

ETHICS IN SCIENTIFIC RESEARCH: (RE)THINKING MANAGEMENT AND ADMINISTRATION PRINCIPLES

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**RESEARCH MANAGER AS A PROFESSION IN THE EU
ECOSYSTEM:
CONCEPTS, TOOLS AND PRACTICE (I)**

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Foreword

Participating in the **foRMAtion** project has proven to be an incredible and truly unique opportunity. In the context of the lessons I attended for the curricular unit «Research Manager as a Profession in the EU Ecosystem: concepts, tools and practice (i)», I had the chance to broaden my knowledge regarding this relatively new and intriguing career option. Since it is the first semester this curricular unit is being taught, I had, admittedly, mixed (but hopeful) expectations regarding what I would be learning and coming into contact with. Nearing the end of the semester, however, I can undoubtedly state that this curricular unit transcends the mere academic sphere, allowing me to grow not only as a student, but as an individual that resides and intends to proceed his professional career in the context of the European Union's broad framework for investigation opportunities.

In this context, I also must underscore my colleague's role and thank them (especially **Joana Goulão**) for their contributions to all the activities that were promoted, allowing for a truly special and thought-provoking environment not only suited for learning but especially for development, whether it be in academic or interpersonal terms. Of course, I must also highlight the very important and indispensable role of my teacher, **Cristina Oliveira**, both as a teacher and surely as a friend. Due to the many, many extensive conversations and discussions we maintained throughout the semester, I was able to not only deepen my horizons, but also consolidate and build upon my previous knowledge, and I am extremely grateful for all of Cristina's numerous contributions to the *formation* of this report.

This report, as its title aims to suggest, will be centred around the role of research managers and administrators as a career option, being an action project that aims to understand how ethics and compliance are both perceived by the research community and handled by research managers and administrators. Understanding ethics implies going far beyond the usual philosophical tradition and explanations and comprehending how this subjective and abstract dimension lends itself to a research lifecycle, in accordance with various principles and norms that presuppose compliance. When dealing with research, the «usual» problems that might arise (because research and its procedures are not always so straightforward) are aggravated by various ethical questions and dilemmas that «haunt» all the actors involved. Even in environments so heavily regulated (whether it be by the European Commission or by the institutional norms) in terms of procedures, there is no denying ethics should not be disregarded or forgotten.

Ultimately, this final project was conceived with a purpose far beyond that of a «typical» final project. As it will ultimately be evidenced, special considerations must be given to both the ethical and compliance dimensions relating to research. In any given scientific community (and specially thanking the NOVA FCSH for their participation), the importance given to ethics compliance is an important aspect to researchers and research managers administrators alike, and the need for a supportive structure that attends to the needs and wants of its investigators must be a desirable and sustainable prospect. If nothing more, this attempt can serve as «cue» for far more discerning considerations and detailed explorations.

Introductory Note

The main purpose of this report, elaborated as a final project for the curricular unit «Research Manager as a Profession in the EU Ecosystem: concepts, tools and practice (i)», is to understand how ethics and compliance challenges are perceived by the scientific community at NOVA FCSH, and research managers and administrators' roles in dealing with any issues that may arise. In aiming to do so, it will also be analyzed how effective institutional processes and systems relate to research ethics and governance, and how they promote a good research conduct. In doing so, it aims to acknowledge how NOVA FCSH monitors key performance indicators and makes evidence-based decisions about policy and strategy regarding ethics compliance in all its various research related activities.

Given this, at first glance, slightly overwhelming undertaking, some clarifications are due. When accessing ethics (and, consequently, compliance to its principles) in research, one must be aware of all the implications this entails. Research lifecycles are notorious complex and supervised, so why would the need for ethical practices and for strict compliance come into question? The answer to this question may be an already complex enough ethical dilemma, although not as grueling as the ones researchers must face daily. The implications of avoiding any type of misconduct in the endless path of searching and advancing for knowledge rest (not entirely but) heavily on compliance with ethical principles and procedures. Thus, accessing this brief outline, the development of this report strives to «bridge the gap» between what research in ethics is presumed to be and how it materializes in a specific scientific community.

The report is organized in four main chapters, each of them with its own small section dedicated to main findings and a brief discussion, to line up a concise and thorough argument, while also being based on observed data. The first chapter, as expected, looks to shed some light on the main concepts to be analyzed throughout this study, that will guide the focus of this examination. The second chapter, more incisive in its overall reach, as it goes over the main documents and procedures that are provided by the European Commission and its overall reach in terms legislation and regulations regarding ethics and compliance. The third chapter, in turn, looks specifically at NOVA University's Ethics Code and sets the stage for the institutional panorama that sets the tone to the fourth and final chapter. The last chapter, as a culmination of those that came before it, combines both theoretical and empirical aspects, as it looks to understand and explain perceptions and behaviors of a (considerable) sample of the NOVA FCSH scientific community and, based on the study conduct and an in-depth interview with a research manager and administrator, will proceed to propose some recommendations on how to best manage procedural problems in regards with ethics compliance in research (or, at least, try its very best to illustrate them).

The ideal result of this report would be exposing the main challenges inherent to the ethics and compliance aspects that research managers and administrators and researchers alike are constantly confronted in the course of their investigations, and to serve as an advising tool to improve and realize their goals.

Chapter I - Ethics and Compliance in Research

I. 1. Understanding the Concepts Behind the Definitions

Research, as an essential activity to the progress of knowledge and the continuous betterment of mankind, is indissociable of various principles and norms that regulate and help guide its development. Such propositions, like for example honesty and integrity, cannot disassociate themselves from the very conception of «ethics». **Ethics**, for the purpose of the study intended to be carried out and studied in this report, is to be understood as the «(...) *act of critically reflecting on the norms, conventions and the consequences of human actions and their beliefs in society*». Ethics presupposes a continuous constructive and reflexive evaluation, that aims to enhance the quality of research in every single one of its stages. Every domain of research can (and should) be subject to a rigorous ethical analysis, to ensure all activities are conducted in accordance to the available guidelines and protocols that aim to respect the various ethical norms. This respect for «(...) *institutional rules and codes of conduct*» is also known as **compliance**, and is also a very predominant facet in terms of research.

Ethics in research requires compliance far beyond what is simply «right» or «wrong» and the expected outcomes of a certain project. Researchers must be able to understand the impact their activities might have on society and all its spheres, assessing both the benefits and the consequences prior to setting out on a research. There are some commonly discussed ethical issues (**Table I.1.i**).

