Scientific ethics and integrity at ULg:
Preventative aspects aiming to guarantee scientific integrity
Procedure to be followed if scientific integrity has been violated
Constitution of the Board for Ethics and Scientific Integrity
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Foreword

The University of Liège promotes high quality research conducted by responsible researchers. It is incumbent upon everyone involved to understand, comply with, promote and encourage recognised ethical practices and fundamental ethical principles to be implemented in various research disciplines, as well as the ethical standards supported by the various national, sectoral and institutional codes of ethics (European Charter for Researchers, Principle 2). While developing its human resources management strategy for research, which is recognised by the European Union, the University wishes to reaffirm and strengthen the good practice guarantee upheld by its researchers in terms of scientific ethics and integrity, by offering them training and supervision which is built into and respects their work, resulting in a relationship of trust and harmony.

The University applies quality control procedures to its research through specific projects, but also through its participation in local or broader working groups. It trains its young researchers, particularly doctoral students, in this analytical process, and provides them with the tools required to implement it. Two significant examples are the laboratory log book and the FELASA legal training in laboratory animal sciences for anyone involved in animal experimentation, regardless of their position.

Consideration and adoption of a position in relation to ethical questions, in both the exact and social sciences occupies a central place in most projects. This is a European requirement. By means of example, innovatively, in 2009 the University created an interfaculty position specifically devoted to teaching about ethics and experimental in vivo research methods. Specific seminars are already offered to candidates for the University Certificate in Doctoral Project Preparation, as well as to doctoral students. This will consist of increasing the number of researchers taking part and systematically offer this training. Among others, the University asks post-doctoral students working outside their own country ethical questions relating to their research projects and ensures that these are monitored (CO-FUND BEIPD project, 2013-2018).

Scientific fraud threatens trust in science and, as a result, in scientific literature. The increase
in competitiveness in global scientific research and the increasing pressure placed on researchers to obtain results and funds, makes it necessary to establish standards relating to the honesty of research work and procedures to deal with claims in the event that fraud is suspected.

The University therefore needs to equip itself with rules on scientific ethics and integrity, to ensure these are understood and to establish a procedure in the event that they are violated. In particular, the University must apply the procedure developed by the French-speaking universities in Belgium (22/11/2007), by adapting it to its own context.

1. **Generalities**

Scientific research often involves the passionate pursuit of an idea. It does not exclude error, but requires a perfectly calm and critical analysis of data and the results obtained. It is the fruit of collaboration and exchanges of ideas and develops through the publication of results. It does, however require respect for each individual's work and the fair attribution of credit in a highly competitive environment. It requires significant resources, and perfect objectivity cannot be allowed to be usurped by interests, even implicit ones, from funders. Finally, it depends upon peer-reviewed assessment of the work, a process where conflicts of interest are often insidious.

These constraints require researchers to have faultless integrity. Establishing strict boundaries as to what is reprehensible is almost impossible when such a variety of situations and research fields are involved. However, there are certain behaviours which are universally recognised as being unacceptable; drawing up a list, although by no means exhaustive, is certainly a useful reminder which can guide (new) researchers and can be a first port of call in the event of a problem.

Paragraph 2 below provides a non-exhaustive list of 'violations' in terms of research integrity, grouped into four main categories. These violations are, of course, not equally serious, but rather than placing them into a rigid hierarchy, it is useful to assess the scale of the damage done to society, to science, to the institution to which the person responsible belongs, and to other scientists who may also be victims on a case-by-case basis.

The University grants all its members, whether they be directly concerned (i.e. their personal interests have been harmed) or not, the right to initiate the process defined below.

In addition to its role when a violation of scientific integrity is suspected, the Board for Ethics and Scientific Integrity has been entrusted by the University with monitoring the informal initial phase. As such, it is assisted by the relevant administrations.

