding disproportionate confidentiality commitments or unjustified restrictions on the publication of the results obtained.

Research personnel undertaking and developing an R&D project in collaboration or under contract must, during negotiations, safeguard all pre-existing information and knowledge owned by the institutions that make up the center. Appropriate contractual documents will be subscribed to adequately record the different interests, tasks, or contributions of the parties. Likewise, the obligation of secrecy and confidentiality assumed by the intervening parties will be stipulated, as well as the allocation of ownership of the results generated within the project framework, contemplating the possibility of their adequate and effective legal protection and the conditions of their exploitation.

When research personnel participate in an industry-promoted project, the necessary agreements with the promoting entity will be established to share the corresponding industrial and intellectual property.

When the research group offers technical services or research personnel participate exclusively in data collection for a protocol developed by third parties, the conditions for communication and publication of the results obtained will be mutually agreed with the promoting entity.

When the institution provides resources and facilities for the promotion and creation of technology-based companies, as a result of the research of a specific group, care must be taken to prevent abuses in favor of the private interests of any of the individuals participating in the company.

COLLABORATIONS

All collaborators in a research project must reach an agreement from the outset regarding the purposes of the research and its dissemination in the most open and transparent manner possible, without prejudice to the requirements necessary for adequate protection of industrial and intellectual property.

From the beginning of the research to the extent possible, all collaborators should agree on task distribution, authorship policies, and industrial and intellectual property.
The person responsible for the research also commits to addressing knowledge or collaboration requests explicitly raised by public or private entities to the Institution. Collaborations with public or private entities must be formalized by FICUS through the corresponding document (contract, agreement, etc.), stipulating in its different clauses all rights and obligations that allow reconciling the interests of the parties involved. Likewise, in cases of contracted research, all agreements between the contracting entity and the persons responsible for the execution will be included in the aforementioned document.

FICUS will ensure that these documents are processed as quickly as possible.

In the exchange or transfer of knowledge and technology with public or private entities, agreements must be made with full transparency, although confidentiality requirements necessary for the protection and valorization of technology will be respected.

In any case, possible conflicts of interest will be avoided both when negotiating the contract conditions and in the dissemination, protection, and exploitation of the results, paying special attention to guaranteeing the maintenance of independence criteria and the ethical foundations of the research.

Research personnel undertaking and developing a collaborative or contract-based research project must, during negotiations, safeguard all pre-existing information and knowledge owned by FICUS and/or other consortium institutions. Appropriate contractual documents will be subscribed to adequately record the different interests, tasks, or contributions of the parties. Likewise, the obligation of secrecy and confidentiality assumed by the intervening parties, the allocation of ownership of the results generated within the project framework, and the possibility of their adequate and effective legal protection and exploitation will be stipulated. All the aforementioned obligations must be expressly communicated in advance to all participants in the research activities.

In any case, possible conflicts of interest will be avoided both when negotiating the contract conditions and, in the dissemination, protection, and exploitation of the results.

ENVIRONMENT AND INSTITUTIONAL RESPONSABILITY

FICUS will promote scientific and technological activities based on originality, excellence, and transparency with a basic, clinical, or translational character, and will foster an adequate research environment among different types of research personnel, exchanges with other research centers, promotion of research results through publication in journals, books, participation in conferences, symposia, etc.

Likewise, collaboration value will be promoted, research quality will be emphasized, and models for organizing research itself will be proposed, transferring its importance to society by fostering dialogue among economic and social agents and offering advice and expertise in research activities.

All individuals involved in the management and development of research must apply relevant policies and guidelines to ensure equal opportunities, with no discrimination prevailing on grounds of birth, race, sex, religion, marital status, opinion, or any other social condition or circumstance, including sexual orientation, especially concerning: (a) access to training and development activities; (b) access to research funding opportunities; (c) selection processes and bodies responsible for them; (d) access to job opportunities and funding calls; and (e) access to leadership positions and roles of responsibility.

Furthermore, FICUS will take necessary measures to prevent individuals working at CIC-IBMCC from experiencing workplace harassment, promoting working conditions based on good treatment and respect, and ensuring the implementation of tools for detecting and resolving deviations in this regard.

Research personnel in training at CIC-IBMCC will be treated with respect both professionally and personally. Similarly, such research trainees must treat with professional and personal respect those responsible for their direct and indirect supervision.

FICUS will ensure that all researchers have access to this Code of Good Scientific Practices and to the current legislation related to various scientific fields. Appropriate documents will be edited and compiled in a specific section ("ad hoc") on the center's website, promoting awareness among

research and technical personnel regarding good scientific practices through adequate information in specific courses, distribution of brochures, and other means.