Table I.1.i Ethical Issues (adapted)	
Issue	Description and Possible Outcome
Animal Research	The protection of animals must always be ensured in accordance with various rigorous principles (reduction, replacement, and refinement)
Data Protection and Privacy	All personal information and personal communications must be treated confidentially and not used without consent or inaccurately
Developing Countries	Special attention must be given to the level of development of countries and methods must be adapted to mutually benefit all those involved
Dual Use	The potential (mis)use of materials, methods, or knowledge that, one hand, might promote good and, on the other, might promote harm
Human Embryo's and Foetuses	Questions related to the intrinsic value of life, t issues related to Human Embryonic Stem Cells (hESC), cloning and genetic heritage modification
Informed Consent	Addressing privacy issues and meant to guarantee the voluntary participation (formation, voluntariness and competence)

I. 2. The Role of Ethics Throughout the Research Lifecycle

As already stated, both ethical and compliance preoccupations are transversal throughout research in its various phases. Since its initial inception and planning stages, research projects must be evaluated (firstly, by its researchers) in terms of its final objectives and the means necessary to achieve them, as well as any potential problems or questions that may arise during the process. Research must be conducted following a set of important norms and principles, those being:

(i) beneficence: research must positively benefit all of those involved in it, and all possible risks to society derived from this aim must be quickly assessed and addressed;

(ii) justice: research must be fair and inclusive, in terms of deliberately and purposely not excluding particular groups or communities from society;

(iii) research integrity and merit: research must be conducted by following competent methods and reporting honest outcomes, to further advance knowledge and cultivate a trusting environment in the scientific community;

(iv) respect for human dignity: research must ensure that all the participants rights, cultures and general sense of choice is always respected and maintained.

The act of conducting research must also be taken very seriously. Researchers must be able to deal with any issues that may arise due to ethics compliance, so they must be able to maintain a certain sense of objectivity when dealing with the data they collect and process, and not be influenced by any personal opinions they may have during their interpretations and inferences. This process only is fully efficient when researchers establish a certain degree of trust with the other actors involved, whether those being participants, research managers and administrators (as will be seen), funders and society (in terms of targeted audience, whether it be in the scientific community or through more extensive dissemination). Speaking of communicating results, although peer review is recommended to be present throughout all the research lifecycle, it is also very important when the findings are to be published. To avoid research misconduct, checking facts and citing sources is important to ethical compliance.

I. 3. Main Findings and Discussion

As will be further elaborated on this report, it becomes clear that both ethics and compliance hold a very important role in conducting research and ensuring that all findings produced are up to certain standards and compatible with principles and values that ensure both integrity and quality in terms of enhancing and advancing knowledge. This dimension is present throughout the research lifecycle, whether it be during the planning, the implementation, or the dissemination phases. All the actors involved in research activities must be made aware of the most important guidelines and principles, since issues and dilemmas may occur at any time. To understand how these problems are perceived by researchers, and how research managers and administrators deal with them, one must look to the applicable European ethical and legal legislation, to understand how these norms are applied and translated into national directives, as explored.

Chapter II - The European Union's Ethical Framework: An Overview

II. 1. The European Commission Charter and Code of Conduct for Researchers

The European Union is, in political terms, founded on a common ground of shared values and principles. So, in terms of scientific research, all policies from the various member-states need to conform to a specific set of principles, those being the ones that are laid out on the **European Charter of Fundamental Rights**¹. To better understand the need for ethics and compliance guidelines and their importance to supporting and conducting research (especially in terms of human rights), there are various principles that are very important, with special relevance given to the ones transcribed (**Box II.1.i**; **Box II.1.ii** and **Box II.1.iii**).

Box II.1.i | European Charter of Fundamental Rights

Article 3 - Right to the integrity of the person

1. Everyone has the right to respect for his or her physical and mental integrity.
2. In the fields of medicine and biology, the following must be respected in particular:
 - (a) the free and informed consent of the person concerned, according to the procedures laid down by law;
 - (b) the prohibition of eugenic practices, in particular those aiming at the selection of persons;
 - (c) the prohibition on making the human body and its parts as such a source of financial gain;
 - (d) the prohibition of the reproductive cloning of human beings.

Box II.1.ii | European Charter of Fundamental Rights

Article 8 - Protection of personal data

1. Everyone has the right to the protection of personal data concerning him or her.
2. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified.
3. Compliance with these rules shall be subject to control by an independent authority.

Box II.1.iii | European Charter of Fundamental Rights

Article 13 - Freedom of the arts and science

The arts and scientific research shall be free of constraint. Academic freedom shall be respected.

¹ European Union. (2010). Charter of Fundamental Rights of the European Union. Official Journal of the European Union C83, pp. 389-403.

<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0389:0403:en:PDF>

While the purpose of this report is to provide an in-depth analysis of a specific scientific research community, these issues are applicable to the various fields of research (thus, the need for clear and transversal European guidelines and procedures).

The European Commission, in the context of the European Research Area, developed the **Charter and Code of Conduct for Researchers**², designated to improve conditions for research work and career development of researchers. This Charter consists in «(...) *a set of general principles and requirements which specifies the roles, responsibilities and entitlements of researchers as well as of employers and/or funders of researchers*».

Box II.1.iv | European Commission Charter of Conduct for Researchers

General Principles and Requirements Applicable to Researchers

- Research Freedom
- Ethical principles
- Professional responsibility
- Professional attitude
- Contractual and legal obligations
- Accountability
- Good practice in research
- Dissemination, exploitation of results
- Public engagement
- Relation with supervisors
- Supervision and managerial duties
- Continuing Professional Development

In general terms, researchers are encouraged to follow fundamental principles and practices, usually documented in Ethics Codes, whether they are found at a European, national, sectoral, or institutional level. Adherence to these principles ensures that researchers do not engage in scientific misconduct, whether it be in conducting, reviewing, disseminating, or reporting during the process of their research. There are three main areas of great concern in terms of what pertains to scientific misconduct: **(i)** plagiarism (the act of appropriating one's ideas, processes, results, or words without providing proper credit); **(ii)** falsification (the act of manipulating research materials, equipment, or processes, as well as tampering with data or results that do not accurately represent the research); and **(iii)** fabrication (the act of making up research data or results and proceeding to report them as factual results).

The Charter is applicable to not only researchers tasked with conducting research activities but also to those involved in management or administrative roles. Therefore, in terms of ethical compliance, this document is of the utmost importance, for it provides a common groundwork from which all scientific research related practices must abide by, in hopes of avoiding any misconduct.

² European Charter and Code of Conduct for Researchers. (2015). EURAXESS.
<https://euraxess.ec.europa.eu/jobs/charter/european-charter>

II. 2. European Procedures and Programs for Research Compliance

Once researchers obtain funding from the European Commission, there are various procedures in terms of ethics compliance. All proposals must comply with fundamental ethical principles, as established in **Regulation (EU) n.º 1291/2013 of the European Parliament and of the Council**, that establishes the current funding framework programme for research and innovation, also known as «Horizon 2020».

Box II.2.i | Regulation n.º 1291/2013 of the European Parliament and Council

Article 19 - Ethical principles

1. All the research and innovation activities carried out under Horizon 2020 shall comply with ethical principles and relevant national, Union and international legislation, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its Supplementary Protocols.

Particular attention shall be paid to the principle of proportionality, the right to privacy, the right to the protection of personal data, the right to the physical and mental integrity of a person, the right to non-discrimination and the need to ensure high levels of human health protection.

(...)

Under the Horizon 2020 programme, there is a process that assesses and addresses the ethical dimension of all activities funded, called the **Ethics Appraisal Procedure**. Any ethical research conduct entails the application of all fundamental ethical principles and legislation pretrained to scientific research. The need for compliance arises from the commitment of every researcher to a continuous and through ethical evaluation in all stages of the research process, starting with the conceptual stage of the proposal, to ensure not only that it respects the applicable legal framework, but that it also enhances the quality of the research and best conveys its end results, in an honest and authentic manner.

