

Code of Good Research Practices

Gregorio Marañón Institute for Health Research

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INTRODUCTION

Purpose and Mission. Scientific research drives social progress by generating knowledge, developing useful technologies, and promoting public health. For this work to maintain its value and public trust, scientific integrity is essential: the professionalism and rigor of researchers ensure that results are reliable and beneficial. The liSGM Code of Good Research Practices establishes a common framework of ethical standards and principles that should guide all phases of research activity, from planning to the communication of results. This code represents the liSGM's commitment to quality and scientific integrity.

Scope of Application. This Code of Scientific Integrity shall apply to all research activities conducted wholly or partially at the liSGM, as well as to all persons participating in such activities, directly or indirectly, regardless of their organizational, statutory, or contractual affiliation, without the need for a formal connection to the liSGM. Consequently, it applies both to the Institute's own staff and to staff from the affiliated hospital who are involved in such activities—in particular, clinical and healthcare personnel—as well as to visitors, fellows, students, technical, support, and administrative staff, and external collaborators whose participation is part of research projects carried out within the scope of the liSGM. All of this is in accordance with the principles set forth in current legislation regarding scientific research, integrity, and best practices, including, among others, Law 14/2011 of June 1 on Science, Technology, and Innovation, and other applicable regulations. Its objectives are to ensure that research is conducted in accordance with the highest standards of rigor, integrity, and responsibility; to promote the adoption and consolidation of best practices in all phases of the scientific process; and to foster ethical reflection on the benefits and risks inherent in research activities.

GUIDING PRINCIPLES OR FUNDAMENTAL VALUES.

Good scientific practices are based on the essential principles of integrity in research. These include professionalism and rigor to ensure the quality of design, methods, and the responsible use of resources; intellectual honesty at all stages of scientific work, ensuring transparency and impartiality; respect for the scientific community, participants, society, ecosystems, and cultural heritage; and accountability in every decision and action.

All researchers (and staff affiliated with the IiSGM) must adhere to these principles, which provide overarching guidance for the ethical and responsible conduct of scientific activity.

Integrity and Respect. Researchers must act with honesty in all scientific activities: experimental design, data generation and analysis, funding applications, publication of results, and acknowledgment of contributions. Plagiarism and data fabrication constitute serious misconduct. Furthermore, researchers are expected to treat colleagues, participants, society, and the environment with respect, as well as to disclose and properly manage potential conflicts of interest.

Transparency and honesty. The IiSGM promotes openness in the exchange of knowledge and scientific discussion. Following the publication of results, researchers must provide relevant data and materials whenever possible and ethically appropriate. Scientific communication must always be complete, fair, and impartial.

Responsibility and Reliability. Researchers are responsible for the quality and rigor of their work, from the formulation of hypotheses to the dissemination of results, ensuring sound methodologies, appropriate analyses, and the efficient use of resources.

Leadership and cooperation. Heads of research areas and groups, as well as senior researchers, must foster a work environment aligned with this code, promoting collaboration, capacity building, and the free exchange of scientific knowledge.

THE RESEARCHER AND THE RESEARCH ENVIRONMENT

Leadership and Team Organization.

Research teams, composed of researchers and technical staff, must have a team leader who provides leadership and represents the project. This leader must foster a work environment that is educational, collaborative, and oriented toward common goals. Team members will actively participate in organized activities and contribute to the exchange of knowledge. Likewise, team leaders will promote cooperation with other groups, avoiding any obstacles to the work of competing teams or to the dissemination of results. The research community must maintain an open attitude toward criticism, questions, and contributions from colleagues and society.

Supervision, tutoring, and mentoring.

The IISGM must ensure that researchers receive rigorous training in research design, methodology, and analysis, as well as adequate preparation in ethics, scientific integrity, best practices, and applicable regulations. This training must be provided on an ongoing basis throughout their professional careers. The IISGM must also ensure training in scientific dissemination and communication, and offer relevant programs on ethics and integrity so that everyone is familiar with current codes and regulations. Experienced researchers and supervisors must guide and train their teams, providing support and setting an example. Training in ethics and integrity must cover all professional stages, from entry-level to the most advanced.

The **relationship between research staff and the managers** of the FIBHGM technical office must be guided by a mutual commitment to transparency, accountability, and professional respect. This collaboration includes essential aspects such as the proper preparation and submission of projects, strict adherence to administrative deadlines, and clear, diligent, and respectful communication. Likewise, both parties must strive to anticipate and manage potential friction arising from workload, the interpretation of regulations, budget management, or the need for additional information, always promoting a climate of cooperation that ensures the quality, integrity, and efficiency of research activities.

Culture of Integrity.

The IISGM must promote a culture of integrity by allocating resources and creating an environment of respect, equity, diversity, and inclusion. It must ensure that researchers work free from undue pressure, with clear policies for managing scientific integrity and misconduct. It must also support those who receive threats and protect whistleblowers acting in good faith, especially the most vulnerable. It must also ensure an adequate infrastructure for data management and traceability. Institutions must also encourage responsible conduct, promote training in scientific integrity, and establish bodies and procedures to prevent and manage misconduct.

Diversity, Equity, and Inclusion.

The IISGM promotes an institutional culture based on respect for diversity—including gender equity, cognitive diversity, and diversity related to disability—and the inclusion of all people, recognizing that diversity within teams enhances creativity and scientific excellence. Environments free from discrimination, bias, and harassment are guaranteed, with equal opportunities in research careers, training, and professional recognition. At all stages of research, the

gender perspective will be incorporated as an analytical category, taking into account biological and sociocultural differences in hypotheses, methodology, and the interpretation of results, and avoiding biases in samples, clinical studies, and work teams. The inclusion of **vulnerable groups** will be encouraged where appropriate, with the necessary ethical safeguards, so that scientific advances contribute to reducing health inequalities. Governing and evaluation bodies will incorporate diversity criteria into their composition, and training in equality and inclusive leadership will be promoted. This commitment is part of the liSGM's institutional integrity.

RESEARCH PLANNING, METHODS, AND PROCEDURES

Authorization from the relevant committees and from the facilities providing materials or equipment will be required before any research can begin. All research involving humans or animals must be reviewed in advance by the Ethics Committee for Research Involving Medicines (CEIm) for studies involving human subjects, samples, or data, or by the Ethics Committee for Animal Experimentation (CEEa) for research involving animals. When multiple groups are involved, the scope and conditions of the collaboration must be formalized in writing.

