



"Responsible research in an open research environment"

Report on the Joint Workshop by the National Research Integrity Forum and the National Open Research Forum

The Clock Tower, Department of Education and Skills, Dublin Friday 8th March 2019

Purpose and Background

This workshop brought together the National Open Research Forum (NORF) and the National Research Integrity Forum (NRIF) - two national fora that have been actively creating national principles and policy statements for the future of research practices under the umbrella of Responsible Research and Innovation (RRI). The purpose was to inform one another of developments, and to explore synergies between Research Integrity and Open Research. The focus was on research integrity in an open research environment: how does research integrity contribute to open research and how can open research requirements support or challenge research integrity processes?

All members of the two fora were invited to participate, alongside representatives of the Department of Education and Skills, Department of Business, Enterprise and Innovation, Research Performing Organisations (RPOs), and Vice Presidents for Research and Research Officers from the higher education institutions. The event was organised by forum representatives from The Technological Higher Education Association (THEA), the Higher Education Authority (HEA), the Health Research Board (HRB) and the Digital Repository of Ireland (DRI).

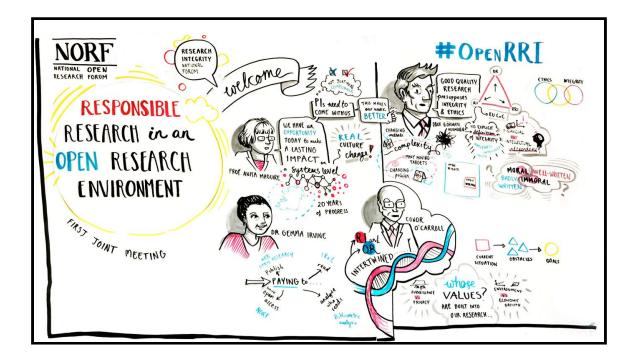
Workshop Summary

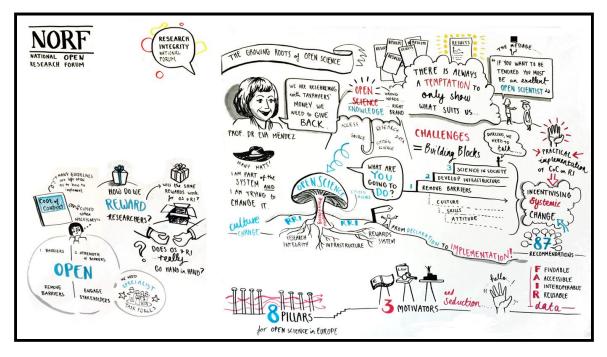
The workshop kicked off with opening addresses by Prof. Anita Maguire (UCC), Chair of the National Research Integrity Forum, and Dr. Gemma Irvine (HEA), Co-Chair of the National Open Research Forum. Dr. Irvine provided an overview of the research system in Ireland over the past 20 years, noting the most recent initiatives, and Prof. Maguire emphasized that the workshop was Ireland's opportunity to coordinate research integrity and open research approaches nationally.

Two expert keynote addresses provided inspiration and context for international developments in research integrity and open research. Göran Hermerén, Professor Emeritus of Medical Ethics, Lund University and Chair of the ALLEA Permanent Working Group on Science and Ethics, delivered a keynote on *"Openness revisited. Research integrity in an open research environment,"* and Eva Méndez, Deputy Vice President for Research Policy Open Science at Universidad Carlos III de Madrid

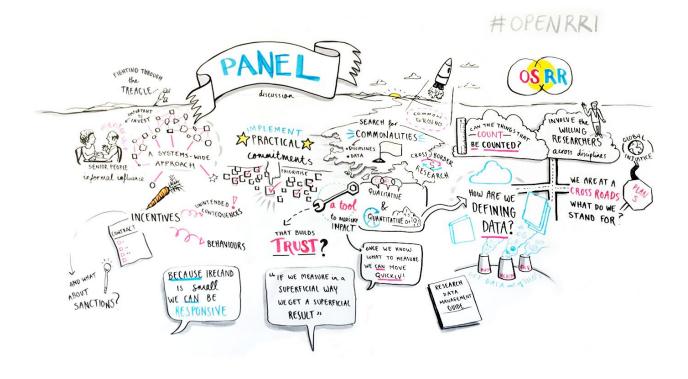
and Chair of the European Commission Open Science Policy Platform, gave a keynote on "*The Growing Roots of Open Science*." Both outlined the challenges in the areas of integrity and openness, drew out the relationship between the two, and provided inspiration for the afternoon workshops.

