BACK TO FUNDAMENTALS OF RESEARCH

Ethics and Academic Freedom

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Position Paper
Editors: Credi, Alberto; Fontanesi, Luca; Montanari, Rebecca; Coppini, Sara; Gualandi, Bianca.

On December 2, 2024, the University of Bologna organised an international event titled: "Back to Fundamentals of Research: Ethics and Academic Freedom." The event featured prominent speakers and experts from national and international institutions, who shared their insights on emerging ethical concerns and the risks to academic freedom. Through this position paper, the University of Bologna aims to highlight the key messages that emerged from the discussions and to outline the challenges and recommendations to create a more responsible and supportive research environment.

Moderator:
Rebecca Montanari, Vice-Rector for Digital Transformation, University of Bologna

Keynotes:
Dirk Lanzerath, Professor of Philosophy and Managing Director of the German Reference Centre for Ethics in the Life Sciences (DRZE), University of Bonn

Further reading:
Lanzerath, D. (2023). 'Research Ethics and Research Ethics Committees in Europe'. In Thomas Zima, David N. Weisstub (eds.), *Medical Research Ethics: Challenges in the 21st Century*. Springer. **https://doi.org/10.1007/978-3-031-12692-5_22**

Lanzerath, D. (2023). 'Vertrauen in Wissenschaft und Forschung. Hohe Ansprüche in Krisenzeiten.' ('Trust in science and research. High expectations in times of crisis') In Dirk Lanzerath, Sebastian Graf von Kielmansegg (eds.), *Medizinische Forschung und COVID-19. Strukturelle Herausforderungen für Deutschland*. LIT. **https://lit-verlag.de/isbn/978-3-643-15392-0**

HIGHLIGHTS FROM THE KEYNOTE PRESENTATIONS

Dirk Lanzerath, Professor of Philosophy and Managing Director of the German Reference Centre for Ethics in the Life Sciences (DRZE), University of Bonn
Research has a profound impact on individuals and on society and ethical reflection should thus be integrated as early as possible into the research process. Environmental ethics and sustainability issues, for example, should be considered during the research and development phase and not later, as currently explored by the **RE4GREEN** project. However, new challenges - such as the risks relating to data dissemination, an increased need for ethical responsibilities outside the biomedical field and new research processes that are moving from laboratories into society (e.g., health apps that are released in a semi-finished state and incrementally updated) - have increased the demand for ethical advice. This, without corrective measures, may put research freedom under pressure.
The most effective protection is achieved when institutions and individuals work together systematically, within a joint ethics governance framework. Institutions, in particular, need to raise awareness at various levels, from facilitating training to setting up and supporting ethical bodies. Distinguishing between research with public and private partners is also important. Companies may lack transparent and independent ethical boards, but research ethics governance frameworks are also needed in non-academic environments.
The University of Bonn has established a comprehensive research ethics governance system with consulting groups and ethical bodies across different research fields and a

central body that advises the entire university. Researchers can seek advice from this committee, and training programs are offered to early-career researchers and institute directors to identify real-life problems. A new centre focused on preventing and addressing abuses of power is also being developed. A model of this kind, based on interaction with external partners, funders, and society, can certainly help to build credibility, reliability and trust in research. However, to be really useful, these governance frameworks must be continuously improved through practical applications and experience.

Liviu Matei, Professor of Higher Education and Public Policy, and Head of the School of Education, Communication and Society, King's College London

Further reading:
Matei, L. (2024). 'New frameworks of reference stir hope for academic freedom.' University World News. 28 August 2024. **https://www.universityworldnews.com/post.php?story=20240827182451588**

Matei, L. & D'Aquila, G. (2025). 'Newly Emerging Frameworks of Reference and Conceptual References for Academic Freedom: Institutional, National, Regional, and Global.' In Adrian Curaj, Cezar Mihai Hâj, Remus Pricopie (eds.), *European Higher Education Area 2030: Bridging Realities for Tomorrow's Higher Education*. Springer. **https://link.springer.com/book/9783031751394**