Research Protocols.

The research protocol constitutes the planning phase of the project and must be written clearly, precisely, and in sufficient detail to allow for the evaluation of its validity and the reproducibility of the study. In general terms, the protocol must include a title, researcher information, an abstract, a problem statement, a theoretical framework, objectives, a methodological design, references, a timeline, resources, and funding sources, while also considering applicable ethical and legal aspects and relevant differences in age, gender, culture, or social context, in addition to the requirements established by law for each type of research.

Any study involving human participants must be registered in public databases before the first participant is enrolled. During the study's conduct, the researcher must adhere to the approved protocol and submit any modifications to an ethics committee for review before implementing them, informing the funding agency when appropriate. Additional questions or unanticipated uses of the research material will require a new protocol.

It is not permissible to conduct research without a complete protocol or to use simplified versions that have not undergone external review, especially in studies involving human subjects (including their data and/or samples) or animals. All projects must be independently evaluated by the relevant Scientific Committee of the liSGM.

Regulatory Requirements.

Research projects must comply with the principles established in the Declaration of Helsinki, the Council of Europe Convention on Human Rights and Biomedicine, the UNESCO Universal Declaration on the Human Genome, ICH E6(R3), as well as Spanish and European legislation regarding biomedical research, data protection, and bioethics. All processing of personal data must comply with Regulation (EU) 2016/679 and Organic Law 3/2018. Research involving human subjects, samples, and/or data requires authorization from the relevant Ethics Committee and must comply with Law 14/2007 on Biomedical Research and its implementing regulations (Royal Decree 1716/2011), Law 14/2011 on Science, Technology, and Innovation; Directive 2004/23/EC on the quality and safety of human cells and tissues; Royal Decree 1090/2015 on clinical trials with medicinal products; Royal Decree 957/2020 on observational studies with medicinal products; Royal Decree 92/2023 on medical devices, Regulation (EU) 2024/1938 on substances of human origin, as well as the applicable regulations on assisted reproduction, transplants, and stem cells, in addition to the local provisions in force in each case. Confidentiality, data protection, and informed consent are mandatory. Animal experimentation must comply with Royal Decree 53/2013 and, in the case of genetically modified organisms, Royal Decree 364/2017. Projects involving biological agents must comply with Law 31/1995 and its implementing regulations. Likewise, any project involving biological risk must comply with biosafety regulations, Royal Decree 664/1997 on the protection of workers against biological agents, Law 9/2003 on the contained use and release of genetically modified organisms, and Royal Decree 178/2004, which implements said Law.

Responsibilities of Researchers.

Any research protocol requiring the use of health care facilities or equipment—whether owned by the institution or external—or shared research resources must be approved by the appropriate authority. In any funding application, the principal investigator guarantees the accuracy of the resources declared. Similarly, each author is responsible for the accuracy of their curriculum vitae, which must be signed; in the case of collective CVs, the person responsible for the application shall sign them. The principal investigator, together with their team, must develop a plan for communicating and publishing results, in accordance with the institution's *open science* and *Responsible Research and Innovation* plan, and comply with the IISGM's affiliation policies regarding scientific output. Furthermore, they must avoid applying for new grants if doing so delays the dissemination of projects that have already been completed. In clinical research, where data collection is complex and difficult to replicate, it is essential to ensure the quality of data collection and storage. All of this

must be clearly and rigorously reflected in the approved protocol; furthermore, the researcher is responsible for developing a data management plan for their project and, if necessary, the corresponding impact assessment.

Methodological rigor. Researchers shall employ appropriate methods and procedures and base their conclusions on a critical and independent analysis of all the results they obtain, interpreting them comprehensively and objectively.

DATA AND MATERIALS MANAGEMENT; RECORDING, CUSTODY, AND PRESERVATION

Recording of data and results.

Researchers are required to record all data, including negative results, in research notebooks or other appropriate media. The principal investigator is responsible for the recording, storage, and safekeeping of samples and data from a research project. All actions must comply with the procedures established in Royal Decree 1716/2011 and, where applicable, the principal investigator must register their sample collection with the national biobank of the Carlos III Health Institute (ISCIII) and adhere to internal information security policies. Access to and use of non-human genetic materials or resources shall be governed by the Nagoya Protocol and Regulation (EU) No. 511/2014, which regulate access to genetic resources and the fair sharing of benefits arising from their use.

The IISGM must ensure the proper preservation and management of materials and data, including unpublished ones. When the exchange of materials with other institutions involves the transfer of a sample, a transfer agreement must be drawn up specifying the conditions of use and the requester's purpose; the responsible team or biobank must be informed, and the appropriate approval must be obtained. The principal investigator will bear the associated costs, and the transfer may be limited due to availability, competitiveness, or confidentiality. Material of human origin may only be shared in a properly anonymized form; if there is a possibility of re-identification, the express informed consent of the source subject is required. Furthermore, any use or transfer of samples and any processing of personal human data must receive a favorable opinion from the Research Ethics Committee.

Original data and relevant materials must be preserved in their original formats, especially if they have been modified. All primary documentation and generated results belong to the Gregorio Marañón Hospital Foundation for Biomedical Research (FIBHGM). Research results must be public and shareable, respecting contractual and intellectual property restrictions, and following the FAIR principles (*findability, accessibility, interoperability,*

reusability) for data access. The resulting data must be considered legitimate and citable products.

The principal investigator must ensure that all personnel involved are aware of and comply with these obligations.

Research Log.

The Research Log is the official means of maintaining a complete record of a researcher's activities regarding any matter related to intellectual/industrial property. The log serves as key documentary evidence of the researcher's role in the work being conducted. The Gregorio Marañón Hospital Foundation for Biomedical Research (FIBHGM) will own the research notebook, and the principal investigator (PI) is the custodian of the notebook and responsible for its archiving and preservation. Therefore, the research notebook is a key element in determining the authorship of a project (who the inventors are) and the ownership percentages thereof.

The research notebook is the fundamental medium for the systematic and verifiable recording of scientific activity. It should be used as a work journal in which the hypotheses proposed, the experiments conducted, any incidents that occurred, and the interpretation of the results are documented in a continuous and orderly manner. Its primary function is to provide a clear and unambiguous record of **what was done, how it was done, who did it, and when it was done**, providing all the necessary information so that any qualified person can **faithfully reproduce** the described experiments. Therefore, each entry must be complete, accurate, and made at the time the activity occurs, avoiding gaps or subsequent reconstructions. The notebook constitutes an official research document, essential both for ensuring scientific integrity and for protecting intellectual property and facilitating future audits, reviews, or verifications.

