

## **OPEN RESEARCH CHECKLIST**

For an introduction to Open Research, visit the Open Research webpages.

The purpose of this list is to highlight a suite of Open Research practices to you, including ones required by funders, by providing an easy-to-follow checklist. It is addressed to all researchers, including PGRs. It is not meant to be prescriptive, but it does highlight areas where funder and/or University requirements apply.

- **Required actions** are aligned to funder and University policies. **Requirements allow for reasonable exceptions,** for example because of confidentiality in consultancy work.
- **Key actions** complement the required actions and support best practice.
- Further actions help make your research even more open, transparent and discoverable.

All actions can be applied flexibly to your research area.

You can use a copy of the checklist for each project, to meet required actions and apply any additional ones relevant to your research.

### AT A GLANCE

#### **REQUIRED ACTIONS<sup>1</sup> KEY ACTIONS FURTHER ACTIONS** There is much more you can do to: Create an ORCID or connect your existing Key actions support the required one in the Open Research repository. actions. They are built around Make your research even more three areas: [one-off action] open, visible, transparent and What factors (e.g. ethical, reusable Make your research articles and commercial) could affect how · Evidence and evaluate research conference proceedings Open Access. you manage and share your Share your Open Research research and how can you knowledge and experience Create records of your older publications address them? with others. (at least since the last REF period) in the What can you do to make your University's repository. research more discoverable? · What can you do to learn more PGR students: make your final thesis about Open Research? Open Access. Create a Data Management Plan (DMP) for all data that will underpin publications and doctoral work. Make your data as open as possible, as early as possible. Create a record for your research data in the University's repository. Include a data access statement in all your research articles. Check your funder's requirements for Open Access, research data and other outputs. Meet any funder-specific requirements beyond the required actions here (e.g., to share software, make monographs open or use specific repositories or licences).

<sup>1</sup>Exceptions may include commercial, contractual, ethical, practical and security-related factors that call for some outputs to be temporarily or permanently restricted. Where necessary <u>please contact the Open Research team</u> to discuss.

#### REQUIRED ACTIONS

#### Research data **ORCID** and Open Access Do you have research data (i.e., evidence Create an ORCID or connect your existing that underpins research)? See a definition one to the Open Research repository. and examples of what may constitute [one-off action] research data. WHY: Using your ORCID ensures your research outputs and activities are correctly attributed to you. **HOW:** Visit the Open Research Repository. In the top right **Create a Data Management Plan** corner, select Surrey researchers sign in (use your (DMP) for all data that will University username and password). Select Edit Profile underpin publications and (top left corner). Scroll down. Under Global IDs, select doctoral research. Register or Connect your ORCID iD. WHY: A DMP helps you plan how you will manage, store and, where possible, openly disseminate your research data. It also helps you address ethical and commercial Make your research articles and conference issues. DMPs are required by many funders proceedings Open Access. as part of grant applications. WHY: Open Access (OA) - free, unrestricted online **HOW:** Use DMPOnline to create your plan. availability of research literature - helps you reach readers See how to write a DMP. You can also beyond those who can subscribe to the content, increasing contact the Library for bespoke support. your research visibility and impact while supporting the sharing of knowledge with society. Open Access is required by many funders, and for REF eligibility. Make your data as open as **HOW:** Add your papers to the Open Research repository possible, as early as possible. on acceptance. In many cases, you can also publish your WHY: See benefits of open data. papers Open Access. Look up current processes to find out Many funders and the University have your options. research data policies. **HOW:** See guidance on sharing your data. Use a discipline-specific data repository where required by your funder or **Create records of your older publications** recommended by your research community (at least since the last REF period) in the or publisher. You can also use Surrey's University's repository. Open Research repository. WHY: You will have a comprehensive record of your publications visible online. This will also feed into your staff profile page and your appraisal sheets. Create a record for your research **HOW:** Create records in the Open Research repository. data in the University's repository. WHY: Creating a record for your data in the University repository ensures it is discoverable, even when the datasets are PGR students: make your thesis Open Access. restricted or hosted elsewhere. WHY: Open Access makes your thesis more visible and HOW: See how to create an official record helps increase its impact. The University and some funders of your data at Sharing your research data. require this. **HOW:** Read the guidelines early on. Use the deposit form to deposit the final version (post-viva and approval). Include a data access statement in all your research articles. WHY: A data access/availability statement tells the reader whether there are datasets Check your funder's requirements for Open Access, associated with a paper and whether and research data, and other outputs. Meet any funder-specific how they can be accessed. Many funders requirements beyond the required actions here and journals require this statement, even (e.g., to share software, make monographs open if it is simply to state you have no data. or use specific repositories or licences).

