GLOBAL RESEARCH COUNCIL

EUROPEAN INPUT TO THE HOSTS OF THE
2024 ANNUAL MEETING OF THE

Global Research Council

Report from the European Regional Meeting

28-31 October 2024, Tallinn, Estonia and online

Estonian Research Council

SCIENCE EUROPE
Shaping the future of research

Table of Contents

Regional Meeting of the Global Research Council: "Research Management in the Era of Artificial Intelligence (AI)" and "Working Together in Co-Creation to Address Global Challenges"

INTRODUCTION AND GENERAL REMARKS FROM THE EUROPE REGION

The Europe Regional Meeting took place between 28 and 31 October, in Tallinn, Estonia. The meeting was co-hosted by the Estonian Research Council (ETAG) and Science Europe. It was attended by European GRC Participants and guests, with a total of 80 attendees in-person and an additional 15 online.

Participants comprised of representatives of GRC participating organisations, research funding organisations from across Europe.

The topic for discussion for this year's GRC cycle were divided into two sub- topics:

- **Research Management in the Era of AI**
- **Working Together in Co-Creation to Address Global Challenges**

These topics have been at the centre of research policy discussions in recent years. Their potential interconnections are becoming increasingly visible, such as using AI in research management to reflect the importance of global challenges in research management processes, or address the Sustainable Development Goals (SDGs). Furthermore, norms point to a shift from current multilateral research collaboration towards more reciprocal practices. Indeed, co-creation can be driven by "disruptive technologies", but only if global actors are on an equal footing.

The outputs of the discussions that took place in all Regional Meetings will be synthesised into Statement of Principles, that will be endorsed during the GRC Annual Meeting in Riyadh, Saudi Arabia on 18-22 May 2025. The Regional Meetings also gave the opportunity to present the activities of the three GRC Working Groups (on Equality, Diversity and Inclusion, Responsible Research Assessment and Multilateral Engagement).

The present report reflects the essence of the discussions held during the Regional Meeting, including the opening speeches, keynote declarations, panel sessions and break out discussions.

The Regional Meeting in Tallinn was opened by the following speakers:

- **Anu Noorma**, Director General of the Estonian Research Council (ETAG)

- **Mari Sundli Tveit**, Chief Executive of the Research Council of Norway (RCN), President of Science Europe, Member of the GRC Governing Board
- **Kristina Kallas**, Minister of Education and Research of Estonia
- **Jüri Ratas,** MEP, Member of the Committee on Industry, Research and Energy, European Parliament
- **Signe Ratso**, Deputy Director-General for Research and Innovation, European Commission (video address)

1. RESEARCH MANAGEMENT IN THE ERA OF AI

The integration of AI in research management has introduced both transformative opportunities and complex challenges. One of the dilemmas discussed was when research organisations should delve into AI tools, which could require them to act as both developers and users. This dual role could be demanding. On one side, current AI tools might not align with the specific requirements of research organisations; on the other, if organisations don't engage with the topic from an early stage, they could miss out on opportunities to become more competitive. As AI is a disruptive technology that reshapes research dynamics, Research Funding Organisations (RFOs) are urged to invest wisely.

The issue of building trust between the research community and disruptive technology was discussed. Trust in AI is built through transparency and by validating outputs, aligning with the results of human-generated research. Integrating AI into assessment processes in collaboration with the scientific ecosystem was also discussed. This may include creating a distributed infrastructure for AI management on a global level. Strategic approaches and literacy in AI are necessary, but beyond these, how the use of AI is communicated remains a critical issue. Participants noted that responsible AI integration should also involve civic society to ensure that science remains accountable and responsive to the needs of society.

AI IN PEER REVIEW PROCESSES

The use of AI in peer review processes was seen as a potentially useful tool, to enhance the efficiency of the process, where humans would preserve the main role. Some RFOs have already began to incorporate AI into the peer review process. For instance, recent proposals include requirements for researchers to disclose how they use AI in their work. AI's role in monitoring and project management was also highlighted, suggesting opportunities to employ AI in pairing reviewers to projects, statistical matching, and identifying conflicts of interest. Further, AI could be utilised in analysing previous publications of grant applicant teams, employing algorithms to identify how their expertise aligns with proposed projects.

