

ICN2 CODE OF CONDUCT IN RESEARCH

Amended on June 2019

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FOREWORD

The Catalan Institute of Nanoscience and Nanotechnology Foundation (the “ICN2” or the “Institute”) is an independent, non-profit research institution devoted to nanoscience and nanotechnology. Its Patrons are the Generalitat de Catalunya, the Spanish Consejo Superior de Investigaciones Científicas, and the Universitat Autònoma de Barcelona. ICN2 is recognized as one of the institutes belonging to the CERCA Institution, the network of research centres launched by the Catalan Government as a cornerstone of its long-term strategy to foster development of a knowledge-based economy. ICN2’s primary mission is to identify and promote the research and innovation in Nanoscience and Nanotechnology, fostering the close interaction between basic research, applied research and the market, to achieve excellence in this area and become a world center of reference.

The ICN2 Ethics Committee is appointed by the ICN2 Director and formed by four senior researchers and two senior managers. Its mission is to act as a consulting body, providing advice to the ICN2 Director on ethics-related issues at the Institute. The ICN2 Ethics Committee operates in compliance with all applicable rules and regulations, as well as the main European guidelines on codes of conduct and ethics in research, including *The European Code of Conduct for Research Integrity* published by the European Science Foundation in 2011 (revised in 2017).

During the meeting held on 30 November 2015, the ICN2 Ethics Committee decided to create working groups to tackle all areas of the Institute’s activities that needed to be addressed from an ethics perspective, including the research itself. This document is the result of the combined efforts of these working groups.

The ICN2 Code of Conduct in Research (the “Code”) constitutes an exercise in self-regulation, the harmonisation of legal requirements and best practices in light of the mission of our Institute, our stakeholders and the way we organise and operate in order to pursue said mission. Following its approval by our Board of Patrons, the ICN2 Ethics Committee has the responsibility to disseminate said Code and all related information to the ICN2 community, especially those involved in research activities and including support staff, contractors, students and trainees; to respond to enquiries; to arbitrate potential infringements; and to keep its contents up to date.

In November 2018, the CERCA Institution launched a “Code of Conduct”, to be applied in its research institutes, that sets the principles and procedures concerning ethics in research, scientific integrity and good practices in the scientific and managing aspects of its centres. It also created the figure of an “Ombudsperson” that will act in situations where scientific integrity may be under question, or conflicts regarding scientific integrity arise. ICN2 has amended this “Code of Conduct in Research” in March 2019 to adapt it to the CERCA framework.

1. PRINCIPLES OF ETHICAL RESEARCH

The Institute is committed to upholding its responsibility to ensuring that the research conducted by its scientists meets the highest possible ethical standards. This Code provides guidelines on the standards of work and conduct expected of all persons engaged in research at the Institute and sets the bases for a framework that promotes good research practices and creates a culture in which integrity in research can be observed.

The key principles promoted by this Code are:

- **Honesty** in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.
- **Reliability** in ensuring the quality of research, as reflected in its design, methodology, analysis and use of resources.
- **Respect** for colleagues, research participants, society, cultural heritage, ecosystems and the environment.
- **Accountability** for the research from idea to publication; for its management and organisation; for all related training, supervision and mentoring; and for its wider impacts.

In order to foster a research environment that adheres to these principles, the Institute will:

- Promote awareness of all guidelines, applicable rules and regulations relating to the conduct of research.
- Provide documents that clearly set out the policies and procedures based on this Code.
- Actively encourage mutual cooperation, the open exchange of ideas between peers, and respect for freedom of expression and inquiry.
- Maintain a climate in which responsible and ethical behaviour in research is expected.

Researchers must familiarise themselves with this Code and any other complementary ICN2 policies and commit to observing its provisions.

2. GOOD RESEARCH PRACTICES

The basic principles outlined in the foregoing section shall be implemented through the dissemination and implementation of good research practices in the following contexts:

- Research Environment
- Training, Supervision and Mentoring
- Research Procedures (Laboratory practices, Office practices)
- Health and Safety
- Bioresearch (Ethics, Security)
- Data Practices and Management
- Publication and Dissemination
- Review, Evaluation and Editing

2.1 RESEARCH ENVIRONMENT

The ICN2 is committed to promoting awareness and fostering a culture of research integrity. It will do so by establishing policies and procedures on good research practices and addressing instances of non-compliance in an appropriate and transparent manner.

The Institute provides all such support and infrastructure for the management of data and research materials that are necessary for reproducibility, traceability and accountability.

It is committed to ensuring open and reproducible practices in the hiring and promotion of researchers.

2.1.1 Accountability

Researchers are accountable to society, the profession, the Institute and affiliated institutions, their colleagues and students, and their funder(s) for the work they carry out. They must ensure that the research performed is consistent with the terms and conditions defined or negotiated, and must adhere to all prevailing safety practices, ethical considerations, and rules and regulations applicable to their specific line of research, as specified in all applicable legislation, European guidelines on good research practices, this Code and other current and future internal ICN2 policies.

2.1.2 Competence, Integrity and Professionalism

It is the responsibility of every researcher to ensure the accuracy of their results and of the work carried out by their assistants.

Researchers must be honest about their research actions and their responses to the actions of fellow researchers. This applies to a whole range of actions, including experimental design, the generation and analysis of data, results publication and the formal acknowledgement of direct and indirect contributions by their colleagues, collaborators and others.

Researchers must foster and maintain a research environment of intellectual honesty and integrity, and scholarly and scientific rigour. Specifically, researchers must:

- Respect the truths and rights of those affected by their research.
- Manage conflicts of interest such that ambition and personal gain do not compromise ethical or scholarly considerations.
- Adopt the appropriate methods for achieving the aims of each research proposal.
- Follow proper practices for safety and security.
- Cite all awards, degrees and research publications accurately, including, in the case of the latter, their publication status i.e. “under review” or “in press”.
- Promote the adoption of this Code and avoid departures from the responsible conduct of research.
- Conform to the policies adopted by their institutions and funding bodies.

Fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting results, are three forms of research misconduct that are particularly serious, unacceptable and punishable.

- Fabrication refers to making up results and recording them as if they were real.
- Falsification is the manipulation of research materials, equipment or processes, or the act of changing, omitting and/or suppressing data or results without justification.
- Plagiarism refers to the use of other people's work and ideas without giving proper credit to the original source, thereby violating the intellectual property rights of the original author(s).

Comprehensive efforts should be made to prevent and discourage such practices through training, supervision and mentoring, and through the development of a positive and supportive research environment.