All research proposals submitted to the European Commission are evaluated based on their scientific merit and on its ethical and social impact, as well as on the compliance with ethical rules and standards, relevant European legislation, international conventions and declarations, national authorizations and ethics approvals, and proportionality of the research methods. The Ethics Appraisal Procedure includes the Ethics Review Procedure (conducted before and during the project) and the so-called Ethics Checks and Audits. Knowing and understanding the Ethics Appraisal Procedure (**Table II.2.i**) ensures that researchers, in all research activities (whether it be during the submission of their proposals, or during the related evaluation, selection and award procedures) comply by fundamental ethical principles imposed the Horizon 2020 Framework Programme. When it comes to ethics, various challenges and dilemmas may arise during the research, thus the need for these clear and insightful procedures.

Table II.2.i The Ethics Appraisal Procedure (adapted)						
	Actions	Rationale	Actors	Phase	Methods	
Ethics Review Procedure	Ethics Self-Assessment	Researchers must be capable of thoroughly evaluating and considering the ethical and compliance dimensions in the various stages of their proposals	Applicant	Application Phase	Consideration of ethical issues of the proposal	
	Ethics Pre-screening/Screening	Ethical issues are analysed and, if identified, the approval of the proposal is based on its objectives, methodology and potential impact	Ethics Experts and/or Qualified Staff	Evaluation Phase	Review of application material	
	Ethics Assessment (if necessary, for proposals involving serious ethical issues)	If the proposals raise serious ethical concerns, the signing of the grant agreement is done after the review of the findings of the Screening (<i>i.e.</i> , hESC)	Ethics Experts	Evaluation/Grant Preparation Phase	Review of application material	
	Ethics Checks and Audits	Ethics checks are carried out throughout the research process In case of a substantial breach of ethical principles, ethical audits are executed	Ethics Experts	Implementation Phase	Review of project deliverables/interview with applicants	

As stated before, under the Horizon 2020 ethical practices in conducting research have special importance, with the European Commission promoting various programmes to best ensure compliance. For example, the **European Network of Research Ethics and Research Integrity** continuously develops training curriculums and materials (mainly targeted for research integrity advisory boards and research ethics committees), in order to fully understand how the currently existing and available materials can be used for training purposes and further development. However, at least in European terms, there is an abundance of materials that varies between countries and institutions, so policy must strive for a continuous development of materials, mostly in terms of ethical compliance.

There are several reasons why the comprehension of the importance of the ethical dimensions are fundamental for conducting research, but perhaps one of the most important reasons is the facts that the European Commission has progressively tried to integrate, for some years now, both research and its associated ethics «issues» in to a broader, ever expanding programme, under the title of **Responsible Research and Innovation**³. Since research and innovation are ever expanding and, hopefully, know little to no limits, ethics represent a much need tool both of reflection and of progress, guiding researchers through the dilemmas they might face and inciting reflection every step of the way, while making sure they comply, in order to avoid the negative effects of an otherwise positive intention. All research activities and methods must be guided by a set of values that translated themselves into applicable guidelines and, as seen previously, those guidelines must be enforced and scrutinized by experts and other qualified staff, to ensure integrity and, in the end, result in both research quality and advancement of science. Both research and integrity cannot find themselves victims to misconduct, as the nefarious effects of malpractice far outweigh its potential benefits. So, to better understand the various protocols and standards for what constitutes ethical compliance, codes of conduct are the way.

The **European Science Foundation** considers «research misconduct» to refer to «(...) *insufficient care for the people, animals or objects that are the subject of or participants in research; breaches of confidentiality, violation of protocols, carelessness of the kind that leads to gross error and improprieties of publication involving conflict of interest or appropriation of ideas (...)*» or, as already established, any kind of act that derives from plagiarism, falsification, fabrication and any type of behaviour that derives from any type of non-compliance to ethical and legal requirements. So, to both address these unacceptable research practices and best help understand how compliance must encouraged and followed, the **European Code of Conduct for Research Integrity**⁴ is fundamental in assessing the importance of good research practices.

³ Ethics - RRI Tools. (n.d.). Available at: <https://rri-tools.eu/ethics>

⁴ European Science Foundation & All European Academies. (2011). *The European Code of Conduct for Research Integrity*. IREG Strasbourg.

http://archives.esf.org/index.php?eID=tx_nawsecuredl&u=0&q=0&t=1619307893&hash=0b55883c53125a21d2eabdbdf40eddc7f882378a&file=/fileadmin/be_user/CEO_Unit/MO_FORA/MOFORUM_ResearchIntegrity/Code_Conduct_ResearchIntegrity.pdf

Box II.2.ii | European Code of Conduct for Research Integrity

2.2.3 Integrity in science and scholarship: principles

(...)

- *Honesty* in presenting research goals and intentions, in precise and nuanced reporting on research methods and procedures, and in conveying valid interpretations and justifiable claims with respect to possible applications of research results.
- *Reliability* in performing research (meticulous, careful and attentive to detail), and in communication of the results (fair and full and unbiased reporting).
- *Objectivity*: interpretations and conclusions must be founded on facts and data capable of proof and secondary review; there should be transparency in the collection, analysis and interpretation of data, and verifiability of the scientific reasoning.
- *Impartiality and independence* from commissioning or interested parties, from ideological or political pressure groups, and from economic or financial interests.
- *Open communication*, in discussing the work with other scientists, in contributing to public knowledge through publication of the findings, in honest communication to the general public. This openness presupposes a proper storage and availability of data, and accessibility for interested colleagues.
- *Duty of care* for participants in and the subjects of research, be they human beings, animals, the environment or cultural objects. Research on human subjects and animals should always rest on the principles of respect and duty of care.
- *Fairness*, in providing proper references and giving due credits to the work of others, in treating colleagues with integrity and honesty.
- *Responsibility for future science generations*. The education of young scientists and scholars requires binding standards for mentorship and supervision.

II. 3. Main Findings and Discussion

In terms of the European Union perspective, it becomes clear that ethics and compliance are fundamental features in research. While the European Commission has proactive role in terms of its action in terms of materials and both ethical and legal documents and procedures, the immensity of existing programmes (and many more in development) are sure to raise all kinds of issues and challenges for researchers. There are some common principles (**Box II.2.ii**) that must be safeguarded throughout the various stages of research, abiding by certain procedures. Still, the need arises to understand how these various guidelines and recommendations are perceived by scientific research communities and by research managers and administrators in their goal of advancing knowledge, in an attempt to always comply with the ethical values and moral norms that contend to achieve and ensure the best possible paths forward.

Chapter III - The Ethical Research Settings at NOVA University Lisbon

III. 1. The NOVA Ethics Code

Considering this comprehensive (although still abridged) understanding of the European Union's stance on the role of ethics and compliance in research, it is fundamental to understand how these same principles and guidelines translate into ethical practices, and how these same norms are perceived by the scientific community, in order to fully understand research managers and administrators' roles in grasping and dealing with them. To begin to conceptualize this objective, it is necessary to carefully analyse the most important document for the case intended to be studied, that being the **NOVA University Lisbon's Ethics Code**⁵.

