

investment has largely been in networks that coordinate the work of many researchers across the country, with some international partners, in order to boost the country's industrial competitiveness without huge investments in infrastructure. This positions Brazil well for international partnerships that require virtual collaborations, short-term researcher exchanges, and collaborations among people with different cultures.

Currently, the Brazilian government is in the midst of a four-year effort to facilitate new international collaborations and supplement educational experiences for students through study-abroad scholarships. Under the Science Without Borders program, some 75,000 students and postdoctoral researchers will receive

scholarships from the Brazilian government to study abroad, and another 26,000 are receiving similar scholarships from Brazilian companies. Approximately 20,000 of the participants are expected to study in the United States, with the others studying in France, Germany, Italy, and the United Kingdom.

In March 2011, President Obama announced a similar program, 100,000 Strong in the Americas. This program aims to increase the number of US students studying in Latin America and the Caribbean to 100,000, and the number of Latin American students studying in the United States to 100,000. Through Science Without Borders and 100,000 Strong in the Americas, the United States and Brazil aim to strengthen institutional

partnerships, facilitate new collaborations, equip the next-generation workforce, and increase prosperity within the region.

The United States and Brazil have collaborated on a number of science and technology efforts during the last few decades. Many of these efforts have been facilitated by the Joint Commission on Science and Technology Cooperation. The Joint Commission was established by a 1984 agreement between the United States and Brazil to plan and coordinate cooperative science and technology efforts that advance the state of science, raise the level of technology, and contribute to attaining common goals.

Kendra Redmond

## EU-funded projects go public www.openaire.eu

The European Commission (EC) wants results from European Union's (EU) Seventh Framework Program (FP7) (2007–2013) and Horizon 2020 (2014–2020) projects to produce fully "open access" publications. In this effort, the EC is funding, through FP7, the project "Open access infrastructure for research in Europe" (OpenAIRE). This project will provide a single access point to all the open access publications produced by FP7 projects during the course of the Seventh Framework Program.

"To try and push more open access publishing, the European Commission has made open access publishing mandatory for around 20% of FP7 projects," said Natalia Manola, the project's manager. "This is written into the contract, but it is still a soft target—hard to enforce and monitor or really measure the impact. The idea of online open access is still quite new and one of the biggest problems is that projects will publish some results in traditional journals and some in open access publications. Knowledge is fragmented and it is difficult to see the output of a project because it is spread around so much. We want everything to be accessible by everyone."

The project's website, www.openaire. eu, contains links to FP7 open access guidelines and a FAQs page to address questions such as how researchers are to follow the guidelines if their publishers do not allow authors to archive their articles.

OpenAIRE is a repository network and is based on technology developed in an earlier project called Driver. The Driver engine trawled through existing open access repositories of universities, research institutions, and a growing number of open access publishers. It would index all these publications and provide a single point of entry for individuals, businesses, or other scientists to search a comprehensive collection of open access resources.

OpenAIRE uses the same underlying technology to index FP7 publications and results. FP7 project participants are encouraged to publish their papers, reports, and conference presentations to their institutional open access repositories. The OpenAIRE engine constantly trawls these repositories to identify and index any publications related to FP7-funded projects. Working closely with the EC's own databases, OpenAIRE

matches publications to their respective FP7 grants and projects providing a seamless link between these previously separate data sets.

OpenAIRE is also linked to CERN's open access repository for "orphan" publications. Any FP7 participants who do not have access to their own institutional repository can still submit open access publications by placing them in the CERN repository.

The project is collecting usage statistics of the portal and the volume of open access publications. It will provide this information to the Commission and use these data to inform European policy in this domain.

OpenAIRE is working closely to integrate its information with the CORDA database, the master database of all EUfunded research projects.

Aiming to build the "knowledge infrastructure" of the European Research Area, an extension project, OpenAIRE-plus, is now working in parallel to OpenAIRE to add open access data sets to the mix and create a so-called "information space" where publications, data sets, and funding information (EC and national) are interlinked. Researchers can make their raw data, benchmark data, or data objects associated to publications available for others to analyze or use.