The research notebook must record, completely and accurately, all relevant information regarding the experimental work. The experimental design must clearly identify and quantify the materials used, always indicating their source—whether commercial, internal, or from third parties. Likewise, all observed results must be recorded, including negative or unexpected ones, as they are an essential part of the scientific process.

The notebook must be stored in a secure location with restricted access to individuals not involved in the research; its preservation and supervision are the responsibility of the principal investigator or group leader. Pages must never be torn from the research notebook, nor should any content be deleted; corrections must be made by drawing a single line through the text, allowing the original text to remain legible. The notebook must always be maintained in a physical or digital format authorized by the institution, following the established standards for its preservation and auditing. It must be stored in a secure location with restricted access to individuals not involved in the project, and the principal investigator is responsible for its safekeeping. The notebook must not

leave the laboratory unless expressly authorized, and its contents may not be reproduced, copied, or disseminated without permission from the principal investigator or the institution. Upon completion of a project, the notebook must be turned over or archived, in accordance with the center's regulations, ensuring its preservation for the legally established period.

General Principles and Safeguards.

Researchers must design, conduct, analyze, and document their studies with rigor and care, using available resources responsibly and adhering to the standards of their discipline. They must treat all research subjects (human, animal, cultural, biological, environmental, or physical) with respect, in accordance with the law and ethical principles. They must also safeguard the health, safety, and well-being of the community and of those participating in the project. Furthermore, they must identify and manage the risks and potential harm arising from their work, ensuring responsible research practices aligned with professional standards.

Data Storage and Preservation.

All primary documentation and results generated in a research project are the property of the FIBHGM. The results must be public and shareable, although their dissemination may be limited by contractual obligations or by protection under industrial or intellectual property rights. Data generated in a research project must be considered legitimate, accessible, and citable products. Original data—including samples, questionnaires, recordings, or images—must be preserved in their original formats, especially when they have been modified. Access to the data must comply with the *FAIR* principles, ensuring their findability, accessibility, interoperability, and reusability, and treating them as legitimate and citable products. The project leader must ensure that all staff are aware of and comply with these obligations, guaranteeing the proper and responsible management of the information and results obtained. In addition, data must be retained for a minimum of 10 years after publication, ensuring their long-term preservation.

Access and Sharing (Open Science).

Open Science serves as the framework for promoting the responsible sharing of data, always within the applicable legal and contractual limits. The project leader must ensure that staff are aware of and comply with these obligations, guaranteeing appropriate access to and responsible sharing of information.

ETHICS IN RESEARCH INVOLVING HUMAN SUBJECTS, SAMPLES, DATA, AND ANIMALS

Research Involving People, Their Data, and Their Samples

Any project involving the participation of individuals, the use of their data, the use of biological samples of human origin, or the processing of personal data—including clinical trials involving drugs or medical devices—requires approval from the Ethics Committee for Research Involving Medicines (CEIm). Additionally, depending on the type of research, authorization may be required from the competent authorities at both the regional and national levels, including, where applicable, the Spanish Agency for Medicines and Health Products, as well as the ministries responsible for agriculture and ecological transition in the case of research involving genetically modified organisms.

Researchers must obtain **the express informed consent** of each participant, or of their legal representatives in the case of minors or individuals incapable of giving consent. Furthermore, when mature minors participate, consent or assent adapted to their level of understanding must be obtained, in addition to the consent granted by their legal representatives. Likewise, when participants do not speak Spanish fluently, consent forms must be provided in a language that ensures full and effective understanding of the information relevant to their participation. The process of obtaining informed consent must be documented.

Confidentiality and the protection of personal data are essential obligations. Researchers must ensure their protection during the collection, processing, storage, and dissemination of results, complying at all times with applicable data protection laws. As a general rule, data must be anonymized; when this is not possible, reliable pseudonymization procedures must be applied to prevent direct access to participants' identities or their reidentification, including reidentification that could result from cross-referencing databases or information available on social media. Data or samples may not be transferred to other projects or researchers without the express authorization of the donors or the relevant ethics committee, nor may they be used for purposes other than those to which consent was given. The rights, safety, and well-being of research participants must always take precedence over scientific or social interests. Risks must be evaluated in relation to the expected benefits, and studies may only be conducted when this balance is favorable. Confidentiality, high-quality data recording, and supervision by qualified personnel are essential requirements.

Named biological samples—whether identified or coded—are ethically linked to the donor and must be treated in accordance with the criteria

applicable to research involving human subjects. Their use requires particular rigor, respect for the subject's autonomy, and strict compliance with ethical and legal regulations. Conversely, fully anonymized samples, whose origin cannot be linked to any individual, may be reused without specific intervention by the CEIm, provided that the conditions of use comply with the provisions of Law 14/2007, Royal Decree 1716/2011, and Law 3/2018, unless the protocol requires additional safeguards.

When a researcher intends to anonymize samples that were previously identifiable, they must submit to the CEIm a detailed anonymization procedure and a data management plan that ensure the effectiveness of the process and protection against leaks, re-identification, or other risks to confidential information. The donor explicitly authorizes the destination and uses of their samples for research, regardless of whether they were obtained for clinical or scientific purposes. Any new use of identified or coded samples will require authorization from the donor, the custodian, or the collection or biobank (as applicable), and the CEIm. Furthermore, the subject must authorize access to their clinical data and be informed of the potential risks and benefits arising from the use of their data, both for themselves and for their family or social group. The transfer or donation of samples or results to third parties without authorization is unacceptable. In retrospective studies involving previously deposited and properly registered nominal samples, the wishes expressed by the donors must be respected. If such wishes are not on record, the CEIm will assess, in accordance with applicable legislation, the possibility of waiving the requirement for consent, while ensuring confidentiality and preventing the disclosure of personal data. Samples obtained in a clinical setting may also be used if patients provided prior authorization, even if the project's objectives were not known at that time. In such cases, the CEIm will determine the validity of the advance consent and the need for additional measures to ensure respect for the donor's rights, such as informing the donor about potential uses—including the most sensitive ones—and allowing the donor to decide whether their samples will be identified or anonymous.