2.1.3 Openness and Obligation to Disclose

Researchers have an obligation to inform the Institute of any issues that arise in relation to their research which may compromise or even harm the Institute's interests and/or reputation.

Research methods and results must be open to scrutiny, subject to all confidentiality clauses applicable to personal and/or commercially-protected information.

All research projects must be properly set down in writing, following established protocols, prior to their initiation. For the most part the text of the protocol coincides with that of the written proposal needed to obtain approval and funding. A research protocol must include, as a minimum requirement, the background to the proposal; the specific objectives being pursued; the methods to be used; a work plan, including a predicted timescale; a list of available and necessary resources; and the names of all those participating in the research. Depending on what type of study is being performed, the protocol should also cover ethical and legal considerations, as well as safety provisions. It is also useful to include a plan for the communication of the results of the study.

Under no circumstances should a protocol, or any part thereof, remain secret. This does not preclude access to certain protocols or parts thereof being restricted temporarily for reasons of competition and confidentiality.

The emergence of an unexpected or additional research question will require the preparation of a supplementary written protocol prior to initiating research in that direction. Where the implications of this new research question so require, the protocol should follow established procedures for external authorisation and supervision. This is imperative when the research directly involves human subjects, experimental animals or human embryonic material, and sometimes also in the event of extensions and/alteration to the primary research objectives. When a research project involves the participation of several groups, whether from the same or different centres, the limits and terms of the collaboration must be formalised in writing. Any appendix to the research project should include: the criteria that define the relationships

between the researchers involved and govern the exchange of information during the course of the project; the explicit distribution of the responsibilities, rights and obligations of the participating groups, both in relation to the tasks to be completed and the results obtained; a plan for the presentation and communication of results; procedures for the storage and distribution of data and samples; a preliminary plan for commercial exploitation, where applicable; and a set of provisions relating to funding and conflict resolution.

2.2 TRAINING, SUPERVISION AND MENTORING

The ICN2 ensures that researchers receive training in research design, methodology and analysis.

The ICN2 promotes the development of training in research integrity, ensuring that researchers at all career stages, from junior to the most senior levels, complete training in research integrity.

In order to receive training, all individuals linked to the ICN2 either through a contract or grant must be assigned a supervisor (i.e. a group or division leader). This supervisor defines the objectives and takes responsibility for the training of each supervisee, advising and guiding them to ensure that the proposed training is adequately completed within the allotted timescale. Furthermore, the supervisor must oversee the working conditions of their trainees and ensure that they are the most suitable for the development of an enriching scientific career.

2.2.1 Supervisor Obligations

Researchers and supervisors must ensure that the role model they provide to junior colleagues is positive and conducive to a research culture of excellence, integrity, professionalism and mutual respect.

ICN2 predoctoral and postdoctoral researchers, whether under contract or as external training-focused scholarships, will be assigned a research tutor, without prejudice to the figures of the supervisor and university tutor. This research tutor is responsible for the educational process of the person in training. They advise and guide the trainees to ensure that the training is completed to the required standard. They must also do all they can to prepare the trainee for their future scientific career. The total number of trainees under supervision by a single tutor must be appropriate and consistent with the scope of their obligations and commitments.

Group leaders and their senior colleagues should ensure a research climate of mutual co-operation where all members of a research team are encouraged to develop their skills and where the open exchange of ideas is fostered.

Each group must adopt guidelines for the supervision of research in accordance with the requirements prescribed by the Institute and relevant laws.

The ICN2 will provide induction and other training for all research trainees, ensuring that training starts as early in their research career as possible. This training should cover research

ethics, occupational health and safety, and environmental protection, as well as technical issues related to the particular research area, and other relevant skills, such as the ability to interact with industry and work with diverse communities.

The supervisor should guide the professional development of their research trainees. This involves providing guidance in all matters related to research conduct and overseeing all stages of the research process, including identifying the research objectives and approach, obtaining ethics and other approvals, obtaining funding, conducting the research, and reporting the research outcomes in appropriate forums and media.

Supervision includes oversight of the research outcomes of all trainees. A supervisor must be satisfied that the research methods and outcomes of the researchers and research trainees under their supervision are appropriate and valid.

Researchers and supervisors must ensure that research trainees receive appropriate credit for their work.

A supervisor must decline appointment as a supervisor of a research programme unless they expect to be able to discharge all of the responsibilities set out herein.

The supervisor should be especially diligent in ensuring that research trainees are not involved in tasks outside those prescribed by their training. As a general rule, subject to exceptions based on reasonable justifying circumstances, trainees should not participate in projects with commercial restrictions on the publication of results or that involve delays beyond those associated with procedures necessary for the commercial protection of the results obtained.

The specific obligations of supervisors are as follows:

- To interact personally with the trainees for whom they are responsible on a regular basis in order to supervise the tasks entrusted to the latter and ensure their completion.
- To encourage regular meetings to discuss the progress of tasks assigned and contribute to the scientific and technical development of the trainees.
- To monitor the working conditions of trainees and ensure that the ICN2 provides appropriate health and safety training.
- To ensure that the ICN2 provides trainees with up-to-date information regarding legal requirements affecting scientific activities.

Supervision of research staff training: The supervisor must be directly and actively involved in the research trainee's training process. This process includes all learning necessary for the correct development of the research task, their integration into the team and laboratory life, and fostering the trainee's relationship with the different areas of the Institute. The supervisor should define the objectives and timetable of the assigned research, and advise and guide the trainee to ensure that the proposed training plan is completed within the allotted timeframe. Furthermore, the supervisor must ensure the appropriate training is undertaken by the research trainee.

Research group management: The group or division leader must establish a limit for the number of people under their supervision within their research group and have knowledge of the rights and obligations of research trainees. The supervisor must interact personally and regularly with the research trainee, supervising all assigned tasks and ensuring compliance with good practices in the workplace.

Personal and scientific growth of young researchers: The supervisor must encourage and promote the participation of trainees in discussion forums and scientific meetings, and prepare them for future challenges by, for instance, encouraging their participation in research projects, secondments abroad, courses, summer schools, etc.

Recognition and authorship: The supervisor is to ensure the proper recognition of work performed by researchers in training and be rigorous with the assignation of authors in publications and other forms of results dissemination. In the event of a dispute regarding authorship between several contributors, the supervisor must assign final authorship, justifying their decision based on the involvement of each participant.

