EUROPEAN RESEARCH

Framework 6 Debut Prompts Calls for a Better Approach

Momentum builds for a European Research Council as the European Union prepares to launch its next 5-year plan for applied research and training

Bernhard Stauffer, a physicist at the University of Bern, Switzerland, is heading off this week for another 3 months' drilling into the Antarctic ice. The European Project for Ice Coring in Antarctica (EPICA) hopes to increase understanding of the world's climate—assuming it avoids the problem of stuck drill bits that has halted previous efforts. It's also "one of the few *real* European projects," Stauffer adds, bringing researchers from Switzerland, the U.K., Germany, France, Norway, and five other countries together on the ice sheet.

As harsh as conditions are at the bottom of the world, EPICA's biggest threat is not the extremes of cold and weather but the shifting political winds in Brussels. Every 5 years the European Union's research program that funds a large part of EPICA, known as Framework, reinvents itself. A new multibillion-dollar budget is adopted, and staff devise new research priorities and new funding mechanisms. Although EPICA has widespread support, Stauffer and his colleagues say they would feel more comfortable being judged in a process that prizes scientific merit above all else. That sentiment is fueling a drive for a new pan-European organization, run by scientists, that would support basic research without political interference.

Every new Framework program brings with it a chorus of complaints. And the Sixth Framework Programme (FP6), which is being feted in Brussels next week in advance of its 1 January start, is no exception. "They are always changing rules, forms, emphasis, [moving from] networks to I-don't-know-what," says Thomas Stocker, Stauffer's boss at Bern and co-leader of the Swiss contribution to EPICA. Researchers say that applying for and running projects impose huge administrative burdens, that the required multinational collaborations are unwieldy and inefficient, that funding decisions are distorted by political pressures, and that large swaths of basic research are ignored.

None of those complaints is new. But this time there's an alternative model in the wind. Last month 200 research managers gathered in Copenhagen to discuss establishing a European Research Council, an entity that would fund knowledge-driven basic research selected by peer review. "If you listen to scientists, they always repeat the same criteria: They want an independent body; ... they want it to be science-driven," says Christoph Mühlberg, who coordinates European cooperation for Germany's research council, DFG.

Every reincarnation of Framework is bigger, richer, and more ambitious. FP6 has a budget of $17.5 billion, 17% more than its predecessor, and received 12,000 "expressions of interest"—suggested projects that help mold its research themes—from researchers. The research must be geared toward boosting Europe's economy—hence its bias toward applied research—and it must not duplicate the work of national research councils. Although the amount seems large, it accounts for barely 5% of nonmilitary research funding across the 15 member nations.

FINAL BUDGET OF FRAMEWORK 6 (MILLIONS OF EUROS)

Genomics and biotechnology	2255
Information society technology	3625
Nanotechnologies, intelligent materials, and new production processes	1300
Aeronautics and space	1075
Food quality and safety	685
Sustainable development, global change, and ecosystems	2120
Citizens and governance in a knowledge-based society	225
Other research activities	2060
European Research Area overhead	2925
Specific program: nuclear energy	1230
TOTAL	17,500

The structure of FP6 seems to accentuate the trend toward bigger, more complex collaborations. FP6 will aim to pool European expertise in a particular field by gathering all the top groups into "networks of excellence." In addition, "integrated projects" will have multimillion-dollar budgets and well-defined methods and goals. These ideas "are good instruments to coordinate research in Europe," says Jean-Luc Clément, director of international affairs for France's CNRS research agency.

Framework is widely credited with getting researchers across Europe talking to each other. Its Mobility program—which seeks to make it easier for researchers to move from country to country—is "one very, very positive trait," says Kai Simons, director of the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden.

But researchers are less enthusiastic about the large, joint projects. Framework has an "infatuation with networks," says Gottfried Schatz, head of the Swiss Science and Technology Council, an advisory body. One problem with them, says Stocker, is that "the more people around a table, the less efficient [the enterprise] becomes." Another problem is that the groupings are often forced. Large networks "demand a new degree of cooperation between groups that are by definition competing with each other," says Frank Gannon, executive director of the European Molecular Biology Organization.

Researchers have also become increasingly frustrated by what they see as the influence of politics in the granting decisions. Susan Gasser, a molecular biologist at the University of Geneva, says she refuses to sit on E.U. review panels because they "review proposals, only to have the final decision be a political one." Adds Peter Gruss, president of Germany's Max Planck Society, "The handling of grants is clearly not a bottom-up, science-directed mechanism."

Many researchers say a new body, free of political influence, is needed to support basic, blue-sky research. "Europe needs to come closer, sooner or later, to the U.S. National Science Foundation or National Institutes of Health," says Patrick Aebischer, president of the Swiss Federal Institute of Technology in Lausanne.

In Copenhagen, researchers discussed the idea of having national funding bodies place a portion of their budgets into a central pot, although many worried that this mechanism would not provide enough money. There was also a proposal to give half of the Framework budget to an independent research council, maintaining the rest for more applied Framework-style projects. But such a scheme would require rewriting E.U. rules and hacking through a thicket of bureaucracy.

Despite these unanswered questions about funding, the organizers of the Copenhagen meeting called on researchers to lobby their own governments for the necessary changes to E.U. research policy. "The idea of a European Research Council is unstoppable," says Gruss. "It will come."

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