The clinical use of information and samples will always take priority over any use for research purposes, given their diagnostic and clinical relevance. Clinicians and researchers must coordinate to respect both the patient's clinical interests and their willingness to participate in research. Even when requesting the donation of leftover materials from healthcare or clinical sources, the patient's freedom to accept or refuse their use must be guaranteed without this affecting their medical care.

The conditions for obtaining samples may vary between protocols; therefore, specific procedures based on professional collaboration must be agreed upon. The donor may revoke their consent at any time, which will require the destruction of the samples and any derived data. Researchers and sponsors must commit in writing to the CEIm to destroy the samples once the authorized studies are completed or, where appropriate, to incorporate them into a

duly registered research sample collection with the donor's prior consent.

For more information, procedures, and inquiries, contact the CEIm (ceim.hgugm@salud.madrid.org) and <https://www.iisgm.com/el-iisgm/estructura/comisiones/ceim/>

Research involving laboratory animals.

The use of animals in experimentation is acceptable only when it serves legitimate and socially valuable purposes: to prevent, diagnose, or treat diseases in humans, animals, or plants; to develop and evaluate pharmaceutical products, food, or other substances; to study and modify physiological conditions; to protect the environment; to conduct scientific or medico-legal research; and to carry out educational or training activities. These uses must always be justified and aimed at benefiting health, knowledge, or safety, ensuring that animal experimentation is strictly limited to cases where no viable alternatives exist.

Experiments should be selected that, using the fewest possible animals and causing the least pain, suffering, stress, or long-term harm, yield the most satisfactory results. Unnecessary duplication of procedures should be avoided, and alternative methods should be applied whenever possible. Animal welfare must take precedence at all stages of the project: acquisition, transport, acclimatization, housing, handling, procedure, recovery, reuse, euthanasia, and final disposition. An experiment must not be conducted if there is another scientifically satisfactory and proven method available that yields the same conclusions without involving the use of animals.

Personnel working with laboratory animals must have accredited training and obtain approval from the CEEA for each procedure. All research involving animals must follow the three Rs principle: replacement, justifying the absence of alternative methods; reduction, using the minimum number of animals necessary without compromising scientific objectives; and refinement, applying techniques that eliminate or minimize suffering and adverse effects on their well-being. These principles ensure the responsible, ethical, and regulated use of animals in research, in accordance with national and European regulations.

All studies must establish clear and measurable humane endpoints that allow the procedure to be terminated before unacceptable levels of suffering are reached.

Record-Keeping for Animal Use Facilities designated for animal experimentation at the IISGM are required to maintain a logbook documenting all animals used, as well as the number and species of animals acquired, the suppliers from which they were obtained, and their final disposition,

once the experiment is completed. This record must be retained for at least three years from the date of the last entry and may be subject to periodic inspection by the competent authority.

The principal investigator (PI) of the project must maintain a record of experimental animals that includes specific details regarding the experimentation, the animals, and the severity of the experiments (non-recovery, mild, moderate, or severe), with specific control and monitoring measures adopted in accordance with the expected level of impact.

It is the principal investigator's responsibility to ensure that the project is properly authorized, to ensure the scientific and ethical justification for the use of animals, to ensure compliance with the approved protocol, to ensure the training and supervision of the team, to ensure complete documentation of the activity, and to report incidents, modifications, and adverse events.

Project Monitoring. Among its functions, the CEEA monitors research projects. The objective is to safeguard animal welfare and ensure compliance with the principles of replacement, reduction, and refinement (the 3Rs), as well as to support researchers in the responsible management of their projects.

For more information, procedures, and inquiries, contact the CEEA (CEEA@iisgm.com) and <https://www.iisgm.com/el-iisgm/estructura/comisiones/ceea/>.

AUTHORSHIP, PUBLICATION, AND DISSEMINATION OF RESULTS

Authorship Criteria.

Authorship of a scientific paper must strictly adhere to the criteria established by the **International Committee of Medical Journal Editors (ICMJE)**. To be considered an author, a person must simultaneously meet four conditions: have made a substantial contribution to the study design or to the analysis and interpretation of the data; have participated in the drafting or critical revision of the manuscript; have approved the final version for publication; and assume responsibility for the content, ensuring the integrity and accuracy of the work. Those who contribute but do not meet these requirements should be acknowledged in the acknowledgments.

Individuals who, due to their position or employment relationship, request inclusion as authors without meeting the criteria may not be listed as authors. Similarly, any person who does meet the requirements must be listed as an author.

Technical reports, annual reports, or documents intended for third parties must include a list of authors, their affiliated institutions, and funding sources, just as a scientific publication

scientific publication. In the case of doctoral dissertations completed at the IiSGM, the advisor, the unit involved, and the committees that authorized the protocols must be listed.

The scientific community recognizes that negative results are just as valuable as positive ones and must be disseminated with the same sense of responsibility. Authors must communicate their findings with accuracy, honesty, and transparency, explaining assumptions, values, uncertainties, and limitations. These principles apply to any publication format, including open-access journals and *preprint* servers.

Publication Practices.

The publication of results constitutes a fundamental ethical duty for researchers, as it contributes to the advancement of knowledge and is part of the accountability that stems from the use of public resources. Dissemination may take place in oral or written form, but must always be honest, transparent, accurate, and open. This commitment includes the obligation to publish negative or inconclusive results, which are considered just as valid and relevant as positive ones. The selective concealment of results distorts scientific evidence and violates the principles of research integrity.

Publication must respect the need to protect intellectual or industrial property where applicable. Researchers must not delay the dissemination of publicly funded results unless required to do so by law. In the case of research conducted under contracts or agreements with public or private entities, dissemination shall comply with the agreed-upon terms, always in accordance with general ethical principles and institutional policies.

Practices such as redundant or fragmented publication (*“salami publication”*)—which consists of artificially dividing a single study to generate multiple articles without scientific justification—are prohibited. Fragmentation is permitted only when the length of the work requires it or when requested by the editors. Similarly, self-plagiarism—defined as reusing substantial portions of previous publications without properly citing them, including translations—is prohibited. These practices undermine scientific credibility and must be strictly avoided.

In oral presentations, researchers must apply the same standards of rigor and prudence as in written publications, avoiding exaggeration of the relevance or applicability of the results. Communications to the media must include explanatory information tailored to non-specialist audiences, mention the authors and their institutions, and acknowledge any funding received. It is not acceptable to communicate results to the media prior to their scientific publication, nor to generate unfounded expectations regarding the findings.