2. **Violation of scientific integrity**

In addition to any legal qualifications (in particular, some acts may constitute serious violations in the sense of employment law, while others may fall under legislation relating to
the well-being of employees in the workplace), the acts listed below relate specifically to violations of scientific integrity.

2.1. In terms of obtaining scientific knowledge:

- The fabrication of research results.
- The intentional falsification, presentation and misleading treatment of source data or research results, the exclusion of data without indication or without due reason.
- Pressure placed on a researcher by a manager to modify source data or research results.
- The deletion of data which has been recorded, before expiration of the recommended retention period or after having been notified of a third party wishing to consult them.
- Concealing data.
- Refusal to grant duly authorised third parties the right to consult source data.

2.2. In terms of collaboration and publication:

- Copying basic data and other data without the agreement of the head of the relevant project (pirating data).
- Sabotaging the work of other researchers, whether in the same research group or not, particularly by concealing and making unusable, in a targeted way, research material, equipment, source data and other recorded work.
- The publication, under one's own name, of written work, research results and discoveries of a third party (University researchers or researchers from outside the University).
- Fraudulently obtaining the status of co-author of a publication without having contributed to it.
- Fraudulently obtaining the title of inventor of an invention without having made an inventive contribution to it.
- The deliberate omission of project collaborators who made essential contributions to a project; the mention, without their agreement, of an individual as a co-author, regardless of their contribution to the project.
- The deliberate omission of essential contributions or citations of other authors on the same subject.
- Intentionally false citations drawn from existing or supposed work from third parties.
- Incorrect indications on progress of the publication of one's own work (for example, 'manuscript submitted' when the manuscript has not yet been sent, 'publication in press' when the paper has not yet been accepted).

2.3. In terms of obtaining research funding:

- Concealing conflicts of interest, financial arrangements or collaboration procedures which could, if they were known, influence the reading of scientific results.
- Acceptance of collaboration agreements which do not preserve the researcher's
independent judgement, restricting his or her freedom to publish (in particular negative results), or impose upon him or her a right to examine publications beyond what is reasonably useful to preserve any rights to intellectual property.

- Acceptance of funding sources or mandates which the University has previously stated as being ethically incompatible with the role of a researcher within the University.
- Acceptance of funding sources or mandates when the researcher knows that these will limit their independence in relation to their work or presentation of their results.

2.4. In terms of scientific expertise for a third party (for example, reviewing articles submitted for publication):

- Deliberately not mentioning conflicts of interest.
- Violating the obligation of secrecy (obligation of confidentiality).
- The erroneous criticism, either deliberately or through negligence, of projects, programmes and manuscripts.
- Unfounded opinions with a view to procuring benefits, either personally or for third parties.
- The unfounded blocking of a publication which is at the revision stage.

3. **Scope**

Without prejudicing the disciplinary procedures contained in legal or regulatory provisions, the procedure applies to any person conducting research activities within the University, whether or not they be employed by the University, and regardless of their origin, status or funding method. This covers scientific collaborators, doctoral students, temporary or permanent members of the scientific staff, professors, researchers under contract employed by the University, experts and logisticians, scientific staff in libraries, FNRS researchers, researchers working outside their own country at the University and CHU researchers working at the University on pilot projects or not by a member of the University, as well as technicians, administrative staff and students when they are involved in research projects.

4. **The procedure to be applied in the event of suspected violation**

4.1. **Principles**

In the event that a violation of scientific integrity is suspected which may prejudice the acquisition of scientific knowledge and its dissemination (public interest), as well as in the event of violations harming personal interests which should be protected, the University will initiate procedures to establish the existence of these violations and any related inappropriate behaviour from those responsible.

In the context of this procedure, behaviour is deemed inappropriate if it is intentional, involves gross negligence or is systematically repeated. Gross negligence is considered to be any behaviour which violates essential due diligence, where the person concerned is
expected to respect this due diligence.

If it appears that the person suspected of inappropriate behaviour has been encouraged or incited to behave in this way by another person who holds a position of authority over that person, the other person will also be suspected of inappropriate behaviour.

