

CODE OF ETHICS AND INTEGRITY IN RESEARCH, VALORIZATION OF RESEARCH RESULTS, AND SPIN-OFF CREATION

(Approved by the Board of Governors during its meeting on 22 November 2010, amended by it during its meeting on 18 March 2013

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1. PURPOSE OF THIS DOCUMENT

This document presents the principles and rules of ethics and integrity that apply to research, valorization of research results, and spin-off creation at ULB.

These principles are derived from the laws and regulations applicable to members of the University's teaching, administrative, technical, and research staff. More specifically, they are drawn from the following documents:

Article 21(6) of the law of 28 April 1953 on the organisation of university programmes by the State, as amended by the law of 21 June 1985 on education;

The royal decree of 13 August 1985 defining the list of activities that are automatically considered to require a significant part of the working time of teaching and research staff in academic institutions;

The Regulation defining external activities that are compatible with a full-time position at the University, approved by the Board of Governors on 18 October 1976, appendix 143.

The law of 22 August 1978 on employment contracts, especially article 17 on the employees' duty of loyalty toward their employer.

Laws on intellectual property, especially the law of 30 June 1994 on copyright.

Regulations applicable to the various categories of members of the university community, inasmuch as they deal with the relationship between said members and the University.

Regarding ethics and integrity in research, following the establishment of a *Higher Council for Scientific Integrity (HCSI)*, this document refers in particular to the European Code of Conduct for Research Integrity , established in 2017 by the *All European Academies (ALLEA)*.

It still makes references to the *Ethical Code of Scientific Research*, drafted by FNRS on 22 November 2007, then by the Royal Academies of Belgium and the Federal Science Policy Office (Belspo) in 2009. It may also take inspiration from other documents and other ideas that it deems pertinent to the topic, insofar as viewpoints and practices change and the translation of the concept in practice may vary according to the field and the scientific discipline.

The implementation arrangements presented in this document prevail over those defined by FNRS.



Regarding ethics and integrity in terms of commercialising the results of research activities, including by creating spin-off companies, this document is in line with the code adopted by the Board of Governors during its meeting on 27 February 2006 and amended by the Board on 16 June 2008 (*code de déontologie et d'intégrité en recherche*). This document is an updated version of the code, in response to the evolution of the research environment as a whole.

2. GENERAL PRINCIPLES

ULB adopts FNRS' position: 'Scientific fraud threatens the public's confidence in science and, therefore, in scientific literature. With more competitiveness in worldwide scientific research and with the increasing pressure put on researchers to produce results and secure funds, it is necessary to define standards on honest research work and to establish procedures for whistleblowing in cases of suspected fraud.

The University must be able to guarantee society the integrity of its researchers, and it must provide researchers with an environment that respects their work and promotes their development in a climate of trust and harmony.'

In addition, members of the university community have a duty toward the University to show professional loyalty, and they must make sure that their external activities, financial interests, and commitments to third parties do not conflict with the University's interests. In particular, they must not attempt to influence the University's decisions related to technology transfer in order to gain financial or other benefits for themselves or their associates. They also must not divulge confidential information related to the University's activities, and must refrain from engaging in any unfair competition that may threaten the University's valorization strategy. Lastly, members of the university community must abide by the scientific and academic standards, both in their relationship with the University and its funders and with their colleagues and team members.

To this end, the Université Libre de Bruxelles has developed tools to promote high-quality research, which cannot exist if the principles below – upon which this Code is built – are not respected. The Code includes two main sections:

- The first covers the principles of scientific integrity, especially by defining and implementing a process to be followed if these principles are violated or if a violation is suspected.
- The second covers the valorization of research results by ULB and the creation of spin-off companies.

Before presenting these two main sections, the section below presents the main body in charge of implementing the University's policy in the areas concerned by this document, namely, the *Ethics Committee*.

Moreover, ULB has recognised the Higher Council for Scientific Integrity ('HCSI') formed within the Royal Academies on the basis of a recommendation by the *Council of Ministers of Europe* formulated in 2007.

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The mission, role, membership and functioning of the HCSI are described comprehensively in the Regulation in the appendix, of which the terms were approved by the Academic Council on 25 October 2021. The provisions of this Code also include the provisions for linking the second opinion procedure organised with the HCSI with the procedure organised before the University Integrity Council in the event of a breach of integrity under this Code.