When errors are detected in a publication, researchers must correct them through correction notes or, in serious cases, through retraction. These processes must be transparent and acknowledge the corresponding

responsibility. Scientific integrity requires acknowledging and correcting errors to preserve trust in research.

Author Order

Authors must formally agree on the order of authorship and meet the criteria for contribution, drafting, final approval, and responsibility for the content. They must also include a statement of contributions, acknowledge those who collaborated but did not qualify as authors, declare conflicts of interest and sources of funding, and publish corrections or retractions when necessary, following transparent procedures.

The order of authorship must be established in accordance with accepted standards in the discipline and agreed upon before the research begins. This order reflects the nature and significance of the contributions made by each participant. In biomedicine, the **first author** is typically the person who made the most significant contribution and drafted the manuscript. The **last author** is usually the person who directs the research or assumes final responsibility for the project and the manuscript. **Intermediate co-authors** may be listed according to their level of contribution or, if contributions are similar, in alphabetical order, with this fact explicitly stated.

When two or more researchers have contributed equally, **shared authorship** may be declared—whether in the first, intermediate, or senior positions—and this circumstance must be explicitly stated in the publication. The **corresponding author** is the person who assumes responsibility for the editorial process and for communications following publication. Whenever possible, the specific contributions of each author should be detailed to ensure transparency. In addition, the institutions where the research was conducted, as well as any grants or funding received, must be listed alongside the authors. The ethics committees that approved the protocol must also be included, and any potential conflicts of interest must be disclosed. The same criteria apply to technical reports, annual reports, or documents intended for third parties. In the case of doctoral dissertations, the advisor, the department involved, and the committees that authorized the studies must be listed.

Peer Review

Peer review is the central mechanism for ensuring the quality and rigor of scientific research. Researchers have an ethical responsibility to participate in these evaluation tasks and to do so with objectivity, clarity, and sufficient justification. All reviews (for publications, funding, promotions, or appointments) must be impartial and based exclusively on the quality of the work. Reviewers must recuse themselves when there is any actual or perceived conflict of interest, a personal or professional relationship that compromises their independence, or a lack of expertise to adequately evaluate the content. The IiSGM must promote evaluation practices that are transparent, justifiable, and consistent with criteria of quality, impact, advancement of knowledge, diversity, inclusion, and

openness. Furthermore, it must avoid exclusive reliance on quantitative indicators, progressively aligning with the principles of the CoARA (Coalition for the Advancement of Research Assessment) initiative.

Confidentiality. Reviewed material may not be disclosed or used without the author's express written authorization. Reviewers must respect the rights of authors and may not appropriate ideas, data, or interpretations obtained during the review process. They must also disclose any conflicts of interest and, if necessary, recuse themselves from the process.

COLLABORATIONS AND RELATIONSHIPS WITH INDUSTRY

Research collaboration requires that all participants assume responsibility for the scientific integrity of the project. From the outset, collaborators must agree on the objectives, the distribution of tasks, the authorship policy, and the management of intellectual property, ensuring open and transparent dissemination. These agreements must be formalized in writing, specifying the scope, conditions, and timelines of the collaboration, especially when multiple groups or institutions are involved. Written formalization ensures clarity, prevents conflicts, and establishes a common framework for responsible work consistent with good scientific practices.

Private Sponsorship.

Collaboration between public institutions and private for-profit entities is common and necessary in the biomedical field, as it promotes technological development, knowledge transfer, and the provision of strategic resources. However, these relationships must be strictly regulated and monitored to guarantee scientific independence, protect the public interest, and ensure researchers' right to disseminate their results.

When the researcher assumes responsibility for the study's design and planning, this responsibility must be maintained even in industry-sponsored projects. Although the researcher may have access to confidential information from the sponsor, such confidentiality must not restrict the ability to publish the results, except in duly justified cases and within the agreed-upon timeframes. Publication is an ethical imperative, and agreements may be established to allow the sponsor to review manuscripts for their potential commercial impact or to regulate intellectual property, including exclusivity periods of up to 90 days.

When researchers participate solely in data collection for an external protocol, the terms of publication must be established in advance and explicitly. All financial agreements, rewards, or compensation must be formalized in a single agreement or contract between the

sponsoring entity and the institution, ensuring transparency and access to information by the responsible bodies.

Conflicts of interest must be avoided at all times, and the principles of intellectual freedom and service to the public interest must be upheld.

Conflicts of Interest

A conflict of interest arises when a researcher's professional judgment regarding a primary objective (such as scientific validity or the public interest) may be influenced by a secondary interest, whether financial, personal, academic, or relational. It is not in itself an ethical violation, but it must be identified, disclosed, and managed appropriately. Researchers must avoid acting when there is an actual, potential, or perceived conflict of interest, or do so only after disclosing it and following institutional policies. Transparency is essential to maintaining objectivity, scientific integrity, and trust in the institution.

Any actual, apparent, or potential conflict of interest that could unduly influence or compromise the proper conduct of research activities, collaboration with other entities, staff training, evaluation tasks, or the dissemination of results must be disclosed.

SCIENTIFIC MISCONDUCT AND OTHER UNACCEPTABLE PRACTICES

Scientific misconduct constitutes a serious violation of research integrity and can cause profound damage to scientific credibility, professional relationships, the responsible use of resources, and, in some cases, to people and the environment. The three most serious forms of misconduct, known as FFP, are: **Fabrication**: inventing data or results and recording them as if they were real. **Falsification**: manipulating materials, equipment, processes, or data, or modifying, omitting, or suppressing results without justification. **Plagiarism**: using the ideas, texts, or work of others without proper acknowledgment.

In addition to these behaviors, there are other unacceptable practices that, while not always constituting FFP, distort the scientific process. These include: manipulating authorship, engaging in self-plagiarism, selectively citing sources to further one's own interests, concealing results without justification, allowing interference from funders, exaggerating the significance of findings, obstructing the work of other researchers, abusing positions of authority, covering up integrity violations, or supporting predatory journals that circumvent quality controls. These practices may be subject to sanctions in their most serious forms. Prevention is essential and requires training, adequate supervision, and a research environment that promotes ethics, transparency, and respect for sound scientific practices.

GUIDELINES FOR THE ETHICAL USE OF RESEARCH SUPPORT SERVICES

Definition and General Principles.

