

# Making Open Science the “New Normal” in a Large and Diverse Institution: The Road so Far.



Edinburgh Open Research

Authors: Kerry Miller, Open Research Coordinator, University of Edinburgh. [kerry.miller@ed.ac.uk](mailto:kerry.miller@ed.ac.uk) ORCID - 0000-0002-6463-6572  
Simon Smith, Research Data Support Officer, University of Edinburgh. [simon.smith-2@ed.ac.uk](mailto:simon.smith-2@ed.ac.uk)

## Introduction



Attempts to effect a fundamental change in research culture and practice are all the more difficult when the environment is as large and as complex as the University of Edinburgh. Open Science (OS) advocates must reach almost 5000 academic staff and more than 15000 postgraduate students; staff and students are spread across 3 Colleges consisting of 21 Schools and more than 200 different Research Centres and Institutes.

In response to these difficulties, the University of Edinburgh has developed an Open Research Roadmap<sup>1</sup> based on LERU's "Open Science and its role in universities: a roadmap for cultural change."<sup>2</sup> Our Roadmap both informs our actions and measures our progress towards making Open Research the "New Normal" for our staff and students.

Undoubtedly, we are making good progress in some areas. However, despite our best efforts, understanding of what OS is and what researchers are meant to do about it remains uneven.

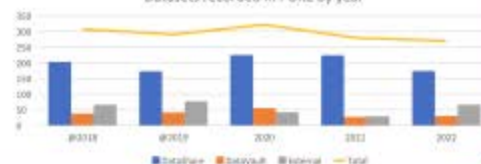
## FAIR Data



An updated Research Data Management Policy<sup>4</sup> came into effect in January 2022. This policy emphasises the importance of good RDM in maintaining research integrity and promotes the use of the FAIR principles by all researchers creating or collecting research data.

The University's open data repository, DataShare, has been helping research staff and students to make their data FAIR since 2009. In 2019 a secure encrypted archive service called DataVault was launched to support the long-term preservation of sensitive data and large datasets that online repositories struggle to manage. Both services provide metadata to a PURE CRIS system to increase the Findability and Accessibility of datasets. Deposited datasets are actively curated to ensure sustainable formats are used and sufficient metadata and documentation is present. In this way, repository staff ensure that our researchers' data will be FAIR in the long-term.

Datasets recorded in PURE by year



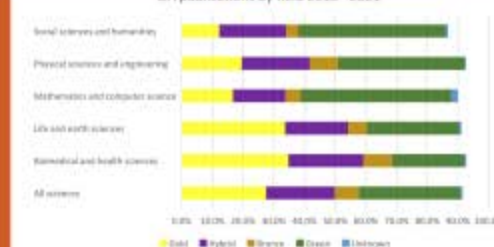
## Future of Scholarly Publishing



Open Access (OA) Publication is well established at Edinburgh with 90.8% of publications OA according to the 2023 Leiden Rankings<sup>5</sup>. In January 2022, Edinburgh became the first university in the UK to adopt an OA rights retention policy. This policy ensures Edinburgh authors cannot be forced by publishers to surrender copyright to their work and gives us the right to publish the authors accepted manuscript in our OA repository on the date of online publication.

Edinburgh Diamond supports staff to publish fully open journals and monographs. The service currently hosts 23 journals and nine monographs. Demand for Edinburgh Diamond is steadily increasing, but expansion is currently limited by a lack of staff resources.

OA publications by field 2018 - 2021



## Culture Change



Culture change is central to achieving the university's Open Science ambitions. Without it real, practical change will be impossible to achieve. This is why we focus our greatest efforts on awareness raising, advocacy, and training. Doing so is especially necessary when working with early career researchers who are keen to adopt new practices that benefit their research and their careers.

The Research Cultures Action Plan<sup>6</sup>, Research Ethics Policy<sup>7</sup>, Statement on the Responsible Use of Research Metrics<sup>8</sup>, DORA & CoARA, Concordat on the Development of Research Careers, Concordat on Sustainable Research, and Concordat for Research Integrity all include aspects of Open Science. These are only a few of the most relevant internal and external drivers and by bringing the relevant aspects of these together in the Edinburgh Open Research Roadmap<sup>9</sup> we have created a plan for achieving OS as the

## Citizen Science



Projects involving high-participation Citizen Science (CS) methodologies already have a significant presence at the

## Research Integrity



The University has been prioritising the development of good practice across many aspects of research ethics and integrity and in December 2022 adopted its first comprehensive Ethics Policy<sup>3</sup>. Research integrity, openness, and transparency are recognised