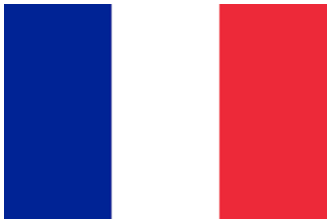

EURAXESS members in focus: France – A decade of change

With a total of 63 Nobel prizes and 16 Field medals, France is a country recognised for the excellence of its scientific research. Among the most recent winners are Esther Duflo (Economy) in 2019, Gérard Mourou (Physics) in 2018 and Jean-Pierre Sauvage (Chemistry) in 2016.

France ranks sixth for its world share of scientific publications and fourth in the European patent system. It is very active in the fields of transport technologies, other special machines, mechanical components, chemistry, as well as nuclear technology and space research. It is also the third beneficiary country of the contributions allocated by the European Commission through the Horizon 2020 framework programme for research and innovation.

Capital: Paris

Major cities: Bordeaux, Grenoble, Lille, Lyon, Marseille, Montpellier, Nantes, Nice, Rennes, Strasbourg, Toulouse

Language: French

Political system: Republic

Currency: Euro

Area: 244,340 sq mi (632 834 km2), 213,010 sq mi (551 695 km2) of which are considered metropolitan France

Promotional page about France: https://www.france.fr/en

EURAXESS France : https://www.euraxess.fr/

Conférence des présidents d'université (CPU) : http://www.cpu.fr/presentation/presentation-of-the-cpu/

Research and Development in France

In France, it is the Ministry for Higher Education, Research and Innovation (MESRI), which designs, develops and implements the national research and innovation agenda.

To meet scientific, technological, environmental and societal challenges, a national research strategy has been in place since 2013, which is in keeping with European orientations on these issues. This strategy is revised every five years under the guidance of the minister in charge of research and innovation. Its aim is to maintain a high-level commitmment to basic, curiosity-driven research while establishing a level playing field for other stakeholders at national, regional and local levels, such as the industrial sector and businesses, civil society and lawmakers.

A large part of French public research is carried out in higher education institutions. Its organisation relies principally on a two-tier system with universities on one side and national research organisations on the other. Collaboration between the two kinds of entities is achieved in so-called 'mixed research' units (UMR), i.e. laboratories whose management and monitoring is shared by one or more organisations and/or universities.

Research is also largely carried out in private companies. Out of the 300,000 researchers in France, 62% are employed in firms. The sectors employing the most researchers are: IT, the automobile industry, aeronautics and space technology as well as publishing, audiovisual and broadcasting. Domestic spending on research and development in France amounted to € 50.6 billion in 2017. This represents 2.21% of the country's gross domestic product (GDP), placing France in 5th place among all OECD countries.

Entrepreneurship and Innovation

Over the past decade, higher education and research insitutions have expanded on programmes to encourage entrepreneurship stemming from public research and innovation. A large number of measures and incentives have been set up, in

Mont Saint-Michel

particular through the Investments for the Future Programme (PIA). With €57 billion at its disposal, the programme is designed to help France face the challenges of tomorrow (competitiveness, environment, health, etc.) and to increase its growth potential by investing in higher education and training, research, industry and SMEs, sustainable development and digitisation.

For more information, please visit https://nest-com.com/comprendre-lecosysteme-de-linnovation-france/.

Funding and Recruitment Opportunities

Research funding

Block funding to research laboratories is jointly allocated from universities and public research organisations while project-based research is mostly funded through independent agencies, such as the National Research Agency (ANR). The ANR supports research projects selected after a peer-reviewed competitive process. In 2018, 1,471 projects were funded at an average of €350,000 per project.

Louvre Museum

As to private research, it is first and foremost funded by *Bpifrance*, a public investment bank supporting state and regional policy aimed at developing and strenghtening the R&D actions carried out by SMEs.

Two more mechanisms specifically targeted at research and innovation include:

- CIFRE contracts which allow a company to benefit from financial aid in order to hire a doctoral student in a company for a three-year contract.
- The research tax credit, which enables companies to be refunded to up of 60% of their initial investments, specifically if they hire early career researchers.

Recruitment opportunities

Several specialised sources can help researchers identify research jobs and research scholarships for their stay in France:

- EURAXESS Jobs, the European Portal, (click on France)
- ABG (L'Intelli'Agence)
- Campus France grant search engine, listing all the grants and scholarship programmes available from national institutions, local governments, corporations, foundations and institutions of higher education

Important Information for Incoming Researchers

The 42 EURAXESS Centres, coordinated by the Conference of University Presidents (CPU), involve about 130 people working on a daily basis in their universities or research organisations in order to help international researchers coming to France and support them during their stay, and after.

