A positive future for research in Ireland:
Royal Irish Academy response to the Research and Innovation Bill 2023

May 2023



# A positive future for research in Ireland

This discussion note outlines a set of guiding principles for consideration by the Department of Further and Higher Education, Research, Innovation and Science as it moves to implement the establishment of Research and Innovation Ireland. It identifies two core policy ambitions for it namely, to build national capacity in research (points 6 and 7) and an inclusive and diverse research system (points 8 and 9). Thereafter it offers some detailed comments on the Heads of the Research and Innovation Bill 2023.

#### Introduction

- I. The Royal Irish Academy is the all-island academy for the arts, humanities, sciences, and social sciences. It strongly supports Ireland's ongoing commitment to research and innovation and its clear articulation in statute law as detailed in the heads of the Research and Innovation Bill 2023 ("the Bill"), and welcomes the establishment of a dedicated research funding agency supporting all disciplines and its potential transformative impact for Ireland.
- 2. Researchers and government alike share an ambitious vision for research across all disciplines in the arts, engineering, humanities, mathematics, sciences, social sciences and technology in Ireland. The establishment of an inclusive and comprehensive competitive research funding agency for Ireland, Research and Innovation Ireland offers an opportunity for researchers, government, industry, the third sector and society to work together to develop a positive and ambitious future for research.
- 3. Research is developing at a pace unimaginable just a few decades ago and serves to improve the quality of our lives at many different levels. As the responses to the national conversation on research Creating our Future illustrates, the public has identified a variety of future challenges from climate change to mental health, national security to emerging technologies and has confidence that research can and should be part of providing solutions to these problems. Research in the arts, engineering, humanities, mathematics, sciences, social sciences and technology, are required as part of Ireland's response to these challenges.
- 4. At a global level, numerous nations and multi-lateral organisations including the European Union and the United Nations are renewing or developing initiatives to strengthen engagement across science, society, industry, and policy. Such strategic positioning clearly demonstrates the importance of building the quality and excellence of Ireland's core research capacity to enable it to meet domestic priorities and to contribute to multi-lateral actions on global issues.

# Policy ambitions for research and innovation in Ireland

- 5. The Royal Irish Academy offers the following policy ambitions for consideration in the development of Research and Innovation Ireland namely:
  - a. Building national research capacity across the arts, humanities, and social sciences (AHSS) and science, technology, engineering and mathematics (STEM) continuum.
  - b. Building a diverse and inclusive research system.

### Building national research capacity across the AHSS and STEM continuum

- 6. An informed understanding of long-term research directions, existing and emerging areas of research excellence, strengths and gaps in the current funding landscape, commitment to supporting the overall research base, and responsiveness to societal and policy needs should be at the heart of Research and Innovation Ireland's programmatic decisions in order to:
  - a) allow researchers and government make sound decisions about the future directions in research and investment.
  - b) contribute to the setting and achievement of national policy priorities across the broad range of policy domains.
  - c) connect, collaborate, contribute and impact globally.
- 7. We urge Research and Innovation Ireland to:
  - a) Articulate ambitious and achievable ambitions for the research sector, and support institutions and individual researchers to pursue them.
  - b) Develop a strategy to aggressively grow the level of state investment in R&D from the current level of 1.3 1.5% of GDP to at least the EU average of 2.03%.
  - c) Proactively nurture a strong research base across the full spectrum of research domains and disciplines and support the necessary structures to enable inter and trans-disciplinary research.
  - d) Respond proactively to the distinctive national needs within the Irish R&D landscape including but not limited to the all-island dimension, regional inequalities, the ambition to significantly upscale the research capacity of the Technological University base, and the promotion of the Irish language and minority languages.
  - e) Recognise the centrality of research infrastructures to the achievement of a globally competitive research base and the necessity to inform investment with reference to the diversity of research needs and long-term research directions.

7.1. It would also be important that there would be a positive alignment between the agency and the national science advisory mechanism to support the effective operation of the national research structure to meet future challenges.

Build an inclusive and diverse research system

- 8. Research and Innovation Ireland can be highly influential in supporting a diverse, inclusive and positive research culture and environment within the higher education and research sectors. We urge Research and Innovation Ireland to:
  - a) Actively consult and engage with the research and innovation community in identifying ambitions, goals and processes to develop research talent, capacity, infrastructures and funding programmes.
  - b) Promote and reward equitable, inclusive, and positive research cultures and environments in its funding calls, terms and conditions, grant reporting, and policies.
  - c) Monitor the impact of its funding programmes upon the equality of opportunity across different groups of researchers including rewarding established excellence, capacity building, transdisciplinary research, emerging research areas, research in minority subjects, minority languages, and independent researchers.
  - d) Embed transparency, integrity, and openness as core operational principles within the agency's own governance, executive structures, and programmatic arrangements.
- 9. The agency should make Ireland an attractive destination and place to work for researchers by promoting a positive and sustainable research culture. This includes the provision of differentiated research funding programming and supports across the researcher career cycle as part of a wider objective of attracting and retaining research talent. Close attention should be paid to the model, structures and principles underpinning the European Research Council's unified structure with research excellence as the fundamental criterion.

## **Specific observations**

- 10. In these next stages of government scrutiny of the Bill, the Royal Irish Academy has the following observations in respect of specific Heads of Bill.
- 11. Head 3 Interpretation: The RIA is supportive of the definitions supplied for 'applied research', 'innovation', 'interdisciplinary research', and 'development. The RIA recommends the inclusion of definitions for 'fundamental research', 'oriented basic research' and 'research excellence'. These terms encompass key concepts and will be critical in informing the operation of Research and Innovation Ireland (RII).

