CURRENT SCIENCE

Volume 124 Number 4

25 February 2023

GUEST EDITORIAL

Adoption of a rights retention policy by academic and research institutions in India: a door to open science

Publication of research output in peer-reviewed journals is essential. It should be freely and fully accessible to all researchers and other interested readers for widest dissemination. The research publication ecosystem has changed in recent decades with commercial publishers largely taking over the journal publication from academic institutions and learned societies, and the digital era heralding the online publication paradigm. Both changes were expected to make research output more easily accessible globally. However, commercial publishers' business interests have largely hid research publications behind paywalls, requiring either author/funder or reader to pay hefty article processing and/or open access charges (Jurchen, S., Tech. Services Q., 2020; https://doi.org/10.1080/07317131.2020. 1728136; Lakhotia, S. C., PINSA, 2017; https://doi.org/ 10.16943/ptinsa/2017/48942). Although not all journals levy article processing and/or open access charges, most 'prestigious' or 'high impact' journals demand charges for publication and/or for reading the published material. In the pre-digital era, the published material remained accessible either through library/individual subscriptions, or complimentary exchange of journals between institutions or free sharing of reprints by authors. While the complimentary exchange of research journals between academic institutions is now nearly absent, most authors hesitate to share soft copy files with peers because of the misconception that this may violate copyright agreements with the publishers (Lakhotia, S. C., Confluence, 2022; http://confluence.ias.ac.in/do-we-need-to-spend-substantial-amounts-onopen-access/).

Open access to digital online literature is defined as access which is 'free of charge, and free of most copyright and licensing restrictions' (Suber, P., *Open Access*, 2012; https://openaccesseks.mitpress.mit.edu/). Despite the many discussions and declarations, the access has remained far from being 'green' or open (International Science Council, Open science for the 21st century, 2020. https:// council.science/publications/open-science-for-the-21stcentury/). The stranglehold of commercial publishers on the scholarly output of researchers has become progressively tighter in recent decades because the copyright agreement requires author, in most cases, to assign exclusive copyright to the publisher as a precondition for publication. Consequent to the unilaterally drafted copyright agreements, the scholarly outputs become partially or fully owned by the publisher unless the author(s)/funder(s) pay the hefty publication costs. Therefore, author/s cannot place the accepted or published version of the research article on their personal or institutional website with green open access during the embargo period (6 to 24 months or longer) and also do not have full freedom to use their own work, including through translation, without the publisher's explicit permission, which may require a payment. In contrast, the commercial publisher benefits substantially by levving open access charges on authors or readers, or by re-packaging/ sublicensing the work to commercial or other providers without requiring authors' permission. The above referred to report of the International Science Council on open science succinctly sums up this vicious circle: 'Corporate publishers routinely demand the transfer of copyright to them as a condition of publication. When doing so, researchers have, of their own volition, assisted in privatising a public good at no cost to the publisher, whose first responsibility is to their shareholders and not to science. Corporate scientific publishing companies have a distinctively asymmetric business model in which scientists gift their work to them and then buy it back at inflated prices, either individually or as part of major bundled deals between corporate publishers and universities or government agencies. The trump card in publishers' hands is that they have cornered the market in 'high-impact' journals, then promote and advance readership and citation of what they publish - thereby inflating the impact factor. In turn, universities use impact factors and citations as criteria for academic advancement. Such positive reinforcement persuades researchers and their institutions that it is worthwhile paying a premium for publication in a particular journal, rather than paying less for publication in a journal with equally high standards.' This situation is grossly unfair to researchers with limited resources at their disposal and is contrary to the philosophy that public funds should primarily support research and dissemination of the output as philanthropic activities rather becoming commercial enterprise (Sengupta, P., Geoforum, 2021; https://doi.org/10.1016/j.geoforum.2020.04.001; Lakhotia, S. C., PINSA, 2014; https:// doi.org/10.16943/ptinsa/2014/v80i5/47963).

Free access to research publications with a Creative Commons attribution license (CC-BY, https://creativecommons.

