ALLEA – GYA – STM webinar on “Inclusion, Diversity, Equity and Accessibility in Scholarly Peer Review”

Background and Introduction

In November 2022, ALLEA (European Federation of Academies of Sciences and Humanities), GYA (Global Young Academy) and STM (International Association of Scientific, Technical and Medical Publishers) convened a moderated panel discussion about “Inclusion, Diversity, Equity and Accessibility (IDEA) in Scholarly Peer Review” with four distinguished panellists from the global research and publishers’ communities.

The scholarly peer review system currently does not accurately represent the research community as a whole: women, researchers from the Global South, early career researchers, and non-native English speakers are all among those under-represented. In addition, researchers not affiliated with the traditional well-established institutions often experience a disadvantage when their work is submitted for peer review. Together, these biases directly affect individuals’ career progression and are likely to impact the quality of research outputs and diversification of the research system in general.

The aim of this webinar was to create more awareness of this topic, discuss existing barriers and gather input for possible solutions to overcome the challenge. To set the scene for an informed discussion, the moderator introduced the topic, followed by short opening statements in which each panellist outlined the barriers and possible solutions from their viewpoint. The audience had the opportunity to actively contribute to the discussion by sharing their views via different polls and asking questions to the panellists.

This short event report summarizes the main themes that emerged during the discussions and identifies areas that can represent a path forward. The programme for the webinar, detailed information on the speakers, and the complete recording, can be found [here](#).

Barriers to IDEA in scholarly peer review

In an opening poll, the audience highlighted the three main barriers to IDEA in scholarly peer review, namely (1) lack of reviewer and editor diversity, (2) implicit biases in academia, and (3) lack of training and awareness (see Figure 1).

During the discussion, lack of diversity within the current research ecosystem was further emphasized to be a key barrier to IDEA, as it is still largely dominated by the Global North and the Anglosphere. As a result, existing inequalities and unconscious biases are continuing to affect academia, for example by influencing funding and hiring decisions, choice of event speakers, opportunities to publish and peer review scholarly work, etc. Importantly, the scientific community itself is often insufficiently
aware of the criticality of diversity, even though there is a vast literature available about its importance for producing better research teams and outputs. Creating further awareness among all groups involved in peer review will be crucial to promote meaningful change.

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<th>What are the biggest barriers for IDEA in peer review?</th>
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<td>1. Lack of reviewer diversity</td>
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<td>2. Implicit biases in academia</td>
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<td>3. Lack of editor diversity</td>
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<td>4. Lack of awareness and training</td>
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<td>5. Peer review models</td>
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<td>6. Lack of data and evidence</td>
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Figure 1: Main barriers to IDEA in scholarly peer review identified by the audience.

Publications are still considered the main currency of academia and having what is perceived as a strong publication record is seen as essential for a successful academic career. Biases and lack of inclusion are therefore posing important barriers to career progression for underrepresented groups.

A fundamental bottleneck to increasing IDEA in scholarly peer review is the lack of diversity data. Until very recently, publishers did not routinely collect such data on their authors, reviewers, and editors, making it nearly impossible to identify who is underrepresented and to design the right interventions. This is slowly changing, but key challenges remain regarding (1) concerns from authors if their data is used in the appropriate way, (2) compliance with privacy regulations, and (3) quantitative comparisons between disciplines, journals, and publishers.

Ideas for actions to support greater IDEA in scholarly peer review

Given the broader underlying issues that prevent true IDEA in academia, it is crucial to structurally rethink how we evaluate researchers and create the right incentives to focus on “what is published”, rather than “who publishes”, “where you publish”, and “how much you publish”. It should be considered good academic citizenship for researchers to participate in peer review. At the same time, this voluntary work should be appropriately recognised to increase participation and thereby improve diversity and inclusion. Recognition for these contributions should not only come from editors and authors, but also research institutions, hiring/promotion committees, policymakers, funders, etc.

Different peer review models were discussed with respect to their possible benefits and limitations to promoting IDEA. Double-anonymised (in which both the reviewers and authors are anonymized) and triple-anonymised (where also the editor is anonymized) peer review models are generally considered...
to contribute to a less-biased system compared to the most prevalent single-anonymised model, in which only the peer reviewers are anonymized. Anonymization is however contrary to current movements to make scholarly publishing more transparent and comes with practical challenges in making articles truly anonymous, especially in a time where many authors publish preprints. In-depth data on authors’ attitudes towards the different models, as well as strong evidence on their relative efficacy, are still needed.

A central question that remains is who should be considered a suitable peer reviewer. Expertise often needs to be very specialized, but there is no reason why, for example, early career researchers (ECRs) cannot be considered peers. The diversity among ECRs is typically greater than among more senior researchers, and by further including them, general diversity of the peer reviewer pool is expected to improve. Much uncertainty remains in what peer reviewers are being requested to do, which can be especially challenging to unexperienced reviewers. Both the panellists and the audience expressed a clear desire for more formal training for all groups involved in peer review, but there is unclarity who should be responsible for developing and providing this.

Figure 2 (from left to right): Moderator Jessica Polka and panellists Haseeb Irfanullah, Nicola Nugent, Pradeep Kumar, and Michael Barber.
About ALLEA

ALLEA is the European Federation of Academies of Sciences and Humanities, representing more than 50 academies from over 40 EU and non-EU countries. Since its foundation in 1994, ALLEA speaks out on behalf of its members on the European and international stages, promotes science as a global public good, and facilitates scientific collaboration across borders and disciplines. Jointly with its members, ALLEA seeks to improve the conditions for research, to provide the best independent and interdisciplinary science advice available, and to strengthen the role of science in society. In doing so, ALLEA channels the expertise of European academies for the benefit of the research community, decision-makers and the public. ALLEA is constituted as a non-for-profit association and remains fully independent from political, religious, commercial or ideological interests.

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About the GYA

The vision of the GYA (the Global Young Academy) is science for all; science for the future, and its mission is to give a voice to young scientists and researchers around the world. The GYA, founded in 2010, is an independent science academy of 200 outstanding early- to mid-career researchers from six continents who are selected from across disciplines based on their academic excellence and commitment to engage with society. GYA members serve five-year terms, and the GYA presently counts members and alumni from 100 countries. The GYA administrative office is publicly funded and hosted at the German National Academy of Sciences Leopoldina. The wide array of GYA activities is supported by a range of international public and private funders.

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About STM

At STM (the International Association of Scientific, Technical and Medical Publishers), we support our members in their mission to advance research worldwide. Our over 140 members based in more than 20 countries around the world collectively publish 66% of all journal articles and tens of thousands of monographs and reference works. As academic and professional publishers, learned societies, university presses, start-ups and established players, we work together to serve society by developing standards and technology to ensure research is of high quality, trustworthy and easy to access. We promote the contribution that publishers make to innovation, openness and the sharing of knowledge and embrace change to support the growth and sustainability of the research ecosystem. As a common good, we provide data and analysis for all involved in the global activity of research.

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