When talking about an Ethics Code (as previously considered), one must keep in mind that this concept refers to a set of guiding principles designed to maintain integrity and transparency. As clearly stated in the NOVA Ethics Code's article 1, this document «(...) *establishes a set of values and standards of conduct that should guide the institution in the exercise of its teaching and learning activities, training, scientific research and interaction with society, based on the ethical principles of equity and justice, respect for human dignity, non-discrimination and equal opportunities, and personal and professional responsibility, in obedience to the law, the (...) [NOVA University Lisbon's] statutes and other regulations*».

As ethics in research is a transversal issue throughout the University, the NOVA Ethics Code is applicable to all its faculties and departments, binding the academic community. In terms of general principles, article 4 lists a comprehensive array of propositions, as transcribed below (**Box III.1.i**).

Box III.1.i | Despacho n.º 15464/2014

Article 4 - General Principles

- (a) respect for equal opportunities for the entire community, not only in terms of student access and performance, but also in terms of the progression of the professional careers of teachers, researchers, non-teaching and non-researching employees, without discrimination of any kind;
- (b) condemnation of discriminatory attitudes, for cultural, gender, race, ethnicity, nationality or political, ideological, religious or sexual orientations, namely actions of physical, verbal, moral or psychological insults, as well as situations of coercion, intimidation, harassment or humiliation;
- € respect and fulfilment of the rights of people with disabilities or special needs;
- (d) guarantee of confidentiality of personal data;
- € recognition of merit and the right to a transparent and fair performance evaluation of all members of the community;
- (f) principle of academic freedom in teaching, learning, and scientific research activities, in a constructive and freely critical climate, in an honest and responsible search for the progress of knowledge;

⁵ Despacho n.º 15464/2014. (2014). *Código de Ética da Universidade Nova de Lisboa*. In Diário da República, 2.ª Série - n.º 245 (pp. 32057-32060).

https://www.unl.pt/sites/default/files/unl-codigo_de_etica.pdf

- (g) recognition of the right to relevant information about institutional statutes and regulations and those of the organs and organic units;
- (h) recognition that all members of the academic community have the right to prompt and professional assistance in cases of accident or sudden illness related to the performance of their duties;
- (i) observance of all other duties and attitudes that promote transparency and academic integrity, justice and equity, respect for the dignity of the human person, and professional and social responsibility.

These principles, although quite wide-ranging and pervasive, serve as an important mechanism in understanding the positions of the researchers and the investigators. In terms of ethics, all the personnel are expected to abide by a professional posture (in terms of honesty and proficiency), as well as act based on principles of responsibility, transparency, impartiality, and exemption.

The NOVA Ethics Codes has a section dedicated to ethics in scientific research and investigation, which will be the focus of this analysis to better understand how its principles are understood. These principles are fundamental and must be observed by all those involved in scientific research activities at the University or in collaboration with it, for they encapsulate the respect for the dignity of the human person, the progress and valorisation of knowledge, the quality and originality of research, scientific truth, and freedom of research. Article 11 of the NOVA Ethics Code also establishes the fundamental obligations of all researchers, to ensure they maintain the principles and attitudes during all their activity (**Box III.1.ii**), as they must:

Box III.1.ii | Despacho n.º 15464/2014

Article 11 - Fundamental Principles, n.º 2

- (a) ensure an ethical basis in all research activities, always safeguarding the essential values to preserve its credibility and quality, including intellectual honesty, authenticity, objectivity, respect for intellectual property, methodological and experimental rigor, impartial data analysis, as well as the non-violation of the rights and dignity of human beings or animals;
- (b) ensure that all research is carried out in compliance with the standards and protocols for the safety of people and property;
- (c) manage with transparency, fairness, and thrift the financial means obtained from the funding entities, in order to ensure the success of the project within the planned deadline;
- (d) to adequately guide the work of master and doctoral students, as well as post-doctoral fellows and other researchers;
- (e) keep an appropriate record that allows verification of the research results;
- (f) ensure confidentiality in order to protect intellectual property, where applicable;
- (g) ensure that the referencing of sources used in the production of the scientific work is rigorous and comprehensive;

- (h) take care to respect copyrights by properly referencing the sources used in the work;
- (i) ensure the correct insertion of the names of authors and co-authors in the respective publications, as well as the expression of due acknowledgment to other collaborators, when justified;
- (j) safeguarding the principle of freedom of research.

As previously acknowledged, there are several situations that go against the NOVA Ethics Code and against a researcher's own integrity. These situations, given the Code's statute, constitute serious offenses passible for the application of sanctions, and present themselves, broadly, as the following: **(i)** plagiarism; **(ii)** intellectual appropriation without legal consent; and **(iii)** fabrication or falsification of results.

III. 2. Supervision and Conformity: The NOVA Ethics Council

With the existence of an Ethics Code, comes the need for a consultive body that upholds and enforces all its principles. Thus, the **NOVA University Lisbon's Ethics Council** concerns itself with the various ethical questions and problems that arise from all the activities promoted and supported by the University regarding all its domains, and especially research. To do this, the NOVA Ethics Council aims to promote formation in terms of understanding what constitutes an ethical problem and strives to advocate for a conduct policy that safeguards the principles of ethical and deontological respect for dignity. The NOVA Ethics Council designates as ethical questions the following sensitive topics (**Box II.2.i**):

Box III.2.i | Despacho n.º 15464/2014

Article 6 - Fundamental Principles, n.º 2

- (a) academic fraud;
- (b) plagiarism and copyright;
- (c) obtaining informed consent;
- (d) protection of privacy and personal data;
- (e) scientific research activities involving, in any form, people, animals or biological material of human or animal origin;
- (f) application of international and national declarations and guidelines on ethics and bioethics.

III. 3. Main Findings and Discussion

Understanding the ethical aspects of research practices at NOVA University Lisbon is crucially important, as the Ethics Code provides an insight at the main set of principles and regulations researchers must abide by while conducting their activities, as well as the by the European directives. These norms are to be followed by all research staff at the University in strictest manner possible, always under scrutiny of the Ethics Council, to ensure integrity. However, it is necessary to understand how the scientific community at NOVA FCSH perceives the ethical dimension of research, as well as the role of research managers and administrators in dealing with compliance in the many situations that might arise.

Chapter IV - Perceptions of Ethics and Compliance in a Research Community: The NOVA FCSH Case Study

IV. 1. The NOVA FCSH Researcher's Viewpoints

Accessing the various perceptions researchers in the NOVA FCSH possess in terms of ethics and compliance, and how they translate into scientific research, is not as straight forward as one would initially assume. Surprisingly, however, there are previously no established set of measures designed for evaluating integrity perceptions in a research environment currently set in place at NOVA FCSH. For the purposes of this report, a survey (**Annex A: Survey Questions**) was elaborated, and latter disseminated throughout this research community (mainly through direct e-mail contact and through the «Newsletter do Investigador»). All questions and methodologies employed followed the GDPR guidelines, and participation was both voluntary and anonymous, with no personal data being collected, maintaining the confidentiality of all participants and their answers. The survey received, until its end date, 53 (fifty-three) answers.