org/licenses/) or equivalent open licenses, requires that all the intellectual-property rights are retained by authors, while only the non-exclusive publishing rights are transferred to the publisher. The transfer of nearly all copyrights to the publisher by authors whose funders do not meet the publication and/or open access costs is unfair. Majority of published research output across the world thus remains inaccessible to researchers and others because of the publishers' paywalls. Consequently researchers in developing countries and less endowed institutions suffer the most on multiple counts. As the publication/access costs are generally proportional to the journal's 'impact factor' (IF), researchers with limited resources seek journals that do not charge or charge less. Such less 'respected' journals are commonly ignored by peers, even if the findings are of high quality. Despite many counter arguments against the use of the IF (Berenbaum, M. R., PNAS, 2019; https://doi.org/ 10.1073/pnas.1911911116; Kumar, A., J. Indian Soc. Periodontol., 2018; doi:10.4103/jisp.jisp 195 18; Chaddah, P. and Lakhotia, S. C., PINSA, 2018; https://insa.nic.in/ writereaddata/UpLoadedFiles/PINSA/PINSA 2018 Art42. pdf; Brembs, B., Front. Human Neurosci., 2018; https:// doi.org/10.3389/fnhum.2018. 00037) and its condemnation by the San Francisco declaration (https://sfdora.org/ read/), the journal IF continues as the most common research assessment parameter. Not publishing in high IF journals lower the author's and host institution's 'ranking', which in turn affects their future research funds.

Adoption of an institutional Rights Retention Policy (RRP) provides a cost-effective unrestricted free access to the research output of an institution to all interested readers by enabling (i) author/s to retain use and reuse rights over the Author Accepted Manuscript (AAM, the peer-review and accepted version, but without the additional editorial processes of the publisher) with minimal requirement of publisher's permission, and (ii) the university to provide free open access to its staff's scholarly output to all. The RRP requires a commitment by the staff to provide soft copies of the AAM version of their articles on the institutional server for green open access.

Many academic institutions across the globe have adopted the RRP (https://cyber.harvard.edu/hoap/Additional resources). This policy requires a publicly accessible institutional repository where its staff members deposit the AAM versions of their scholarly article under an open license like the CC-BY. Accordingly, the author grants a non-exclusive, irrevocable, worldwide license to the host institution to exercise all rights under copyright relating to each of the scholarly articles in any medium and to authorize other co-authors to do the same. At the same time, the copyright gets back to the authors giving them the freedom to use and reuse their own work after publication. Thus, authors can revise or expand editions, reuse articles in anthologies or monographs, and authorize translations, text mining, and the copying needed for long-term preservation (Suber, P., Insights, 2021; doi: http://doi.org/10.1629/ uksg.1543). To be effective, the RRP requires that during the first submission of a manuscript for publication, a statement is included in the manuscript to declare that for free open access, the author/s has/have applied a Creative Commons Attribution (CC-BY) or an equivalent open license to any Accepted Author Manuscript version arising from this submission, as required by the Rights Retention Policy of the *Institution/Funder* (name). This informs the editor and publisher upfront about the existence of host institution's/funder's RRP. This safeguards against any future legal issues since the institutional policies take priority over external requirements.

An institutional RRP policy disrupts the commercial publishers' unjustified monopoly that lets them usurp the authors' and funders' right to the research output. A fear against the adoption of RRP by academic institutions that this may affect the chances of their staff's research output being published in journals that claim high impact factor (Alexander, P. H., Insights, 2020; http://doi.org/10.1629/ uksg.525) has been refuted (Suber, P., Insights, 2021, 34, 8; http://doi.org/10.1629/uksg.543). The RRP may include a waiver clause (https://cyber.harvard.edu/hoap/Drafting a policy) for authors to seek an exemption from open access in exceptional cases but not from placing the work on the repository. Experiences shared by several universities across the world that have implemented institutional RRP (https://libraryblogs.is.ed.ac.uk/open-scholarship/2022/ 10/14/rights-retention-policy-an-update-after-9-months/) do not indicate many instances where an accepted manuscript was refused by the publisher because of the RRP.

The Government of India is considering a one nation, one subscription (ONOS) policy to enable green open access to readers in India to journal articles published by the identified publishers. However, even if this succeeds, it will not provide green open access to pay-walled articles published by Indian researchers to readers outside the country or to readers in India to journals not covered under the ONOS. On the other hand, adoption of RRP by country's educational and research institutions will enable free access to the country's research output everywhere in the world. The 'Open Science Policy' (2014) of Departments of Biotechnology, and Science & Technology of the Government of India (https://dst.Gov.in/sites/default/files/ APPROVED%20OPEN%20ACC-ESS%20POLICY-DBT& DST(12.12.2014) 1.pdf) requires final accepted manuscript resulting from research projects, fully or partially funded by DBT/DST to be deposited at the institutional repositories or the interoperable institutional open access repository or the central harvester (www.sciencecentral.in). A rigorous implementation of this policy and the adoption of RRP by different academic and research institutions in the country will indeed open a wide door to the muchdesired open science.

Subhash C. Lakhotia

Cytogenetics Laboratory, Department of Zoology, Banaras Hindu University, Varanasi 221 005, India e-mail: lakhotia@bhu.ac.in