

EUROPEAN RESEARCH AREA

E.U. Research Chief's Strategy: Unite and Conquer

To mixed reviews, Philippe Busquin is striving to integrate European research to put it on an even footing with the U.S.

BRUSSELS—With his nerdish spectacles and benign demeanor, European Union (E.U.) research commissioner Philippe Busquin hardly looks like a rabble-rouser. But the Belgian socialist is trying to foment a revolution in Europe's scientific community under the banner of the "European Research Area" (ERA)—a sprawling effort to better coordinate the continent's rich but scattered scientific strongholds. The ERA hopes "to overcome the fragmentation of Europe's research effort," Busquin told *Science* in a wide-ranging interview earlier this month. "Within Europe, we want to catalyze research collaborations and forge stronger links between the main players." Looking beyond the continent, he says, "the goal is to reach critical mass in R&D so that we can be an equal partner with the U.S. and international research giants."

Busquin's relentless campaign to forge research links across Europe has won some influential converts. European Science Foundation president Reinder van Duinen, for one, calls the ERA "a concept whose time has come." But others question whether Busquin's pan-European research vision will ever be more than a pipe dream, and they worry that the multilateral projects his office stimulates will relegate smaller players, from Austria to Slovenia, to the sidelines.

Under the ERA banner, Busquin's team at the research directorate's headquarters on the Square de Meeus has rolled out a series of initiatives in recent months. The ERA's central instrument is the next 4-year E.U. research program, Framework 6 (FP6), which would nurture big-ticket collaborations and double the funding for researchers to country-hop (*Science*, 2 March, p. 1676). In spring Busquin sent the proposed FP6 budget to the European Parliament, where it is likely to be massaged in debate this fall.

After the major FP6 campaign came initiatives on coordinating European cancer and aerospace research; solidifying the continent's genomics research by arranging more funding for the European Bioinformatics Institute (*Science*, 18 May, p. 1275) and the European Mouse Mutant Archive (*Science*, 15 June, p. 1985); and helping form the European Governmental Research Organizations forum to bring together leaders of seven ma-

jor research labs, from the CERN particle physics center to the European Molecular Biology Laboratory. The forum is an obvious step that could have been made sooner, Busquin notes: "I was surprised that the leaders of Europe's biggest international research organizations never got together."

Busquin studied physics before entering Belgian politics, but he likes to express his research commissioner role (a post he has held since September 1999) in chemical terms: as a catalyst. That's because FP6—which would shell out roughly \$16.2 billion from 2003 to 2006—will represent only 2% of Europe's total research spending. Mobility is another Busquin buzzword; FP6 would double (to nearly \$1.7 billion) the funds for programs to encourage researchers to move from lab to lab within Europe. "Sometimes it's easier for a researcher to go from Madrid to Boston than it is to go from Madrid to Sweden," he says.

Although Busquin promotes European unity, some disunity about his approach was likely to emerge at a meeting of Europe's research ministers earlier this week. Germany's research chief, Edelgard Bulmahn, told *Science* that FP6 "is heading in the right direction ... to change the course of European research." However, her Swedish counterpart, Thomas Östros, worries that the draft is too stingy for basic researchers.

Another critic is the European Life Scientist Organization (ELSO), whose leader, Kai Simons—director of the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden—argues that FP6 wouldn't do enough to help young scientists launch their

careers. Busquin points out that the Framework proposal would double funding for the E.U.'s Marie Curie Fellowships, which give grants for postdocs to spend time in a lab in another European country. But Simons contends that the biggest problems come later, when young scientists are ready to move into independent research. In most European countries, he says, there aren't enough positions, so many talented young researchers flee to North American labs. To remedy that problem, ELSO is lobbying for a new "Career Development Award" that would help advanced postdocs set up independent teams. "No amount of structuring, coordination, or large-scale targeted research will make up for an absence on the ground of highly trained, well-funded, and unfettered researchers," Simons says.

A different set of concerns comes from scientists in central and eastern European countries—several of which are candidates for E.U. membership but already pay to play

in the current Framework. They worry that the FP6 draft's emphasis on big science and country-spanning projects may leave some of their best labs out in the cold. "We understand that better integrating European science is important," says neuroscientist Josef Syka, president of the Grant Agency of the Czech Republic. "But small countries worry about being forgotten in the process."

Syka and other representatives of candidate countries were scheduled to meet earlier this week with E.U. officials to discuss their concerns. Busquin says he is confident that the new Framework will benefit eastern Europe. "I know

there are some problems," he says. But candidate countries "will not be forgotten."

If the FP6 passes muster with research ministries and the European Parliament next year, Busquin hopes that the ERA "will help make European research more competitive and more attractive" for researchers worldwide. "My goal is for European science to be the world's best. We have the intellectual capacity, strong economies, and a good social system." Now all that Europe needs, he says, is some cohesion.

—ROBERT KOENIG

With reporting by Michael Balter.



Wide-angle vision. Busquin's idea of a European Research Area will be put to the test over the coming weeks.