Throughout the day, graphic harvester Eimear McNally visualised the key points of the discussion creating a rich and lively representation of the issues at hand, leading to the illustrations in this report.





For the panel discussion that followed, the keynote speakers were joined by Prof. Anita Maguire and Dr. Patricia Clarke, Programme Manager–Policy and EU Funding at the HRB and Co-Chair of the National Open Research Forum. Chairing the morning keynote and panel discussion was Dr. Conor O'Carroll, who recently chaired the European Commission's Working Group on Rewards under Open Science, and the Working Group on Education and Skills under Open Science.



Following lunch, the workshop moved into a World Café setup chaired by Dr. Natalie Harrower, (Director of the Digital Repository of Ireland, Chair of ALLEA E-Humanities Working Group and NORF member), and Siobhán Sleeman (Research Policy Analyst, HEA and member of both NORF and NRIF) with participants assembled in groups to respond to particular themes where cross-cutting challenges for research integrity and open research exist.

Facilitators presented the questions to a group, noted key elements of the discussion, and then after a set period of time, moved to the next table of participants to present the same question for development and refinement. When the circuit was complete, rapporteurs delivered a summary of the key points, which have been collated for this report.



Pictured right: Eimear McNally

Key Themes Explored

1. Culture Change and Incentives

The importance of the link between Research Integrity and Open Research was discussed. There is a need for coordination between NORF and NRIF on common agenda items. The implementation of the Open Research agenda will improve transparency of research data, methods and results, having a positive effect on Research Integrity.

There are important differences in focus between the different stakeholders which must be explored and understood e.g. funders and policy makers may wish to have a greater focus on Open Research, but traditional research metrics remain important in RPOs, especially for international rankings. Buy-in of senior management and senior academic staff in RPOs will be essential to achieving culture change and in mentoring of future generations of researchers.



It will be important to raise awareness of the benefits of participating in Open Research and to follow this through with practical steps to embed Open Research in recruitment, promotion and grant assessment processes. It should be made simple for researchers across all disciplines to publish Open Access, perhaps with separate budget lines. Supporting this culture change will require technical infrastructure and human capital to support all the aspects of Open Research. One example provided is the general move towards "publish and read" agreements with publishers, which assists with a transition from traditional subscriptions towards paying publishers to publish open access.

2. Measurement and Assessment

How to improve the use of 'responsible' research metrics across the research system was discussed. It was noted that it would be of value for all research funders and HEIs to agree to a small set of robust and internationally comparable metrics (e.g. Snowball Metrics), that could be monitored and compared at a higher education system level. By embedding these metrics in the funding and strategies of HEIs, including the reward of individual researchers, these 'responsible' metrics may help to drive positive behaviours at various levels. Agreeing a core set of common metrics would also help to reduce the administrative burden associated with collecting data to different definitions and standards for various stakeholders within the research system. The importance of identifying appropriate metrics for capturing and rewarding public engagement in research was recognised.

Signing up to and implementing the DORA principles - the San Francisco Declaration on Research Assessment - was recommended. It was noted that some of the research funders (IRC, HRB, SFI)

have already signed up to DORA, but there is a need for HEIs to also support this initiative. The possibility of THEA/IUA signing to up DORA on behalf of their members could be explored.

3. Resources required to support the Open Research Agenda

For policy to be put in place, we need to identify what is required and how much it will cost, taking into consideration the resources that are already in place. In general, the main resources required will be a) Infrastructure and b) Training.