The survey encompassed three different sections of analysis, namely **(i)** Demographic Categorization, **(ii)** Questions, and **(iii)** Open Questions. While section **(i)** aimed mostly to characterize the participants, sections **(ii)** and **(iii)** focused mainly on the content already presented in **Chapter I (Ethics and Compliance in Research)**, **Chapter II (The European Union's Ethical Framework: An Overview)** and **Chapter III (The Ethical Research Settings at NOVA University Lisbon)**. The results of all sections will be presented and examined based on this division, to (or, at least, try to) fully understand what is behind researcher's perceptions and where they stand when ethics are at stake.

In terms of **(i)** Demographic Categorization, all participants were above the age of 21, with 49,1% being older than 51 years (of which, 30,2% were older than 60) and 49,1% younger than 50 years and older than 31 years. Only 1 participant was between the age of 21 and 30, tipping the «scale» in favour of a «younger» community. Still, in terms of age, the distribution is pretty much even in terms of proportion of ages younger and older than 50. The same, however, cannot be said when it comes to sex, more than half of the participants identified as female (60,4%), while the remainder of participants identified as male (39,6%). When it comes to current academic profile, the overwhelming majority of participants are researchers (54,7%), followed by professors (32,1%), research managers and/or administrators (7,5%, which amounts to 4 individuals) and a PhD candidate (and researcher, a contracted researcher and a student, each of these last three represent 1,9% of the analysis. Thus, in a preliminary analysis, it becomes clear that (for the goals of this report), the NOVA FCSH research community is represented by a majority of individuals that identify as women, with evenly distributed ages between 31 and older than 60, most of them researchers at the faculty. With the scope of the study now clear, now a more quantitative approach will be used to understand, concretely, how the individuals face research ethics.

Section **(ii)** (Questions) was conceived with benefit of usage of a Likert Scale, that provided the following answers options: «Strongly Agree»; «Agree»; «Neutral»; «Disagree»; «Strongly Disagree»; «I Don't Know». As previously mentioned, the questions covered the discussions contrived in **Chapters I, II and III**, with one added dimension (specifically, perceptions about NOVA FCSH). For the sake of simplicity, the same order will be followed to present the results.

In terms of ethics and compliance in research, all participants expressed an overall positive sentiment in terms of ethics and compliance principles and norms in research being fundamental in ensuring a responsible research and innovation conduct, with 83% and 15,1% strongly agreeing and agreeing, respectively, with 1 individual (1,9) being neutral in the face of the remainder 98,1%. Throughout the research lifecycle, ethics as a constant and transversal issue that researchers need to deal with is strongly agreed by 75,5% of individuals, while almost 20% agree with this fact and 5,7% are neutral. In general, the role of ethics is recognized by all participants, with a vast majority of them considering this activity as important in all facets and stages of research.

Now, when analysing researcher's views on the (previously laid out) European Union's ethical framework, that's when things become both complicated and compelling, as evidenced below (**Table IV.1.i**):

Table IV.1.i NOVA FCSH scientific community's perceptions on the European Union's Ethical framework (n = 53)		
Question(s)	Measure	Percent (%)
The European Commission's standards and guidelines regarding ethics are comprehensive and through in assessing and ensuring good compliance practices.	Strongly Agree	22,6
	Agree	34
	Neutral	15,1
	Disagree	5,7
	Strongly Disagree	1,9
	I Don't Know	20,8
The European legislation regarding ethics and compliance is easily compatible and transposed to national guidelines.	Strongly Agree	17
	Agree	22,6
	Neutral	20,8
	Disagree	7,5
	Strongly Disagree	1,9
	I Don't Know	30,2

It becomes clear that, when it comes to European legislation and procedures, a large portion of the participants does not know exactly in what they consist and materialize into, which can be partially explained by the reasons already exposed in **Chapter II**. This will carry out when analysing the next set of questions, but one main conclusion that can be immediately inferred is that a better coordination between the European Commission and researchers both needed and essential.

When looking to the perceptions relating to sentiments towards the ethical research settings at NOVA University Lisbon (specifically in terms of the NOVA Ethics Code and the NOVA Ethics Council), it becomes quite apparent that most of the individuals express mostly neutral sentiments or do not know the scope of the institutional framework. Whether it be in terms of the contents of the NOVA Ethics Code or the reach of the Ethics Council, it becomes quite evident that there needs to be a reinforcement of institutional and governance mechanisms and researchers in general, for it is imperative for a research community to be fully aware (not to the extent of the answers given here) of all the research settings.

Table IV.1.ii | NOVA FCSH scientific community's perceptions on the ethical research settings at NOVA University Lisbon (*n* = 53)

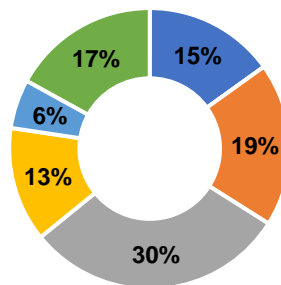
Question(s)	Measure	Percent (%)
The NOVA Ethics Code contains all the essential information and regimentations relating to ethical practices in all the University's activities.	Strongly Agree	15,1
	Agree	26,4
	Neutral	22,6
	Disagree	1,9
	Strongly Disagree	1,9
	I Don't Know	32,1
The contents of the NOVA Ethics Code, especially the fundamental principles regarding research, are of crucial knowledge to all scientific staff conducting activities.	Strongly Agree	28,3
	Agree	26,4
	Neutral	18,9
	Disagree	3,8
	Strongly Disagree	-
	I Don't Know	22,6
The NOVA Ethics Code covers all vital points of ethical dilemmas and forms of possible misconduct.	Strongly Agree	11,3
	Agree	18,9
	Neutral	20,8
	Disagree	9,4
	Strongly Disagree	1,9
	I Don't Know	37,7
The NOVA Ethics Council is a fundamentally supporting body in terms of maintaining and ensuring ethical behaviour.	Strongly Agree	20,8
	Agree	15,1
	Neutral	28,3
	Disagree	7,5
	Strongly Disagree	-
	I Don't Know	28,3

This sentiment of neutrality transposes itself into the NOVA FCSH environment as well. When asked if NOVA FCSH fosters a good infrastructure in terms of advocating for ethics and compliance in research, participants expressed either neutral or ambiguous sentiments (nearly 30%, combined), with attention having to be drawn to the more negative sentiments as well. As it stands, nearly 20% of feel that NOVA FCSH, in terms of research ethics, lacks adequate infrastructures.

Graphic IV.1.i | NOVA FCSH scientific community's perceptions on infrastructures that advocate for ethics and compliance in research (n = 53)

NOVA FCSH fosters a good infrastructure in terms of advocating for ethics and compliance in research

■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree ■ I Don't Know

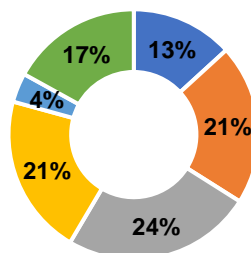


When it comes to ethical dilemmas though, the same proportion agree and disagree, while 13% of individuals think that they face ethical dilemmas due to lack of institutional support. Besides the proportional of those individuals that are neutral, it is interesting to state that 17% are oblivious to this fact. Once again, it all comes back to the need of a strong top-down institutional framework that assists researchers when it comes to ethics and compliance, as will be explored.