Confidentiality: The supervisor must inform the research trainees about any confidentiality issues that may affect a particular line of research.

2.2.2 Research Trainee Obligations

All research trainees must receive training in research ethics in general and on this Code in particular. Said training should be a priority early in their careers. Research trainees must understand that in performing research they are joining an endeavour that requires dedication and accountability.

A research trainee must demonstrate a professional attitude towards research. Frequent sessions with the supervisor are important, requiring the cooperation of both parties. The trainee should not wait until they are approached by their supervisor, but should play an active part in ensuring sufficient meetings are held at the required frequency.

The responsibilities of the research trainee include:

- To become familiar with the Institute's rules that govern their degree, working life at the Institute and all relevant internal policies.
- To complete all induction and training courses as soon as practically possible after starting the research programme.
- To discuss with the supervisor the type of help they consider most useful and keep to an agreed schedule of meetings to ensure regular contact.
- To take the initiative in raising concerns or difficulties and share the responsibility of finding solutions.
- To ensure progress is made in accordance with the stages agreed with the supervisor, including the presentation of any required written material in sufficient time so as to allow for comments and discussion before proceeding to the next stage.
- To discuss their progress against milestones with the supervisor at regular intervals, as well as any obstacles that prevent them from keeping to the agreed timetable.
- To adopt all safe working practices relevant to their field of research and adhere to the ethical practices appropriate to the discipline;

- To accept responsibility for producing the final copies of their thesis, its content and ensuring that it meets the relevant university's requirements, including as regards the presentation format.

Relationship with the Institute: The research trainee must inform the Institute of their employment status at all times, including of any changes that may occur during their time at the Institute. They must provide ICN2 administrative services all required documentation and be sure to keep the information up to date. Moreover, the research trainee shall make good use of the material and financial resources made available under the principles of effectiveness and efficiency. The use of ICN2 resources for private purposes is forbidden. In turn, the Institute will ensure that professionals who carry out their activity meet the legally established requirements and that the Institute has the necessary authorisations for any scientific practice that is subject to specific regulations.

Relationship with senior/group leader: The personal relationship with senior researchers and/or group leaders must be cordial and respectful. The researcher shall adhere to the research project assigned by the group leader. Both the trainee and the group leader should agree to meet when either party so requires, to discuss any issues related to the evolution of the research project, to their relationship with other members of the group or any with the Institute, or to good practices in the course of their work.

Relationship with colleagues: The personal relationship between research colleagues must be cordial and respectful. Any conflict between personnel must be communicated to the group leader, who will act as mediator for conflict resolution. An atmosphere of inclusiveness, transparency and respect for the legitimate right of access to information should be created. Participation in decision-making processes should be encouraged by all stakeholders involved in or concerned by research activities prior to the adoption of the relevant decision by the competent authority.

Assigned work and research activity: Researchers must integrate fully into the project assigned for training and meet the obligations deriving from it, as well as try to achieve the objectives assigned. To do so they must follow the advice and recommendations of their academic tutors and research directors. They must report the progress of their work and report any personal initiatives and potential problems identified during the course of the research work. They must participate in scientific activities, discussion forums or seminars related to the development of their work. The utmost transparency is required when reporting all research activities and the veracity of the results, for which internal communication policies exist.

Precautions: Research activities should be conducted in accordance with the precautionary principle, anticipating potential environmental, health and safety impacts of research outcomes and taking due precautions, proportional to the level of protection, while encouraging progress for the benefit of society and the environment.

2.3 RESEARCH PROCEDURES

Researchers design, perform, analyse and document research in a careful and well considered manner.

Researchers make proper and conscientious use of research funds.

Researchers publish results and interpretations of research in an open, honest, transparent and accurate manner, and respect the confidentiality of data and/or findings when legitimately required to do so.

Researchers report their results in a way that is compatible with the standards of their discipline, and can be verified and reproduced.

2.3.1 Laboratory Practices

Health and Safety: The researcher must comply with the safety measures established by the Health and Safety Department. If the researcher does not know how to proceed in any situation, they must consult with this department in order to follow established protocols.

Respect for Spaces: The researcher must respect the working space of laboratory colleagues and keep their workplace clean and tidy, both in public and individual areas. Common instrumentation, lab material and facilities should be “left as it is found” i.e. ready for use by the next person.

Ideally, all instrumentation should have a person assigned as responsible for ensuring its proper use, for the identification and resolution of any issues, and for helping other users with the basics as and when needed.

In the case of equipment for which it is necessary to book sessions in advance, researchers must respect the timetables as reserved and/or assigned.

Common lab material must be available to all users.

Researchers must be conscious of the costs of experiments, equipment and material. They must commit to making optimum use of the funding and group resources.

Data Interpretation and Plagiarism: The following are considered bad practice: the abusive or tendentious interpretation of data, falsification of data or evidence to generate the appearance of truthfulness, and total or partial plagiarism of the work of others, and others of a similar nature.

Data Collection and Storage: All research projects should provide a system for the collection and storage of the data and other material resulting from the research, as well as a plan for their safekeeping and conservation. This plan should ensure, where required, the confidentiality of the results obtained.

Data Protection: All research protocols involving the use of institutional computer files or the development of databases with information about the research being performed must ensure confidentiality. Researchers are responsible for its storage in secure files not accessible by non-authorised third parties. Internally developed protocols are required to ensure the traceability of access, authorisation and data security.

Secretiveness: It is forbidden to make secret projects out of the assigned research project. Violation of this prohibition constitutes professional malpractice, without prejudice to its legal consequences.

Collaborative Projects: When collaboration is required with different ICN2 groups or groups from other research centres in order to carry out a research project, researchers must adopt necessary precautions to ensure compliance with the relevant requirements and authorisations.

Acknowledgments: The acknowledgment statement of a publication should be precise. All persons or institutions mentioned have the right to decline to be mentioned. All persons and institutions that supported the research or indirectly contribute to the project should be mentioned in deference.

Data Logging and Rectification: All data resulting from experiments or research observations have to be collected, without exception. This information must remain permanently recorded in databases, logbooks or other appropriate format, and be available for review by third parties. These records must also include changes, errors, and negative, unexpected or discordant results, as well as the name of the person who performed or observed the same.

Conservation of Data Collected: To ensure suitable conservation, proper custody and preservation should be made of the different documentation and resulting materials. In the case of data recorded electronically, the Institute's IT Department will provide a specific plan for the backup and storage of these records.