Liviu Matei, Professor of Higher Education and Public Policy, and Head of the School of Education, Communication and Society, King's College Londone
THow are ethics and academic freedom conceptualized and codified formally? How are they understood in practice?
It is important to have up to date, effective and shared conceptualizations and codifications of these concepts. Moreover, a clear understanding of these concepts is essential for researchers, students, staff, and other stakeholders as it significantly impacts operations and decisions in academia.
In order to guide and support the work of individuals and institutions in line with the fundamental values and principles of higher education and research, it is important to ensure well structured, functional and consistent frameworks of reference for academic freedom (for both the rights and responsibilities that it entails), comprising conceptual reference points for the key concepts, codes of conduct/implementation guidelines and mechanisms for monitoring. Various, often overlapping frameworks exist already. Global frameworks, for example, are built around UNESCO's 1997 and 2017 recommendations on the status of higher education personnel, and research and researchers, respectively.
The EU is currently developing a regional framework of reference for academic freedom, to be anchored on new, dedicated legislation. The UK Higher Education (Freedom of Speech) Act of 2023 exemplifies how countries create new national frameworks of reference. The European University Association's consequential framework for university autonomy is an illustration for institutional and inter-institutional frameworks.
The multitude of frameworks at various levels may result in fragmentation and contradictions. In addition, academic freedom can be seen and codified variably as a value, fundamental right or governance principle, thus creating further complications. For example, how can values be enforced and monitored within particular frameworks, as opposed to fundamental rights?
In a remarkable development, the European Higher Education Area (49 countries) adopted a series Statements on the Fundamental Values of Higher Education between 2020 and 2024, charting a new and potentially highly impactful regional framework of reference. Here, academic freedom is conceptualized and codified as a shared fundamental value alongside institutional autonomy, student and staff participation in higher education governance, academic integrity, and public responsibility for higher education and of higher education. Governments of these countries have formally committed to protect and promote the six values, as jointly defined, in their systems. A mechanism for monitoring the implementation of commitments has been developed jointly.
It is important for all stakeholders (students, staff, university leaders, policy makers, etc.) to learn about the relevant frameworks of reference, in order to be able to effectively practice and defend these values and principles.

ROUNDTABLE 1: THE INSTITUTIONAL PERSPECTIVE

F. Esposito - How can national governments safeguard the excellence of their own research systems, while taking into account other needs, such as national or economic security? How to balance national and global issues

- This question highlights a tension between seemingly conflicting needs, but balancing openness, integrity, and security is essential.
- Openness and integrity are clearly connected: open data enhances integrity by allowing scrutiny and validation, ensuring trustworthy research.
- Integrity and security are also deeply intertwined: breaches in security are often breaches in personal or organisational integrity.
- Openness and security have the most challenging relationship: openness protects against the misappropriation of data but not against their misuse. This is why the G7 advocates for data that are "as open as possible, as secure as necessary." Importantly, only researchers have the expertise to make the final judgement on this.

M. Hiney - How have ethical concerns in the research community changed between 2017 and 2023, as reflected in the different editions of All European Academies' European Code of Conduct for Research Integrity? And what do you envisage for the next edition?

- The updated Code reflects the changes that occurred over the past eight years: it has an increased focus on industry collaboration, environmental concerns, diversity and inclusion, as well as on new technologies, open science, and social media's impact on research dissemination.
- The core principles of reliability, honesty, respect and accountability remain the same, but we have emphasised the research environment: excellent research happens if there are infrastructures that enable it.
- The European Commission (EC) is funding new research to examine ethical challenges that are not covered by the Code and give guidance to ethical commissions through addenda to the Code.
- Future focus areas for the Code will include research security, maintaining integrity amidst financial pressure, science diplomacy, the relationship between the Global North and Global South and how research integrity and ethics can apply to society as a laboratory.

S. Misljencevic - What are the current and future strategies of the EC to effectively guarantee the excellence and freedom of research in light of emerging security issues? What will be the role of defence and dual-use research?

- The Charter of Fundamental Rights of the European Union highlights the importance of respecting freedom in the arts and sciences, but this freedom is in decline, putting innovation at risk, and its protection is fragmented across EU member states. This has prompted a rethinking and a strengthening of the principles that underpin it.
- External threats, such as disinformation and foreign interference, can affect sovereignty. To provide tools to higher education and research institutions and researchers navigating this complex scenario, the EC organised a mutual learning exercise on tackling R&I foreign interference and made a Commission Proposal for a Council Recommendation on enhancing research security.

- Domestic threats, which include political pressure, also require some form of protection to prevent possible negative impacts on research. The EC has thus launched a study to assess the legal and factual protection in the EU and identify potential areas of intervention. Preliminary results are expected in early 2025 and will be followed by an inclusive stakeholder consultation.

J. Palmowski - Considering the position of the Guild on institutional autonomy and academic freedom, how can you support your member universities to turn these principles into practice? How can University networks contribute to promoting responsible international collaborations?