¹ Directives relatives à l'intégrité dans la recherche scientifique ('Directives on integrity in scientific research'), National Fund for Scientific Research, November 2007



3. COMMITTEE ON ETHICS AND INTEGRITY IN RESEARCH

An *Ethics Committee* was established by the Board of Governors in 2006. In 2008, the Board decided to broaden its scope, making it a *Committee on Ethics and Integrity in Research*, in order to tackle more comprehensively all aspects of the issue covered in this Code. The Committee is responsible for implementing the provisions established in this Code. It also may make suggestions to the Board regarding amendments or updates to the Code.

Any 'violation' of rules related to integrity in research fall within the purview of *the Integrity Council*, whose members also sit on the Committee. The nature of such violation is defined clearly (see section 4.2).

The *Committee on Ethics and Integrity in Research* also has authority to handle disputes regarding valorization, the designation of researchers as inventors or authors, and the university community members' fulfilment of their duties toward the University as part of their research and valorization activities. Cases are referred to the *Committee* by the University's authorities, or by the Valorization Commitee. The Committee on Ethics and Integrity in Research has investigative powers, and may suggest that ULB's Authorities take any measure they deem appropriate to deal with cases it is presented with, for instance:

- Request evidence of authorship for research or implementation, in accordance with academic standards.
- Demand that researchers who have a conflict of interest between their activities within the University and their participation in a private company reduce or cancel their investment in the company.
- Designate researchers who should be considered inventors or authors, in the event of a dispute over their designations.
- Suggest remedial measures for the damages suffered by the University when a researcher has violated their duty of loyalty or threatened the University's intellectual property rights valorisation strategy.

In addition, the Committee may issue opinions to the University's Authorities on any question related to the application of the provisions above, after consulting with the Faculties if necessary.

Membership of the Committee is decided by the Board of Governors. The Committee may, if it deems it appropriate, call upon the knowledge of experts.

4. VIOLATION OF THE PRINCIPLE OF INTEGRITY IN SCIENTIFIC RESEARCH: GENERAL PRINCIPLES AND PROCEDURE IN CASES OF SUSPECTED VIOLATION

4.1. Principles

These provisions aim to promote high-quality research and to guarantee integrity in scientific research. More specifically, their purpose is to:

- ensure monitoring of good practices in research;
- prevent scientific fraud;
- o deal with cases of suspected scientific fraud, by establishing investigation procedures for



- suspected violations of scientific integrity; and
- o raise awareness among researchers of potential conflicts of interest.

4.2. Categories of violations

The actions below are violations of scientific integrity. This is not a comprehensive list.

- Violations related to the acquisition of scientific knowledge: fabricating research results, falsifying raw data, presenting or processing research results in a deliberately misleading way, excluding or removing raw data, concealing data, and refusing access to raw data by third parties duly authorised to access it.
- Violations related to collaboration and publishing: copying raw data without permission from the person in charge of the data (data theft), sabotaging the work of other researchers, plagiarising, abusively gaining status as co-author, deliberately omitting names of collaborators or essential contributions by other authors, making deliberate errors in citations, and giving incorrect indications on the progress of the researcher's own work.
- Violations related to research funding: concealing conflicts of interest or arrangements that could influence the assessment of scientific results, accepting collaboration agreements that could jeopardise the researcher's independence of judgement or their freedom to publish, and accepting sources of funding that are ethically incompatible with the researcher's role at ULB.
- Violations related to scientific expertise missions conducted for third parties: breach of the researcher's duty of secrecy and confidentiality, erroneously criticising projects, programmes, or manuscripts, and making baseless judgements in order to gain an advantage.
- Residual violations: other violations referred to in article 3.1 of the European Code of Conduct for Research Integrity, included in the appendix, insofar as they are separate from the violations described above.

For a violation to be considered fraudulent, it must be deliberate or constitute serious or systematic neglect. Cases of serious neglect include behaviours that breach basic duties of diligence.



4.3. Integrity Council

In order to deal with violations of the principle of scientific integrity and suspected cases thereof, the Committee on Ethics and Integrity in Research designates three of its members who form the *Integrity Council*, made up of academics whose scientific skills and experience cover the broadest range of fields possible.