Graphic IV.1.ii | NOVA FCSH scientific community's perceptions on ethical dilemmas due to lack of institutional support (n = 53)

Researchers at NOVA FCSH often find themselves in ethical dilemmas due to lack of institutional support

■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree ■ I Don't Know



When going over the open questions in section (iii), a clearer picture of how perceptions both align and differ in the research community clarifies, in-depth, some of the possible points of concern that might prevail. Participants, in this section, were asked two specific questions:

(1) «What are the difficulties and challenges researchers face regarding ethics and compliance in research?», and

(2) «Do you think that, even attending to the various ethical principles and compliance practices, research misconduct is the biggest threat to scientific integrity?».

To present the data in the clearest way possible, an answer will be given to both questions, combining the contributions of all participants in this survey. In terms of the first questions, the main difficulties and challenges regarding ethics and compliance in research were designated as the following (**Box IV.1.i**):

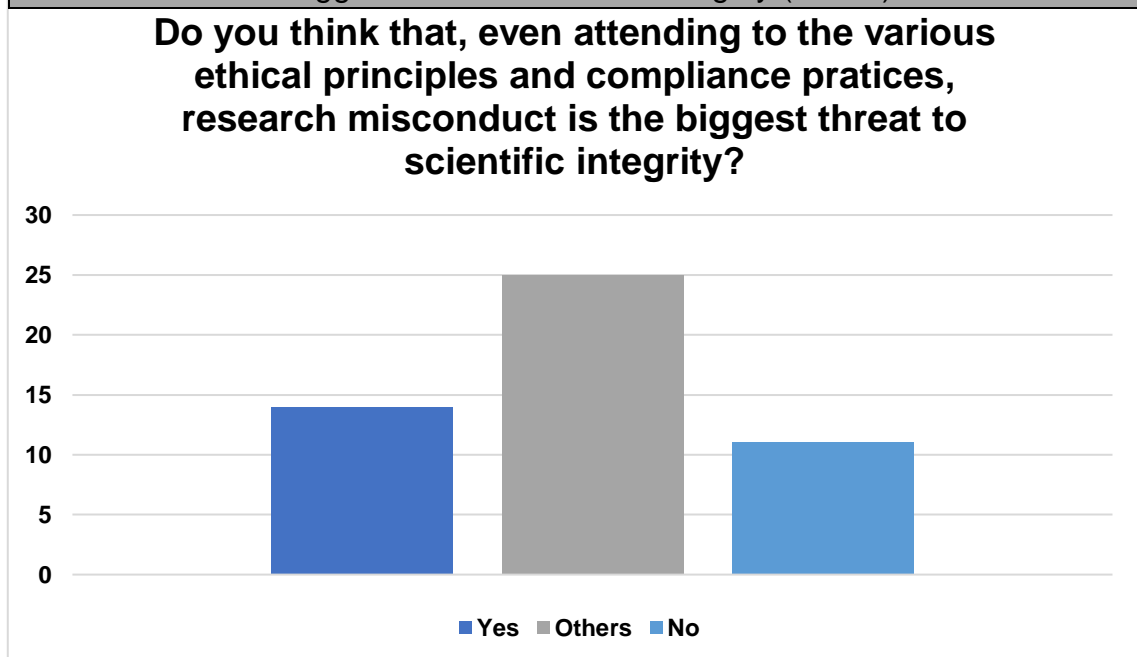
Box IV.1.i | NOVA FCSH scientific community's (general) perceptions on difficulties and challenges regarding ethics and compliance in research

- Being fully aware of the way the conduct of scientific efforts affects those immediately implicated, as well as the public's opinion of science and scientists;
- Closed groups and endogamic research and professorial *status*;
- Fabricating research findings, falsifying research results and plagiarism;
- Finding appropriate methodologies;
- How to make deep research about sensitive data relating vulnerabilities of human beings;
- How to write the document «Ethical and Legal Issues» for an ERC /H2020 grant;
- Ideological bias;
- Internal personal issues amongst senior academic positions that influence freedom of choice one the people depend on them to keep grants and positions;
- Lack of access to specialized bibliography;
- Lack of support systems/advisors;
- Lack of transparency and of respect for the work of others;
- Not having an Ethics Code to cite, from NOVA FCSH specifically;
- Not knowing how to proceed;
- Obtaining the general consent to use participant's activities images;
- Privatization and mercantilization of the access to information and dissemination of research results;
- Relationship with those involved in fieldwork (political or moral deviations and subordination to political or economic interests);
- Reuse of references from sources described in books;
- Some of the research compliance is too demanding concerning some specific research domains;
- The assumption, on the part of academic bodies, that non-trivial issues regarding research policies, are well-known by today's academic community;
- The lack of clarity in the institutions that own the cultural / artistic objects;

- The lack of knowledge of general public regarding science and so some difficulties in getting consent;
- The leadership is miserable and fosters an environment with «friends» and «enemies»;
- The unfamiliarity with some rules of conduct;
- To present a full set of raw information that may allow debate on interpretations (the somewhat small size of articles in many publications these days reduces the possibility of doing so). At times, to cite studies by other researchers in a proper way, and also to make one's own research easily available as soon as possible, especially when it was funded by public money;
- Turning principles into practice.

Regarding the second question, answers are pretty much evenly split, but with a curious expression on «other threats», as seen below (**Graphic IV.1.iii**):

Graphic IV.1.iii | NOVA FCSH scientific community's perceptions on research misconduct as the biggest threat to scientific integrity ($n = 50$)



When it comes to the perceptions the biggest threats to scientific integrity, NOVA FCSH's participants, in their majority, go beyond just research misconduct, citing the «(...) *difficult paths to reach the objective*», and even admitting that there are not «(...) *many chances to misconduct in research since everything is peer reviewed and there are many institutional rules and procedures*». At the same time, some advances on technology and people rights (regardless of gender) also teeter on the verge of misconduct, while consent must be earned by the academic community («(...) *getting academia closer to the society would be a great facilitator*»), as well as lack of time, low quality requirement, weak preparation, lack of funding and ideological bias. While on this note, citizenship integrity is also mentioned, as it is impossible to trace and sue informal powers, nepotism is frequent from person relationships to competitions for academic positions, with one participant referring that «(...) *along the corridors the*

expression would be “the competition has already a photo”. Thus, legal winning does not mean ethical score for rules are published to serve an aim». This sentiment is echoed throughout a number of responses, with several of them referring to the «threat» of the «(...) whole liberal system that commands the academic world where we are in constant competitiveness for funds and have the pressure to correspond to what is trendy at the moment». Also prevalent in these answers is the shared notion that research is becoming a career with «no future».

IV. 2. Managing and Administrating: How to Subdue Apprehension?

Having accessed the various perceptions of researchers in the NOVA FCSH scientific community, it is only reasonable to begin to understand how important the role of research managers and administrators is, how these actors can serve as a «bridge» between researchers and science, especially in terms of ethics compliance. For this purpose, an interview (**Annex B: Interview Questions**) was conducted, for which additional informed consent was obtained from all individual participants for whom identifying information is included in this section. Thus, an immense debt of gratitude is owed to **Ana Carrapato** from CRIA (Centre for Research in Anthropology), who graciously conceded her time for an in-depth overview of the tasks and challenges research managers and administrators face in guaranteeing the compliance of ethical procedures in scientific research.