**HOW:** See guidance on access statements.

# **KEY ACTIONS**

To address factors (commercial, security, ethical) that may affect openness to research:				
	Discuss any issues at the pre-award stage with the relevant team as appropriate: <u>innovation</u> , <u>ethics</u> , <u>trusted research</u> , <u>data protection</u> .			
Rese	earch should be 'as open as possible, as closed as necessary'. To avoid 'closed' research:			
	When publishing an article, try to retain your rights: this will enable you to reuse your own work in research and teaching, and to make it Open Access immediately on publication.			
	Get permission as early as possible to <u>use copyrighted content</u> in your thesis and other outputs. Where possible, include <u>open resources</u> .			
	Address research data sharing plans in your ethics applications and in any <u>consent forms</u> . See <u>relevant guidance</u> .			
	Address ownership of IP and research data sharing plans in your collaboration agreements and any other research contracts. See the <a href="University's inventor guide">University's inventor guide</a> and <a href="relevant scenarios">relevant scenarios</a> .			
	Include costs to support open data/data sharing practices (e.g., research time for preparing data for sharing, data storage) in research grant applications.			
	Anonymise your data to preserve the privacy of your participants, or aggregate data so it can be shared but retain commercial/IP protection.			
	Identify, claim and verify your profile on the main external databases (Scopus and Web of Science); these can also be linked back to ORCID.  Document your research data, code and other outputs to enable discovery, verification and re-use. This includes describing your project and related data according to metadata standards, including a README file with relevant information and applying good practice in file naming and organisation. See relevant guidance.			
	Follow the guidance on using keywords to make your research more discoverable. Also follow advice on title, abstract and keywords for search engine optimisation.			
	Add the correct affiliation, in the recommended format, to your research outputs. The correct format is as follows:  Name   Department   Faculty   Institution   City   Country  Example: Professor Max Lu, Department of Chemical and Process Engineering,  Faculty of Engineering & Physical Sciences, University of Surrey, Guildford, United Kingdom.			
To le	earn more and keep up to date about Open Research:			
	Complete the Open Research online module. Download your Open Research badge and add it to your website, social media, signatures and ORCID profile.			
	Attend <u>training</u> on a range of topics. <u>Contact us</u> to arrange a bespoke session for your School.			
	Refer to the Open Research website for detailed guidance and links to key resources. Bookmark the handbook that contains all the links you need.			
	Visit the Research support hub for news, upcoming training and other information.			
	Join the Surrey Open Researcher Community on Teams for updates and discussion.			

## **FURTHER ACTIONS**

To make even more of your research Open Access:		To make your research collaborative and reusable:  Address authorship, contributions and responsibilities from the	
	Consider making your monographs, book chapters and edited collections Open Access. Explore current options and read how to choose an OA publisher for your book.  Consider making other research outputs Open Access if possible. These may include reports, resources developed for practitioners and the public and artistic works such as designs and music compositions. The Library can help you upload them in the Open Research repository, assign a DOI for discoverability, advise on copyright and apply a suitable open licence. Contact openresearch@surrey.ac.uk for more information.		start of your collaborative projects.  Share your data, software and code, lab notebooks and other outputs in open formats and under an open licence. Software Sustainability Institute guidance gives you an overview of software repositories. The recommended licence for research data is the Creative Commons Attribution Licence (CC BY); but choose the licence most suitable for your research. Consider open licence options for software and code. Subject to commercial considerations, you may also decide to waive copyright altogether.  In addition to software and code, consider open source options for your data analysis, hardware and humanities research.  Follow community standards to facilitate interoperability of datasets.  Explore Citizen Science ideas that could enhance your research
To m	ake your research even more visible:	Ш	and engage the public.
	Use social media (including academic social media) to promote your research. Consider Mastodon as a platform to interact with your research community (see a discussion of the pros and cons).  Write blogs, lay abstracts or articles for the public. For example, consider contributing to The Conversation.  Contact the University's Public Engagement team for more ideas on how to make your research reach a wide range of audiences.  Ik research and teaching  Explore options for using and creating open educational resources.  Use research publications and open data in your teaching.  Embed open practices into your teaching.		Familiarise yourself with the University's commitment to DORA and to the responsible use of research & innovation metrics.  Consider signing DORA as a researcher to pledge your support for the use of best practice in researcher assessment.  Publication and citation metrics are in the public domain; identify, claim and verify your profile on the main external databases (Scopus and Web of Science); these can also be linked back to ORCID.  Engage both with qualitative assessment and with a broad range of qualitative indicators.  Value all forms of research outputs including datasets and software packages and, when referenced, cite these directly (i.e., as separate entities to the main article).  Adopt the Résumé for Researchers and Innovation (R4RI) narrative CV approach to capture the quality, significance and impact of a broad set of your research contributions.
To make your research even more transparent and reproducible:			Not sure which open practices you can use in your discipline?  Get inspired by examples of open practice in different disciplines and Surrey case studies.
	Preregister your study or submit a Registered Report.  Explore ways to make your qualitative research more transparent.  Share pre-publication versions (preprints) of your articles for timely dissemination of results.  Support open peer review models for		Already practising Open Research? We would like to hear from you. You may want to share tips on open practice (e.g., around methods, analysis, platforms and tools used in your discipline); develop and share your expertise by taking part in the UKRN train-the-trainer scheme; simply discuss Open Research with others. Please contact <a href="mailto:openresearch@surrey.ac.uk">openresearch@surrey.ac.uk</a> or post on the <a href="mailto:Open Researcher Community channel">Open Researcher Community channel</a> .

If you have any questions on Open Research, please contact <u>openresearch@surrey.ac.uk</u>. Depending on your query, you will be directed to the appropriate expert. Please also have a look at the <u>Teams that support Open Research at Surrey</u>.

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