Each member of the Integrity Council has two substitute members, who must fulfil the same requirements as the member they substitute for. They are designated in the same way.

Members of the Integrity Council are designated for a two-year renewable term.

4.4. Integrity Council complaint review process

4.4.1. Complaint reception and investigation

Complaints related to scientific fraud and, more generally, integrity in research, are received by the Integrity Council, which puts a representative in charge of the case. The representative examines the documents provided, and meets with the defendant as well as with the complainant as soon as possible.

Any person summoned by the Integrity Council may be accompanied by a person of their choosing. This will be specified in the summons. If the person summoned decides to be accompanied, they must inform the Chairperson of the Committee, providing them with the accompanying person's name and title.

Within 30 days, the Integrity Council member in charge of the case can do two things:

- They make a definitive ruling on the case, if they consider that the evidence does not conclusively point to fraud or if they consider that the potential conflict with public interests is of lesser importance; this ruling requires the agreement of both the defendant and the complainant who believes their personal interests have been damaged. In this case, they inform the Integrity Council and, if applicable, the complainant who has not established that their personal interests have been damaged.
- Otherwise, or if there is any doubt, they transfer the case to the Integrity Council.

4.4.2. Case review by the Integrity Council

The Integrity Council examines the evidence provided and, if necessary, holds new interviews with the complainant and the defendant.

1)If the Integrity Council deems the complaint clearly unfounded, it declares the complaint inadmissible. Within thirty days of this decision being communicated, the complainant and the Rector may request a second opinion from the Higher Council for Scientific Integrity, following the procedure provided for in the regulation of said Council included in the appendix.

Within the same time limit, the complainant, if exercising this option in accordance with the preceding paragraph, sends a copy of their request to the Integrity Council, the defendant and the Rector; the Rector, if exercising this option, sends a copy of their request to the Integrity Council, the defendant and the

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complainant.

In accordance with the aforementioned regulation, the Higher Council for Scientific Integrity meets within 60 days of receiving the request and communicates its opinion to the Rector, the Integrity Council, the complainant and the defendant within 6 months of its first meeting.

After receiving the second opinion of the Higher Council for Scientific Integrity, the Integrity Council decides, within thirty days of receiving this opinion, either to confirm its decision of inadmissibility, giving special reasons for its decision if it is contrary to the second opinion, or to continue the procedure on the merits in accordance with the provisions of the following regulation. Its decision, whatever it may be, is at this stage no longer subject to a request for a second opinion.

2)Should the investigation by the Integrity Council reveal sufficient signs pointing to fraud, the Council transfers the case to the Rector, who appoints a *fact-finding committee* (FFC).



4.5. The fact-finding committee (FFC)

4.5.1. Membership

The FFC is appointed by the Rector. It includes at least three members with recognised scientific expertise in investigating cases of suspected fraud; among these members, the Rector designates a Chairperson. Members of the Integrity Council may not be members of an FFC.

The Rector informs the dean of the Faculty involved and, if applicable, the Medical Director of the hospital employing the person suspected of fraud.

The FFC's investigative mission may not last for more than 60 days. The FFC may call upon external experts.

4.5.2. Process

The FFC notifies the defendant, as well as the complainant who may invoke damages to their personal interests, of the investigative steps it takes and the witnesses it decides to hear.

The FFC must hear the complainant upon request. It has full discretion to determine whether the complainant's personal interests have been damaged. Of course it also gives the defendant the opportunity to make their case.

All persons questioned are informed, at the beginning of the interview, that their statements will be recorded in the form of minutes that will be included in the case file and sent to the defendant and to the complainant whose personal interests have been damaged.

Minutes are written up at the end of the interview. The person questioned is invited to sign the minutes; unless they voluntarily renounce their testimony, they immediately receive a copy.

Upon concluding its investigation, the FFC:

- draws up a detailed report, including recommended steps to resolve the case, which it sends to the Rector, the Integrity Council, the defendant, and the complainant whose personal interests have been damaged;
- includes in its report a list of all documents it was provided with, as well as the original interview minutes;
- the FFC's report must explicitly refer to the type of violation observed, evaluate its severity, and determine whether the behaviour that resulted in the violation should be viewed as fraud pursuant to section 4.2 of this Code;
- The report must also explicitly determine whether an ethical breach has occurred and suggest, if applicable, that the case be transferred to the relevant authority in charge of



ethics in the field in question and/or to the disciplinary committee in charge. See in particular the 'Règlement de discipline du corps professoral et du corps scientifique' ('Disciplinary regulation for academic and scientific staff') adopted by the Board on 23 February 2004 and amended on 16 March 2009 and 15 February 2010;

- If the breach has resulted in a publication in a scientific journal, the report will provide a list of articles for which a retraction request must be sent to the journal's editor.