Custody of and Access to Data Collected: All persons who are part of the research team should have access to the data and their interpretation. The person responsible for the research must have a single record of all the data and custody of samples, which must be accessible to third parties. The transfer of personal data to third parties shall be governed by local and international rules and regulations.

Authorship: Editing reports, working papers, technical reports or any other document addressed to third parties should always include the sequence of authors of the investigation or inquiry, centre or centres, and any grants received. The same applies for scientific publications and patents. To fully meet the criteria of authorship of a publication or patent, the following must be met:

- To have contributed substantially to the creative process, i.e. conception or design, or to the analysis and interpretation of data.
- To have contributed to the preparation of any correspondence, releases, reports or resulting publications.
- To have participated in obtaining the necessary data to support the conclusions of the published work.
- Authors must accept the final draft of the original manuscripts that are processed for registration or publication.

Sustainability: Research activities should be safe, ethical and contribute to sustainable development in line with the sustainability objectives of the Institute. The principles of energy efficiency, cost reduction, ecology, recyclability and responsible use of resources (reduce, reuse and recycle) should be upheld at all times.

2.3.2 Office Practice

Energy Use:

- Use energy-efficient equipment.
- Turn off computers during periods of prolonged inactivity.
- Use sleep mode when you stop working at the computer temporarily.
- Unplug electronic devices that are not in use.
- Use printers with energy saving systems, print in grayscale and double sided to minimise ink and paper consumption.
- Perform preventive maintenance of equipment to ensure proper operation and a minimum consumption of materials.
- Ensure continuous air renewal. Make proper use of the heating and cooling systems to keep temperature constant between reasonable values.

- Switch off the lights when no one is in the room.
- Inform maintenance staff about the possibility of reducing energy use.
- Use natural light and remove barriers preventing the entry of natural light.
- Generate awareness among newcomers about the guidelines on energy use.

Clean and Tidy Office: It is considered a good practice to keep all workspaces clean and tidy, whether shared or otherwise. Besides aiding focus, you will be adhering to basic safety rules.

Respect for Materials: Tables, chairs, whiteboards and any other furniture and/or elements such as computers, screens, etc. provided to the researcher must be looked after and used appropriately.

Sharing Spaces: It is especially important to take into account the “Clean and Tidy Office” guideline when the space is shared by many people. Out of respect for others, eating, drinking, excessive noise and odours, as well as any element that can be reasonably deemed offensive should be avoided in common spaces.

Sustainable use of resources: Common resources, such as office material and common lab material are to be used sensibly. A responsible use of resources is expected from users. As far as possible, the ICN2 will monitor the acquisition and use of common resources across different labs in order to reduce waste, cost and avoid duplication of resources.

2.3.3 Environmentally Friendly Research

Waste management can be made more efficient by choosing technologies and strategies which minimise the use of resources and the associated risks. The goal is to manage waste in such a way that unwanted effects are kept at a level that is acceptable both ethically and in terms of safety.

Consideration of this leads to a set of principles to be used as a guide in making ethical choices about waste management:

- The risks of waste management should be considered when undertaking new projects.
- Those who generate waste should take responsibility and provide the resources for the management of these waste materials in a way which will not impose undue burdens on future generations.
- Waste should be managed in a way that ensures an acceptable level of protection for human health and the environment and affords future generations at least the minimum level of safety deemed acceptable today. There is no ethical basis for discounting future health and environmental risks.
- Waste management strategy should not be based on the assumption of a stable Institute into the future, nor on an assumption of technological progress. Rather it should deal with waste in the present.

The best strategy for managing laboratory waste is to maximise safety and minimise environmental impact. It considers these objectives right from the time of purchase. The primary principle governing the prudent handling of laboratory waste is that *no activity should begin unless a plan for the disposal of non-hazardous and hazardous waste has been instated by the Institute.*

Clearly, the best approach to laboratory waste is to prevent it being generated in the first place. Examples include reducing the scale of laboratory operations, reducing the formation of waste during laboratory operations, and substituting non-hazardous or less hazardous chemicals in chemical procedures.

It is advisable to reuse unwanted material, redistribute surplus chemicals and reduce hazards. Practices that implement this strategy include purchasing only what is needed, keeping chemical inventories to prevent the purchase of duplicates, and reuse excess materials.

If waste cannot be prevented or minimised, then recycling chemicals that can be recovered safely from waste should be considered, as well as the potential for recovering energy from waste.

The Institute may choose to handle some or all responsibilities using in-house personnel, or contract professional waste management companies.

Among these responsibilities are:

- Inspection of waste containers to ensure complete and legal labelling, and container dating when required.
- Adequate management of waste accumulation areas for safety, security, aisle width, and separation of incompatible substances.
- Inspection of waste containers to ensure that they are always closed and in good condition, including repackaging of leaking containers.
- Preparation and updating of waste management and contingency plans.
- Sampling and characterisation of routine wastes.
- Sampling and characterisation of “unusual” or new wastes.
- Preparation of transportation documents.
- Identification of disposal sites.
- Performance of periodic waste management audits to ensure compliance with regulations.

Regarding waste management, the Institute must ensure proper identification of waste, segregation at the source of generation, collection in prescribed coloured containers, safe transportation, appropriate treatment and environmentally-sound disposal. Training will also be provided to all those working in lab facilities.

The ICN2 ensures that projects will comply with regulatory and legal requirements, and will endeavour to go beyond them through the application of the best available, economically viable methodologies, technologies and procedures for researchers. Sustainability measures must be implemented at the earliest possible stage in the process, in line with all applicable standards.

Our starting point is the principle of continuous improvement and taking practical action. One of our main priorities is to incorporate into our strategies and processes appropriate care for the environment and the conservation of natural resources; improvement of working conditions; the exchange of knowhow; the ongoing training of our scientific staff; the use of the best technologies; a readiness to take part in dialogue; and the involvement of all researchers in the decisions that are of relevance to them.

2.4 HEALTH AND SAFETY

The ICN2 is committed to establishing an occupational health and safety risk management process that is proportionate and evidence-informed, where resources and effort are determined by the nature and scale of the Institute's workplace activities.

We strongly encourage all leaders at all levels within our workplace (research groups) to demonstrate, through their actions, their commitment to occupational health and safety.

The ICN2 must provide a clear statement on occupational health and safety and delegate related accountabilities and responsibilities to personnel, as well as provide adequate resources and a responsible financial budget for the function.

We integrate compliance requirements with relevant health and safety legislation and the Institute's policies and procedures.

