

With last year's implementation of its mandatory Open Access to Knowledge Policy, Fiocruz went beyond the discussion on the validity of the movement for open access to scientific information certified by peers and effectively contributed with its progress. The policy addresses the two main strategies of this movement: The golden route, which encourages the creation of a new generation of journals committed to open access and the conversion of existing ones to open access, and the green route, which encourages the adoption of digital institutional repositories for the authors themselves to archive scientific articles that have already been published or accepted for publication, with the permission of the publishers.

The movement for open access to scientific knowledge is an effort of professionals related to scientific communication to make unrestricted online access to literature published in scientific journals a reality. This movement emerged in the late 1980s for two reasons: As a reaction to "the journal crisis" brought about by commercial publishers who increased the price of scientific journal subscriptions successively and led academic and research institution libraries to make drastic cuts in acquisitions, and, second, from the dissatisfaction of researchers who got poor visibility for the results of their research due to a restrictive, anachronistic model of publishing scientific articles in closed journals. In addition to these two factors, the movement was favored by the stage of development of information and communication technologies (ICT) and the Internet, which enabled alternative low-cost, broad circulation publications.

Considered landmarks of the movement for open access to scientific knowledge, three meetings - held in Budapest (2001), Bethesda (2002) and Berlin (2003) - set the strategies that shaped the deployment of a new model of scientific communication. A model under which access to scientific literature is digital, online, and free of both costs and barriers, such as of copyrights and financial. The movement called for the engagement of the scientific community and governments, which has already occurred almost everywhere around the world. Today, the movement needs to move forward and establish a sustainable model solution that would make the cost of open access scientific publishing feasible, which over the years has given preference to the model under which the author pays for it. An idea that has not prospered as it should have is the transfer of this cost to research foment institutions and agencies. Since 2014, the European Commission has reimbursed the initial costs of editors who allow open access.

With the recent launch of the Journal Portal <<http://periodicos.fiocruz.br/pt-br>>, in a certain way Fiocruz meets the golden route guidelines because it enhances online access, free of costs or barriers, to a significant amount of scientific information produced in Brazil and abroad in the health field. The seven journals the Foundation publishes, among which

Trabalho, Educação e Saúde, are now gathered in a single space and have become partakers of what Pierre Levy rated as one of those very rare moments when a civilization invents itself, so that in but a short amount of time we will have transitioned from one humanity to another, referring to the drastic changes caused by a cyberculture that is here to stay.

Regarding the green route, Fiocruz's Open Access Policy strengthened the Arca institutional repository, spreading it to all of its units. Besides the obvious visibility authors and articles will get, the institution has incorporated in its policy the granting of funding for article processing to encourage its researchers to opt for publishing the results of their research in open access scientific journals, which will facilitate archiving in the Arca repository. A year after policy implementation and of the expansion of the Arca, is it not time to set the criteria for this institutional funding in a regulation? This could develop and consolidate the policy, because it would be an incentive for our researchers to undertake self-archiving in the repository. The understanding is that if the research project is funded with public money, the results should be accessible to society in the form of a scientific paper.

In South America, a few countries have enacted laws to make it mandatory to deposit scientific articles aiming to disseminate the results of publicly funded research in free access digital repositories. European countries have gone further. They want all articles that have had public funding to be of open access by 2020. In addition, the Digital Agenda for Europe has already set a policy for open access to research data and to the reuse of such data and is investigating digital preservation. Meanwhile, in Brazil, Senate bill No. 387, mandating the deposit of scientific articles that disseminate the results of publicly funded research, has been being considered in Congress for years without a definition, a situation that should be a major flag of the struggle to be wielded by those involved in the scientific work.

With these two achievements - the new repository and the portal - in addition to the new Open Access Educational Resource (OER) platform, driven by a current open access policy, Fiocruz can have a stronger voice, organized in an arena that is little accustomed to debates and in which power-holders launch exclusive proposals for the internationalization of Brazilian science without extensive discussion with most of those responsible for scientific publications in Brazil. In the same arena, they impose a true scientific information policy based merely on cold figures obtained from statistics produced by modern software tools and metric indices of quotes created 50 years ago to guide the scientific journal subscription sales market. For example, a definition of the scientific policies for the country, such as the intensification of the existing *stricto sensu* graduate studies abroad programs aiming to carry out research in partnership with foreign researchers, has been ignored.

Having forged a technological dimension in both the production and publication of scientific journals and in the construction of repositories, both available on the Internet, the open access model requires a new type of vocational training. However, there are no concrete qualification proposals for those working in the scientific communication process. Nor is there enough funding to address the increasingly demanding and costly scientific publication criteria, such as the requirement to translate scientific articles into English and the development of a marketing and disclosure plan, a fact that reinforces the open access model under which the author pays to have his or her work published. In core countries, these costs are easily absorbed. There are great difficulties to afford them in peripheral countries, however.

Jean-Claude Guédon, a researcher at the University of Montreal, believes the solution is to produce science for our own needs and social demands, seeking, in alliance with natural partners, to consolidate South-South cooperation. The movement for free access to scientific information can play an important role in leveraging science in countries in the region that experience the same inequities and have similar social determinations for processes such as health and education.

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