4.5.3. Case investigated by the FFC and transferred to the Integrity Council

The Integrity Council examines the FFC's report. If necessary, the Council holds other hearings or investigations.

If the Council deems the charges fully or partially founded, it produces a final report with appropriate recommendations, which is sent to the Rector. If the Council deems the charges unfounded, it closes the case and notifies the Rector in its report.

If the Integrity Council's report suggests the possibility of major disciplinary sanctions, the case will follow the ordinary procedure laid down in the University's regulations, including forwarding it to the relevant disciplinary commission.

In any case, the Integrity Council sends its report to the defendant, to the complainant whose personal interests have been damaged as acknowledged by the FFC, to the Dean, and/or to the Medical Director of the hospital employing the defendant.

The defendant and the complainant can provide written statements within 10 days of receiving the report.

4.5.4. Possible process for a second opinion from the Higher Council for Scientific Integrity

Within thirty days of receiving the report by the Integrity Council, the complainant, the defendant and the Rector may request a second opinion from the Higher Council for Scientific Integrity, following the process provided for in the regulation of said Council as included in the appendix.

Within the same time limit, the complainant, if exercising this option, sends a copy of their request to the Integrity Council, and if applicable, to the defendant and the Rector; the defendant, if exercising this option, sends a copy of their request to the Integrity Council, the complainant and the Rector; the Rector, if exercising this option, sends a copy of their request to the Integrity Council, the defendant and the complainant.

In accordance with the aforementioned regulation, the Higher Council for Scientific Integrity meets within 60 days of receiving the request and communicates its opinion to the Rector, the Integrity Council, the complainant and the defendant within 6 months of its first meeting.

4.6. The Rector's decision



Within a period of 30 days following:

- -either the end of the period referred to in article 4.5.4, paragraph 1 if no request for a second opinion has been made in said period,
- -or the communication of the second opinion from the Higher Council for Scientific Integrity, issued in application of article 4.5.4,

the Rector takes the steps that fall within their purview, including any disciplinary measures. They inform the Dean of the Faculty in question and/or the Head of the hospital in question and, if applicable, forward the case to the University's Academic Council, depending on the severity of the violation, the impact on ULB's reputation, and the measures to be taken.

4.7. Confidentiality

The University takes all the steps necessary to ensure the highest level of confidentiality is maintained throughout the process.

It ensures the complainant is protected against any reprisals or any harm, especially in cases where the complainant depends upon the defendant.



ULB also ensures the defendant's reputation is not unduly affected until the case is closed.

It decides when and how information should be made public, as well as the content of said information, during and after the procedure.

At all steps of the process, any person summoned for a hearing may be accompanied by a person of their choosing. This will be specified in the summons. If the person summoned decides to be accompanied, they must provide the accompanying person's name and title.

4.8. Specific recommendations for hospitals associated with the University

Research is one of the missions of physicians working in an academic or university hospital, or who have a relationship with the University.

The research activities of clinical researchers are an essential foundation of scientific progress in biomedicine, and scientific integrity in this field is of the utmost importance.

Hospitals associated with ULB are invited to adopt the provisions contained herein, and to mention scientific integrity in the official statutes for hospital physicians.

5. PROVISIONS RELATED TO VALORIZATION OF RESEARCH RESULTS AND THE

CREATION OF SPIN-OFFS

5.1. Foreword

For a number of years, ULB has been implementing a policy of valorization of its research results, leading it to apply for patents and grant licences to existing companies or to new companies created especially to put research results to use (spin-off companies).

Members of the university community — especially in the case of spin-off companies and in particular the people who have produced the results used by the spin-off — sometimes hold positions of authority or have financial interests in companies to which the University may transfer knowledge or know-how.

This document, which serves as a supplement to the regulatory provisions related to valorization², specifies the University's policy regarding potential incompatibilities and conflicts of interest that may occur in such cases.

