

Changing hiring and promotion to recognise reproducible and transparent research practices.

Summary

Incorporating open research practices in hiring and promotion criteria will allow reproducible and transparent research to bloom at King's College London.

Background

Advances in science and research broadly depend on transparent and reproducible research. Yet, questionable research practices are widely reported, and are partly responsible for large-scale failed attempts to reproduce or replicate findings across a broad range of research disciplines. The common cause of such practices is in part due to the value placed on publication and grant track records, which can undermine the value of replication, verification and transparency.

To deal with this issue, twelve universities – Aberdeen, Bristol, Edinburgh, Keele, Newcastle, Oxford Brookes, the Royal Veterinary College, Sheffield, Surrey, and UCL – have joined the UK Reproducibility Network, a network with leads at 40 plus UK research institutions. They are working together with researchers, universities, and stakeholders to incentivise transparent and reproducible research.

Their efforts coincide with the cOAlition S (a consortium of research funders) support for major pushes to open access publication and data (i.e., Plan S) and reliable metrics of research quality (Declaration of Research Assessment, DORA).

It is critical that KCL finds itself prepared and ready to stand alongside other institutes in promoting reproducible and transparent research and responding to specific funders' requirements.

Objective

One important and feasible engine for change is to incorporate open research practices in hiring and promotion criteria. Open research practices include (broadly) sharing data and/or study materials/code, pre-registering study protocols, publishing preprints, open peer review, and open access publication.

Incorporating recognition of open research practices into hiring and promotion criteria will enable King's College London to facilitate Plan S and DORA implementation, but also to sign the Concordat on Open Data and to enhance its environment component of the Research Excellence Framework submission.

More importantly, to instigate change, it is crucial that researchers are recognised for practicing open research. The lack of positive incentives and support from institutions is viewed by many as one of the main barriers to practicing open research practices. This view is corroborated by a majority of respondents to our survey of 180 KCL researchers conducted by the King's Open Research Group Initiative (KORGI), an action-oriented committee seeking to remove structural barriers to transparent, accessible and reproducible research within KCL.

Current Status

The current approach to this matter is variable and informal, with short-term value given to open access publication to comply with REF submission. Though KCL signed DORA, its implementation is ongoing, with a key concern being adequate recruitment guidance. Parity is not awarded to other open research practices, which are in fact the basis for sound research (e.g., pre-registration, data sharing). KORGI, with the help of the Research Innovation Committee (RIC), are to my knowledge to only groups supporting changes to hiring and promotion with the view of fostering greater standards of research quality, in line with the wishes of respondents to our survey. More support is required at the institutional level

Proposal

Existing hiring and promotion criteria must require a track record of at least one of the following: open data and/or study materials/code, pre-registering study protocols, open access publishing, publishing preprints, and open peer review. Criteria should be stated clearly and publicly in advertised job descriptions, hiring policy, and/or in essential/desirable characteristics. Decisions about how and which open research practices will be incorporated into hiring and promotion criteria will be made in consultation with Faculties so as to avoid unnecessary disadvantage. As a starting point, faculties can follow the example of KORGI and RIC who intend to pilot a Progress Development Review (PDR) modified in accordance with this proposal at the IoPPN. This can be replicated and scaled to different faculties.