Scientific personnel must reconcile the principle of intellectual freedom with commitment and loyalty to the institution that provides the framework for effectively conducting their research. Therefore, research personnel must fully integrate into CIC-IBMCC and be well-informed about all activities carried out, as well as the role they play in serving society.

FICUS will ensure that research development takes place while guaranteeing the safety and health of the personnel involved and respecting the environment. It will be the right of all research personnel at the center to have access to information and effective protection in terms of safety and health in their work.

Likewise, it will be the duty of all research personnel at the center to be aware of the policies for occupational risk prevention and environmental protection and to ensure that their activities are carried out in accordance with them, as well as to make appropriate use of the resources, facilities, and services provided by the center.

COMMITMENT TO DISSEMINATION AND IMPLEMENTATION

This code includes mandatory regulations and will be applicable to all personnel of FICUS as well as to any personnel administratively dependent on other entities (CSIC, University of Salamanca, CIBER, etc.) who carry out their research, learning, administrative, or any other nature of work under the auspices of CIC-IBMCC and using its facilities, equipment, supplies, and/or other materials or resources.

All mentioned personnel will electronically confirm at the beginning of their relationship with CIC-IBMCC the receipt of a series of documents they are obligated to know, among which is this Code of Good Scientific Practices.

Additionally, FICUS will disseminate this CBP from the CIC website (www.cicancer.org), as well as from other support platforms and media for research promotion.

FICUS will ensure that research personnel are aware of this code by disseminating it from its website www.cicancer.org as well as from other support platforms and media for research promotion

PROTOCOL FOR DEALING WITH MISCONDUCT

All scientific personnel have the duty to report any conduct suspected of constituting misconduct in the research environment within CIC-IBMCC.

For this purpose, a contact form has been made available on the CIC-IBMCC's intranet to report any suspected misconduct or other issues that occur within it. The provision of this form is part of the measures being taken by FICUS to comply with *Law 2/2023, of February 20, regulating the protection of persons reporting regulatory breaches and combating corruption.*

Once a report is filed, FICUS will manage it, initially through the mediator or ombudsperson, who is responsible for receiving and processing, in a completely impartial manner, reports of misconduct. The presence of the ombudsperson provides research personnel with a framework of trust in compliance with the rules.

However, for personnel belonging to consortia institutions, they have the right to report these incidents through the internal procedures established by these institutions.

Upon receipt of any report, the ombudsperson will conduct an initial assessment, and if there are indications of its veracity, it will be processed according to the following procedure:

- For personnel belonging to consortia institutions, it will be forwarded to the corresponding committee of the institution to which the affected personnel belong.
- For FICUS personnel, it will be forwarded to the FICUS Ethics Committee for investigation and action regarding the report.

- For matters related to animal or human experimentation, it will be forwarded to the corresponding bioethics committees of the University of Salamanca.

FICUS will implement the agreements and penalties adopted by these internal and external committees.

Below is an explanatory diagram of the protocol to follow in the event of a report of scientific misconduct within CIC:

