

## POLICY

# France prepares first national research strategy

*Plan promises funding stability and better career prospects for young scientists.*

BY BARBARA CASASSUS

France is getting ready to create a national, multi-year research plan for the first time — a move warmly welcomed by the country's major research agencies.

The details of the programme, unveiled by Prime Minister Édouard Philippe in Paris on 1 February, are yet to be defined, but the government says that it will protect research funding, boost the recruitment of early-career scientists and help France to stand out in an increasingly competitive global research landscape.

The programme should cut bureaucracy and give scientists more resources, allowing them to plan more effectively for the future and freeing more time for research, said Phillippe.

Fourteen chiefs of public research agencies, including the national fundamental-science agency, the CNRS, welcomed the move in a joint statement. It “is an opportunity to ensure that France remains a major scientific country” at a time of intense international competition — particularly from Asia, the leaders said.

Scientists in France have long complained that their research budgets fluctuate with political administrations — something that the strategy aims to address.

Publicly funded research in France is conducted mostly in university-affiliated labs run by agencies such as the CNRS and field-specific



French Prime Minister Édouard Philippe.

bodies — for example, INSERM for biomedical science. Each receives a portion of the central research budget, about €8.8 billion (US\$9.9 billion) for 2019.

Last July, a parliamentary fact-finding mission backed the idea of a national research plan. Scientists, research leaders and members of parliament are currently advising on the programme, which will be modelled on a national defence strategy; working groups will look at funding, human resources to improve

science-career prospects for young scientists, and links between the public and private sectors to boost innovation.

The government intends to introduce the plan in a law expected to pass by 2021. Its details are still flexible, an adviser to the research minister told a press briefing — but it will cover at least three years and could coincide with the European Union's next major research-funding programme, Horizon Europe, for 2021–27. The adviser said that the plan would also raise the research budget.

Reactions from the broader research community have been mixed. “I look forward to seeing the details, particularly the size of the budget and the policy on recruiting young scientists,” says Frédéric Dardel, president of Paris Descartes University. He adds that because the long-term programme should be in place before the presidential elections in 2022, it will help to stabilize research policy and funding, regardless of who wins.

Some have taken a dimmer view. “We have been asking for a multi-year investment plan for more than 15 years, with an increase of €1 billion a year over 10 years,” says Patrick Monfort, secretary-general of the French National Trade Union of Scientific Researchers. “The three areas that will be discussed are important, but there is no official mention in the announcement of increasing the budget,” he says. ■

XAVIER PIERRE/CNRS

## EUROPE'S MEGA-PROJECTS

## Six teams vie for billion-euro funding

*AI and virtual time-machine projects are among those hoping to become giant European Union science initiatives.*

BY ALISON ABBOTT

The European Commission has selected six research projects — in areas from health and energy to artificial intelligence (AI) and cultural heritage — to compete to become one of its next billion-euro ‘flagship’ science initiatives, *Nature* has learnt.

The commission chose the 6 candidates in December from a list of 16 proposals, say scientists on the shortlisted teams. On 1 March, each team will receive €1 million (US\$1.1 million) to develop a detailed feasibility proposal over the next year. Up to three will be chosen to become full initiatives to launch in 2021.

The commission already supports three scientific mega-projects, known as Future and Emerging Technology (FET) Flagships — on the brain, graphene and quantum technologies — which are each funded to the tune of around €1 billion over 10 years. The high-profile projects aim to make paradigm-shifting advances in their fields by bringing together expertise and funding from scores of academic and industrial sources across Europe.

The six newly shortlisted initiatives are: a project that would explore how AI can enhance human capabilities; one to hasten the clinical availability of cell and gene therapies; a personalized-medicine initiative; two projects that aim to improve the efficiency of solar-energy technologies; and a humanities project called the Time Machine, which seeks to develop methods for enabling digital searches of historical records in European cities.

The Time Machine's selection was a welcome