AI also offers potential in assessing the quality of reviews and assisting review panels in evaluating submissions. Some participants noted that this is an appropriate time to introduce AI into project assessments, although some recent studies question if research quality can (to what extent) be assessed by AI. If legal, confidentiality and technical issues are solved, the use of AI in review processes can support standardising processes in form of an "assistance model" across funding bodies.

Investments into AI are already being made by organisations, including the development of tools that enable reviewers to assess their own work's alignment with established review practices. AI could further help identify expertise gaps in multidisciplinary research or assist in overcoming conflicts of interest. Further, it could support in expanding the diversity and scope of reviewers, enabling new ways to organise and streamline the review process. While minor errors are still expected, it can expedite the review process and contribute to higher quality outcomes.

Main concerns on the topic included the need to maintain the transparency of the full peer review process. Fostering trust in the scientific community is a foundational need in order to work with these tools. To establish trust and confidence, it is necessary that all stakeholders understand how AI infrastructure operates. Finally, data protection issues and data security are a key concern for all actors involved.

ROLE OF THE GRC

The GRC could serve as a space for learning, sharing practical resources, and fostering multilateral collaborations. It is a place for the research community to exchange tools used throughout a project's lifecycle, and potentially share data, or conduct pilot studies. The GRC could act as an observatory for AI applications in Research, Development, and Innovation (RDI) management, and provide valuable insights into AI capabilities and their impact on research. To address existing fragmentation among infrastructures with similar aims, the GRC could help map the range of AI capabilities available, offering a clearer picture to stakeholders involved. By bringing together more funders, projects, and scientific communities, the GRC can support collective efforts to develop and share the best solutions.

The GRC can also play a role in bridging the information gap between those using AI and those shaping policy. There is a need for AI literacy at the policy level, and the GRC could support education in this area. However, the GRC must carefully consider its focus to avoid duplicating efforts.

2. WORKING TOGETHER IN CO-CREATION TO ADDRESS GLOBAL CHALLENGES

The increasing complexity and interconnectedness of today's global challenges, such as environmental sustainability and public health, require solutions that transcend national and disciplinary boundaries. Co-creation, as a holistic approach, is considered an essential tool for addressing these multi-dimensional issues. By incorporating local knowledge and perspectives, co-created solutions can become more sustainable and resilient, reinforcing the view that "business as usual" is no longer possible. Research funders are called to rethink traditional approaches, taking historical contexts and structural challenges into account when engaging in co-creation.

The interconnected nature of global problems was noted, with the understanding that each major issue is often tied to other global problems. Effective co-creation begins with a thorough understanding of the problem, ideally through a "co-design" phase where all stakeholders

collaboratively define the core issue. Participants also recognised the various definitions of co-creation, underlining the need for a shared understanding in collaboration and project execution. To that consideration, participants urged the precise definition of the areas of co-creation, as well as the need to establish boundaries, as co-creation is one way amongst others to conduct research. A complete transformation of the research system cannot be expected, due to the political nature of many topics.

Training in international collaboration is vital for co-creation, and also requires a clear definition of missions. An inclusive co-creation approach can help rebuild trust, ensuring that citizens do not feel excluded amid rapid scientific advancements. Local partnerships are instrumental in fostering a deeper understanding, especially when it comes to environmental issues, ecosystems, and climate challenges faced by certain regions. Research quality and the success of co-creation can be enhanced by local partnerships, especially in the topics mentioned above.

While mission-driven approaches are promising in addressing global challenges, they come with challenges of their own. Maintaining long-term commitment to these missions requires structural and motivational support from all stakeholders involved. In order to promote sustainable solutions, both ecological and social dimensions should be addressed. That would require the involvement of diverse sectors, including the humanities, industry, and civil society.