- The defence of academic freedom and institutional autonomy among universities is the first founding principle of The Guild. Since our creation, we have seen how academic freedom has been increasingly challenged in Europe, and so as a network we advise policymakers in the European Commission and the European Parliament as they develop measures to protect academic freedom in Europe.
- Another crucial role of The Guild is to provide confidential spaces for its members, including its rectors, for confidential discussions on delicate challenges that relate to academic freedom and institutional autonomy.
- Finally, academic freedom comes with responsibility, to exercise your academic freedom for the public good. And that gives us a responsibility to be inclusive as institutions, but also in the way we pursue international collaboration. For this reason, the Guild focuses on fostering equitable research partnerships, particularly with African institutions, as we address common challenges framed by the AU-EU Innovation Agenda for the benefit of Africans and Europeans.

A. Celletti - How can responsible research practices be properly considered in the current and future research assessment framework? What role could evaluation agencies play in fostering open and secure research?

- Responsible research practices involve the respect of ethical standards, the reproducibility of results, and the prevention of data manipulation and plagiarism.
- In this scenario, adherence to FAIR (Findable, Accessible, Interoperable, Reusable) data principles are crucial, which is why in ANVUR's 2020-24 assessment exercise includes a "methodology" criterion that emphasises transparency and, when possible, data accessibility. Agencies should also encourage open science, ensuring publicly funded research is openly accessible.
- Evaluation agencies need to use a robust peer review process to mitigate unconscious biases related to gender, geography, institution, and language and organise training sessions for evaluators.
- Finally, it is essential to recognise the long-term impact of research, as significant breakthroughs may take an extremely long time to demonstrate their potential. Newton's laws were formulated in the 17th century and the first artificial satellite was launched more than two centuries later, in 1957. Evaluating innovative ideas through their short-term outcomes and impact can indeed conflict with academic freedom.

Roundtable - The researchers' perspective

Moderator:
Luca Fontanesi, Rector's Delegate for Competitive Research Projects, University of Bologna

Participants (all from the University of Bologna):
Roberta Calegari, Department of Computer Science and Engineering
Federico Casolari, Department of Legal Studies
Luca Lorenzini, Department of Veterinary Medical Sciences
Elisabetta Poluzzi, Department of Medical and Surgical Sciences

ROUNDTABLE 2: THE RESEARCHERS' PERSPECTIVE

R. Calegari - Can artificial intelligence systems be powerful instruments in the hands of those who want to build a responsible research ecosystem? If so, do they need to be developed according to specific rules or guidelines?
- AI has significant potential to transform the research ecosystem, accelerate research processes and enhance responsible research practices. However, AI must adhere to ethical guidelines, such as the EU's principles of lawfulness, ethics, and robustness.
- Projects like **AEQUITAS** aim to translate these high-level requirements into practical requirements, providing an experimentation environment to test AI fairness and understand the boundaries, risks, and societal impacts of AI systems. Involving stakeholders, particularly minorities, in the design process ensures AI serves the common good and fosters a responsible, inclusive research environment.

F. Casolari - In today's legal, social and ethical framework, to what extent are researchers free to act independently and what instruments are available to them to carry out excellent research responsibly?
- Many national constitutions and the EU Charter of Fundamental Rights state that academic freedom shall be respected. This does not mean, however, that such freedom is absolute. Limitations exist, such as the need to protect animal welfare or intellectual property rights.
- EU institutions, together with those of Member States, should promote coherent, simplified, and harmonised legal tools to promote a fair balance between the academic freedom and limitations that are needed to address today's threats to national and supranational security. In this respect, European research networks can facilitate a voluntary, coordinated approach at national and transnational levels.
- As the 2017 UNESCO recommendations emphasise, researchers must be aware of and take action to identify gaps and help create coherent and balanced legal frameworks that consider environmental and societal issues.

E. Poluzzi - Healthcare is especially complex when it comes to managing the ethical dimensions of research. Can you give us a practical example of responsible research from your everyday experience?
- Ethical principles in clinical research, like those from the Helsinki Declaration, are crucial, as they ensure respect for participants, institutions, and the scientific community. The challenge lies in balancing strict ethical guidelines with clinical freedom.
- Ethical guidelines and ethical evaluation procedures should be aligned with the rapid evolution of clinical protocols.
- It is important to educate all stakeholders, including patients, about ethical principles while fostering interdisciplinary dialogue to adapt them to the rapidly evolving landscape of clinical research.
- Universities have a pivotal role in enhancing ethical literacy. The University of Bologna, for example, has a Bioethics Committee that provides information, promotes training initiatives and makes proposals on issues of bioethical importance.
- Ethical guidelines should not be considered obstacles but essential components in ensuring impactful and respectful research.