4.2. Board for Ethics and Scientific Integrity (CEIS)

The CEIS consists of seven members appointed by the University’s Executive Board and whose scientific experience is recognised and is sufficiently broad to cover all disciplines.

The CEIS consists of:

- Mr Rudy Cloots, Vice-Rector for Research
- Mr Pierre Drion, Professor, in his role as Secretary of the University’s Animal Ethics Committee.
- Mr Vincent Geenen, FNRS Director of Research, part time professor
- Ms Vinciane Pirenne, FNRS Director of Research
- Mr Vincent Seutin, Full professor, in his role as President of the ULg Hospital-Faculty Ethics Committee
- Mr Jean Surdej, Full professor
- Mr Ezio Tirelli, Full professor

The mandate lasts four years and can be renewed.

The CEIS is available to anyone who wishes to obtain an opinion in terms of scientific deontology and integrity. In addition, the CEIS may initiate or be requested to initiate by any member of the university, an investigation into issues relating to scientific ethics or integrity.

It may issue institutional recommendations to the University authorities as well as individual opinions for stakeholders in specific cases. It may also recommend that the University authorities create *ad hoc* working groups on specific themes relating to scientific ethics and integrity and, possibly, sectoral ethics committees.

In order to enable the CEIS to conduct this preventative role correctly, the Vice-Rector for Research calls upon the CEIS to meet on a quarterly basis.

Members of the CEIS and any invited guests are subject to the strictest confidentiality and strive to ensure that any information collected and discussed as part of their preventative missions and during procedures where violations are suspected is kept confidential.

4.3. The CEIS's complaint investigation procedures

4.3.1. Anyone suspecting a violation of scientific integrity, whether their personal interests are considered to have been harmed or not, can submit a complaint either to the CEIS who will entrust the case to one of its members, or to a member of the CEIS of
his or her choice, who will deal with the case.
If a member of the CEIS suspects that integrity has been violated but a complaint has not been made, they inform the CEIS who will entrust another member to deal with the case.

Members of the CEIS who are responsible for dealing with a case will meet with the person under investigation and the complainant as soon as possible. Within a period which may not exceed 60 days, the CEIS member:

1. will resolve the case if he or she believes that any violation of public interest is less significant and with the consent of the person under investigation and the complainant who considers that his or her personal interests have been harmed. He or she informs the CEIS and, if necessary, the complainant who has not personal interests harmed, of its resolution;

2. will, by default and in the event of any doubt, submit the case to the CEIS.

4.3.2. The CEIS examines the items in the submission prepared by the lead member and conducts new hearings, if need be, with the complainant and the person under investigation. Within no more than 30 days, the CEIS will decide either to:

1. close the complaint if the evidence is considered to be unfounded; or

2. send the case to the Rector who will appoint a committee charged with establishing the facts (CCEF), according to the methods set out below.

The CEIS informs the parties involved of its decision.

4.3.3. The CEIS drafts an annual report to the Rector of all complaints which have been investigated.

4.4. The committee charged with establishing the facts (CCEF)

Within 15 days of receipt of the case from the CEIS, the Rector appoints a committee charged with establishing the facts (CCEF), consisting of at least three members with recognised scientific experience in the scientific field in question. The Rector appoints the President from among the members. Members of the CEIS cannot be members of a CCEF. Unless there is any conflict of interest, the Rector informs the director of the research unit and the Dean of the Faculty involved, as well as, where necessary, the head of the institution from which the person under investigation originates.

Within five days of the Rector’s decision, the Rector informs the person under investigation and the complainant (who considers that his or her personal interests have been harmed) of the composition of the CCEF.

The CCEF conducts any investigations necessary within a period which does not exceed 90 days. It may call upon the skills of a scientific expert. In particular, it offers the person under
investigation the possibility of expressing themselves about the claims made against them, of providing evidence and of requesting that additional investigations be conducted.