² Règlement en matière de propriété, de protection et de valorisation des résultats des recherches effectuées à l'ULB ('Regulation on the ownership, protection, and valorization of the results of research conducted at ULB'), adopted by the Board of Governors in 2004 and amended on 7 July 2008.



5.2. **Definition**

'Direct financial interest': shares, options granting rights to shares, or a promise to receive shares in a company, or a long-term consulting agreement with the company. Equity investment shall only be considered to be a direct financial interest if

- a) it amounts to at least 5% of the capital; or
- b) the license under consideration or the inventor's future research may have a significant impact on the value of the company's shares. A small investment in a large publicly-owned company shall not be viewed as a direct financial interest, but a few shares in a start-up company or in a company owned by a small number of shareholders may be viewed as such. A direct financial interest may be held either by the inventor themselves or by members of their household or immediate family.

5.3. General principles

As it grants licenses for research results that it owns, ULB makes an effort to identify companies that have both the ability and the will to continue developing the technology and release the resulting products on the market.

Additional precautions must be taken when conflicts of interest may arise as a result of the inventors and/or people in charge of the ULB department involved having direct financial interests in the company to which the University is considering granting a license.

Members of the university community may take part privately in the activities of spin-off companies within the limits set by applicable laws and regulations, for up to two half-days per week and subject to a notification of this activity being sent to the relevant Faculty and approved by the Board of Governors.

University staff members must also abide by the rules governing the ownership, protection, and valorization of research results, including the creation of spin-off companies.

5.4. Provisions related to the prevention of conflicts of interest in the case of spin-off companies

If the inventor(s) have, or are considering acquiring, direct financial interests in a spin-off company that is applying for a license from ULB, staff members in charge of valorisation within the Research Department, in collaboration with the Financial Administration Department, are tasked with determining whether the company will be able to gather the financial and human means necessary (including management) to ensure the proper development of the technology to be licensed.

If this assessment yields a positive outcome, the Valorization Committee can decide, based on the information at its disposal:



- either to send a letter of intent to the company in question, granting it a time-limited right of first refusal, in order to start negotiations for a license; it should specify that a licence can only be granted if the company can prove that it fulfils well-defined financial criteria;
- or to pursue efforts to commercialise the technology with other companies, in order to determine whether one of them would be better suited than the spin-off company to developing the technology.

If the assessment yields a negative outcome, ULB will direct its valorisation efforts toward finding a company that is better suited to developing the technology under license.

5.5. Provisions related to the prevention of conflicts of interest in the case of existing companies

If the inventor(s) have a direct financial interest in an existing company that is under consideration for a licensing agreement, staff members in charge of valorisation will determine whether other companies may be able to develop the technology under better conditions.

The Valorization Committee has the final say.

5.6. Applicable ethics rules and specific provisions related to staff members in charge of valorisation

Staff members in charge of valorisation and supporting the creation of spin-off companies call upon their best professional judgement and draw from various sources in order to identify companies that may be interested in a licensing agreement. In doing so, they take into account any proposals made by the inventor(s) as well as any constraints related to the funds that enabled the results for which a licence is being considered.

When a candidate company is identified for a potential exclusive licensing agreement, and before any such agreement (or option) is negotiated, staff members must be especially attentive to potential conflicts of interest; should they identify a conflict of interest, they shall notify the Valorization Committee, which determines what steps must be taken.

Every year, ULB staff members in charge of valorization and supporting the creation of spin-off companies declare the financial interests they own in companies that are or may become potential licensees, and abstain from taking part in discussions and negotiations regarding these companies. More generally, they abstain from taking part in discussions and negotiations regarding cases in which they may be viewed as inventors pursuant to ULB regulations governing the ownership, protection, and valorization of research results.



6. HIGHER COUNCIL FOR SCIENTIFIC INTEGRITY ('HCSI')

Without prejudice to articles 4.4.2 and 4.5.4, for all matters relating to the procedure to be followed in the case of a request for a second opinion from the Higher Council for Scientific Integrity, as referred to in this Code, reference should be made to the 'Regulation' of said Council in the appendix for any further information.

7. ENTRY INTO FORCE OF THE AMENDING PROVISIONS

This version of the Code will enter into force the day after its approval by the Board of Governors, and will be immediately applicable to ongoing proceedings.