Research Support Services (RSSs) are technical and functional structures designed to facilitate, standardize, and strengthen research activity across the entire IISGM. Their primary purpose is not strictly commercial, but rather instrumental and strategic, insofar as they enable an increase in the quality, efficiency, competitiveness, and regulatory compliance of the research conducted. In this context, the ISCIII allows the RSS to generate both costs and legitimate benefits for the IIS as a whole, which are governed and managed by the Research Foundation. Therefore, benefits are understood not only in terms of direct economic gains but also as indirect returns, organizational savings, and scientific and institutional value.

The relationship between researchers and SAIs must be governed by principles of transparency, mutual respect, fair recognition of contributions, and compliance with applicable ethical and legal standards. These standards establish the rights and obligations of both parties to ensure that the collaboration is ethically sound and scientifically productive.

Each SAI must have a **publicly available and up-to-date service portfolio** that describes the services offered, the technical requirements for the samples or data it receives, estimated turnaround times, applicable fees, and service request procedures. This portfolio must be accessible to the entire IISGM research community and reviewed annually.

SAI fees must be based on the principles of transparency and economic sustainability. The cost of services shall be set to cover, at a minimum, the recovery of operational, running, maintenance, replacement, and equipment upgrade costs. The fee structure shall ensure that the service's activities do not, under any circumstances, generate a financial benefit for the staff responsible for the SAI. It is expressly prohibited for revenue from these services to benefit the research group to which the person in charge of the SAI belongs, thereby ensuring impartiality in management and the full reinvestment of resources into the SAI's own infrastructure. All revenue derived from the SAI's activities must be managed by the FIBHGM.

Under no circumstances may the provision of technical services be conditioned upon, linked to, or compensated by the inclusion of SAI staff as authors of scientific publications. Similarly, authorship in research papers may not be used as compensation for the use of the service.

Personnel assigned to the SAIs shall perform exclusively the duties specific to the Service. Any extraordinary activity shall require the express authorization of the competent authority and, under no circumstances, may it adversely affect user service or response times.

Prior Service Agreement. At the start of each significant service provision, the requesting researcher and the SAI director must formalize a written service agreement that includes, at a minimum: a description of the requested work, the anticipated timelines, the expected level of contribution from SAI staff (technical or substantive), the agreed-upon form of acknowledgment (authorship, acknowledgment, or citation), and the conditions for the custody of and access to the generated data. This agreement does not replace the service portfolio but rather supplements it for each specific project.

Obligations of SAI Technical and Scientific Staff

SAI staff must ensure the proper functioning of the equipment that forms part of the service. To this end, a rigorous preventive maintenance schedule for the equipment will be established to guarantee compliance with the required technical standards. The person in charge is obligated to identify technological obsolescence in advance and propose renewal or upgrade plans that keep the service at the forefront of science and competitiveness.

SAI staff must provide competent advice based on the best available knowledge and the quality standards of their discipline, always acting impartially and ensuring equitable treatment for all users. They are obligated to maintain the confidentiality of the projects, data, and results to which they have access, as well as to report transparently on the Service's capabilities, limitations, and response times. In addition, they must keep a rigorous record of the procedures and results obtained and, in the case of methodological and statistical support, maintain analytical independence, document any technical modifications or decisions, and agree from the outset whether their contribution will be technical or substantial. Unless SAI staff are listed as co-authors, the SAI assumes no responsibility whatsoever for the subsequent use of the delivered results.

The liSGM will act as the guarantor of the technical excellence of its SAIs, ensuring that staff assigned to the Services constantly update their skills through a continuing education plan. Likewise, the liSGM will ensure the systematic validation of operational methods and protocols, promoting participation in external quality control programs or intercomparisons, when these exist within its scope of activity. This institutional commitment is particularly rigorous for those SAI facilities subject to quality certification or accreditation processes.

SAI staff shall not assume scientific, ethical, or legal responsibilities that fall to the principal investigator, except when such functions have been

formally assigned and accepted. In addition, they must keep a detailed record of the use of support services, including, where appropriate, the procedures and results obtained. In the case of methodological and statistical support, analytical independence will be maintained. Any technical modifications or decisions made must be documented.

Obligations of Researcher-Users

Research users must plan their interaction with the SAI beginning in the project design phase, providing complete information on the experimental design, hypotheses, planned analyses, and any potential risks associated with sample handling. They must comply with the Service's protocols, demonstrate the necessary training for the independent use of complex equipment when required, and agree in advance on the form of acknowledgment based on the contribution of SAI staff, as established in the service agreement. In the case of databases provided by the researcher, it is their responsibility to provide truthful, complete, accurate, and verifiable data. The SAI will notify the researcher of any deficiencies detected (study design, methodological biases, database inconsistencies, etc.) so they can be corrected.

Likewise, they are responsible for collaborating on a shared interpretation of the results, providing the scientific and methodological context of the techniques applied.

Data and Results

The data generated through the Service are the property of the principal investigator, although the SAI may retain copies for purposes of traceability, quality control, and reproducibility of results. The principal investigator (PI) is responsible for data custody. SAI staff may not use this data for other projects without the researcher's explicit consent. The SAI is not responsible for ensuring data custody and preservation, although it is recommended that data be retained for five years after generation, even after the researcher has ended their affiliation with the institution.

Intellectual Property of Developed Methods and Tools

When SAI staff develop methods, protocols, analysis workflows (pipelines), or computational tools as part of a collaboration with a research group, ownership of the intellectual and industrial property rights arising from such developments shall belong to the FIBHGM, unless a specific agreement or contract provides otherwise. In cases where the methodological development constitutes a substantial intellectual contribution, this must be acknowledged through corresponding co-authorship in the resulting publications or registrations. Likewise, the conditions for exploitation or reuse by third parties shall be determined by mutual agreement between the SAI and the research group,

always in strict compliance with the FIBHGM's institutional policies on industrial and intellectual property.

Biological Samples and Materials

Samples deposited in biobanks or collections are governed by their own regulations, which include requirements for informed consent, traceability, and conditions for transfer to third parties. The researcher must use the reagents and materials provided by the Service responsibly, avoiding waste and complying with safety regulations. Before a project is completed, both parties must agree in writing on the disposition of any remaining samples or materials, whether they are to be stored, destroyed, or transferred to a biobank.

