

## Action plan: aligning research assessment practices with CoARA

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### Introduction

#### What is EMBO?

The European Molecular Biology Organization (EMBO) is made up of over 2,000 leading researchers, promoting excellence in the life sciences in Europe and beyond. The major goals of the organization are to support talented researchers at all stages of their careers, stimulate the exchange of scientific information, and help build a research environment where scientists can achieve their best work.

EMBO Fellowships and grants are awarded to talented researchers through a qualitative evaluation, for which peer review is the central mechanism. Reviewers are members of the EMBO community: a geographically diverse selection of elected EMBO Members and Associate members whose expertise covers a wide scientific scope across the full range of life science research.

#### Commitment to responsible research assessment

EMBO has long advocated for abandoning the inappropriate use of publication-based metrics in judging researchers' and uses a more qualitative, informed, and transparent approach. EMBO is a founding member of the [San Francisco Declaration on Research Assessment \(DORA\)](#), a global initiative focused on advancing practical approaches to research and researcher assessment across all scholarly disciplines. EMBO has piloted and implemented innovative approaches and processes in its funding schemes and its journals.

Since 2016 EMBO has required applicants to omit any publication-based metrics in their applications and instructs reviewers not to use those metrics in their evaluations. These policies are, of course, in line with the principles identified by CoARA.

EMBO has reinforced its commitment to improving research assessment processes by signing the [Agreement to Reform Research Assessment](#) and joining the [Coalition for Advancing Research Assessment \(CoARA\)](#).

## CoARA working group “[Recognizing and rewarding peer review](#)”

EMBO has successfully formed a Working Group on [Recognizing and rewarding peer review](#). The group includes 18 organizations: funders, institutes, publishers and community groups. It aims to find ways to recognize and reward high-quality peer review activities and pilot their implementation. More information is available at: [https://coara.eu/app/uploads/2023/11/WG-Overview\\_Recognizing-and-Rewarding-Peer-Review.pdf](https://coara.eu/app/uploads/2023/11/WG-Overview_Recognizing-and-Rewarding-Peer-Review.pdf)

Formal peer review plays a crucial role in research and must therefore be given appropriate recognition in assessment processes. The CoARA working group will develop systematic approaches for recognizing and rewarding peer review activities.

Efforts will be made at multiple levels:

- 1) Collecting systematic evidence on ways in which high-quality peer review activities can be recognized and rewarded;
- 2) Using this evidence to develop principles and guidelines for recognizing and rewarding peer review activities;
- 3) Piloting the implementation of these principles and guidelines in research performing and research funding organizations;
- 4) Supporting the wider implementation of these principles and guidelines.

Bernd Pulverer, Head of EMBO Publications, is co-chair of the working group.

Sandra Bendiscioli, Senior Policy Officer, participates in the working group.

## CoARA commitments and how EMBO fulfills them

CoARA has identified several principles that will have an impact on transparency and equity in the future of research assessment. EMBO has formed an interdepartmental working group composed of the Heads of its funding schemes and Policy staff, and commits to working toward the following:

### **Recognise the diversity of contributions to research and of careers in research**

The working group acknowledges the need to broaden the selection and evaluation criteria to accommodate/recognize the diversity of researchers' activities. In line with the value EMBO places on researchers' engagement within the scientific community and society, the working group intends to identify and implement additional selection and evaluation criteria to accommodate the diversity of these activities. In particular, Open Science practices and peer review activity are being considered.

See also: CoARA Working Group on [Recognizing and rewarding peer review](#).

## **Base research assessment on qualitative evaluation, supported by responsible use of quantitative indicators**

EMBO has always based its evaluation processes on qualitative evaluation and will continue to do so. No quantitative indicators have been used so far.

## **Abandon the inappropriate use of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor and h-index**

EMBO implemented this measure in 2016. Applicants for the EMBO schemes are requested to remove any publication-based metrics such as journal impact factor (JIF) and h-index from their publication lists. Reviewers are instructed not to use those metrics in their evaluations.

## **Commit resources to reforming research assessment**

EMBO has committed resources to reforming research assessment, including participation of staff in a working group dedicated to reviewing and aligning selection processes.

Moreover, staff members will participate in the CoARA Working Group on Recognizing and Rewarding Peer Review.

## **Review and develop criteria, tools, and processes**

EMBO has already begun reviewing the policies and procedures described in the funding schemes. The internal working group aims to align common criteria and processes across programmes, and improve and clarify the current language describing selection criteria.

To align policies across the organization, the initial changes will be drawn from the existing policies at EMBO Publications and focus on adding information related to research integrity, open science, and open data in the context of research assessment.

## **Raise awareness of the reform and provide communication, guidance, and training on new criteria and processes**

The EMBO team engages with the scientific community on a regular basis and discusses the reasons for embracing responsible research assessment. The selection panels are always consulted in the process of making changes to criteria and procedures. Additionally, the team is in the process of creating additional webpages to describe the different policies across EMBO. These webpages will:

- Describe the work that EMBO is doing related to responsible research assessment
- Highlight the similarities across policies in the EMBO funding schemes
- Concisely detail the EMBO Press policies
- Display an FAQ for the funding programmes

## **Evaluate practices and criteria, and make data openly available for evidence gathering and research.**

Once a decision is taken on which policies to change, EMBO will implement a pilot programme to track how the changes impact, e.g., the quality of applications and the diversity of awardees.

## Action timeline

### 2023

- January – Signed the CoARA agreement and joined the coalition
- March – Formed the internal working group and briefed the programme Heads
- July – Successfully created the CoARA working group on Recognizing and Rewarding Peer Review, with EMBO as co-chair
- November – Second meeting of the internal working group to discuss next actions, focusing on the Young Investigator Programme and Open Science practices. Decision: Accept listing of peer reviewed preprints in applications for the Young Investigator Programme
- November - Kick off meeting of the CoARA working group on Recognizing and Rewarding Peer Review

### 2024

- February – Submitted the EMBO? action plan to the CoARA Zenodo platform
- Define new criteria and changes to current procedures, with a focus on Open Science and Peer Review activities
- Discuss proposed changes to selection committees
- Update relevant guidelines and information for applicants
- Continue participating in the CoARA WG on Peer Review

### 2025

- Define procedure to evaluate effects of changes
- Continue participating in the CoARA WG on Peer Review

### 2026

- Discuss any additional possible changes
- Start implementing any pilots

### 2027

- Evaluate the outcome of the pilots and assess the need for any possible adjustments

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