Measurable objectives and targets for health and safety are established, such as the OHS Goals of the Institute, ensuring continuous improvement aimed at eliminating work-related illness and injury as far as is reasonably practicable.

The Institute provides appropriate health and safety training and information to our staff, and ensures that hazards and incidents are promptly reported and investigated, and that control measures implemented to eliminate or minimise the risk of recurrence.

There is a regular review of the Institute's occupational health and safety management system and effective monitoring of its implementation.

Laboratory staff also has specific responsibilities to oversee the implementation of effective risk management and to ensure that safe working procedures are clearly understood. They must also ensure that workplace facilities and conditions are maintained to a high standard, that hazardous substances are stored and handled safely, and that all equipment in use is in safe working order.

All staff, students, visitors, contractors and volunteers have a duty of care for their personal welfare and the welfare of their colleagues. To meet this commitment, each person must follow safe working practices at all times, and take all reasonable care to prevent personal injury, injury to others, or damage to equipment.

2.5 BIO-RESEARCH: BIOETHICS AND BIOSECURITY

The ICN2 has a set of biosecurity guidelines designed to protect lab personnel from potential exposure to infectious agents, and to prevent the release of agents harmful to plants or animals. In line with such guidelines, the ICN2 will develop a Biosecurity Programme that includes a number of components, such as determining laboratory containment requirements (physical and operational controls); medical surveillance (including immunisation where appropriate); classroom and online training; and compliance with regulatory requirements for importing and shipping biological agents.

All members of the Institute carrying out any of the foregoing procedures shall have prior training, relevant experience and authority.

All projects dealing with biomaterials are subject to formal ethical review. If the protocol directly involves humans, experimental animals, or human embryonic material, the text must have been independently assessed by an ethics committee on clinical research and/or animal experimentation. The supervising authority for the ICN2 on these issues is the Ethics Committee on Animal and Human Experimentation of the Autonomous University of Barcelona (*Comissió d'Ètica en Experimentació Animal i Humana –CEEAH, de la Universitat Autònoma de Barcelona -UAB*).

2.5.1 Biosecurity

Overall control of the programme shall be supervised by the designated BIO-LAB manager and the Maintenance and Safety Department, with administrative and technical support provided by the UAB Biosecurity Committee. They will review, assess and provide advice on research protocols, bio research areas in the ICN2 building in already existing Biosecurity Level 1 (BS-L1) and the forthcoming Biosecurity Level 2 (BS-L2) labs when the newly funded BIO-LAB is in full activity. They will also help in the process of obtaining BS-L2 certification for the new BIO-LAB, in coordination with the facilities management team.

Purchase orders including biomaterials will have to be strictly documented, including mention of applicable protocols, and will be screened by the Maintenance and Safety Department and the assigned BIO-LAB staff. These orders will need a period of 15-20 days for assessment (especially new materials) in case of BS-L1 and up to 40 days in case of BS-L2 for certification purposes. Previously-assessed material orders will be quickly reviewed.

BS-L2 lab projection, documentation for government activities certification/approval, rules of use and access protocols are already being developed, while being discussed with the UAB Biosecurity Committee. A meeting with the committee will be set soon to establish set recommendations for the BS-L1 laboratories already up-and-running, which will be forwarded to the group leaders for review as needed to ensure the excellence of ICN2 biosafety and bioethics policies.

Any biological sample entering the ICN2 must be known about by the Safety and Maintenance Department and the BIO-LAB manager. Two such entry points have been identified:

- Samples received from an external institution collaborating with a research group or division.
- Samples commercially available and ordered directly by a research group or division.

The research groups and divisions have a responsibility to inform the assigned BIO-LAB manager and the Maintenance and Safety Department of any expected entry of biological samples into the ICN2. In the case of new samples of new working protocols this should be done a minimum of 45 days in advance. The information provided should include the type of biological sample, its origin (institution, company, etc.) and the intended protocol to be performed on it during experimentation. Any sample of human, animal or vegetal origin received from an external institution must also be certified by the sender as fulfilling EU

bioethical standards and as being acquired from the source following the protocols recommended by the ethical committee of that institution.

It would also be recommendable to have a tick box in the order forms specifically for biological products in order to block any purchase not previously authorised by the Maintenance and Safety Department and the assigned BIO-LAB staff. All potential purchases with the biosample sign should be informed to the Maintenance and Safety Department and the assigned BIO-LAB staff before being executed.

A list of authorised biological samples will be kept and updated upon entry to cold storage facilities. Any biological sample that arrives at the ICN2 that has not been authorised will be destroyed upon receipt and communicated to the research group or division leader.

Specific training actions will be implemented regularly and in response to particular needs to make sure all researchers and technicians working in bio-research are properly trained and have adequate tools and resources to carry out their tasks in a BS-L1 or BS-L2 environment. BS-L2 users will be authorised by the BIO-LAB managing staff after training and examination. The performance and adherence to good practices of all BS-L2 users will be monitored.

Upon hiring, a technician working in the BIO-LAB will be in charge of overseeing all procedures carried out at the lab. This person will also implement experimentation and supervise other users.

All researchers involved in bio-research will be informed accordingly.

2.5.2 Bioethics

ICN2 bio research does not foresee producing bio samples, but we will make sure that collaborators providing samples comply with all the ethical regulations regarding human, animal and plant samples.

Research projects will include all the relevant ethics information related to the specific research proposed. An official certificate will be issued by the Biosecurity Committee of the UAB for all previously certified facilities.

Through controlled use of its specific BS-L2 facilities, the ICN2 will guarantee ethical methodology concerning provision of appropriate biosafety and biocontainment facilities and protocols. The strict control of certification will allow researchers to guarantee the availability of BS-L2 facilities to carry out experiments up to this biosecurity level and, if needed, to any particular specific biological sample that has been certified after previous submission, together with an intended protocol of use, to the facilities managing staff and the safety department. The security level certification of the facilities can be important in the submission of Horizon 2020 projects and is also expected to be mandatory in the near future when applying for national projects or grants.

Regarding bio-waste management, the Institute must ensure proper identification, segregation at the source of generation, collection in prescribed coloured containers, safe transportation, appropriate treatment and environmentally sound disposal of biowaste. Training will also be provided to all people involved in the Bio-Lab facilities.

The ICN2 ensures that projects will comply with regulatory and legal requirements and endeavour to go beyond them by applying the best available, economically viable methodologies, technologies and procedures for researchers. Sustainability issues need to be considered at the earliest possible stage, following all applicable standards and applying efficient and sustainable solutions.