Authorship, Acknowledgments, and Conflict of Interest

In accordance with the criteria of the ICMJE and the European Code of Conduct (ALLEA), Service staff may be listed as co-authors when they simultaneously meet the following requirements: having made a substantial contribution to the design, methodology, or interpretation of the data; participating in the drafting or critical review of the manuscript; approving the final version of the text; and assuming responsibility for the portion of the work they performed. The mere technical execution of routine tasks, the maintenance of equipment without intellectual input, or the securing of funding without scientific participation do not justify authorship. When the Service's contribution does not meet the level required for authorship, it must be explicitly acknowledged in the acknowledgments section, mentioning the name of the Service and, where applicable, the person who performed the work.

It is recommended to use the CRediT (Contributor Roles Taxonomy) to document the specific contributions of SAI staff in each publication in a standardized manner, thereby facilitating transparency and fair recognition of all contributions.

Misconduct and Unacceptable Practices

Within the scope of SAIs, unacceptable practices are defined as actions that compromise scientific integrity, the proper functioning of the units, and equity among users.

Unacceptable practices by researcher-users. Misappropriation of results constitutes misconduct, whether by using data generated by the Service without acknowledging the contribution of its staff or by presenting them as one's own without proper attribution. It is also unacceptable to pressure Service staff to manipulate data, omit unfavorable results, or apply inappropriate statistical methods in order to obtain artificial statistical significance. The unauthorized use of equipment, reagents, or facilities without the required training or permits is likewise prohibited, as is

failure to comply with established deadlines for equipment use when this adversely affects other users. It is considered malpractice to request work with deliberately unfeasible deadlines with the aim of justifying the exclusion of the Service from publications or other scientific outputs.

Unacceptable practices by SAI staff. Systematic favoritism toward certain research groups to the detriment of others in the allocation of deadlines, resources, or quality of service also constitutes misconduct; the deliberate delay of projects; making the quality of service provided contingent on acknowledgment of authorship; the use of users' data or results for one's own purposes without explicit authorization; and the use of the SAI to obtain personal financial gain or career advantages for Service staff or affiliated research groups. These behaviors violate the principles of integrity, impartiality, and shared responsibility that must govern the relationship between users and the Services.

BEST PRACTICES IN THE USE OF COMPUTER SYSTEMS

The use of IISGM computer equipment must be limited exclusively to professional activities. It must not be used for personal purposes, nor should documents containing personal data be stored on it without assuming responsibility for their safekeeping and backup. Any modification to the equipment, its connection to external devices, or its removal from the facility requires express authorization. Furthermore, it is essential to report any incident, malfunction, or suggested improvement to the IT manager, especially if it may affect the operation of the healthcare service.

Access to the Internet and corporate email must be used solely for work purposes. Both services may be audited in accordance with current regulations. With regard to personal data, users must only access the information necessary for their work and must always comply with established security measures. All staff are bound by professional confidentiality, and any medium or document containing personal data must be securely destroyed or disposed of. The transfer of data outside the organization requires authorization and appropriate protective measures.

When a security incident occurs, it is essential to report it immediately to your supervisor, detailing what happened and the measures taken. Passwords and user accounts are personal and non-transferable; they must be kept confidential, managed diligently, and any loss or suspected compromise must be reported.

Digital certificates also require strict protection. Users must safeguard their private keys and report any related incidents

to the registration office or certification authority. Likewise, the established rules and safeguards must be followed to ensure the validity of electronic communications.

Corporate email must be used responsibly. It is recommended to avoid using it for non-work-related matters, and it is prohibited to send personal data, health information, or sensitive information outside the institutional network without appropriate encryption mechanisms. To reduce the risk of spam, email addresses should only be shared with trusted entities, and any suspicious messages should be forwarded to the support center for analysis.

All devices must have active antivirus and anti-malware protection systems, which must not be disabled. Any suspected infection must be reported immediately. Software applications must be kept up to date, and installing non-corporate software without authorization is prohibited. Copies of installed software may not be made, and the Security Department may take action against unauthorized programs.

To avoid problems, it is recommended that you lock your computer when you leave your workstation. Paper documents containing personal data must be properly safeguarded while in use and kept under lock and key when not in use, preventing access by unauthorized persons.

RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE IN RESEARCH—ADD CAM REGULATIONS

Artificial intelligence (AI), both in its generative aspect (creation of text, images, audio, or data based on learned patterns) and in its analytical aspect (predictive models, classifiers, and machine learning algorithms applied to data analysis), offers extraordinary opportunities for biomedical research, but it also entails risks that must be rigorously managed. These tools do not possess human cognitive abilities: they process data but do not interpret meaning. Their use in research requires prudence, constant human oversight, and strict adherence to ethical and regulatory principles. Organizations such as UNESCO, the European Commission, and the ACM recommend systematically assessing the risks and impact of these tools prior to their implementation.

The following are considered acceptable uses, provided they are always performed under human supervision and properly disclosed: reviewing and improving the wording and style of manuscripts; the generation of code for data analysis, provided it is verified and validated before use; literature searches and synthesis as a starting point (never as a primary source); the translation of scientific texts; assistance in the creation of figures, diagrams, or graphs; and the use of AI models as tools for

data analysis (classification, prediction, image segmentation, natural language processing) integrated into documented and reproducible research workflows.

The following are considered unacceptable uses: The generation of simulated experimental data presented as real constitutes an unacceptable practice. The complete drafting of manuscripts or substantial sections without critical review or disclosure of AI use. The creation of bibliographic references without individually verifying their existence and accuracy (including so-called “hallucinations,” which consist of fabricating references, data, facts, or plausible but false results, and which represent a specific and serious risk posed by generative AI). The input of patient data, genetic information, medical records, or any other sensitive personal data into external AI platforms without guarantees of regulatory compliance. The use of AI to evaluate third-party manuscripts in peer-review processes without disclosing it, as this compromises both the confidentiality of the manuscript and the integrity of the evaluation process.

Ethical Principles for the Use of AI

Legitimate scientific purpose. AI must be used solely for legitimate scientific purposes, maintaining rigor, integrity, and respect for ethical principles. Although these tools enable the generation of complex content and the automation of analyses, they can also introduce biases, errors, or fabricated content; therefore, they must never justify unacceptable practices such as fabricating or falsifying data or manipulating results. Its use must always be proportionate and limited to cases where it is truly necessary or beneficial for achieving a valid scientific objective.

Regulatory Compliance. The use of AI in research must comply with applicable regional, national, European, and international legislation, as well as ethical codes, technical standards, and institutional policies. Research staff must be aware of their obligations and the potential consequences of failing to meet them. The European Artificial Intelligence Regulation (Regulation (EU) 2024/1689) establishes strict requirements for security, privacy, traceability, and human oversight—particularly for systems classified as high-risk—and mandates documented procedures and risk assessments. The use of AI tools must comply with their licenses, contracts, and disciplinary standards, adhering to principles of honesty, independence, and freedom from bias. In the event of a conflict or harm, responsibility lies with the research staff, who must act with diligence and knowledge.

