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TITLE: Ensuring Open Access to European, Latin American and Caribbean research: a description of the OpenAIRE and NECOBELAC FP7 Projects

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## Introduction

Ever since the enshrining of the concept of Open Access in the declarations like the Budapest OA Initiative (2002), the Bethesda Statement on Open Access Publishing (2003) and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) – famously referred to as the "3 B's" by Peter Suber – , there has been a veritable proliferation of projects worldwide promoting Open Access (hereafter "OA").

Over the years, a substantial number of OA projects have successfully promoted the setting up and support of institutional or discipline-based repositories into which researchers are encouraged to deposit their pre- and/or post-prints ("green OA"). Among many such projects we can mention the EC's DRIVER initiative, the Irish Rian.ie research repository, the Australian government's ARROW project, SHERPA and the Repository Support Project, both based at the Centre for Research Communications (CRC) at the University of Nottingham. Other projects have concentrated on promoting alternative business models of publishing, including fully-fledged OA journals ("gold OA") or "hybrid, author-side payment" models. Latterly, proponents of OA are increasingly recognising the need to tackle the less technical but equally formidable work of OA advocacy: convincing researchers to opt for and promote amongst their peers, OA modes of disseminating their research output. OA advocacy work ultimately aims for a more seamless embedding of OA dissemination practices into existing academic workflows, and so it is work that also entails recruiting the support of university research managers and librarians. Hence, more recently, OA research projects have focussed on aspects pertaining to, inter alia, the economics of OA publishing, OA policies, research funder OA mandates and author attitudes to OA (see, for example, Houghton et al., 2009; Swan, 2006; Nicholas et al., 2005; Swan & Brown, 2005; Antelman, 2004).

This brief article will focus on two OA projects, OpenAIRE – Open Access Infrastructure for Research in Europe – and NECOBELAC – Network of Collaboration between Europe and Latin American Caribbean Countries, both of which count on the input and cooperation of team members of the Centre for Research Communications (CRC) at the University of Nottingham.

# **OpenAIRE**

The Open Access Infrastructure for Research in Europe (OpenAIRE) is a three-year programme funded under the Seventh Framework Programme of the European Commission (FP7). OpenAIRE follows on from the DRIVER project (Digital Repository Infrastructure Vision for European Research) undertaken under the FP6, the main aim of which was to set up a pan-European digital repository infrastructure to optimise the sharing of repository functionality and content.

There are seven selected subject areas that can be awarded FP7 funding: Energy; Environment (including Climate Change); Health, Information & Communication

Technologies (Challenge 2: Cognitive Systems, Interaction, Robotics); Research Infrastructures (e-Infrastructures); Science in Society; and Socio-economic Sciences and the Humanities. The EC and European Research Council (ERC) aim to make the research outcomes resulting from FP7-funded projects as widely disseminated and freely accessible as possible.

To that end, among OpenAIRE's main activities is the setting-up of an Open Access Pilot which provides the support and infrastructure to enable FP7 researchers to fulfil the EC-ERC's requirements that they deposit their final peer-reviewed manuscripts and/or post-prints either in an institutional repository or a subject-based repository (e.g. ArXiv, REPEC). In the case of FP7 researchers not being able to easily locate such repositories, they will be able to deposit their publications in the OpenAIRE "Orphan" Repository, which is akin to the Depot "keep-safe" repository in the UK, in that it both redirects researchers to a more appropriate, institutional repository in which they can deposit the publication, if one exists, or allows them to deposit in the OpenAire Repository. This support is provided to FP7 researchers through the OpenAIRE European Helpdesk System (which at the time of writing is undergoing the final tests of the prototype).

The EC-ERC requires all FP7 researchers who signed their project grant agreements after August 2008 to guarantee that they will endeavour to make their publications or final peer-reviewed manuscripts OA within a maximum of 6 months after publication date (thereby allowing for the widespread embargo period operated by many publishers – see the RoMEO database for more details on publisher OA embargos), and up to 12 months for research carried in the areas "Science in Society" and "Socio-economic Sciences and the Humanities". This requirement is found in Clause 39 of the FP7 grant contracts. The EC-ERC extends the OA requirement for FP7 researchers to their primary data too: they are encouraged to upload such data to relevant data repositories immediately after the close of project or no later than 6 months after the date of publication.