In particular, they offer free and personalised assistance to them and their families in order to:

- **Prepare their stay:** assistance on entry, residence and work procedures (visas, work permits, residency permits...)

EURAXESS – *Researchers in Motion* is an initiative of the European Research Area (ERA) that addresses barriers to researchers mobility and seeks to enhance their career development. This pan-European effort is currently supported by 42 countries, each of which will be profiled in our quarterly e-newsletters.

- **Help them settle in France**: assistance in finding accommodation, healthcare coverage, bank account...
- **Help them with daily administrative procedures:** registering for social security, family benefits, taxes, pensions...
- **Facilitate integration:** French language classes, cultural activities, sports, babysitting and schooling...

More than 60,000 researchers from some 144 different countries have already benefited from the services of the EURAXESS France network.

EURAXESS Centres are distributed across the whole French territory: find your nearest **EURAXESS Centre here.**

EU Council Presidency

France will be holding the EU Council presidency from January to June 2022.

French-South American Research programmes

STIC AmSud, MATH AmSud and CLIMAT AmSud are regional cooperation programmes that connect French research and investigation agencies with their counterparts in South America (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela*****).

***** Brazil, Ecuador and Venezuela only participate in MATH AmSud and STIC AmSud, not CLIMAT AmSud.

They cover the fields of information and communications technology (STIC AmSud), mathematics (MATH AmSud), and climate variability and change (CLIMAT AmSud).

Their objective is to foster researcher mobility through joint research and development projects between South America and France. Every year, between 20 and 30 projects are submitted to each of the three programmes, and, after an external evaluation process, an average of 5 to 10 receive funding from the participating agencies. The projects must last two years and involve at the very least two South American teams and one French team. Gender balance is encouraged, as is the participation of junior researchers. The projects receive between EUR 15 000 and 25 000 a year on average. Calls for proposals are usually open between November and March.

More information at http://www.sticmathamsud.org.

The main elements of research cooperation between France and Brazil

France is Brazil's fifth largest scientific partner (behind the USA, the UK, Spain, and Germany) and fourth largest in terms of citations, with almost 3 000 Franco-Brazilian publications being produced annually in recent years (representing 12% of Brazil's joint publications). Brazil is France's 14th largest scientific partner, both in terms of co-publications and citations.

Presence of French scientific institutions in Brazil – main figures

- A total of 25 scientific partnership instruments / joint research laboratories – 12 from the French National Centre for Scientific Research (CNRS), 5 from the French National Research Institute for Sustainable Development (IRD), 4 from the French agricultural research and international cooperation organisation working for the sustainable development of tropical and Mediterranean regions (CIRAD) and 3 from

the French National Research Institute for Agriculture, Food and the Environment (INRAe).

- A total of 30 university chairs are held by French professors in Brazilian universities.
- The CNRS is Brazil's largest scientific partner in terms of co-publications, and Brazil is the CNRS's largest partner in Latin America. Rio de Janeiro hosts the CNRS regional office, the Jean Christophe Yoccoz UMI (an international mathematics research laboratory) and 11 international research projects. In total, CNRS researchers perform 800 research missions a year in Brazil.
- The IRD has a representation in Brasília, with 10 expatriate researchers, 12 researchers on long-term missions and around 220 researchers on short- and medium-term stays in the country every year.
- CIRAD has a regional office in Brasília that covers all of South America. It also represents the INRAe-Agreenium consortium. There are currently 11 permanent expatriate CIRAD researchers in Brazilian institutions and an average of 100 short-term missions every year. CIRAD is the second largest scientific co-publisher with Brazilian institutions in disciplines related to agronomy. Around 30 projects are underway, including a dozen major Franco-Brazilian research and development projects supported by regional and international funding. More than 20 partner institutions are heavily involved with these major projects.
- A scientific platform organised by the Institut Pasteur and the University of São Paulo (USP) in partnership with the Oswaldo Cruz Foundation was inaugurated in July 2019.

The CNRS, IRD and CIRAD participate in various programmes, particularly in the Northeast Region of Brazil and in the Amazon rainforest, as well as in regional STIC, MATH and CLIMAT AmSud initiatives.

- CAPES-COFECUB and USP-COFECUB programmes: based on the scientific excellence of joint research projects, and on the training of doctoral students (CAPES-COFECUB), these programmes are involved with a total of 119 on-going projects – 105 CAPES-COFECUB projects and 14 USP-COFECUB projects (each lasting 4 years).
- In total, 900 projects have been completed under CAPES-COFECUB – 3 000 doctors have been trained since the first programme took place (1978-1979).