By applying the principle of continuous improvement and taking practical action, it is one of our main concerns to incorporate into our strategies and processes care of the environment and the conservation of natural resources, improvement of working conditions, the exchange of know-how and continuing training of our scientific staff, the use of the best technologies, a readiness to take part in dialogue and the involvement of all researchers in the decisions that are of relevance to them.

2.6 DATA PRACTICES AND MANAGEMENT

Data can be defined as measurements, observations, or any other primary products of research activity, such as protocols, algorithms (incl. computer codes), biological, chemical or physical materials. The integrity of research depends on the integrity of data collection, analysis, use, storage, sharing and all other aspects of data management.

Without exception, all data arising from experiments or research observations must be recorded. That information must remain stored in databases, registered notebooks or other appropriate format, in a condition that facilitates external review.

The central aim is that sufficient materials and data are retained to justify the outcomes of the research and to defend them if they are challenged. The potential value of the material for further research should also be considered, particularly where the research would be difficult or impossible to repeat. The Institute requires that lab-based data be retained in indexed lab books and, where appropriate, supervisors should regularly review and sign off said notebooks to signify records are complete and accurate.

The researcher must decide which data and materials should be retained, although in some cases this is determined by law, the funding agency, publisher or by convention in the discipline. Research records should be sufficient to reconstruct the work carried out, both for the purposes of future research and to verify that the work had been done as described in publications. The records must also include changes; errors; any negative, unexpected, or conflicting results; as well as an indication of the person who performed the experiment or made the observation, the date, and where the research products can be found.

All research protocols must include a description of the collection of data arising from the research, along with a plan relating to their custody and storage. The necessary means and infrastructure must be provided for correct storage and safekeeping of all data (and its related documentation) resulting from a research project. In the case of data recorded on electronic media, a specific plan will be included for the preparation and physical storage of backup copies.

2.6.1 Data Ownership

All primary documentation (registered data collection notebooks, databases, etc.) and any biological or chemical material obtained during the course of a research project is the property of the centre to which the person responsible for the research is affiliated. Recording, storage and safekeeping of that material are the responsibility of the individual responsible for the project. Should a researcher change institutions, the individual responsible for the project will be able to provide the researcher a photocopy of part or all of the records, a copy of the existing electronic information, a photocopy of the data-collection notebooks, or aliquots of available biological or chemical materials, provided such sharing is necessary. When the change involves the person responsible for the research, the director of the centre will take responsibility for supervising this process.

All individuals who belong to the research group must be able to access information on the data obtained and their interpretation. The individual responsible for the research will have a single record of the locations of all the different data collection instruments (registered notebooks, databases, etc.) and samples that must be accessible to third parties.

Data and materials arising from a research project must be publicly available and in a condition to be shared with third parties, except in cases where restrictions have been established on the basis of possible future commercial use, or risk of compromising the confidentiality of human subjects. For data or materials to be provided, the person requesting them will need to communicate the intended use of the same. The research group will also need to be aware of the request; there must be a material or data transfer agreement with the approval of the individual responsible for the research; and the person making the request must be willing to pay all reproduction and shipping costs incurred. Sharing may be restricted for reasons of availability, competition or confidentiality. Material or data obtained from human subjects must be shared in such a way that the subjects cannot be identified; if identification of individual subjects is possible, those individuals must first consent.

2.6.2 Obligations of the Researcher

To achieve the aims of this policy, researchers must:

- Keep clear and accurate records of the research methods and data sources, including any approvals granted, during and after the research process.
- Ensure that research data and primary materials are kept in safe and secure storage provided, even when not in current use.
- Provide the same level of care and protection to primary research records, such as laboratory notebooks, as to the analysed research data.
- Retain research data, including electronic data, in a durable, indexed and retrievable form.
- Maintain a catalogue of research data in an accessible form.
- Manage research data and primary materials according to ethical protocols and relevant legislation.

2.6.3 Periods of Retention

All original primary and secondary data arising from a research project must be retained intact in paper or electronic format as appropriate and stored in a secure and accessible form for a substantial period of time (at least 5 and preferably 10 years). Where funders or professional bodies have specific regulations with regard to the period of data retention or with regards to where you should place/publish data (e.g. specific archives), these regulations should prevail.

2.6.4 Confidentiality of Data and Results

Researchers, producers and/or users given access to confidential information must maintain that confidentiality. Confidential information must be used only in ways agreed with those who provided it. Particular care must be exercised when confidential data are made available for discussion.

The ICN2 has a policy on the ownership of and access to databases and archives that is consistent with confidentiality requirements, legislation, privacy rules and other guidelines.

The communication processes must ensure that researchers are informed of relevant confidentiality agreements and restrictions on the use of research data.

Computing systems are secure, and IT personnel understand and fulfil their responsibilities regarding network security and ICN2 system access control.

All ICN2 researchers and personnel holding primary material, including electronic material, must understand their responsibilities for security and access.

2.6.5 Storage and Disposal of Data and Materials

The ICN2 provides facilities for the safe and secure storage of research data and for maintaining records of where research data are stored.

Agreements covering ownership and storage of research data should be in place and reviewed whenever there is exchange and/or departure of research staff.

Wherever possible and appropriate, research data must be stored in the researcher's department or other appropriate ICN2 repository, although researchers may be permitted to hold copies of the research data for their own use. Arrangements for material held in other locations should be documented.

In projects that span several institutions, a consortium or collaboration agreement has to be set up which will cover, among other issues, the storage of research data, results and primary materials within each institution.

2.6.6 Transfer / Taking of Data Outside the Institute

Data and research results belong to the Institute. Researchers leaving the Institute who wish to retain data/copies of data for personal use must obtain written permission prior to leaving the ICN2 from the ICN2 Director. The destination of the information, samples or material for any purpose other than the initial project will always require the approval of the person responsible for the investigation and enforcement of the rules on informed consent.

Personal data must not be transferred outside the European Economic Area. An exceptional transfer can only be made where there is adequate protection for the rights and freedoms of individuals in relation to the possession of information about them.

2.6.7 Ownership of Research Data and Materials

The ICN2 has a policy in relation to the ownership of research materials and data during and after a research project is completed. Ownership may also be ruled by the funding arrangements of the project. As a general rule, the most satisfactory arrangement will be that the materials and data retained at the end of a project are the property of the institution that hosted the project or a central repository controlled by the project coordinator or consortium.