The RIA fully supports the adoption of the European Research Council (ERC)<sup>i</sup> model to define and operationalise research excellence and its assessment across the new RII structures. Research excellence as conceived of by the ERC is based upon a peer review evaluation of the quality of the research idea and the researcher, with the latter evaluated according to their career stage.

The Academy further offers the following definitions for consideration by the Department of Further and Higher Education, Research, Innovation and Science:

#### Definition of fundamental research

"This means research carried out for the advancement of knowledge, without seeking long-term economic or social benefits or making any effort to apply the results to practical problems or to transfer the results to sectors responsible for their application" (Source: EuroStat). Such research may also be referred to by the term 'pure, basic research'.

#### Definition of oriented basic research

Research "carried out with the expectation that it will produce a broad base of knowledge likely to form the basis of the solution to recognized or expected, current or future problems or possibilities" (Source: EuroStat).<sup>2</sup>

- **12. Head 7 Establishment day:** The Academy welcomes that the RII will have separate legal personality.
- 13. Head 8 Objects: The Academy welcomes the principles expressed under Head 8 in particular the commitment to support excellence in research across all disciplines and from fundamental to applied research across all career stages; its recognition of research and innovation's contribution to sustainability. In light of Ireland's international ambitions as expressed within Impact 2030 it suggests an additional insertion to point (d) as per the wording in italics below:
  - d) "In collaboration with An tUdarás and other public research funders, to build a globally competitive research and innovation system, and to grow Ireland's reputation as a location for excellent research and innovation".

The RIA also wishes to bring to the Department's attention the important distinction that should be drawn between fundamental research and oriented basic research recognising their distinctive and separate orientations, objectives and indicators for the assessment of excellence.

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Basic research

<sup>&</sup>lt;sup>2</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Basic\_research

13.1. **Academic Freedom**: The Academy suggests that consideration be given to the inclusion of academic freedom under Head 8 as a key principle applying to the research and innovation system. It is important that the governance structures envisaged under these Heads of Bill be read in conjunction with s.8(1)(f) and s.120 <u>Higher Education Authority Act 2022</u> (inserting s.5A into the Higher Education Authority Act 1971) under which an tÚdarás is obliged to respect, preserve and promote the academic freedom of both higher education institutions and their academic staff (see s.14 Universities Act 1997 and <u>Article 13</u> of the EU Charter of Fundamental Rights (CFR)). This is to be done while having regard to inter alia the resources available and the obligation to secure the most beneficial, effective and efficient use of those resources (s.5A(2)).

Given the extensive powers of Research and Innovation Ireland (hereafter RII) under the Bill, the Academy would expect to see a similar obligation on that body as on an tÚdarás and on the Minister and the government.

- 14. Head 9 Functions: The Academy welcomes the express function of the RII in supporting equality, diversity and inclusion in research and innovation (K) and the necessity of honouring this in relation to its function of attracting research talent to the State (I). The Academy welcomes the commitment within the Bill to the role of RII in supporting institutions in undertaking policy-facing research and to build a culture within Irish policy making that supports the use of research and evidence. It suggests the following amendment to (h) namely to replace 'to support policymaking' with the wording 'to inform policymaking' to avoid the appearance that the necessary academic independence of universities and other research performing institutions could the undermined.
- **15. Head 14 Advice to Minister:** The Academy welcomes that the RII can give advice to the Minister on research related matters but notes that there is no obligation on the Minister to have regard to that advice.
- 16. Head 15 Membership of the Board: The membership of the RII is critical to the advancement of academic excellence in Ireland. The size of the Board seems appropriate to ensure a range of voices. The Academy is supportive of the measure to ensure the representation of enterprise and the adoption of gender specific targets in membership of the RII Board.

The criteria of 'sufficient experience and expertise relating to matters connected with the functions of the RII' as determined by the opinion of the Minister are insufficient but could be strengthened through a commitment to taking a competency-based approach in the making of Board appointments.

Head 15 does not explicitly provide for the representation of persons with expertise in research itself. The Health Services (Governance) Act 2019 does make more detailed provision for

representation and the Academy calls for specific provision to be made for presentation upon the board as follows:

- "(12) At least 2 of the persons appointed under (1) shall be persons with significant leadership and research experience in the sciences, social sciences, creative arts, technology, humanities, engineering, mathematics and humanities, whether in or outside of the State"
- 17. **Head 20 Committees of Board:** It would be useful to indicate the type of benchmarks that would be used to assess what constitutes the knowledge and experience necessary for council/board/committee members to discharge their functions.
- 18. Head 23 Appointment of Chief Executive Officer: The Academy welcomes the requirement that the RII CEO must meet the criteria to sit on the Board.
- 19. Head 28 Corporate Plan: The Academy suggests that this Head could be further strengthened and confer an obligation upon the RII to consult higher education institutions, research performing organisations, representative bodies including the national academy and researchers through surveys etc.
- 20. **Head 51 Transfer of certain activities of An tÚdarás:** The Academy would welcome more explicit wording under this provision to clarify that the RII will now be responsible for the advancement of and support of excellence in research in the arts, humanities and social sciences.

# **About the Royal Irish Academy**

The Academy promotes and supports excellence in scholarship across the sciences, humanities and social sciences. It is an independent, self-governing body of Ireland's most distinguished and internationally renowned scholars and scientists. The Academy encourages and facilitates scholarly informed debate and discussion on issues of public interest in line with its members' expertise.

For more information on this submission please contact the Royal Irish Academy, policy@ria.ie

<sup>&</sup>lt;sup>1</sup> The European Research Council programme funds award Europe's most prestigious research grants, supporting excellent researchers in carrying out ground-breaking, high-risk, high-gain, frontier research projects in any area of research.