- a) Infrastructure: ideally a centralised national infrastructure for data and article storage should be provided, complemented by specialist teams to assist. A good example of such a centralized infrastructure is ICHEC, the Irish Centre for High End Computing. If this is not feasible, there should at a minimum be inter-connectivity between individual pieces of infrastructure. For open publishing, could the HRB Open Research Platform transition to become a national Open Research publishing platform?
- b) Training: a cohort of research data stewards/data managers will need to be put in place throughout the RPOs. Programmes to train them will be essential; could a train-the-trainer programme be developed or availed of at European level? The work of data stewards could be complemented by Open Research champions in the RPOs, who can champion Open Research across all levels of the RPO.

The issue around "openness" of fees charged by publishers for Open Access was discussed, as well as tracking Open Access fees paid at a national level. RPOs should be introducing cost centres for Article Processing Charges (APCs), to identify the total national spend on APCs. It was also recommended that RPOs sign up to the Open-APC INTACT project, which releases datasets on fees paid for Open Access journal articles by universities and research institutions.

4. Responsibilities

The main actors within the research system with responsibilities for supporting the transition to open research were identified. At the national level, there is a need for inter-departmental coordination to ensure coherence in government policy with regard to open research, with associated leadership and resourcing for implementation.

Research funders (including the European Commission) also have a critical role to play in

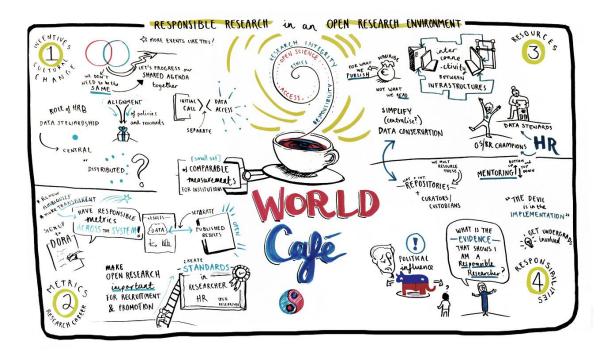


promoting research integrity and the Open Research agenda. Ensuring alignment between funders' eligibility and assessment criteria and the career structures within HEIs can encourage researchers to embrace and adopt open research practices.

Within HEIs, the Research Support and Graduate Research Offices can promote and support the development of an Open Research culture within the HEI and particularly among early career researchers. It is important that these offices link with the HR department to ensure training is available and that incentives and rewards for researchers are embedded within career structures. For example, a Research Excellence Award could also be offered for commitment to Open Research.

The HEI Libraries (with support from IT Services) also play a vital role in ensuring the provision of necessary infrastructure and support for open research, from provision of e-repository services, advocacy and support, to data management planning and policy. National and international repository services may also become increasingly important in giving researchers choice of where to deposit their publications and data.

Researchers themselves are of course integral in this shift to Open Research. Raising awareness among researchers and offering training and mentoring will form an important part of this process, as will revised career structures, incentives and rewards. Identifying Open Research champions within HEIs could support with driving this agenda forward and bringing about a culture change.



Key Recommendations

- 1. Funders and RPO management teams should seek to embed Open Research in recruitment, promotion and grant assessment processes
- 2. All stakeholders should champion the benefits of Open Research
- 3. A centralised national infrastructure, or a number of certified disciplinary infrastructures, should be supported for data preservation and open access publishing, complemented by specialist teams to assist.

- 4. Suitable training (including Train-the-Trainer programmes) for researchers and to develop a cohort of professional data stewards should be made available for all RPOs to benefit from.
- 5. The cost of Open Access publishing should be tracked at national level using data provided by the RPOs.
- 6. Research funders and HEIs should be encouraged to sign-up to DORA (The San Francisco Declaration on Research Assessment).
- 7. The use of responsible metrics should be promoted a core set of robust, internationally comparable metrics should be agreed and monitored by research funders, HEIs and policy makers.
- 8. All stakeholders with responsibilities for progressing the Open Research agenda should ensure alignment of policies and practices, as far as possible, to ensure the research system as a whole moves in a common direction.
- 9. Researchers need to be involved at all stages of adopting and road-mapping Open Research in Ireland