L. Lorenzini - Veterinary medical scientists have long discussed how to manage delicate ethical aspects, such as how to reconcile animal welfare with the objectives of the research. What lessons learned and/or best practices could benefit other disciplines?

- Over time, we have observed a shift from a paradigm of mutual utility to one of empathy in the human-animal relationship, which has had significant implications, including for lab animal science. Veterinary science shows that ethical considerations enhance research quality and acceptance by balancing animal welfare with scientific goals, improving research quality and reproducibility.
- Since also in veterinary science, technologies can be used ethically or unethically, depending on their purpose (e.g., adapting livestock to climate change or creating companion animals lacking fitness), structured ethical frameworks and a culture of care are crucial for balancing ethical responsibility with scientific goals.
- Transparency and communication are essential to build trust and tackle ethical challenges, such as artificial intelligence and the risk of misinformation.
- To define a structured ethical framework, interdisciplinarity is also crucial – beyond fostering a culture of care and transparency.

Challenges

Multiplicity of ethical declarations, rules and committees.
- In times of new threats and crises, ethical guidance is especially necessary, e.g., to address security and foreign interference issues or to avoid the misuse of generative artificial intelligence.
- Rules, declarations, guidelines, and committees serve to guide research, not to control it, but are sometimes perceived as obstacles.
- Ethical frameworks range from institutional to global levels, each with specific codes of conduct. Collaboration may be undermined if these are not harmonised by a clear set of shared rules.

Underestimation of the interplay between ethical responsibilities and academic freedom.
- Ethical frameworks may significantly impact the daily operations and decisions of academic institutions and researchers.
- The increasing need for research security and risk management might affect the freedom of researchers in choosing their research practices and methods.
- Researchers' lack of awareness of risks and obligations and the lack of adequate guidelines, training and support may affect the balance of freedoms and responsibilities.

Potential interference of research security in excellent science.
- Adhering to ethical standards and ensuring reproducibility are key to trustworthy and responsible research practices. Transparency and adherence to FAIR data principles are essential for achieving excellent research. This view is also reflected in the new "methodology" criterion added to the most recent Italian research assessment exercise.
- The push for more open and transparent research is counterbalanced by a seemingly conflicting push for research security, driven by recent conflicts and the fear of the unintended military use of research data and scientific discoveries.
- Researchers are at the crossroads between these two forces, which are moving in opposite directions and at times they lack the tools or references to decide and act responsibly.

Recommendations

Engaging relevant stakeholders to design strong and shared ethical frameworks.
- Institutions should collaborate with researchers and other stakeholders to adopt, communicate and implement an ethical framework. Aligning ethical principles with practical applications, especially in sensitive fields, requires dialogue with external stakeholders like industry, which may have different priorities.
- Engaging internal and external stakeholders, listening to vulnerable groups, and fostering interdisciplinary dialogue can strengthen the relationship between science and society.
- Funders should support researchers and institutions by providing tools to address ethical and security issues in complex scenarios.

Balancing academic freedom and ethical principles.
- Academic freedom is a fundamental right that institutions, funders, and governments should guarantee.
- Rights and freedoms may not be absolute. While governmental institutions may introduce limitations that are strictly needed to preserve public order and security, university and research institutions should adopt an ethical framework that considers risks, security and respect for individuals. Academic freedom also lies in the choice of framework to be adopted as a reference.
- Ethical principles should be integrated into research "by design" rather than as an afterthought. Training, tools, and support services should be provided to all stakeholders.
- If new policies are created, bottom-up approaches to policymaking that involve researchers and society must be encouraged.
- A coherent regulatory framework should result in simplified regulations, guidelines, and obligations in order to be effective.
- Researchers should be conscious of their accountability to the public by adopting responsible research methods.

Balancing openness, integrity, and security.
- The apparent conflict between research security and openness as a guarantee of integrity is resolved by making data "as open as possible, as secure as necessary". The researchers will be the key actors in conducting risk assessment and due diligence activities on their research, in agreement with their institution and supported by the same, research funders and evaluation agencies via tools, guidelines and expert advisors.
- Promoting and supporting the application of FAIR principles for research data and ensuring the transparency of research processes helps maintain a balance between openness and security, protecting against misappropriation while fostering integrity.
- Scholars should engage more actively in public discourse involving all relevant stakeholders to counter disinformation, misinformation and build trust in science.