2.6.8 Collaborations with Private Entities

In order to develop a project promoted and funded by a private company, a Research and Development (R&D) Agreement will be set up between the ICN2 and said company. This agreement will rule and manage all the issues related to the project: place and date, the signing parties, identification of the legal representatives, project purpose and objectives, project terms and termination, reporting, researchers responsible, financial compensation and terms of payment, transfer of material, confidentiality, IP rights on results, use and exploitation rights, dissemination and publication, liability, subcontracting, warranties, governing law and jurisdiction, labour risk protection, and any other necessary issue and interest of the parties.

When knowledge and technology is exchanged or provided to private entities, public interests must always take priority and therefore complete transparency must be maintained in all agreements. In addition, the ICN2 establishes the necessary limits to protect the intellectual property of their researchers and avoid unjustified publication restrictions on the results obtained.

When a research group offers a technical service or researchers participate exclusively in the collection of data as part of a protocol developed by a third party, the conditions for communication and publication of the results obtained will be established by mutual agreement with the promoting entity.

2.6.9 Obligations of Researchers in Collaborative Projects

Researchers involved in joint research projects must be aware of and abide by all policies and written agreements related to the project, particularly those related to the dissemination of research results and the management of research data and primary materials.

When a research collaboration agreement is established, researchers must inform any actual or eventual conflicts of interest related to any aspect of the project as soon as possible and necessarily before the start date of the project.

2.7 PUBLICATION AND DISSEMINATION

Publication-related conduct: Researchers should publish the results and interpretations of their research in an open, honest, transparent and accurate manner. Researchers should strive to ensure the earliest possible publication of the results of their research, unless commercial or intellectual property considerations (e.g. patent application) justify delay.

Publication of these results (or substantial parts of the same) in different journals is acceptable only with the consent of the editors of the journals and where proper reference is made to the first publication. In the author's CV, such related articles must be mentioned as one item.

Financial or other types of support for the research and its publication should be properly mentioned and acknowledged.

2.7.1 Authorship

Authorship should only be assigned in the event of a creative and significant contribution to the research (i.e. contribution to the design, data collection, data analysis and/or reporting, and not for general supervision of a research group or editing of text). Guest authorship (i.e. listing authors who do not qualify) or ghost authorship (i.e. omitting individuals who meet authorship criteria) are not acceptable.

Before submitting a manuscript, report, conference communication or any other form of collective work for publication or dissemination, all the researchers included in the list of authors must agree that the list includes all and only those authors who have contributed significantly to the work (as described in Section 2.3.1. and following common practice in the scientific community). It is the responsibility of the submitting author to obtain the agreement and permission, in writing or in electronic form, from all the co-authors to submit the work, prior to such submission.

All authors are fully responsible for the content of the publication, unless it is specified they are responsible only for a specific part of the study and publication. In collaborative research, the sequence of authors should be agreed by all authors, ideally at the start of the project or the initiation of the article/monograph and may follow national and/or disciplinary codes. The criteria for deciding the order of authors should be agreed at the start of the project or writing. The work and contribution of collaborators and assistants should be acknowledged if appropriate, with their permission.

All authors should declare any relevant conflict of interest, which may be financial, commercial, personal, academic or political.

Important work and intellectual contributions of others that have influenced the reported research should be appropriately acknowledged. Related work should be correctly cited. References should be restricted to (paper or electronically) printed publications and publications 'in print'.

2.7.2 Dissemination

In communication with the general public and in popular media the same standards of honesty and accuracy should be maintained; any attempt to exaggerate the importance and practical applicability of the findings should be resisted.

2.8 REVIEWING, EVALUATING AND EDITING

Peer review is understood as all requests to an individual in their position as expert or similar status to undertake a specific assessment, examination or evaluation of a manuscript submitted for publication, an individual or group grant proposal, a clinical or experimental protocol subject to assessment by an ethics committee, or a report arising from an on-site visit to a laboratory or centre.

The term 'peer review' is used here to describe impartial and independent assessment of research by others working in the same or a related field. Peer review has a number of important roles in research and research management, in the assessment of grant applications, in selecting material for publication, in the review of performance of researchers and teams, and in the selection of staff.

Participation in peer review processes should be encouraged. Peer review provides expert scrutiny of a project, and helps to maintain high standards and encourage accurate, thorough and credible research reporting.

Peer review may also draw attention to deviations from the principles of this Code, such as double publication, errors and misleading statements. Peer review has been important in the detection of fabrication and fraud in research. However, on its own, it cannot ensure research integrity.

The results of scientific research must always be subject to peer scrutiny. Thus, publication of results in journals or other media that apply a process of peer review is an essential part of the research protocol.

It is important that participants in peer review:

- are fair and timely in their review,
- act in confidence and do not disclose the content or outcome of any process in which they are involved,
- declare all conflicts of interest, do not permit personal prejudice to influence the peer review process, and do not introduce considerations that are not relevant to the review criteria,
- do not take undue or calculated advantage of knowledge obtained during the peer review process,
- ensure that they are informed about, and comply with, the criteria to be applied,
- do not agree to participate in peer review outside their area of expertise,
- give proper consideration to research that challenges or changes accepted ways of thinking.

2.8.1 Conflict of Interest

Peer reviewers must declare all relevant conflicts of interest.

Reviews must be objective and based on scientific criteria rather than personal opinion. Reviews should be declined in the event of a conflict of interest—for instance, when there is a direct relationship between the author(s) and the reviewer or when the reviewer is in direct competition with the authors—or if the invited reviewer does not consider that he or she is sufficiently prepared to perform the review.

Use and fate of documentation submitted for assessment:

Reports and written documents that are subject to review are always confidential and represent privileged information. As a consequence, such documentation a) may not be used for the benefit of the reviewer until the information has been published; b) may not be shared with other colleagues except in specific circumstances or with the explicit permission of the editor or research organisation; and c) may not be retained or copied except where this is allowed by those responsible for the editorial process or the research organisation for whom the review is requested. Common practice is to destroy or return the material once the review process is completed.

Responsibilities of researchers:

Researchers whose work is undergoing peer review must not seek to influence the process or outcomes or otherwise interfere in the peer review process.

Researchers in receipt of public funding have a responsibility to participate in peer review processes.

Supervising researchers have a responsibility to mentor and assist trainee researchers in developing the necessary skills for peer review and understanding their obligation to participate.

