

## POLICY

# EU–Swiss research on shaky ground

Vote for immigration quotas leads to suspension of talks over Horizon 2020 programme.

BY QUIRIN SCHIERMEIER

World-class research facilities, lucrative funding opportunities, majestic mountains and exquisite chocolates — Switzerland has long been a land of milk and honey for scientists. But the success of a ballot to stop ‘mass immigration’ to the small nation of eight million has worried the international scientific community and threatens to cut Switzerland’s close ties with the European Union (EU).

The binding nature of the 9 February referendum, which was initiated by a right-wing party and approved by an extremely narrow majority, will force the Swiss government to set yearly quotas to limit the influx of foreigners. Policy-makers in the capital, Bern, are drawing up a new immigration system that must be in place within three years.

The move has caused an outcry in Brussels and across Europe. Although Switzerland is not part of the EU, it maintains bilateral agreements with the bloc on key policy areas, including research and education. The country has for the past decade been an associate partner in the EU’s multi-year research programmes, the latest of which, Horizon 2020, was launched last month. This allows Swiss-based researchers to apply for EU grants and lead large European research partnerships.

Since 2007, 147 Swiss-based researchers have received grants from the European Research Council (ERC), the fifth-highest tally among European countries. One of the EU’s most ambitious research programmes, the €1-billion (US\$1.4-billion) Human Brain Project, is hosted by the Swiss Federal Institute of Technology of Lausanne (EPFL). Overall, Switzerland punches well above its weight in terms of scientific output (see ‘High productivity’).

But more than half of Switzerland’s scientists are foreigners, and Bern has been warned that it is breaching the bilateral agreement on free movement of people that entitles Swiss and EU nationals to live and work in any of the 28 EU countries and a handful of associate nations.

Research agreements will also be affected. In normal circumstances, Switzerland’s status as an associate country in the €80-billion Horizon 2020 programme — to which it has pledged more than €3.5 billion — would probably have been easily agreed. But the outcome of the referendum prompted the cancellation of a meeting between the European Commission and Swiss negotiators last week, throwing Switzerland’s participation in the programme into jeopardy.

The situation has caused grave concern among Swiss-based researchers. “We are in



Swiss support for a vote to set immigration quotas (right) only just topped opposition to it (left).

shock,” says Jérôme Grosse, a spokesman for the EPFL. “Voters just haven’t realized what dire consequences the referendum might have on Swiss–EU relations, and on research and innovation in our country.”

The European Commission said last week that it expects Switzerland to agree to the free movement in Europe of citizens from Croatia, the EU’s newest member, before discussions over Horizon 2020 can resume. But on 16 February, the Swiss federal councillor in charge of justice, Simonetta Sommaruga, informed Croatia and the commission that Switzerland will not grant Croatians unrestricted free right to live and work in the country. In response, the commission has suspended negotiations over Switzerland’s involvement in Horizon 2020.

If Switzerland is refused its previous Horizon 2020 status, Swiss-based researchers could still participate in the programme on a project-by-project basis, as scientists from non-EU or non-associate countries such as the United States already do. But scientists would not be

able to use ERC grants awarded under Horizon 2020 to do research at Swiss host institutes. And scientists based in Switzerland would not be able to lead EU-funded research consortia in the future. Nicholas Antonovics, a spokesman for Maire Geoghegan-Quinn, the European research commissioner, says that the commission will not comment at this stage on what that might mean for the Human Brain Project.

A “diplomatic effort on the highest level” will be required to prevent harm to Swiss — and European — science, says Bruno Moor, head of International Cooperation at the State Secretariat for Education, Research and Innovation in Bern. “Switzerland needs Europe just as Europe needs Switzerland,” he says. “We have a responsibility to move heaven and earth to get out of this cascading crisis.”

Anything short of maintaining Switzerland’s status in EU research programmes would be troubling, says Daniel Höchli, director of the Swiss National Science Foundation in Bern, the main grant agency. The foundation, along with the Swiss Academies of Arts and Sciences, university rectors and the presidents of Swiss institutions of higher education, had firmly opposed the restrictions on immigration.

“Ideally, Swiss scientists would remain fully eligible to take part in Horizon 2020 for a three-year interim period,” Höchli says. “This would allow us to negotiate alternative ways of mutual collaboration in case the bilateral agreement on free movement of persons, and hence research, falls.”

Recruiting foreign talent to Swiss labs might get more difficult, warns Dirk Helbing, a German sociologist at the Swiss Federal Institute of Technology (ETH) in Zurich. “People will think twice about whether they want to do science in a country where foreigners feel they might not be fully welcome,” he says. ■ SEE EDITORIAL P.265

## HIGH PRODUCTIVITY

Between 2005 and 2009, Switzerland was a world leader in output of research papers per capita.