## **NECOBELAC**

The overall objective of the NECOBELAC (Network of Collaboration between Europe & Latin American-Caribbean countries) project – also funded under the FP7 – is to develop and promote a network of collaboration to improve scientific writing and advance the creation, dissemination, access, retrieval and use of Open Access health information between European, Latin American & Caribbean (LAC) countries. Partners in the Project are from Istituto Superiore di Sanità (ISS) Italy, the Consejo Superior de Investigaciones Científicas (CSIC) Spain, the University of Nottingham, the Centro Latino Americano e do Caribe de Informação em Ciencias da Saude, Brazil, Instituto de Salud Pública, Universidad Nacional de Colombia and the Universidade do Minho (UMINHO), Portugal.

The central premise underlying NECOBELAC's activities is that OA publishing modes for health information are especially crucial because they allow for the timely and effective application of that information in national and regional contexts in which the funds for subscribing to toll-access research literature in these areas are scarce or non-existent. The benefits of having openly-accessible medical literature are clearly more tangible in such precarious conditions. In this sense, NECOBELAC builds on a long tradition of health

information related databases and platforms (e.g MEDLINE and PubMed Central) opening up public access to the medical literature reporting the results of research that is usually supported by public funds.

In order to promote OA modes of dissemination and publishing, NECOBELAC objectives cover the definition of strategies to network EU-LAC countries, the stimulation and support of the development of information tools and infrastructures for health research information activities in EU-LAC countries, and the development of a cross-national advocacy strategy to encourage all stakeholders to uptake the new OA infrastructure in EU-LAC countries. This infrastructure will be concentrated mainly around supporting the development of an OA repository network infrastructure in these countries, always with an eye to facilitating the dissemination of health information.

Such a focus on the OA repository network needs to be considered within the context in which "gold" OA publishing via fully-OA journals is already well-established in many LAC countries. For example, the Scientific Electronic Library Online portal – SciELO – developed by BIREME (Latin American and Caribbean Centre for Health Science Information, http://regional.bvsalud.org) in Brazil, today hosts 637 OA Journals from eight LAC-EU countries (Brazil, Chile, Colombia, Cuba, Argentina, Portugual, Spain and Venezuela), totalling 16,951 issues, and 255,476 articles, covering all subject areas, not only health-related ones. SciELO collections are also under development for Bolivia, Costa Rica, Mexico, Paraguay, Peru, South Africa and Uruguay. Repositories, however, are thinner on the ground in LAC countries: OpenDOAR registers *circa* 80 for these continents together, many of these being OA theses and dissertation portals.

Barriers to the dissemination of LAC researchers' results go beyond those related to merely finding an adequate vehicle for publication. For example, linguistic barriers to publication are well-known to constitute a formidable barrier for non-native speakers of English in academia, as noted by Velho, 2004 and Escobar and Da Costa, 2006). Recognising this, NECOBELAC also aims to promote and strengthen awareness in OA collaboration between health-related researchers located in EU and LAC countries. To this end, NECOBELAC partner organisations are also offering training activities specifically in scientific writing in the medical and health-related areas. Other NECOBELAC training modules cover OA publishing and Repositories, and the project envisages that all initial training programmes given by NECOBELAC partners will then be cascaded outwards at a local level in the respective participating countries.

## **Final Considerations**

Both OpenAIRE and NECOBELAC take as their point of departure that OA dissemination of research results is a *sine qua non* for the equitable distribution of research results worldwide, thereby leading to the social advancement of society. Furthermore, the premise of both projects – and of OA in general – is that unnecessary duplication of costly research is avoided if research results in the form of data and articles are openly accessible, so that researchers can get on with the crucial business of building on previous research. This is particularly the case for funding-starved countries.

Both projects seek to strengthen the coordinated development of existing national and regional OA repository infrastructures, and to inform and support researchers regarding the ease of use of such infrastructures. But given that the technical infrastructure is already in place in many instances, or under development, both projects also recognise the compelling need for less technical OA advocacy work in order to ensure stakeholder and community engagement with the projects' goals. Above all, the widespread uptake of OA research dissemination depends on organisational culture change in academia, and our work shows that this assertion applies to European as well as Latin American and Caribbean countries.

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