However, for research to be taken up by society, it needs to be discussed at the right level. Specifically, when addressing climate change, co-creation is often more tangible at the local level. In contrast, at the global level, scientific knowledge is often integrated into political and economic frameworks, where competing priorities, such as economic growth, resource distribution, and geopolitical interests, can lead to a clash of opinions, emotions, and interests.

At the same time, it is dangerous to assume that researchers alone can solve every problem, as this can create unrealistic expectations among society and decision-makers. Co-creation in this context involves a thoughtful division of labour and responsibilities. It is therefore essential to achieve a proper understanding of true scientific questions leading researchers, solution-driven applications, community knowledge and political performance. Technological advancements will not resolve all issues at once, and it is important to acknowledge that we may not achieve the ideal solutions we hope for today, but rather the feasible solutions currently within reach.

Engaging politicians in co-creation was also deemed necessary, recognising nonetheless that co-creation is a long-term commitment, and political agendas often operate on shorter timelines. Importantly, in collaborating with policymakers in co-creation, it is important to provide a clear breakdown of the financial and resource implications each solution entails. By clarifying these investment requirements, co-creation efforts can align better with political decision-making processes, making the impact and resource needs transparent.

While in many cases co-creation can be the best approach to address specific challenges, it was stressed, however, that science often needs the space and time to unfold freely and from the ground up to create new knowledge. Co-creation should thus not be regarded an aim in itself, but a modality of organising research that should be applied if necessary. Funders should thus provide frameworks and build capacity for co-creation and at the same time allow a research-driven choice of how to address scientific questions (which can mean an informed and deliberate decision not to co-create). The choice of modality for conducting research should itself be science-led!

ROLE OF THE GRC

Recognising the shorter timelines of political agendas, in contrast to the long-term commitment needed for co-creation, global platforms like the GRC could provide long-term insights to inform future-oriented policies.

Finally, the importance of co-creation lies in creating more opportunities for collaboration across disciplines, scales, and regions, and in expanding transdisciplinary approaches to address these global challenges.

FINAL REMARKS

As a summary, European GRC participants agreed on the following points:

RESEARCH MANAGEMENT IN THE ERA OF ARTIFICIAL INTELLIGENCE (AI)

- Transparency and human oversight is key in dealing with the complex challenges in AI, whereas opportunities to integrate AI into research management are ample.
- Trust between the research community and AI must be built through transparency, solid legal, technical and confidentiality frameworks as well as validation, ensuring reliable outcomes.
- RFOs should invest wisely in AI, balancing the drive for competitiveness with staying true to their research objectives.
- AI should be introduced in peer review processes to enhance efficiency, while humans drive the process; RFOs are starting to require researchers to disclose AI usage.
- AI could support peer review through pairing reviewers with projects, statistical matching, identifying conflicts of interest, and assessing review quality, amongst others.
- There is a need for and mitigation of implicit and automation biases in peer review and maintaining data protection and security, as trust in AI's role relies on clear understanding and safeguards for all involved.
- Responsible AI use requires strategic approaches, AI literacy, and inclusion of civic society to ensure that science remains accountable, inclusive, and responsive to societal needs.

WORKING TOGETHER IN CO-CREATION TO ADDRESS GLOBAL CHALLENGES

- Co-creation, where the adequate approach, must begin with a thorough understanding of each issue, ideally through a collaborative “co-design” phase that involves all stakeholders to clearly define core problems.
- Incorporating local knowledge and reciprocal partnerships is essential to developing sustainable and resilient approaches to co-creation, aiming at fostering research quality. Recognising the political nature of certain topics sets out need for clear boundaries in co-creation areas.
- International collaboration training and clear mission definitions are crucial for effective co-creation.
- An inclusive approach builds public trust and ensures citizens do not feel left out in the face of rapid scientific progress.
- Mission-driven approaches show promise but require long-term commitment and structural support.
- Researchers alone cannot solve complex problems, nor should they be expected to. Co-creation should involve a division of labour, exploiting technological advancements but not relying on them for solutions.
- Engaging politicians in co-creation is vital, though challenging due to shorter political timelines. Clear communication of costs and benefits for all involved can help align co-creation efforts with political decision-making processes, making the impact and resource needs transparent.