Transcript of video contribution by

Glaucius Oliva Academia Brasileira de Ciências

Hello, I'm Glaucius Oliva, a professor and researcher at the University of São Paulo and vice president of the Brazilian Academy of Sciences in the São Paulo region. Within the framework of the Brazilian Academy of Sciences, I have been coordinating a working group on the issue of open access publications, their costs and the problem related to the exponential growth of so-called "predatory" scientific journals.

I want to start with a few statements. Firstly, all human progress is directly related to the advancement of knowledge through science. Information and knowledge are the two main components of nations' assets in the 21st century. All, essentially all, of the great challenges facing nations and humanity in general-in health, food, energy, the environment, sustainability, overcoming inequalities, employment, etc.-will only be answered by science and education.

All leading countries in human, economic and social development maintain structured education, science and technology systems that include balanced support for the entire knowledge chain, from basic science to technological applications and innovation. The vast majority of investments in research are public or come from private non-profit funds. All research begins with a new idea, formulated in the light of previously established knowledge and with a view to solving a problem or even driven by curiosity.

This is followed by structuring the proposal, obtaining resources to finance it, carrying out the research itself, with all the precautions relating to ethics and scientific integrity, and, finally, disseminating the results achieved for due peer review, which guarantees the quality of the research carried out and the conclusions drawn. In this sense, there is no doubt that the gigantic advance of science and technology in recent history has been the result of a global system comprising a triad.

One: institutions and people dedicated to doing science. Two: its promotion with public and private resources. And three: a system of checks and balances that assesses the quality and results of research. I say this to reaffirm that academic communication is an integral part of the research process, whether at congresses and scientific meetings or, above all, through the well-established system of scientific publications in specialized, peer-reviewed, selective and rigorous journals. Naturally, a robust system of quality scientific publications comes at a cost.

Until recently, that is, until the turn of this century, the publishing system basically worked by paying for subscriptions to read scientific journals, subscriptions provided by academic institutions and/or funding agencies. However, this century has seen the consolidation of the understanding that the results of publicly funded research expressed in scientific publications must be made immediately available in open access to all citizens.

This is an obvious right for those who have contributed their taxes or donations to their funding. This basic premise has led to pressure from the countries that produce the most science in the world for all journals to make the complete transition to open access, in which the costs of scientific journals transition from the pay-per-read model to pay-per-publication.

Two serious problems have arisen as a result of this transition. One: on the one hand, the fees charged to authors by publishers for publishing their work have become exorbitant, representing an absurd cost for researchers and academic institutions, which disproportionately affects developing countries, where research resources are still scarce. And two: on the other hand, the highly profitable business model of scientific journals has resulted in an explosion in the number of scientific journals with poor editorial practices, and thus classified as "predatory".

Since they actively seek out and pressure scientists to submit and obviously pay for papers to be published, often without any quality review, which have little or no scientific value and unhealthily pollute humanity's body of knowledge, consolidated in scientific publications. In this sense, it is essential that countries and their funding agencies use this moment of transition offered by transformative agreements with publishers to overcome the two problems I have mentioned: the abusive cost of fees and open access publishing, and the epidemic proliferation of predatory scientific journals that do not pay for research or for writing and peer review and charge significant, in some cases abusive, amounts for the last stage of the process, which is to manage the final editorial review process of scientific papers and their availability on widely accessible digital portals.

In Brazil, this issue has been conducted by CAPES in a broad and participatory manner. It is important to note that at the end of the 20th century CAPES created the main instrument for democratization and access to scientific publications with the establishment of the fantastic Portal de Periódicos, through which the vast majority of scientific publications from all over the world can be read by Brazilian researchers from any region or location in the country immediately after publication.

The cost of this is fully covered by the National Treasury, with subscription fees negotiated with all the publishers in amounts compatible with the reality of available public resources. There is now a need for this system to evolve from "pay to read" to "pay to publish" models, with transformative agreements that take the direct cost of APCs off the backs of Brazilian researchers. The Brazilian Academy of Sciences, which I represent here, has discussed this issue extensively, resulting in the following recommendations for CAPES' handling of this process.

Firstly, for researchers, we need to change our publishing culture, adopting more frequently the use of preprints, green open access publications and accessible or even free open access journals, in the diamond model, whenever possible. Preferring to publish in journals with solid, active scientific and editorial boards linked to world-class scientific societies and universities.

Avoid journals that use predatory editorial practices, which exist for the sole purpose of profit rather than the dissemination of high-quality research results and the promotion of knowledge. These journals invite you to pay to publish or act as editor or guest of special issues so that you can invite others and pay to publish. There is no editorial board or even fake editors.

Paying authors will always have their papers accepted. The impact factors of these journals are artificially inflated, with the requirement to include citations of articles from the same journal. For agencies, universities and research institutions, the recommendations are to rethink and revise the current scientific evaluation policies, valuing the editorial quality of the journal more than brand names or impact factor.

Agencies should have policies to monitor open access journals that lack quality and are therefore predatory. Only journals with good editorial quality should be included in transformative agreements. And ABC, the Brazilian Academy of Science, is available to help in the process of selecting good journals. Agencies should have policies to encourage open access, of the green type, such as preprints and postprints, and we don't think it's advisable for any national agency to sign Plan S, which could bring obligations that we don't have the capacity to fulfill.

Negotiate with publishers the transition to Read & Publish at prices equivalent to what is already paid for subscriptions to the Portal de Periódicos and, ideally, prevent state or local agencies from signing Subscribe to Open agreements, even though some are currently paying APCs, because in this case the bargaining power is lost in smaller numbers. We have to think about ways of working with other developing countries, in Latin America, for example, to improve the prices achieved in the agreements, and also support the development of the best Brazilian journals to bring them up to par in editorial quality with the good international journals with diamond model open access via the SciELO system.

In the negotiation of transformative agreements with publishers, press for transparency in international Read & Publish agreements in order to set prices here, avoid article quotas per journal that perpetuate regional inequalities, for the work of scientists active in the country and campaign permanently for APCs by individual researchers to have a strong discount for countries with medium-sized economies, as well as those with small economies.

One option, in this case, would be to negotiate so that researchers in Brazil pay APCs in proportion to their GDP per capita when compared to rich countries. These are some of the points we have been discussing and we strongly believe that discussing this issue in forums such as this workshop contributes greatly to solving these problems.