

ERA of austerity

The economic crisis is a setback to the European Research Area, warns **Colin Macilwain** — and the research community is ill-placed to respond.

The European Research Area (ERA) — the concept of Europe as a unified entity in which people can collaborate on science — is a grand idea. Like other grand European ideas, it is under pressure this summer, as the cracks in the European Union (EU) start to show.

Divisions have surfaced most glaringly in the economic sphere, where tension over the debt crisis in Greece has led some observers to question the very survival of the euro — the grandest European idea of them all. But the problems have implications for the scientific world too. Splits among Europe's leaders, together with impending spending cuts, can only drain impetus from European research projects and programmes.

Attending the Euroscience Open Forum (ESOF) meeting in Turin, Italy, this month, it struck me that the community of European scientists who might defend these programmes remains alarmingly underdeveloped. The institutions that might fight for research — academies, societies and media outlets — just don't exist. That's made it hard for organizations such as Euroscience — a small non-profit group based in Strasbourg, France, which seeks to unite researchers, corporations and lay admirers of science — to find a footing.

Part of the ERA's forthcoming crisis is financial. Eighty-five per cent of Europe's €80-billion (US\$100-billion) annual public spending on research and development comes from independent national agencies. As these come under unprecedented budget pressure, they will retrench, and show even less interest in collaborating with their neighbours. The remaining 15%, for joint research, is only ever expanded when national coffers are flush. The European Research Council, for example, got going when the last EU budget round was completed in 2006 only because new money was available on top of the previous research budget. That won't be the case when the next seven-year budget is done, in 2013. And the chances of rapid research-council expansion thereafter recede by the day.

Even more seriously, European research policy has a credibility gap (*Nature* 464, 349; 2010). The EU has made no progress in meeting its target, set at the European Council of 2002, of raising research-and-development spending from 1.9% to 3% of EU gross domestic product by this year. And no one has been held accountable. That lack of accountability reflects the central weakness of the EU. To function politically,



any nation, 'community' or 'union' needs unitary institutions — a credible legislature, a political culture and a media.

Twenty years ago, these were widely expected to evolve. They have not. The European Commission, in particular, addresses most of its verbose pronouncements to an empty echo chamber. Its research-directorate press conferences sometimes comprise one or two reporters and up to 30 officials. Thus its framework programme for research — whose €7-billion budget is substantial, half of NASA's — has no public profile. And that will undermine efforts to put research at the heart of the next EU budget. One of the first suggestions made by Máire Geoghegan-Quinn, the new EU research commissioner, was to change the framework programme's name to something more emphatic — an approach that, I fear, misses the point.

Community action

It would take a genuinely European 'scientific community', as well as a European media, to develop broader awareness of research programmes. Most of Europe's scientists think of themselves as 'good Europeans'. But — understandably — they like the idea most in the abstract. They tend to draw the line at joining bureaucratic, Europe-wide collaborations that they see as irrelevant, or even detrimental, to their careers. For many, the critical paths of professional development more obviously lead more through Boston or San Francisco than through Berlin or Seville.

Many factors underpin that perspective, and the biennial ESOF meeting attempts to address one of them: the prevalent global structure of scientific meetings. The broad-discipline meetings that matter most to professionals are invariably held in North America, by the likes of the American Physical Society or the Society for Neuroscience. The latter's last jamboree drew 30,500 visitors to Chicago in October, including almost 4,000 from Europe.

The main elements of the ESOF meeting, created in 2004, are a multidisciplinary, policy-orientated programme similar to that of the prestigious American Association for the Advancement of Science (AAAS) Annual Meeting and a public outreach component of scientific discussions and displays. Once an ESOF host city has been selected, it falls mainly to local organizers to finance and arrange the meeting. The AAAS, by contrast, is a large-membership society with plenty of publishing income.

At the last ESOF meeting, in Barcelona, Spain, in 2008, the future looked bright for the development of the forum, for the European scientific community that it seeks to nurture, and for European research in general. This year's event, despite thought-provoking presentations and an impressive public programme in the squares of old Turin, failed to scale quite those heights. It avoided awkward policy issues, such as the recent, searing cuts in Italian research budgets. And a good number of those who run science in Brussels and Rome — never mind in Paris, London and Berlin — didn't attend. Palpably apprehensive about the future, several speakers expressed exasperation at the fanciful verbiage (from "grand challenges" to "joint programming") that surrounds discussions of European research plans.

ESOF's inconsistency reflects wider divisions in European science, between nations and regions, that presage trouble for the ERA. Last month, the 27 member states of the EU endorsed 'Europe 2020', a "strategy for smart, sustainable and inclusive growth". The document spells out all the fine things that Europe is going to do in the next decade to start the spree of innovation that is supposed to dig the continent out of the economic hole in which it finds itself.

This, together with a research and innovation strategy being developed by Geoghegan-Quinn, is to be discussed by heads of government at the autumn European Council in Brussels in September. Let's hope their Blackberries are switched off, because little in the public pronouncements of Nicolas Sarkozy, David Cameron or Silvio Berlusconi so far suggests that they are ready to concentrate for more than 5 minutes on research and innovation, let alone agree on a course of action to make Europe innovate effectively.

One probable consequence of these leaders' fiscal policies is a collapse in research funding in Europe, as has already occurred in Italy. The ERA struggled to get anywhere even in a long period of continued economic growth. In an era of austerity, its prospects look grim. ■

Colin Macilwain is based in the United Kingdom.

e-mail: cfmworldview@gmail.com

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