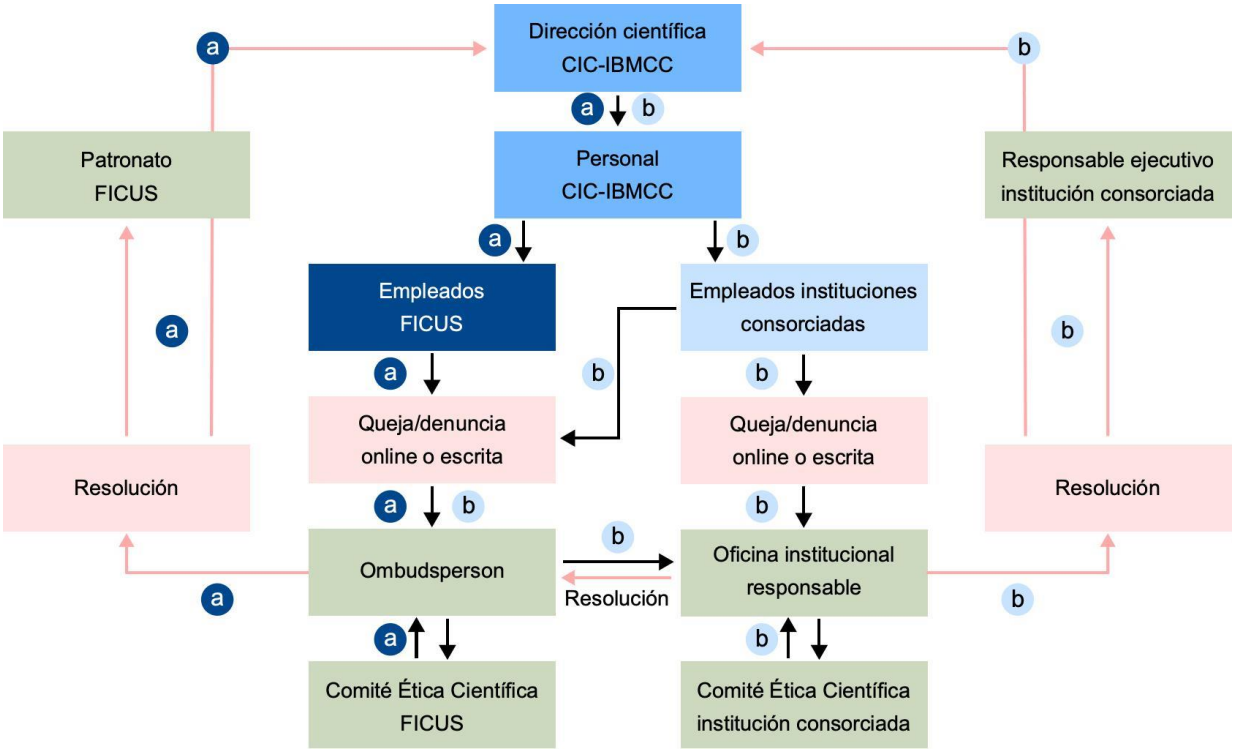

Fig. 1. Protocol for dealing with sccientific misconduct within CIC-IBMCC.

REFERENCES AND REGULATIONS

- Law 31/1995, of November 8, on Prevention of Occupational Risks. Consolidated text. Last modification: December 29, 2014.

- Royal Decree 664/1997, of May 12, on the protection of workers against risks related to exposure to biological agents at work.
- Royal Decree 665/1997, of May 12, on the protection of workers against risks related to exposure to carcinogenic agents at work.
- Organic Law 15/1999, of December 13, on the Protection of Personal Data. Royal Decree 63/2006, of January 27, approving the statute of research staff in training.
- Royal Decree 55/2002, of January 18, on the exploitation and assignment of inventions made in public research bodies, in accordance with the provisions of article 20 of Law 11/1986, of March 20, on Patents.
- Law 8/2003, of April 24, on animal health.
- Law 54/2003, of December 12, reforming the regulatory framework for the prevention of occupational risks.
- Royal Decree 178/2004, of January 30, approving the general regulation for the development and implementation of Law 9/2003, of April 25, which establishes the legal regime for the confined use, voluntary release, and commercialization of genetically modified organisms.
- Royal Decree 65/2006, of January 30, establishing requirements for the import and export of biological samples.
- Law 14/2007, of July 3, on Biomedical Research, amended by Law 14/2011, of June 1, on Science, Technology, and Innovation.
- Barcelona Biomedical Research Park, PRBB. Code of good scientific practices. 2009.https://www.prbb.org/system/uploads/attachment/file/3/en/CBPC_PRBB_CAT_CAST_ENG.PDF
- Code of good practices in research, 2010. University of Barcelona. http://diposit.ub.edu/dspace/bitstream/2445/28543/1/codibonespractiques_spa.pdf
- Recommendations of the Spanish Bioethics Committee regarding the promotion and implementation of good scientific practices in Spain, 2010.

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- Law 22/2011, of July 28, on waste and contaminated soils.
- Opinion paper on monitoring open science, Publications Office of the European Union. https://op.europa.eu/en/publication-detail/-/publication/2bcde3e1-7f53-11ed-9887-01aa75ed71a1/language-en
- National Strategy for Open Science. Technical General Secretariat of the Ministry of Science and Innovation. https://www.ciencia.gob.es/InfoGeneralPortal/documento/c30b29d7-abac-4b31-9156-809927b5ee49

CHANGE LOG

Rev. / Edit.	Date	Modified section / Summary of the changes
0	29/07/2020	First edition of the document.
1	01/06/2023	Correction of minor typographical and/or expressive errors, aesthetic modifications, addition of Fig. 1 in section 10.
1b	18/03/2024	Style modification of the guide to adapt it to the current style guide for manuals, guides, and protocols of the CIC. Translation into English.
1c	20/09/2024	Correction of minor typographical errors.