Human oversight and accountability. AI can produce plausible but incorrect results; therefore, human oversight is essential at every

phases of research. Scientific and ethical responsibility always rests with people, who must carefully verify the generated content, maintain a critical mindset, and understand the difference between human and algorithmic agency. Detailed documentation of the process (data, models, parameters, and validations) is key to ensuring transparency and enabling independent evaluations, especially in light of the replicability issues highlighted by various institutions. This oversight must cover the entire system lifecycle, including error detection, correction, and incident reporting.

Algorithmic bias and equity. AI models, whether generative or analytical, can reproduce and amplify biases related to gender, race, age, socioeconomic status, or other factors present in the training data. In biomedical research, these biases have direct implications for health equity and can lead to erroneous or discriminatory conclusions. Researchers using AI models to analyze clinical or population data must assess the representativeness of the training data, apply techniques for detecting and mitigating biases, and document the model's known limitations regarding the diversity of the study population.

Privacy, confidentiality, and health data. The use of AI poses significant risks to privacy and confidentiality, as many tools store and reuse the data entered, which can violate data protection regulations if the data includes personal or sensitive information. Researchers must avoid entering non-anonymized data or protected results and opt for secure platforms, avoiding beta versions or systems with continuous learning. European guidelines emphasize incorporating privacy by design through techniques such as encryption, filtering, anonymization, and secure environments.

It is expressly prohibited to enter health data, genetic data, medical records, diagnostic images, or any information that could allow for the direct or indirect identification of a patient into AI platforms that are not hosted on infrastructure controlled by the institution or that do not comply with the General Data Protection Regulation (GDPR, Regulation (EU) 2016/679) and Organic Law 3/2018 on the Protection of Personal Data and the Guarantee of Digital Rights. This prohibition extends to publicly accessible commercial generative AI platforms whose terms of use permit the storage, reuse, or training with data entered by users.

Authorship, Substantial Contribution, and Intellectual Property. Scientific authorship requires a substantial intellectual contribution, approval of the final version, and assumption of responsibility for the content. AI cannot be listed as the author of a scientific publication, as it lacks the capacity to assume

responsibility for the generated content. Intellectual property protects original creations from their inception, while industrial property encompasses patents, trademarks, and designs. Generative AI poses additional challenges because its models can be trained on protected works; therefore, tools with authorized content must be used, and their licenses must be reviewed. AI-generated content is not automatically original or attributable as authorship and must be verified and disclosed.

Disclosure of AI Use in Publications. The use of AI tools at any stage of research or manuscript preparation must be explicitly disclosed in the article's methods section, specifying at least: the tool used and its version, the purpose of its use (writing, data analysis, code generation, translation, etc.), the stages of the process in which it was employed, and the extent of subsequent human intervention (review, editing, validation). Additionally, authors must comply with each journal's specific policies on the use of AI, which may impose additional requirements. Failure to include this disclosure will be considered a violation of the principles of transparency and scientific integrity.

Transparency, traceability, reproducibility, and replicability. Transparency requires always declaring the use of AI, specifying tools, stages, and parameters, while traceability requires documenting data, models, prompts, and processing flows to ensure integrity and resolve potential intellectual property disputes. Reproducibility (obtaining the same results with the same data and code) and replicability (achieving consistent results with new data using the same method) are essential in scientific research, but AI makes them difficult due to the opacity of many models and the inherent variability in their operation. Therefore, it is essential to rigorously record model versions, configuration parameters, the prompts used, and the complete processing pipelines.

Cybersecurity. The use of AI tools in research entails security risks that must be properly managed. The main risks for research staff include: the leakage of confidential data or unpublished results through external AI platforms; reliance on cloud services without institutional control over data availability, storage, or processing; and the use of models trained on data whose origin, quality, or license are unknown. To mitigate these risks, researchers must properly configure the tools they use, verify each platform's privacy and data retention policies, protect sensitive data through encryption and secure environments, and prioritize the use of institutional tools.

or validated tools over freely available commercial solutions whose security guarantees have not been verified.

AI in Peer Review. The use of AI tools to evaluate third-party manuscripts in peer-review processes poses significant risks to confidentiality—since the content of the manuscript may be stored on external servers—and to integrity, as scientific evaluation must be based on human expert judgment. Most scientific publishers expressly prohibit or restrict this practice. Consequently, IISGM research staff must not use AI tools to analyze, summarize, or evaluate confidential manuscripts without the explicit authorization of the editor and without disclosing such use. This principle applies in conjunction with the confidentiality rules established in the Peer Review and Evaluation section of this Code.

HANDLING OF COMPLAINTS AND INQUIRIES

The **Scientific Integrity Committee (CIC)** is the body responsible for handling inquiries, questions, or complaints related to research integrity. Its role is to mediate, provide training, and advise research staff, acting as an advisory body whose primary objective is to promote an ethical research environment. When misconduct leads to a labor-related conflict, the procedure will follow a different course, and the protocol for internal conflict resolution or other necessary actions may be activated. Communications addressed to the CIC must be submitted through the IISGM's official channel, and if an in-person consultation is required for an informal and confidential assessment, an appointment must be scheduled via the CIC's email (cic@iisgm.com).

All IISGM research staff and their collaborators are required to report any knowledge of or suspicion regarding misconduct, always acting in good faith. If any party acts in bad faith or obstructs the investigation, the FIBHGM may take appropriate measures; furthermore, when the conflict involves HGUGM staff, the management of Gregorio Marañón Hospital will be informed.

All inquiries or complaints, whether internal or external, will be evaluated by the CIC and addressed provided they fall within its scope of action. Communications must be based on facts and, whenever possible, accompanied by supporting documentation or specific evidence; investigation records may be used as evidence. Complaints may not be anonymous, although inquiries may be made anonymously. In any case, the complainant must provide a reliable communication channel to receive responses or additional requests for information. The CIC will guarantee the confidentiality and

anonymity of the individuals involved until the start of formal mediation or conflict resolution proceedings. To view procedures and further information (<https://www.iisgm.com/el-iisgm/estructura/comisiones/comite-de-integridad-cientifica/>).

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