The CCEF indicates to the person under investigation as well as to the complainant (who considers that his or her personal interests have been harmed) the investigations which they will conduct.

The CCEF is obliged to hear the complainant, upon his or her request. It judges whether the complainant's personal interests have been affected.

Anyone who is heard is informed, at the start of the hearing, that their declaration will be recorded in the form of a statement incorporated into the case file and communicated to the person under investigation as well as to the complainant.

At the end of the hearing, an official report is drafted. The person heard is requested to sign the report; unless they voluntarily choose not to, they receive a copy immediately.

After the investigation, the CCEF drafts a detailed report including recommendations for resolving the case, which it addresses to the Rector, the CEIS, the person under investigation and the complainant whose breach of personal interests is confirmed.

The CCEF report includes, in particular, a slip with all the items which have been submitted to it, as well as the original reports from the hearings. The CCEF's report must make explicit reference to the type of violation under investigation, judging the degree of gravity and establishing whether the behaviour which led to the violation should be considered as inappropriate.

The report should also explicitly examine whether there has been a deontological violation and if so, propose that the case be sent to the authority responsible for deontological compliance in the relevant discipline.

In the event that a violation has led to publication in a scientific journal, the report should specify the articles which the editor of the journal in question should be requested to retract.

4.5. Decision of the Board for Ethics and Scientific Integrity

4.5.1. The CEIS is informed of the CCEF report and all its annexes. If need be, or upon request, it hears the person under investigation and the complainant whose breach of personal interests is confirmed. If the CEIS considers that other investigations are required, it sends the file back to the CCEF without prolonging the procedure for more than 30 days.

4.5.2. Within 30 days of receipt of the CCEF report, the CEIS drafts a report for the Rector. When the CEIS considers that the claims made are wholly or partially with foundation, it identifies in its report the author of the violation of scientific integrity, specifying the behaviour which it considers to be inappropriate and proposing to the

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Rector the measures and acts which it considers appropriate. The CEIS also proposes any measures it considers relevant with a view to reducing the risks of similar cases occurring in the future.

4.5.3. If the CEIS is of the opinion that the claims are without foundation, it can close the case and inform the Rector.

4.5.4. In all cases, the CEIS communicates its report to the person under investigation, the complainant whose the breach of personal interests is confirmed, the director of the research unit, the Dean and, if necessary, the institution from which the person under investigation originates. The person under investigation and the complainant may express themselves in writing to the CEIS within ten days of receiving the report.

4.6. Decision of the Rector

Once the Rector has the CEIS report, including any comments from those mentioned in 4.5.4., the Rector takes any measures deemed to be within his or her competence within 30 days.

The Rector informs the CEIS, the director of the research unit in question, the Dean of the Faculty in question and, if necessary, the institution of origin. The Rector sends the file to the University's Executive Board, given the gravity of the situation, the impact on the University's reputation and the measures to be taken.

4.7. Confidentiality of the procedure

The University ensures that all stages of the procedure are governed by the strictest confidentiality and that this is imposed upon any individuals participating in it. It also strives to ensure that the reputation of the person under investigation is not unduly damaged, until the procedure is closed.

If there are compelling reasons to do so, the University reserves the right to issue information to the public, at the end of the procedure.

4.8. Objections and incompatibility

Within five days of submitting a complaint to the CEIS or to the appointed members of a CCEF, the person under investigation and the complainant whose the breach of personal interests is confirmed are informed of the composition of these bodies and have five days to present any objections to individuals whose impartiality may be doubted.

Anyone called upon during the procedure who believes that they are potentially partial as the result of personal relationships or conflicts of interest relating to the person under investigation or the complainant whose the breach of personal interests is confirmed must resign.
In the event of a member of a CCEF being disqualified, the Rector shall appoint another person as soon as possible. If a member of the CEIS is disqualified and this results in quorum not being reached, the Rector, delegated by the Executive Board, shall appoint another person as soon as possible.