Europe Gears Up to Double Its Investment in Research

Author: SPONBERG, ADRIENNE FROELICH

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Europe Gears Up to Double Its Investment in Research

ADRIENNE FROELICH SPONBERG

In late 2005, much of the talk around Washington, DC, focused on competitiveness and innovation in science and technology. The National Academy of Sciences released "The Gathering Storm: Energizing and Employing America for a Brighter Economic Future," warning policymakers of an impending crisis: the erosion of US scientific and technical talent. Shortly thereafter, business leaders and lawmakers gathered in Washington, DC, for a national innovation conference to discuss the steps necessary to maintain US eminence in science and technology. Meanwhile, similar conversations were taking place on the other side of the Atlantic.

In 2005, the European Union (EU) began to prepare for its seventh research framework program (FP7). EU framework programs, through which EU research and innovation activities are funded, have been in place since 1984. The programs have typically spanned five years (with the last year of one program overlapping the first year of the following one), but FP7 will cover a seven-year period (2007–2013). The program was proposed by the European Commission in April 2005; it must now be approved by the European Parliament and Council.

A key component of FP7 is the proposal to establish an autonomous European Research Council, which would function something like the National Science Foundation (NSF) in the United States. Another program emphasis is on making Europe more attractive to researchers. EU leaders have expressed concern that the limited mobility of researchers between countries in the EU has made appointments in other countries, such as the United States, more attractive than staying within the EU (see *www.aibs.org/washington-watch/washington_watch_2004_02.html*). Pia Elda Locatelli, Italian member of the European Parliament and rapporteur on EU research policy, recently wrote in an editorial that "it's time to stop crying about the 'brain drain' of brilliant researchers.... We have to face the competition and do more to offer to young, brilliant researchers worldwide a 'European opportunity.'"

To undertake these activities, the European Commission proposes a large increase in the budget. The current yearly average for the framework program is EUR 3.8 billion. For FP7, the Commission wants to ramp up from EUR 6 billion in 2007 to EUR 15 billion in 2013. Janez Potocnik, EU commissioner for science and research, says the big price tag is necessary because the EU is falling further behind. "It's not catching up with the United States and Japan; on the contrary, China is catching up with the EU.... Our intention of doubling the funds was to create a 'positive shock' which Europe needs right now."

European leaders are billing the framework as a cornerstone to boosting Europe's competitiveness in an increasingly global economy. In a speech to the European Parliament, British Prime Minister Tony Blair highlighted research and development (R&D) as the first priority area in addressing the globalization challenge. Blair noted that leaders need to concentrate on two tasks to ensure the future of Europe: making sure more of the European budget is spent on R&D, and better coordinating R&D work.

European concern over R&D investment is not new. Three years ago, the EU set a goal of spending 3 percent of gross domestic product (GDP) on R&D by the year 2010. The report "Key Figures 2005 for Science, Technology and Innovation" indicates that Europe is in danger of missing that goal. The growth rate of R&D intensity (R&D expenditure as a percentage of GDP) has steadily declined toward zero since 2000; consequently, Europe's investment in R&D is 1.9 percent of GDP, compared with 2.59 percent for the United States and 3.15 percent for Japan.

EU leaders have been vocal about the need to heed the commission's recommendation to double the R&D investment. In his speech to the parliament, Blair noted that sufficient funding had to be in place for R&D. Locatelli says proposals to double the budget for FP7 "are not negotiable."

Of course, approving a proposal to double the research budget and actually providing the funds are two very different matters. Science policy analysts in Washington need only to point to the 2002 legislation authorizing the doubling of the NSF budget over a five-year period. Since the bill's passage, NSF's budget has increased only by an average of about 3 percent per year, far from the 15 percent annual increases necessary to double the budget.

European scientists are not taking FP7 lightly. To date, nearly 20,000 scientists have signed a petition calling on members of the EU to increase research funding (*www.embo.org/petition/petition.php*). The petition warns leaders that "investment in research cannot be relegated to an option that can be discarded"—a message as relevant in the United States as it is in Europe.

Adrienne Froelich Sponberg (e-mail: asponberg@aslo.org) is the director of public affairs for the American Society of Limnology and Oceanography.