Conflicts of interest in general terms:

A conflict arises when a person's judgement concerning a primary interest, such as scientific knowledge, could be unduly influenced by a secondary interest, such as financial gain. As much attention should be paid to perceived and potential conflicts as to actual conflicts. Researchers are expected to fully disclose conflicts relating to financial matters in accordance with the Institute regulations and must adhere to the Institute's policy regarding additional consultancy work.

Conflicts of interest which fall outside these regulations, but which could have actual or perceived bearing on the research, must be disclosed and discussed with colleagues in the first instance and then to the ICN2 Director as soon as possible and a researcher must comply with direction made, in consultation with the relevant group leader, to manage identified conflicts.

Obligation to disclose:

Researchers frequently have a conflict of interest that cannot be avoided. Decision-making processes in research often need expert advice, and the pool of experts in a field can be so small that all the experts have some link with the matter under decision.

An individual researcher should therefore expect to be conflicted from time to time, and be ready to acknowledge the conflict and make disclosures as appropriate.

It is Institute policy that all perceived and real conflicts of interest should be promptly disclosed in writing to the appropriate supervisor or senior manager.

While there is no requirement to disclose the details of a conflict of interest, for example, because of a confidentiality agreement or for personal reasons, the existence of the conflict must be declared, followed by withdrawal from the situation.

Managing conflicts of interest:

Researchers should use the following approach to manage conflicts of interest:

- read and understand the policy of the Institute,
- maintain records of activities that may lead to conflicts, for example: consultancies; membership of committees, boards of directors, advisory groups, or selection committees; and financial delegation or in receipt of cash, services or equipment from outside bodies to support research activities,
- when invited to join a committee or equivalent, review current activities for actual or apparent conflicts and bring possible conflicts of interest to the attention of those running the process,
- disclose any actual or apparent conflict of interest as soon as it becomes apparent.

2.8.2 Dual Use of Research Results

Researchers aware of possible fraudulent or malicious use of research results must inform the ICN2 Ethics Committee as well as the project's funding authorities accordingly.

Defence and/or security-oriented research, or research financed by defence and/or security agencies, is not barred at ICN2, but will be subject to scrutiny and ethical review. Any plan for such activity must be reported in advance (prior to submitting the proposal to the funding agency) to the Ethics Committee for its review. The information must include

- the goals/objectives of the research called for as in the call document (with hyperlink)
- the objective of the research proposal, including the target defence and/or security applications
- its TRL level (or any other measure of the degree of fundamental character or technological maturity of the activities)
- the name of the funding agency, company or institution
- provisions regarding public open access of the research results (can and/or will the research results be published or not)
- ownership of the IP generated and possibilities of commercialisation for non-defence related applications
- any other information of relevance for the ethical assessment of the project.

Considering this information, the Ethics Committee will produce a recommendation to the Director of ICN2, who will decide on the authorisation of the activities. The Director will inform of the contents of the research activities to the Board of Trustees, in advance of their initiation.

3. VIOLATIONS OF THIS CODE

All ICN2 personnel involved in research must be trained to identify and provide objective, detailed and accurate account of any sort of alleged Code violation. They also have the responsibility to notify alleged Code violations to the ICN2 Ethics Committee (ethics@icn2.cat) through a written, objective and detailed statement. The ICN2 Ethics Committee will ensure that no person suffers any penalty for any notice, account, allegation or appeal made as long as they are made in good faith. On the contrary, action will be taken against persons acting in bad faith towards other individuals or groups.

Upon receipt of an alleged Code violation notice, the ICN2 Ethics Committee will inform the ICN2 Director as soon as possible, stating the nature of the alleged violation, persons allegedly involved, and any possible conflict of interest of any of the Ethics Committee members (or any other person that might participate in the inquire process) in investigating and solving the alleged breach.

In accordance with the Code of Conduct of CERCA Institution, the ICN2 Director shall inform the CERCA Institution and the CERCA Ombudsperson of those cases of suspected material breach of scientific integrity that are of sufficient relevance, as soon as they arise. The communication with CERCA and its Ombudsperson will follow the strictest principles of confidentiality and respect for the persons allegedly involved. Such material cases of sufficient importance may include those concerning the revision or retraction of published articles, those that may lead to disciplinary measures, and those that may involve the Direction, the Management or the members of the Ethics Committee of ICN2. In such cases, the CERCA Ombudsperson will propose non-binding solutions that must be discussed and eventually approved by the Board of Trustees of ICN2. The CERCA Institute and the Ombudsperson may also act ex officio. The Ombudsperson may set up ad hoc consultative committees and ask for advice and coordination from the Government of Catalonia's body responsible for resolving issues of scientific integrity.

If the ICN2 Director considers that the case is not of sufficient relevance to submit it to the CERCA Institution and/or its Ombudsperson, and that the ICN2 Ethics Committee can investigate the alleged violation without the occurrence of any conflict of interest or any other situation that may compromise its impartiality and objectivity, the Committee will start an investigation process, ensuring objectivity, accuracy, fairness and confidentiality until the case is successfully resolved. Involvement of CERCA and/or its Ombudsperson can be decided by ICN2's Director at any point of the process, if considered necessary

In the inquiry process, the Ethics Committee will make sure that the person(s) accused of allegedly violating the Code is (are) informed accordingly and given the opportunity to present allegations in writing. All parties involved will have the same opportunities to present their arguments to the ICN2 Ethics Committee, who will mediate and try to redirect the situation in a positive and ethical manner, making sure any type of research misconduct is completely discontinued. Likewise, any conflict of interest that may arise in this process will have to be disclosed and managed to avoid biased conclusions.

Case records will be confidentially and thoroughly filed for transparency reasons as well as for historical reasons, where previous cases will enable consistency and fairness in the treatment of subsequent ones.

Where the violation involves law infringement, the ICN2 Ethics Committee does not have the material capacity to resolve the case in a positive and ethical manner, or upon the decision of the ICN2 Director, besides resorting to the CERCA Institution and its Ombudsperson, external lawyers or other adequate professionals may be hired for further instruction of the case. The ICN2 Ethics Committee's conclusions shall be communicated to the ICN2 Director and to the parties involved, with the opportunity for appeal. Upon review of such conclusions and (if applicable) appeal, the ICN2 Director shall determine the proportionate actions to be implemented, which will be proposed for approval of the Board of Patrons of ICN2

4. CODE REVISION PROCESS

This Code is a living document that will be reviewed by the ICN2 Ethics Committee regularly and revised if necessary to take account of evolving concerns of the Institute's stakeholders, legal requirements and best practices.