Understanding what is the most important role that a research manager and administrator must fulfil when it comes to ethics in compliance in research is understanding that, foremost, a vast set of soft skills is necessary (for example, problem-solving, emotional intelligence, conflict management, and others), as well as deep understanding of the various work programs and legal documents. Dealing with ethics requires a special ability to listen, because sometimes researchers are oblivious (or do not fully understand) what types of ethical issues and dilemmas they must declare, because most of the time, they figure it is enough to foresee them and guarantee they will not raise further problems. At some point (both in pre-award and post-award, at the explicit behest of the various funding institutions), research managers and administrators must intervene and guide researchers and investigators through what seems a «natural» and intuitive process for them, but that is actually very regulated and rises itself in a complex procedural and legal foundation, since ethics is a very important and fundamental aspect of scientific research, especially since the aftermath of the Nuremberg Trials at the end of the Second World War. As Ana best describes it, «*You deal with persons, so you (...) [must] have ethical questions*», ranging from issues regarding dealing with human subjects to ensuring data protection and confidentiality. Of course, due to the inherent instability of the profession, all researchers are expected to do the job they love while taking it very seriously. And that is where research managers and administrators come in, to ensure the proper steps are taken and that at each turn of the way researchers are supported in the various problems they face, especially when they relate to knowing about ethical procedures and regulations.

It is, in fact, arduous to ensure that all European protocols and regulations are attended, and that the research is up to date with them in ethical and legal terms. For a principal investigator, everything that does not depend on their actions and those of their team is a challenge in terms of assisting European protocols and regulations. For a research manager and administrator, the task falls on them to understand all the steps that are necessary to take to comply fully and adequately. For instance, and talking specifically about Portugal, Ana poses a very interesting consideration, being that, at a nation-wide context, it is sometimes difficult to figure out who is in charge, in terms of requesting and accepting applications and guarantee that everything is up to date in terms of ethics compliance. Also, given the settings of European research, particularly in terms of various projects that involve multiple actors (whether it be countries or institutions), research managers and administrators find themselves directly between possible conflicts in different perceptions of ethical issues, especially when it comes to assuring benefit sharing in research that deals with other countries, especially complying with all the different settings of ethical rules. A research manager and administrator must take up the responsibility before the European Commission, and that can always be quite hard and challenging, but as stated previously, worth it, in the name of advancing science and knowledge.

As should be expected, the NOVA Ethics Code is an important instrument for all researchers that develop projects and investigations under its name. So, given the national panorama, researchers constantly find themselves between strict limits that do not compromise the ambitions of research activities, while encompassing the more important ethical guidelines. While no immediate conflict is mainly common, research managers and administrators must, firstly, read through the European guidelines and, secondly, the national instruments, much like a dialectic and always exchanging «(...) *“stair process”*», that presupposes no conflict with the structure directly above. As stated previously, research managers and administrators must encourage researchers to check if they are following all the principles, especially when they need to write them down, because proposals are only as good as their commitment to ensuring ethical practices. In Ana's insightful opinion, if a researcher goes against (especially willingly and knowingly) the NOVA Ethics Code, then they are failing as researcher, especially if they do not protect and hold with the up most value the value of the persons they use in their activities, whichever dimension that takes.

As stated with the survey answers, it becomes quite clear that NOVA FCSH does not have a good ethical structure in terms of where to go to in case researchers need to resolve any issue resulting from managing and administering a project. A consensus builds upon the fact that, especially for researchers, NOVA FCSH needs a formal structure, and especially an Ethics Council at the immediate level (not only the one that oversees all the University), or at least an available group of individuals that are available whenever research managers and administrators, as well as other actors, go to when they have any sort of important doubts or questions. In the end, although NOVA FCSH does not have

any sort of this type of commission, researcher managers and administrators must and have to solve all kinds of situations that might arise. Although this is a testament to the work and commitment of the various actors involved at a governance level, it becomes quite apparent that an entire faculty cannot rest solely on the shoulders of the researchers that already have some much «faith» resting on the faculty (especially in terms of ethics, because this is in itself a very big dilemma). This cycle of aimless wandering only speaks to the perceptions that researchers have about research in general and justifying them, so reforms at the immediate institutional level are necessary. Since every research activity deal with compliance issues on a regular day-to-day basis, not having an (immediate) ethics consulting body is not viable, especially at the faculty level. As Ana mentioned, to avoid any type of conflicts with the structure above, change must be made at a more direct level, especially since «(...) *the doubts (...)* [research managers and administrators] *have on social sciences (...), on ethics, will not be exactly that same (...)* [as with] *working on biology (...)* [or] *processes of genomics (...)*». While cross-cutting issues serve the University level, a smaller group within the faculty is required, for that tool is missing and is indispensable (as well as useful, for example, for applications, for a structure «in house» for guidance is always must appreciated).

As previously analyzed, some of the main challenges and difficulties in terms of ethics compliance as a research manager and administrator speaks to a general issue with research, which is the instability of the profession, whether in contract terms or monetary terms, as well in terms of recognition. If a researcher is not «comfortable» in terms of his professional career, his priorities naturally constantly shift and that, in turn, might influence is performance (which is not intended to be monitored or measured in this report). Also, given the recent *status* of this profession, a special formation is required and incentivized, although they are not always strict to the point and «disregard» previously obtain levels of knowledge and experience, as well as take time to complete. Even so, and keeping the focus on ethics, research has never been jeopardized because of «(...) *lousy salaries*», which speaks as a testament to the commitment and dedication of the NOVA FCSH scientific community as a whole. The biggest challenge (although also the most interesting) in terms of ethics for research managers and administrators implies knowing fully well the intricacies of a given project, as well as its every detail. Researchers usually have a clear picture of what they hope to achieve and how, so it falls upon research managers and administrators to guide them the best they can, while ensuring that they follow every possible step to succeed, fostering a very close and professional environment, enhanced by the development of different intrapersonal skills.

As seen with the open-ended questions explored before, scientific misconduct (as covered in **Chapter II**), although a threat to scientific integrity, presents itself in a wide range of issues, which in turn encompasses the role of research managers and administrators to adequately guide researchers and promote the best and most effective practices in research, given its very complex framework.

IV. 3. Main Findings and Discussion

This chapter, as culmination of those that came before it, attempts to combine the extensive laid-out theoretical explanations with concrete empirical data gathered by both a survey and a conducted interview. Focused primarily on the scientific community at NOVA FCSH, this chapter aggregates some enlightening information regarding perceptions of ethics and compliance, mainly through the lenses of researchers and research managers and administrators alike.

It becomes quite clear that, in a first instance, the importance of ethics in research is recognized by all the institutional actors, with its pivotal role in conducting scientific projects and activities. As should be expected, accessing the importance of the European Commission's action in terms of research guidelines and principles becomes more of a challenge, with many individuals expressing more difficulty in just recognising their compatibility with national legislation, due to its compounded and overarching nature. As seen previously, the European settings for conducting research are especially strict, so that reflects on researcher's opinions about their projects and proposals. But, as it is soon observed, the same sentiments echo towards the national setting as well, especially in terms of both the NOVA Ethics Code and the NOVA Ethics Council. A considerable proportion of participants expresses not understanding nor knowing the contents of the Ethics Code and the importance of the University's Ethics Council, or the scope of action of both these invaluable instruments. On a more «personal», actors also expressed a wide array of perceptions regarding difficulties and challenges regarding ethics and compliance in research, as well as their views of the institutional support provided by NOVA FCSH in these cases.

Attempting to comprehend how management and administration principles best lend themselves is only relevant in the context of concrete action. Thus, only through the experienced lenses of a research manager and administrator can a full analysis of how to proceed be giving. Through a very insightful and incisive interview, it becomes clear that research managers and administrators hold a very important and unique role in guiding and helping researchers through their projects. Although some of the difficulties and problems that researchers point to are the same that research managers and administrators face as well, the role of the former is one that entails a certain level of responsibility, especially when it comes to dealing with ethics and compliance. So, and according to the data collect and analysed, it becomes evident that there is a clear need for some type of institutional arrangements and reforms, in order to fully attend to both researchers and research managers and administrators need concerning ethics.

In a word of encouragement, it seems that all actors involved at the NOVA FCSH level seem predisposed to advocate for changes that, on a larger scale, relate to research as a profession and, consequently, by improving the conditions around those aspects, improvement in terms of ethics and compliance is concurrent. Thus, and drawing from the content of all the chapters in this report, the perceptions of the NOVA FCSH in terms of ethics and compliance calls for a thorough restructuring of management and administration principles in research.

Final Remarks and Further Recommendations

The major finding of this report is that ethics and compliance in research is one of the most important aspects when discussing scientific investigations. However, this dimension is often subject to serious challenges and dilemmas, given its already very complex and specific nature. When accessing ethics and compliance, one must keep in mind its vital role during the research lifecycle, as well as some of its most important areas of possible concern. Of course, ever since research is becoming more prevalent at international levels, the need for cross-boundary guidelines and principles is even more present. Given the European context, «*The room for special local rules or guidelines is narrowing down. Soft harmonization could ease the way for dealing with cases involving researchers in different countries and/or institutions*»⁶. Having explored the vicissitudes of the European Commission's framework for ethical research, it becomes clear that its effectiveness is only supported by a strong institutional presence, to ensure that all regulations and legislations are followed and kept throughout the research activities. Researchers in the study carried out by this report expressed some challenges in this domain, especially when relating to the more «present» level, namely when it comes to NOVA University Lisbon and, as a result, NOVA FCSH. Given the importance of instruments such as the NOVA Ethics Code and the University's Ethics Council, more must be done to properly ensure that the research community is made aware of their objectives and reach.

Thus, the role of research managers and administrators proves itself invaluable. Almost 40% of participants strongly agree that research managers and administrators have a fundamental role in ensuring that during all the research process and activities, ethics and compliance are maintained. Their roles are almost transversal to all activities (pre-award and post-award), so it falls on them, at a more institutional level, to support researchers and their strategies and to oversee them at every turn. At the NOVA FCSH level, it becomes clear that some instrumental innovations must be carried out, mainly when it comes to confronting researchers perceived challenges and their institutional environment. The most needed meaningful one, perhaps, relates to the creation of an ethics commission relating solely to activities developed at NOVA FCSH, to ensure both NOVA University Lisbon's and European principles are being followed. This group could provide continuous ethics clearances and follow-ups throughout research, and ideally would be composed of researchers from various areas of knowledge and experiences, as well as research managers and administrators.

In essence, ethics is not simple. As the understanding of moral requirements for ethical conduct of (and compliance in) research evolves, it is critical to (re)think about the importance of research managers and administrators in promoting and ensuring an ethical conduct in the research environment, relating to not exclusively to the actors in these processes, but also the many different contexts.

⁶ ENERI & ENRIO. (2019). Recommendations for the Investigation of Research Misconduct (druck.at Druck-und Handelsgesellschaft mbH).
http://www.enrio.eu/wp-content/uploads/2019/03/INV-Handbook_ENRIO_web_final.pdf

Compliance with Ethical Standards

Conflict of Interest The author declares that he has no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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Annexes

Annex A: Survey Questions

(a). Demographic Categorization

1. Age

- <21
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- > 60

2. Sex

- Female
- Male
- Prefer not to disclose

3. Current Academic Profile

- Student
- Professor
- Researcher
- Research Manager and/or Administrator
- Other:

(b). Questions

4. Ethics and compliance principles and norms in research are fundamental to ensure a responsible research and innovation conduct.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

5. Throughout the research lifecycle, ethics is a constant and transversal issue that researchers need to deal with.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

6. The European Commission's standards and guidelines regarding ethics are comprehensive and thorough in assessing and ensuring good compliance practices.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

7. The NOVA Ethics Code contains all the essential information and regimentations relating to ethical practices in all the University's activities.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

8. The European legislation regarding ethics and compliance is easily compatible and transposed to national guidelines.

- Strongly Agree
- Agree
- Neutral
- Disagree

- Strongly Disagree
- I Don't Know

9. The contents of the NOVA Ethics Code, especially the fundamental principles regarding research, are of crucial knowledge to all scientific staff conducting activities.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

10. The NOVA Ethics Code covers all vital points of ethical dilemmas and forms of possible misconduct.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

11. The NOVA Ethics Council is a fundamentally supporting body in terms of maintaining and ensuring ethical behaviour.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

12. NOVA FCSH fosters a good infrastructure in terms of advocating for ethics and compliance in research.

- Strongly Agree
- Agree

- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

13. Researchers at NOVA FCSH often find themselves in ethical dilemmas due to lack of institutional support.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

14. Research Managers and Administrators have a fundamental role in ensuring that during all the research process and activities, ethics and compliance are maintained.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I Don't Know

(c). Open Questions

15. What are the main ethical dilemmas you face in your research?

16. What are the difficulties and challenges researchers face regarding ethics and compliance in research?

17. Do you think that, even attending to the various ethical principles and compliance practices, research misconduct is the biggest threat to scientific integrity?

Annex B: Interview Questions

1. What is the most important role that an RMA must fulfil when it comes to ethics in compliance in research?

2. How arduous is ensuring that all European protocols and regulations are attended and that the research is up to date with them in ethical and legal terms?

3. What is your assessment in terms of the engagement of the research community with the NOVA procedures and norms regarding ethics?

4. Given the settings of European research, particularly in terms of various projects that involve multiple actors (whether it be countries or institutions), where does the RMA fit between possible conflicts in different perceptions of ethical issues?

5. Do you feel that the national panorama, especially the NOVA Ethics Code, grants the researchers enough freedom between strict limits that do not compromise the ambitions of research activities, while encompassing the more important ethical guidelines?

6. Do you feel that NOVA FCSH has a good ethical structure in terms of where to go to in case you need to resolve any issue resulting from managing and administering a project?

7. What do you perceive to be the main challenges and difficulties in terms of ethics compliance as an RMA?

8. As an RMA, what would be your recommendations for improvement in terms of ethical research, and what would you advise for researchers hoping to venture into this complex and ever-changing field?

9. Do you consider that, even attending to the various ethical principles and compliance practices, research misconduct is the biggest threat to scientific integrity?